

# City of Phoenix Employees' Retirement System

Investment Performance Analysis

Quarter Ended  
**December 31, 2011**

Prepared By  
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# RVKuhns

▶▶▶ & ASSOCIATES, INC.

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## Capital Markets Review As of December 31, 2011

### Fourth Quarter Economic Environment

Steadying domestic trends and fluctuating economic headwinds abroad were the overall themes in the fourth quarter. Domestically, the economy experienced improved numbers in manufacturing, retail sales, and consumer confidence. In December, the unemployment rate decreased to 8.5%, a 35 month low, thanks in part to a steady rate of private hiring and a decreasing labor force participation rate. The BEA's final third quarter data was revised downward from 2.0% to an annual growth rate of 1.8%. In an attempt to maintain historically low interest rates, the Federal Reserve reiterated its commitment to "Operation Twist," while also announcing a plan to publish a conditional future federal funds rate in an effort to boost transparency.

The European Central Bank, along with the Federal Reserve and four other major central banks, agreed to cut the cost of dollar loans to banks by 0.50% in an effort to improve the liquidity of European banks. Mario Draghi replaced Jean-Claude Trichet as president of the ECB in early November. Mr. Draghi spearheaded several key policy changes across the Eurozone in an attempt to restore stability to the monetary union. Eurozone leaders also pushed through an historic agreement for increased economic integration and tougher fiscal controls. Italian 10-year bond yield remained at elevated levels while Spanish yields retreated slightly from November highs, ending the year at 7.11% and 5.09% respectively. Commodities, represented by the DJ-UBS Commodity Index, finished slightly up for the quarter at 0.35% after a turbulent year. Gold's spot price decreased in the fourth quarter to \$1,564 but increased 10.06% for the year.

#### Domestic Equities

- An improved U.S. economic outlook helped U.S. equities erase summer losses.
- Small-cap stocks outperformed their large-cap counterparts with small-cap value stocks, represented by the R 2000 Value, as the highest performer at 15.97% for the quarter.
- With the energy and industrials sectors leading the way, the S&P 500 (Cap Wtd) posted an 11.82% return for the quarter and a 2.11% return for the year.
- Market volatility, as measured by the CBOE Volatility Index, decreased to 23, and is down sharply from the third quarter reading of 43.
- Despite the positives, investors continued their retreat from U.S. equity mutual funds as \$49B flowed out during the quarter, while taxable bond funds saw inflows of \$34B.

#### International Equities

- Although uncertainty over the future of the Eurozone remains, the MSCI EAFE gained 3.38% for the quarter.
- Continuing a trend seen throughout the year, small-cap stocks underperformed large-cap stocks as the MSCI EAFE Small Cap finished the quarter down -0.52%.
- The MSCI Emerging Markets index returned 4.45% for the quarter but still finished the year substantially down at -18.17%.

#### Fixed Income

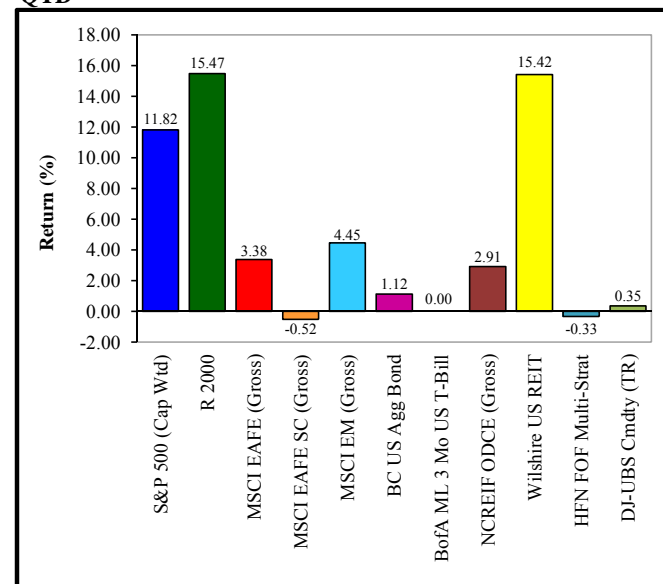
- U.S. fixed income continued to be a safe haven for global investors, with the BC US Agg Bond Index returning 1.12% for the quarter and 7.84% for the year.
- U.S. Municipal Debt and U.S. TIPS were also strong performers for the year, with the BC US Muni Bond Index and the BC US Trsy: US TIPS Index returning 10.70% and 13.56%.

### Trailing-Period Performance

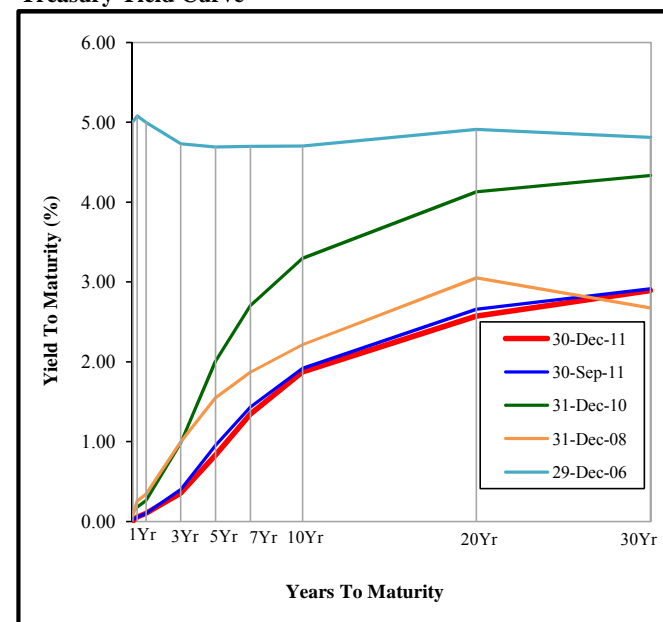
	Mth End Oct-2011	Mth End Nov-2011	MTD	QTD	CYTD	1 Year	2 Years	3 Years	5 Years	10 Years
S&P 500 (Cap Wtd)	10.93	-0.22	1.02	11.82	2.11	2.11	8.39	14.11	-0.25	2.92
R 2000	15.14	-0.36	0.66	15.47	-4.18	-4.18	10.25	15.63	0.15	5.62
MSCI EAFE (Gross)	9.65	-4.83	-0.94	3.38	-11.73	-11.73	-2.27	8.16	-4.26	5.12
MSCI EAFE SC (Gross)	7.20	-5.40	-1.90	-0.52	-15.66	-15.66	1.60	15.00	-3.80	9.42
MSCI EM (Gross)	13.26	-6.66	-1.20	4.45	-18.17	-18.17	-1.24	20.42	2.70	14.20
BC US Agg Bond	0.11	-0.09	1.10	1.12	7.84	7.84	7.19	6.77	6.50	5.78
BofA ML 3 Mo US T-Bill	0.00	0.00	0.00	0.00	0.10	0.10	0.11	0.14	1.48	1.95
NCREIF ODCE (Gross)	N/A	N/A	N/A	2.91	15.93	15.93	16.14	-1.78	-0.22	6.17
Wilshire US REIT	14.71	-3.93	4.74	15.42	9.24	9.24	18.53	21.79	-1.96	10.16
HFN FOF Multi-Strat	0.86	-0.73	-0.45	-0.33	-5.46	-5.46	-0.47	2.81	-1.02	3.22
DJ-UBS Cmdty (TR)	6.62	-2.22	-3.75	0.35	-13.32	-13.32	0.64	6.39	-2.07	6.63

Performance is annualized for periods greater than one year.  
Treasury data courtesy of the U.S. Department of the Treasury.

### QTD

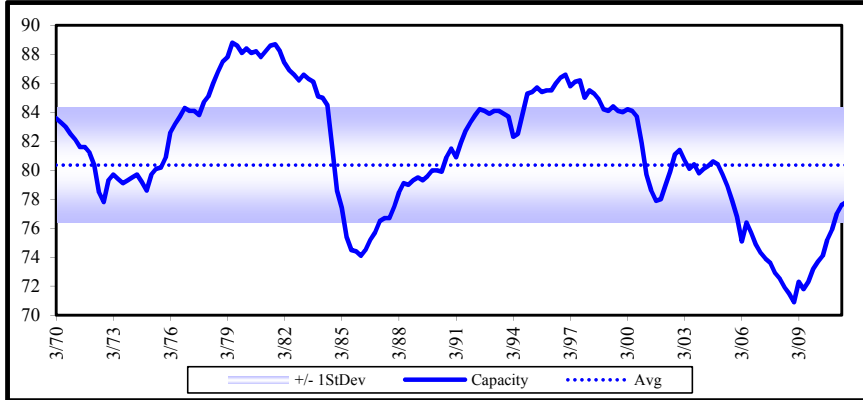


### Treasury Yield Curve

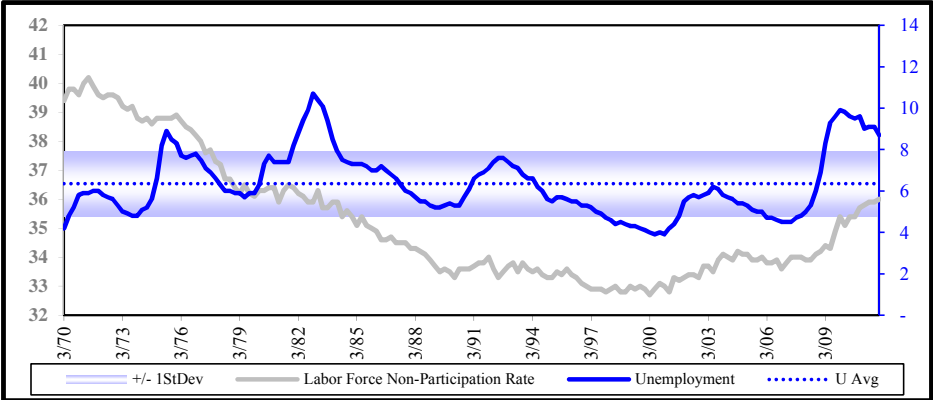


## Economic Measures <sup>1</sup> As of December 31, 2011

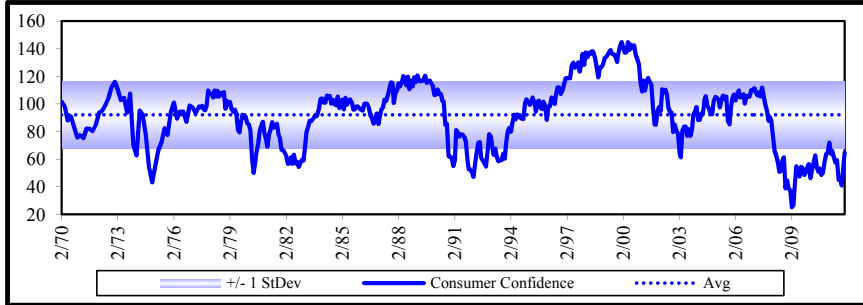
### Capacity Utilization as of December 31, 2011



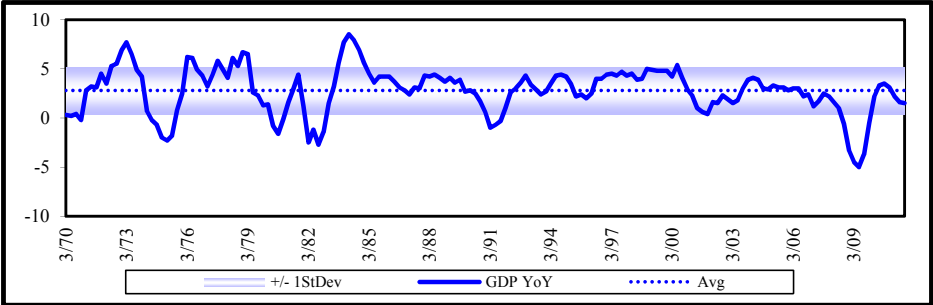
### Unemployment Rate as of December 31, 2011



### Consumer Confidence as of December 31, 2011

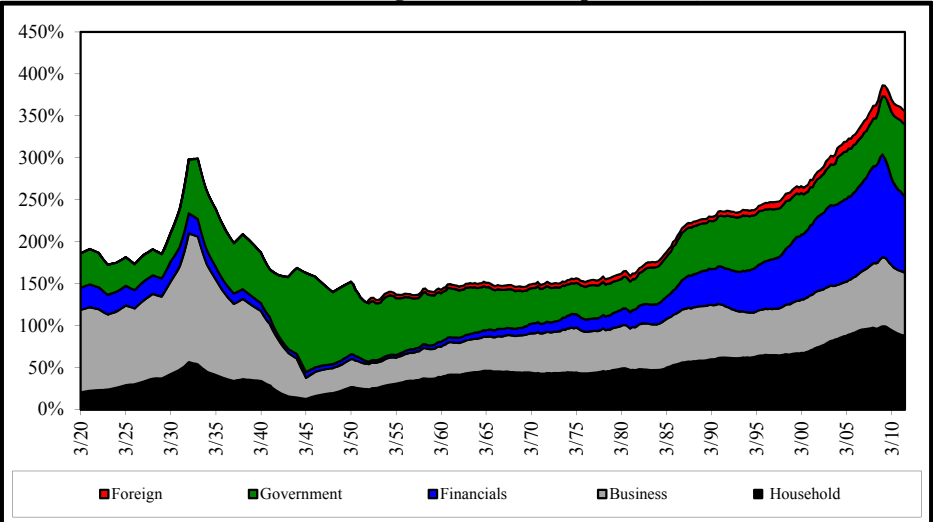


### Real GDP YoY Change as of December 31, 2011



	12/31/2011		9/30/2011	20 Year	40 Year
Capacity Utilization	78.10	▲	77.70	79.40	80.30
Unemployment Rate	8.50%	▼	9.00%	6.00%	6.40%
Shiller 20 City YoY - Housing	N/A		-3.54%	3.19%	N/A
PMI - Manufacturing	53.10	▲	52.50	52.10	52.30
Baltic Dry Index - Shipping	1,738	▼	1,899	2,438	2,120
Real GDP YoY	1.60%	▲	1.50%	2.60%	2.80%
Consumer Confidence (Conf. Bd.)	64.80	▲	46.40	92.75	92.28
Breakeven Inflation - 10 Year	1.95	▲	1.76	N/A	N/A
CPI YoY (Headline) <sup>4</sup>	3.00%	▼	3.90%	2.50%	4.40%
CPI YoY (Core) <sup>4</sup>	2.20%	▼	2.00%	2.30%	4.30%
PPI YoY	4.80%	▼	6.90%	2.30%	4.00%
M2 YoY	9.60%	—	9.60%	5.60%	6.80%
Personal Savings	4.00%	▲	3.50%	4.20%	6.50%
Disposable Personal Income	0.40%	▲	0.10%	0.40%	0.60%
Prsnl Consumption Expenditures	2.40%	▼	2.90%	2.10%	3.90%
US Dollar Total Weighted Index	73.33	▲	72.81	88.12	95.89
WTI Crude Oil per Barrel	\$99	▲	\$79	\$40	\$36
Gold Spot per Oz <sup>5</sup>	\$1,576	▼	\$1,629	\$286	\$321

### US Credit Market Debt as a Percentage of GDP as of September 30, 2011<sup>2</sup>



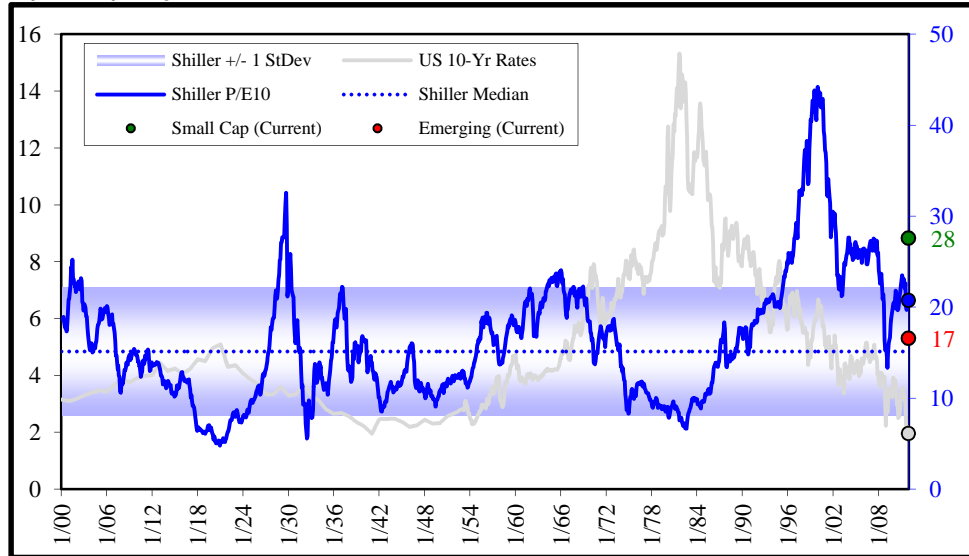
<sup>1</sup> All data courtesy of Bloomberg Professional Service, except as noted below.

<sup>2</sup> Data prior to 1952 is from "The Statistical History of the United States, From Colonial Times to the Present", by Ben Wattenberg, Morgan Stanley Research.

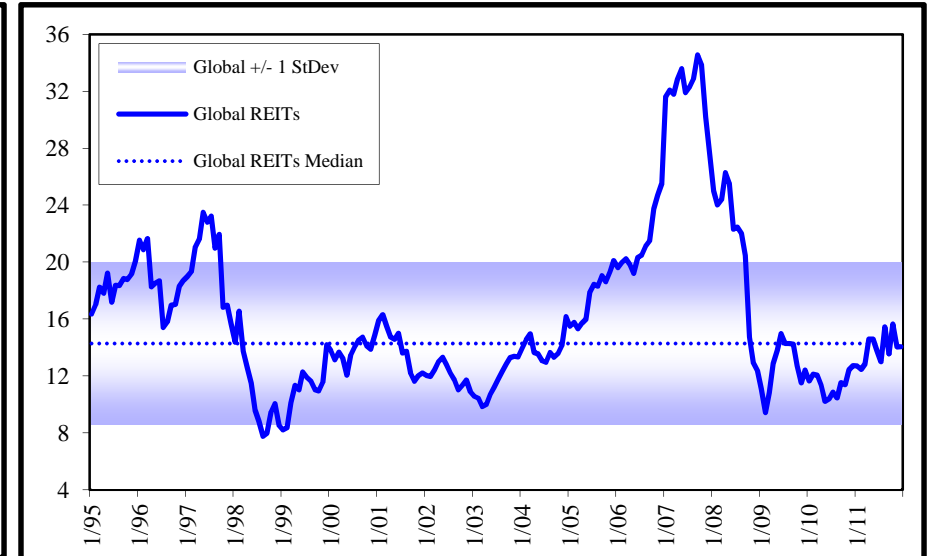
<sup>3</sup> "N/A" is shown for data that is not yet available. <sup>4</sup> CPI figures are cyclically adjusted. <sup>5</sup> 20- and 40-year average Gold spot prices are adjusted for inflation.

## Valuation Metrics<sup>1</sup> As of December 31, 2011

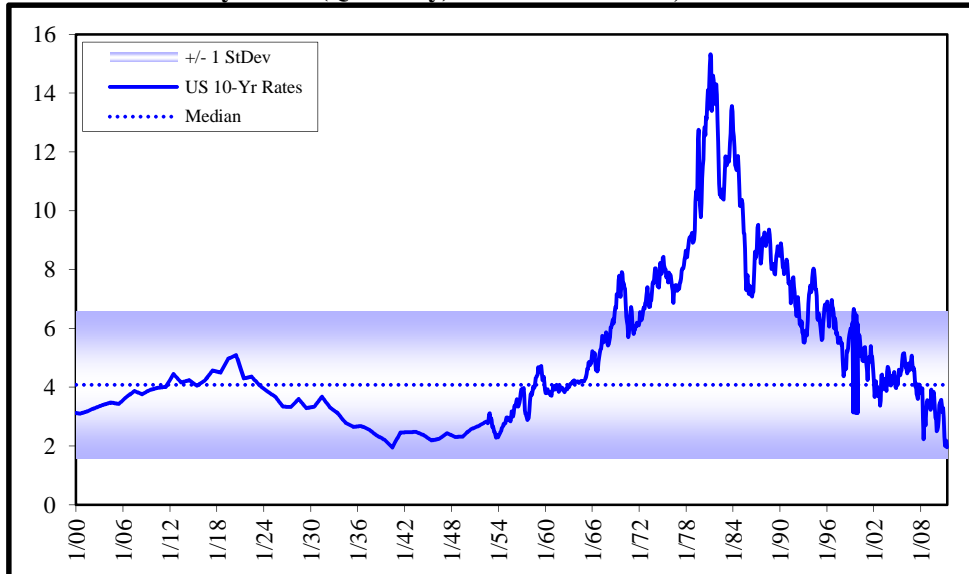
### Cyclically Adjusted P/E Ratios<sup>2</sup> as of December 31, 2011



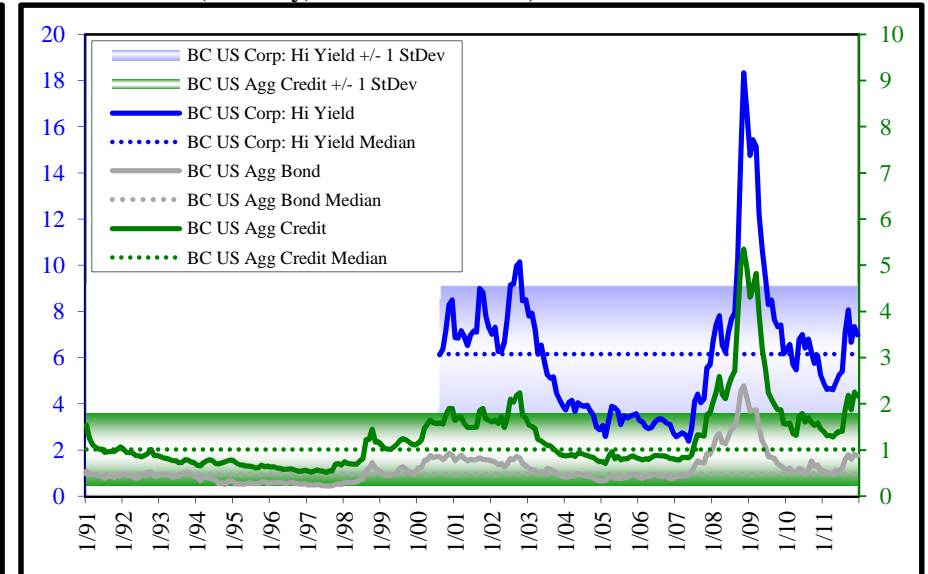
### REITs Price to Cash Flows as of December 31, 2011



### Historical Treasury Yields (Quarterly)<sup>2</sup> as of December 31, 2011



### Historical OAS (Monthly) as of December 31, 2011



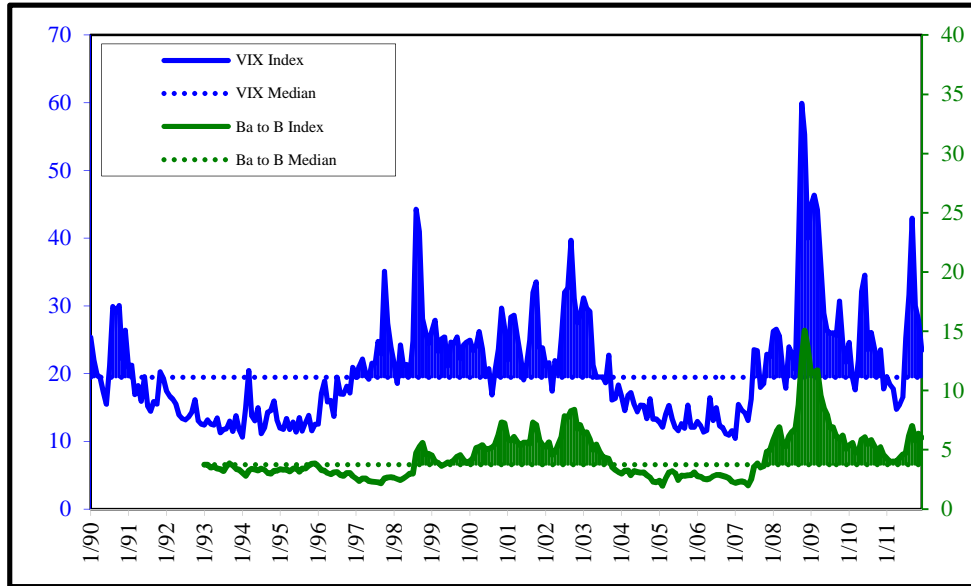
<sup>1</sup> All data courtesy of Bloomberg Professional Service.

<sup>2</sup> Source: Bloomberg and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E for the S&P 500 Index is based on 10-year trailing real earnings. Small Cap is represented by the S&P 600 Small Cap Index, and Emerging is represented by the MSCI Emerging Markets Index. Due to limited history, only the current 10-year P/E is shown for Small Cap and Emerging.

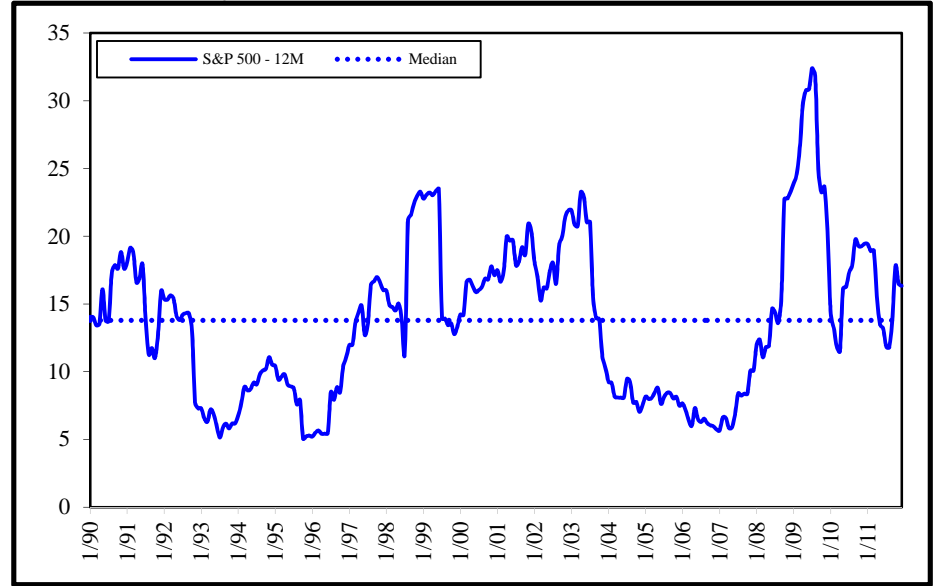
<sup>3</sup> US REITs is represented by the MSCI US REITs Index and Global REITs is represented by the MSCI World Real Estate Index.

**Risk Metrics <sup>1</sup>**  
As of December 31, 2011

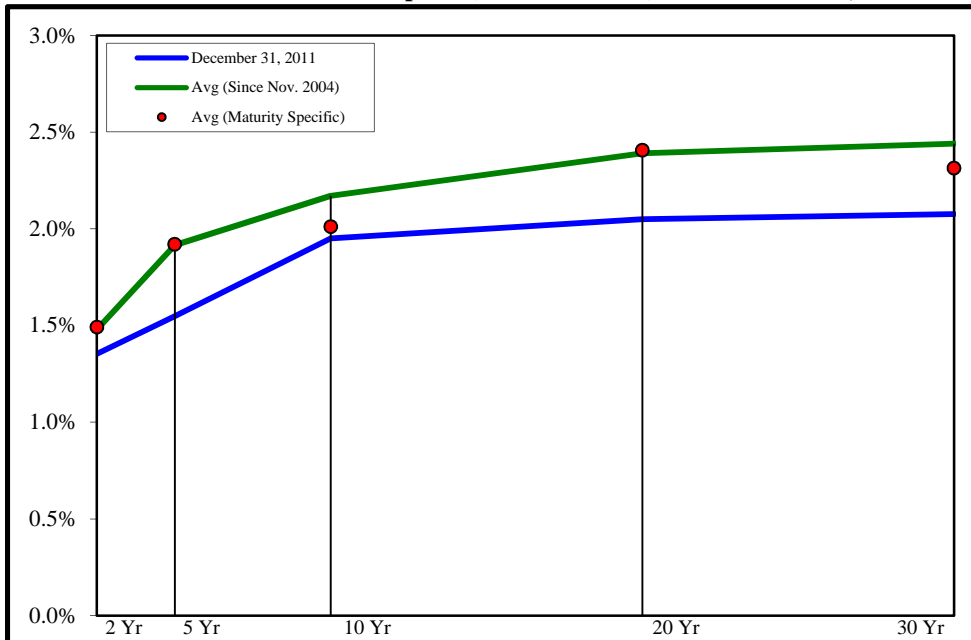
**Fear Metrics as of December 31, 2011**



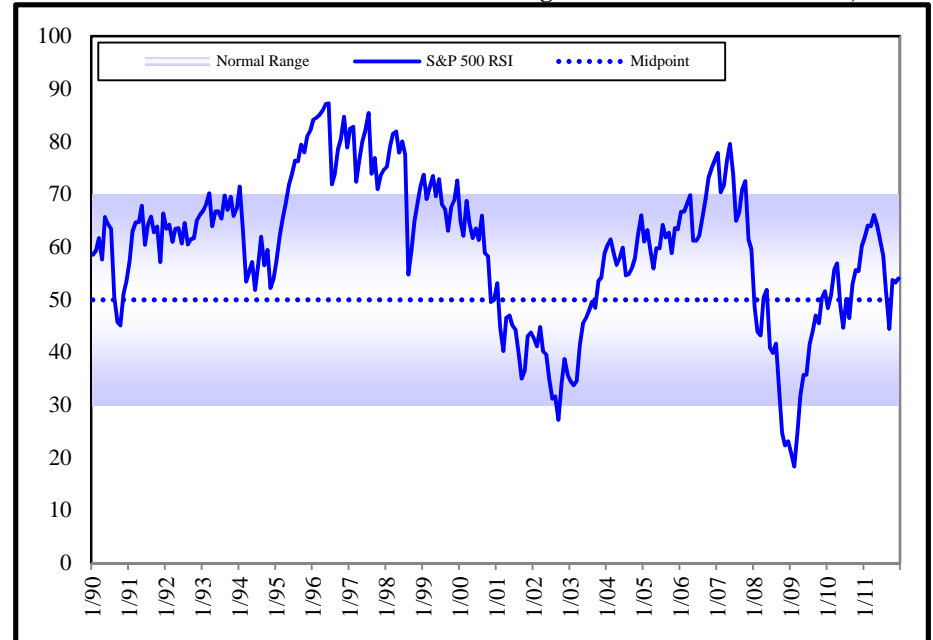
**Historical Volatility - S&P 500 Index as of December 31, 2011**



**Breakeven Inflation - Common Inception (November 2004)<sup>2</sup> vs. December 31, 2011**



**Momentum Indicator - S&P 500 Relative Strength Index as of December 31, 2011**



<sup>1</sup> All data courtesy of Bloomberg Professional Service.

<sup>2</sup> Common inception of November 2004 is based on historical data availability. Specific inception dates are as follows: 2- and 20-year (2004), 5-year (2002), 10- and 30-year (1998).

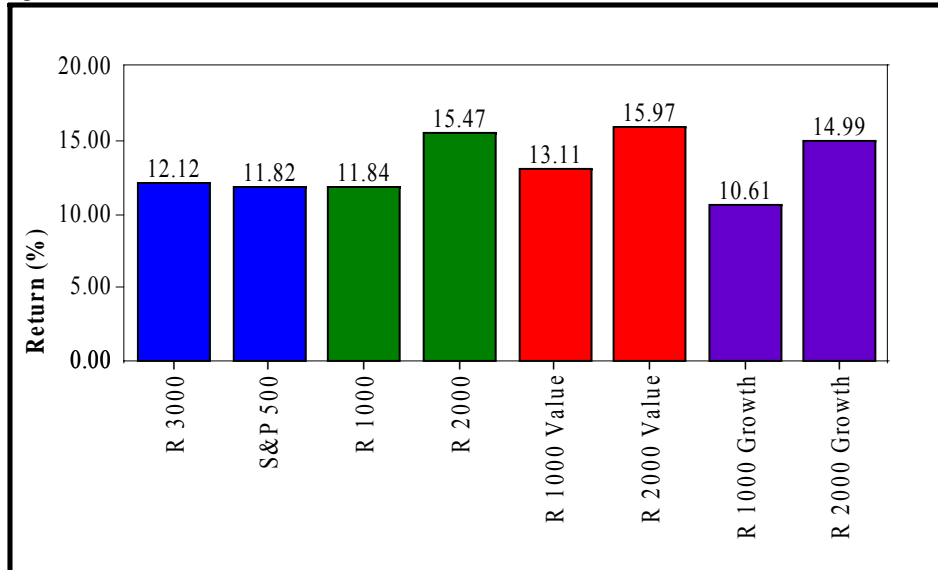
**Annual Asset Class Performance  
As of December 31, 2011**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Best	33.36%	28.58%	66.42%	31.84%	12.35%	25.91%	62.14%	33.16%	34.54%	35.97%	39.78%	8.44%	79.02%	28.60%	22.49%
	22.36%	20.34%	27.31%	31.04%	8.44%	16.56%	56.28%	31.27%	26.65%	32.59%	16.23%	5.24%	58.21%	26.86%	15.99%
	19.66%	16.42%	24.69%	16.16%	7.89%	14.81%	47.25%	25.95%	21.39%	26.86%	15.97%	2.06%	47.32%	22.40%	13.56%
	17.65%	11.77%	24.35%	14.28%	7.28%	10.25%	39.17%	20.70%	21.36%	19.67%	11.63%	-2.35%	32.46%	19.20%	9.24%
	15.11%	8.69%	21.26%	13.15%	6.61%	5.54%	36.18%	18.33%	14.02%	18.37%	11.63%	-10.01%	28.60%	16.84%	7.84%
	14.52%	5.23%	21.04%	12.40%	5.64%	3.58%	28.97%	13.06%	13.82%	16.32%	9.91%	-20.47%	27.18%	16.36%	4.98%
	12.76%	3.94%	20.19%	11.63%	5.28%	3.12%	28.68%	11.13%	6.75%	15.79%	6.97%	-26.16%	26.46%	15.12%	2.11%
	9.65%	3.75%	13.17%	6.18%	4.42%	1.78%	23.93%	10.88%	5.33%	11.85%	6.60%	-33.79%	18.91%	15.06%	0.10%
	5.33%	1.87%	4.85%	-3.02%	2.49%	-1.41%	11.93%	9.15%	4.91%	9.85%	5.49%	-35.65%	11.41%	10.16%	-4.18%
	2.05%	-2.55%	2.40%	-5.86%	-2.37%	-6.00%	9.28%	8.56%	4.55%	4.85%	5.00%	-37.00%	9.72%	8.21%	-5.46%
	-3.39%	-17.01%	2.39%	-7.22%	-11.89%	-7.44%	8.39%	8.46%	3.07%	4.33%	1.87%	-39.20%	5.93%	6.54%	-11.73%
	-11.60%	-25.33%	-0.82%	-9.10%	-12.11%	-15.66%	5.87%	6.79%	2.84%	2.71%	1.79%	-43.06%	1.92%	6.31%	-13.32%
	N/A	-27.03%	-2.58%	-13.96%	-19.51%	-20.48%	4.10%	4.34%	2.74%	2.07%	-1.57%	-46.78%	0.21%	4.77%	-15.66%
Worst	N/A	N/A	-7.65%	-30.61%	-21.21%	-22.10%	1.15%	1.33%	2.43%	0.41%	-17.55%	-53.18%	-29.76%	0.13%	-18.17%

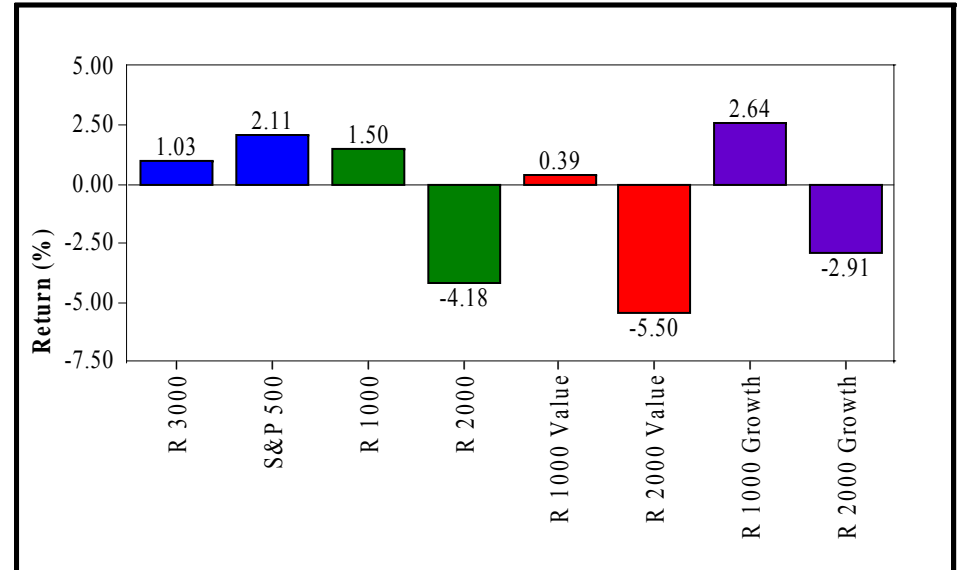
<i>S&amp;P 500 Index (Cap Wtd)</i>	<i>R 2000 - US Small Cap</i>	<i>MSCI EAFE (Gross) - Int'l Dev.</i>	<i>MSCI EAFE Small Cap Index</i>	<i>MSCI Emg Mkts Index (Gross)</i>	<i>BC Agg Bond - FI</i>	<i>BC US Corp: Hi Yield - FI</i>	<i>BC US Trsy: US TIPS - FI</i>	<i>BC US Gov't/Credit: Lng Trm Bond - FI</i>	<i>NCREIF ODCE Index (Gross) (AWA)</i>	<i>Wilshire US REITs - REITs</i>	<i>HFN FOF Multi-Strat (Net) - ARS</i>	<i>DJ-UBS Cmty (TR) - Commodities</i>	<i>BofA ML 3 Mo T-Bill - Cash Equiv</i>
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**Domestic Equity Market Performance and Risk  
As of December 31, 2011**

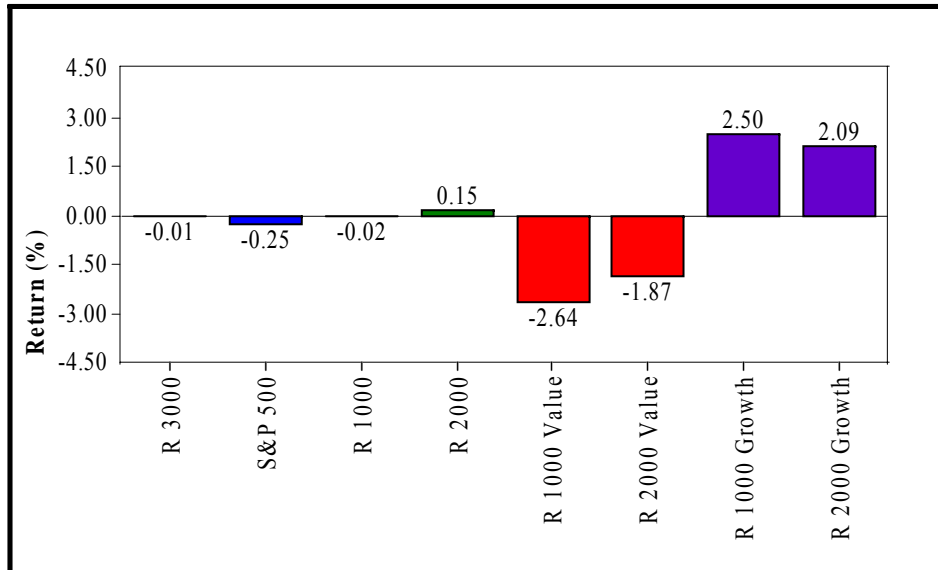
**QTD**



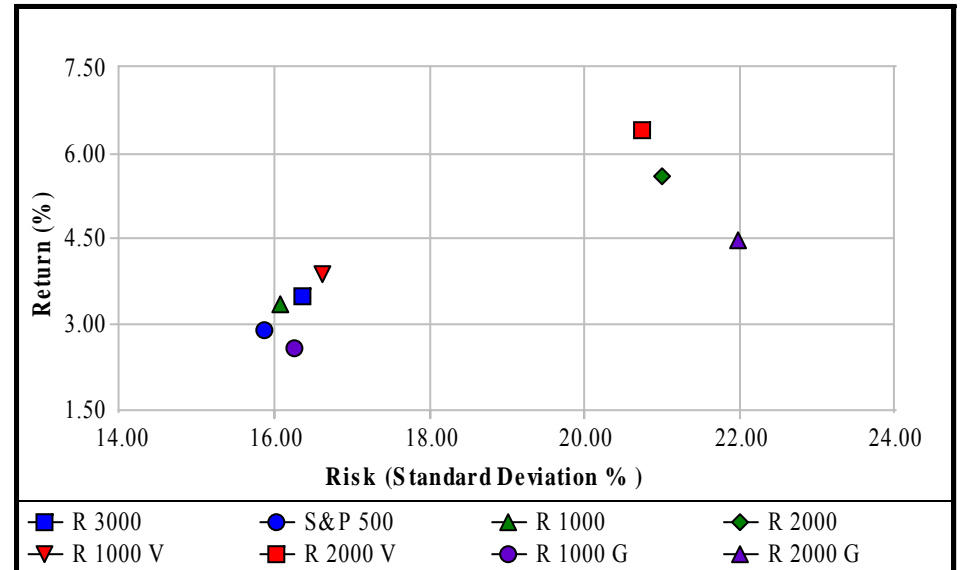
**1 Year**



**5 Years**



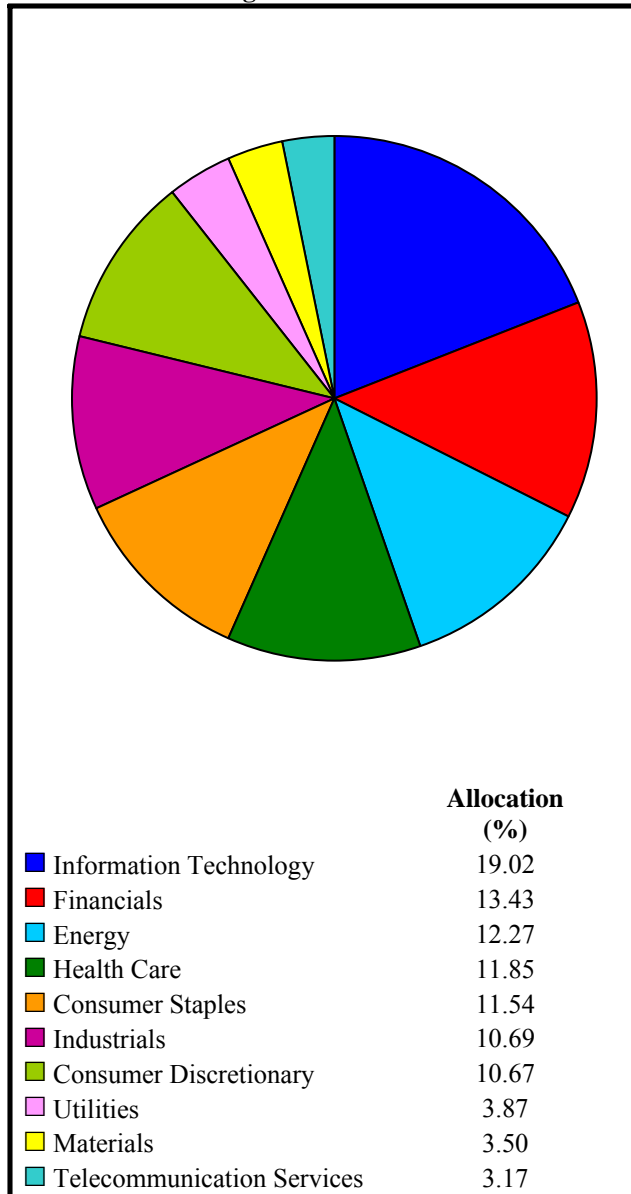
**Risk and Return - 10 Years**



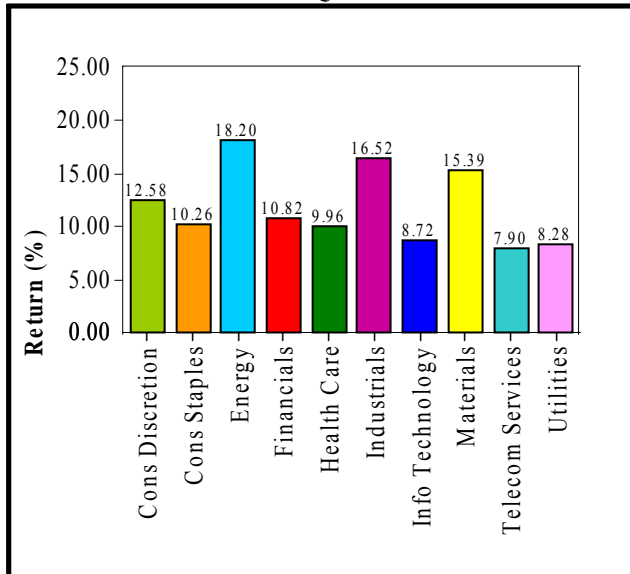
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

## Domestic Equity Sector Weights and Returns As of December 31, 2011

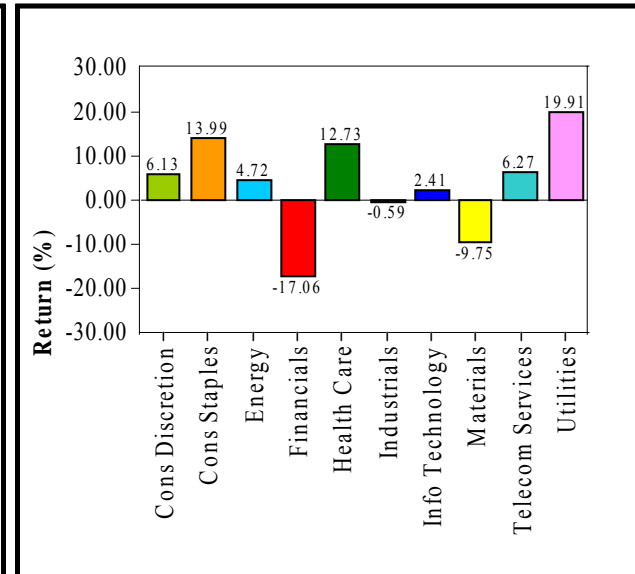
**S&P 500 Sector Weights**



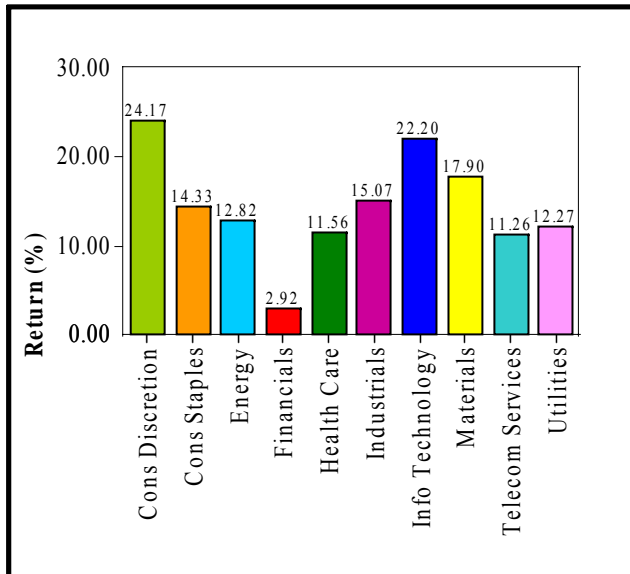
**S&P 500 Sector Returns - QTD**



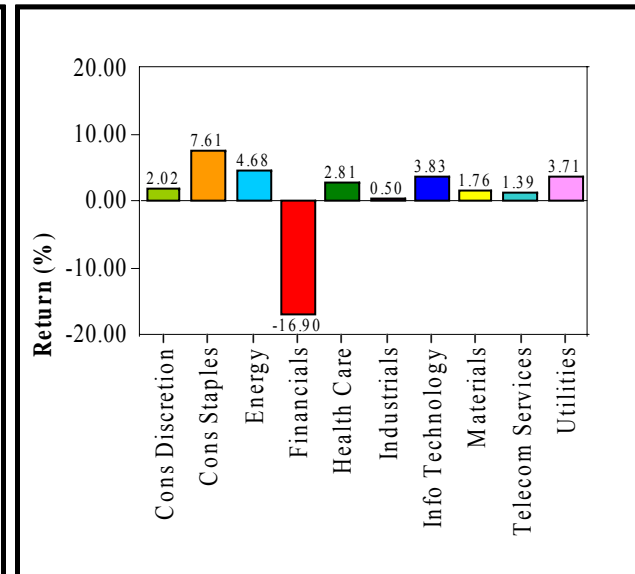
**S&P 500 Sector Returns - 1 Year**



**S&P 500 Sector Returns - 3 Years**



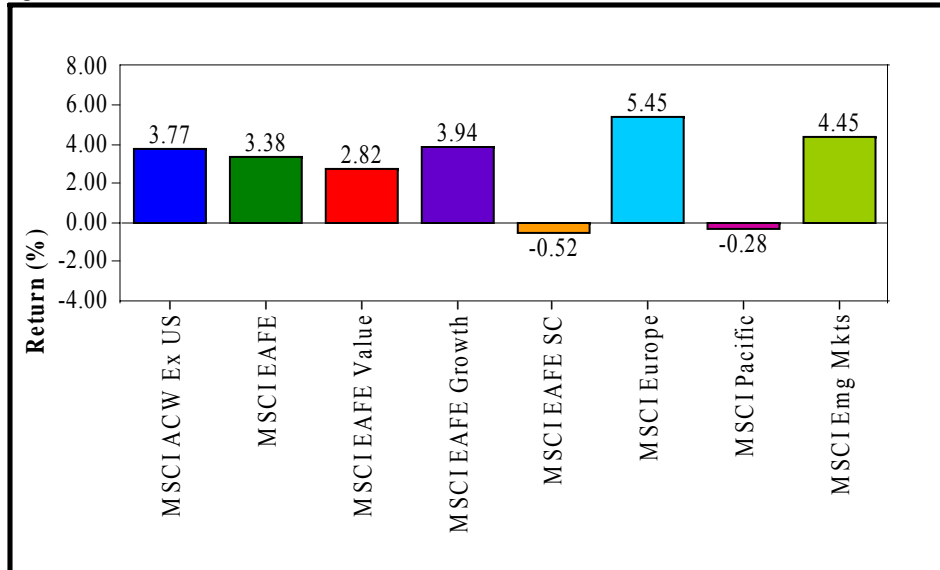
**S&P 500 Sector Returns - 5 Years**



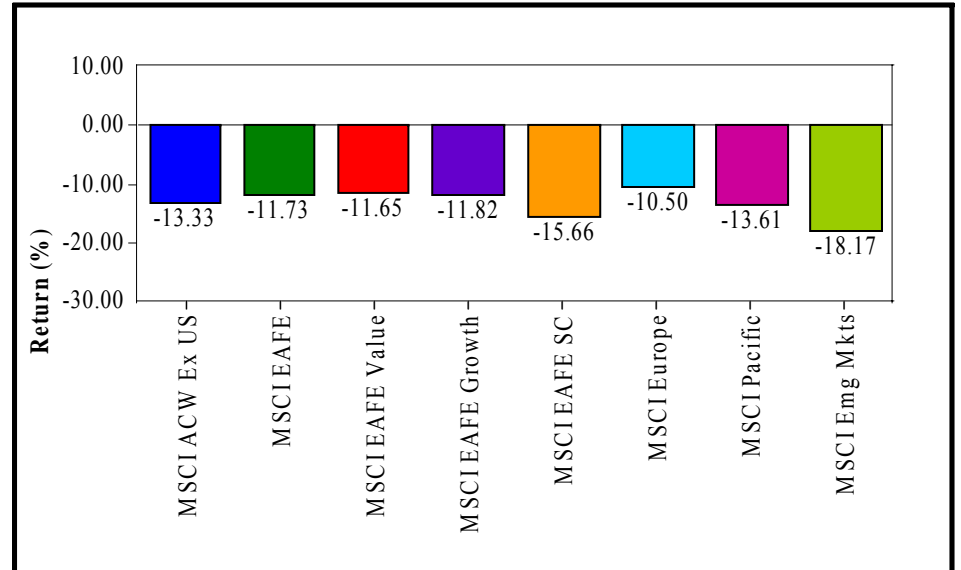
Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Returns provided by MPI Stylus, allocations provided by Standard & Poor's.

**International Equity Market Performance and Risk  
As of December 31, 2011**

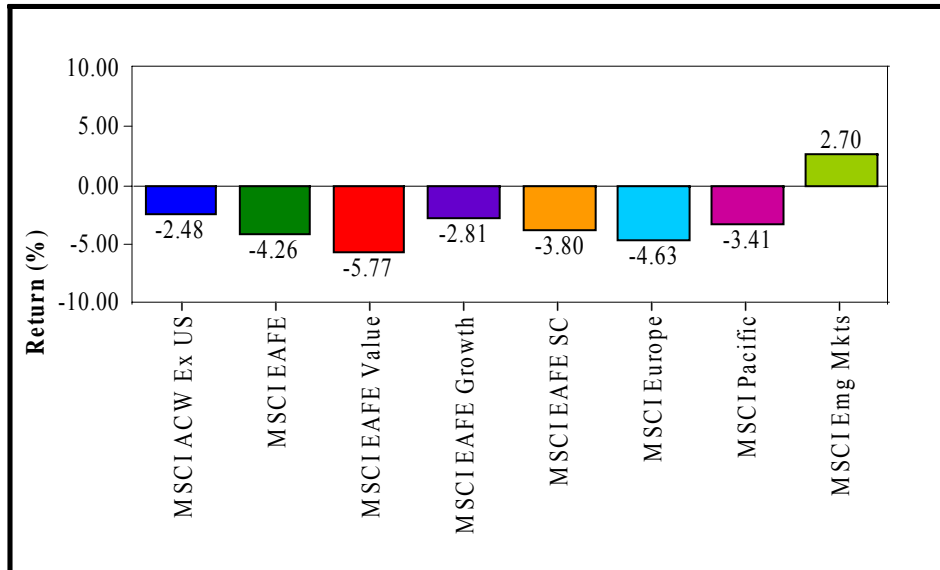
**QTD**



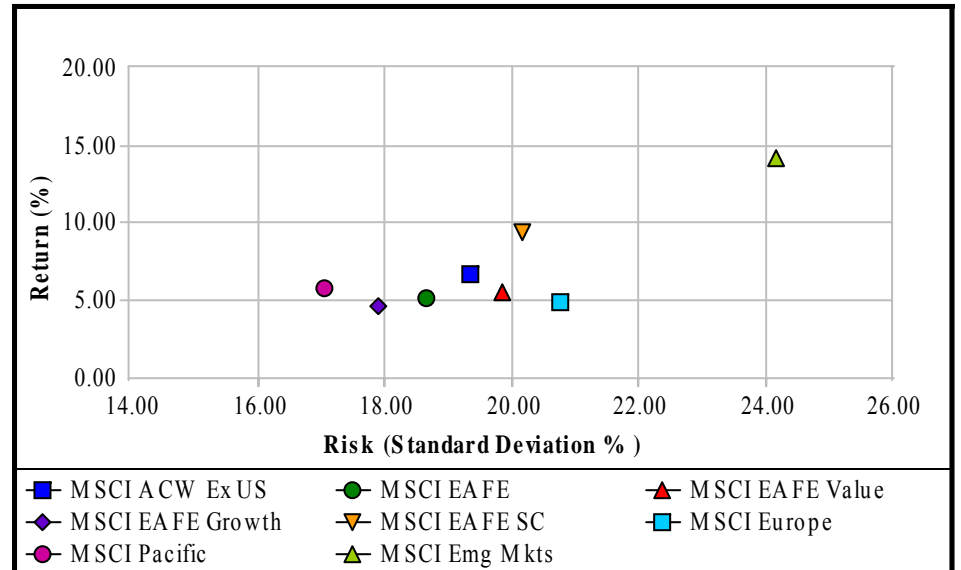
**1 Year**



**5 Years**



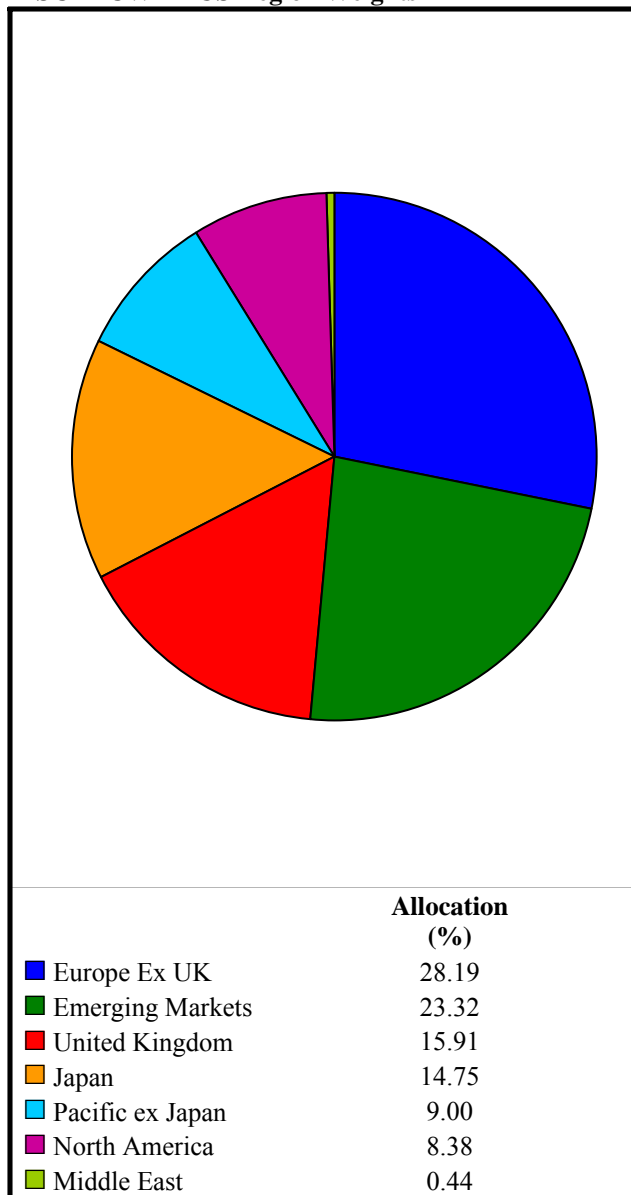
**Risk and Return - 10 Years**



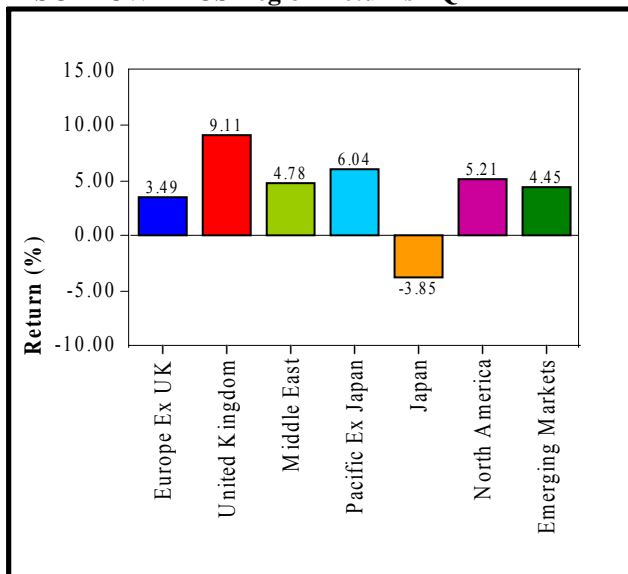
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All returns are shown gross of foreign taxes on dividends.

**International Equity Region Weights and Returns  
As of December 31, 2011**

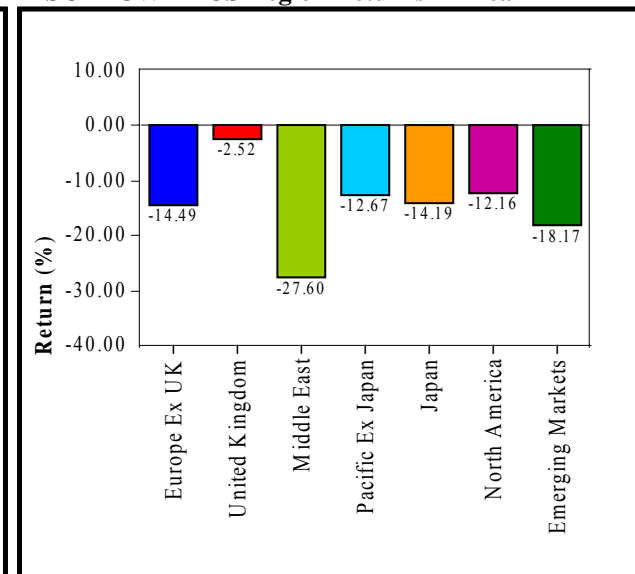
**MSCI ACW Ex US Region Weights**



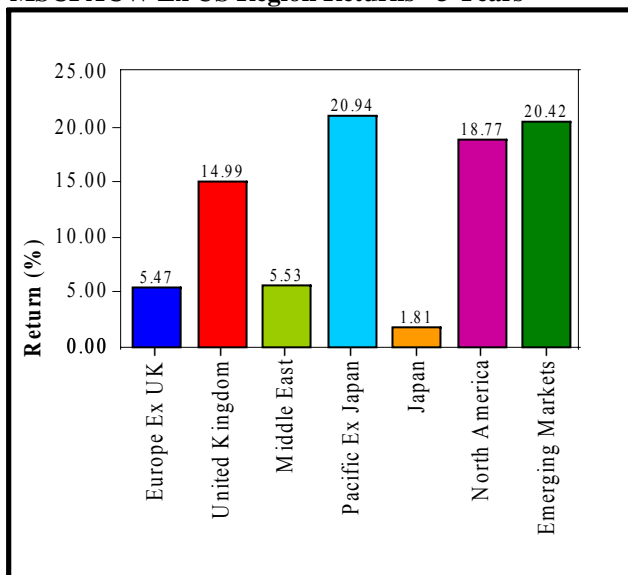
**MSCI ACW Ex US Region Returns - QTD**



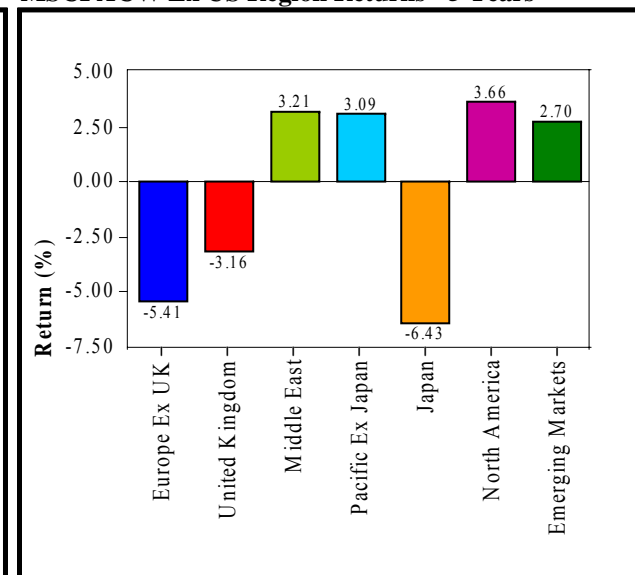
**MSCI ACW Ex US Region Returns - 1 Year**



**MSCI ACW Ex US Region Returns - 3 Years**



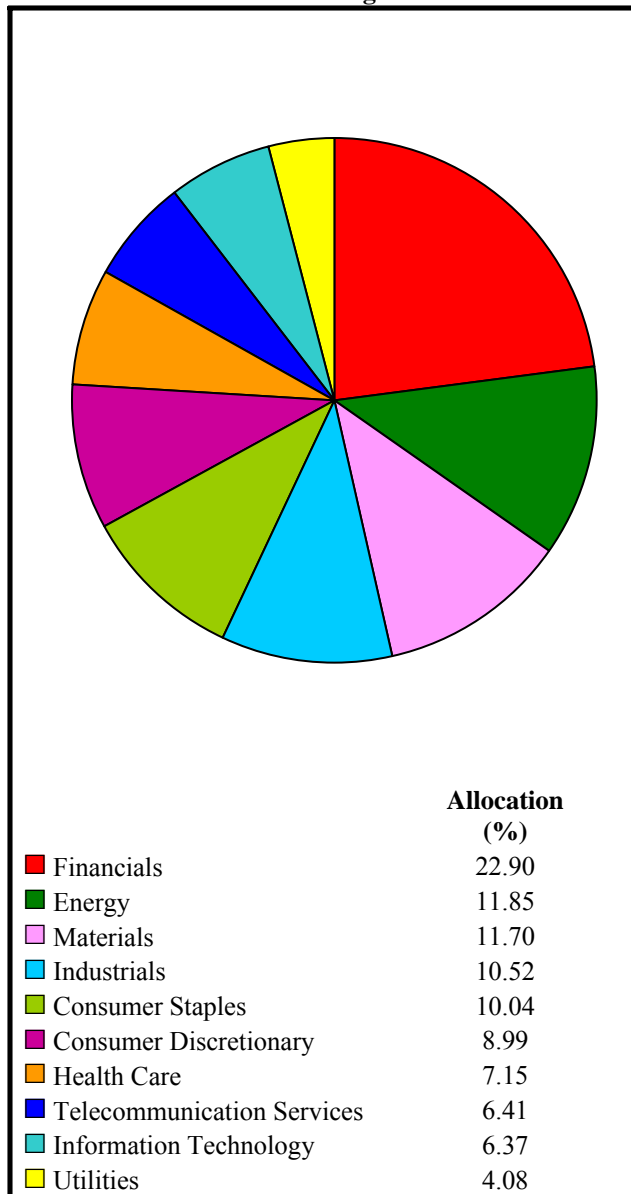
**MSCI ACW Ex US Region Returns - 5 Years**



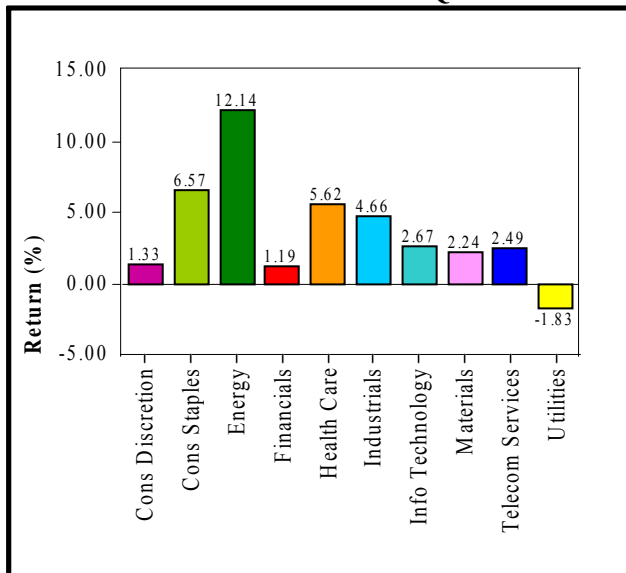
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## International Equity Sector Weights and Returns As of December 31, 2011

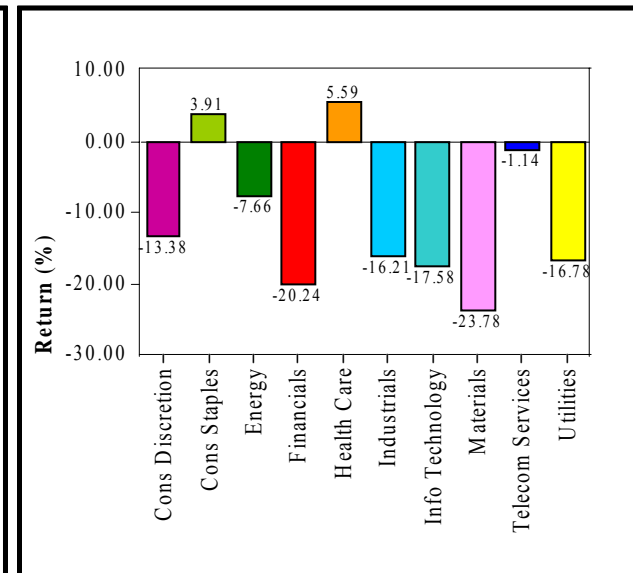
**MSCI ACW Ex US Sector Weights**



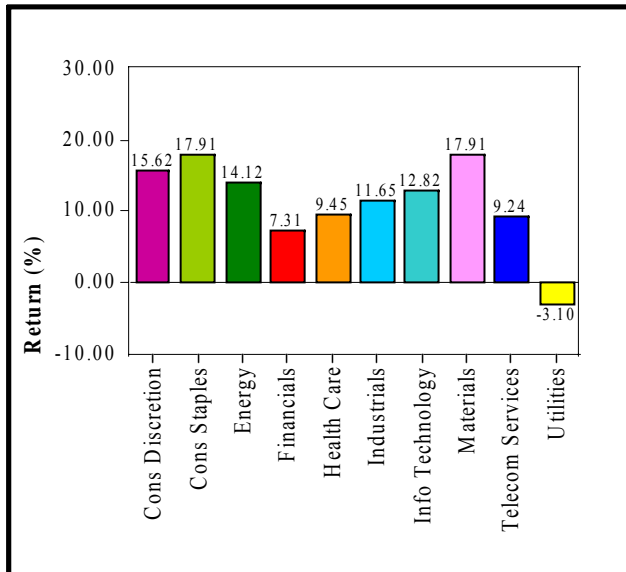
**MSCI ACW Ex US Sector Returns - QTD**



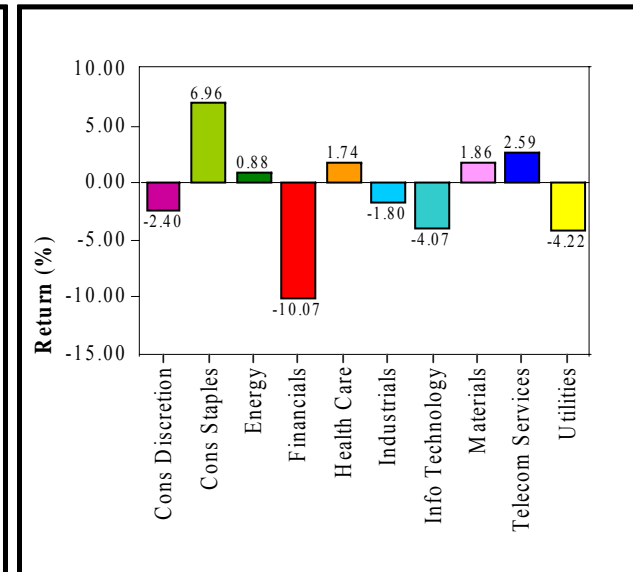
**MSCI ACW Ex US Sector Returns - 1 Year**



**MSCI ACW Ex US Sector Returns - 3 Years**



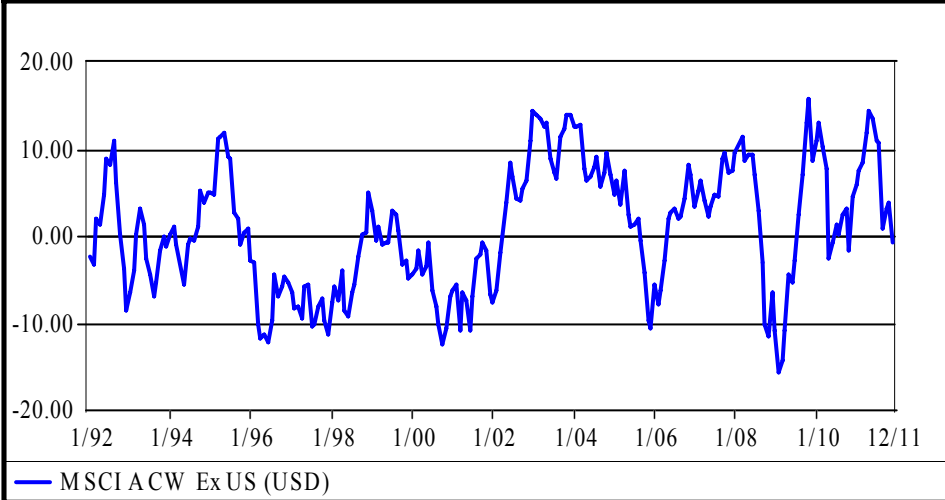
**MSCI ACW Ex US Sector Returns - 5 Years**



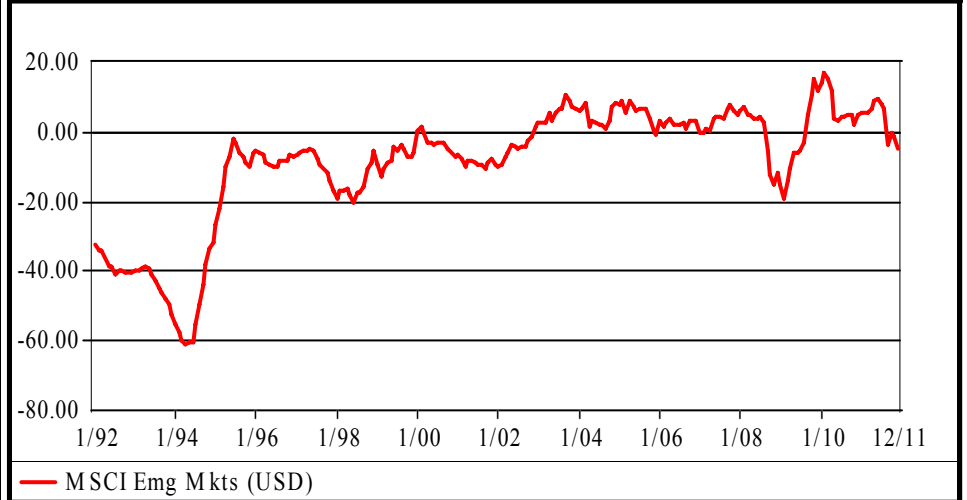
Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Returns and allocations provided by MSCI Barra. All returns are shown gross of foreign taxes on dividends.

**Effect of Currency on International Equity Performance  
As of December 31, 2011**

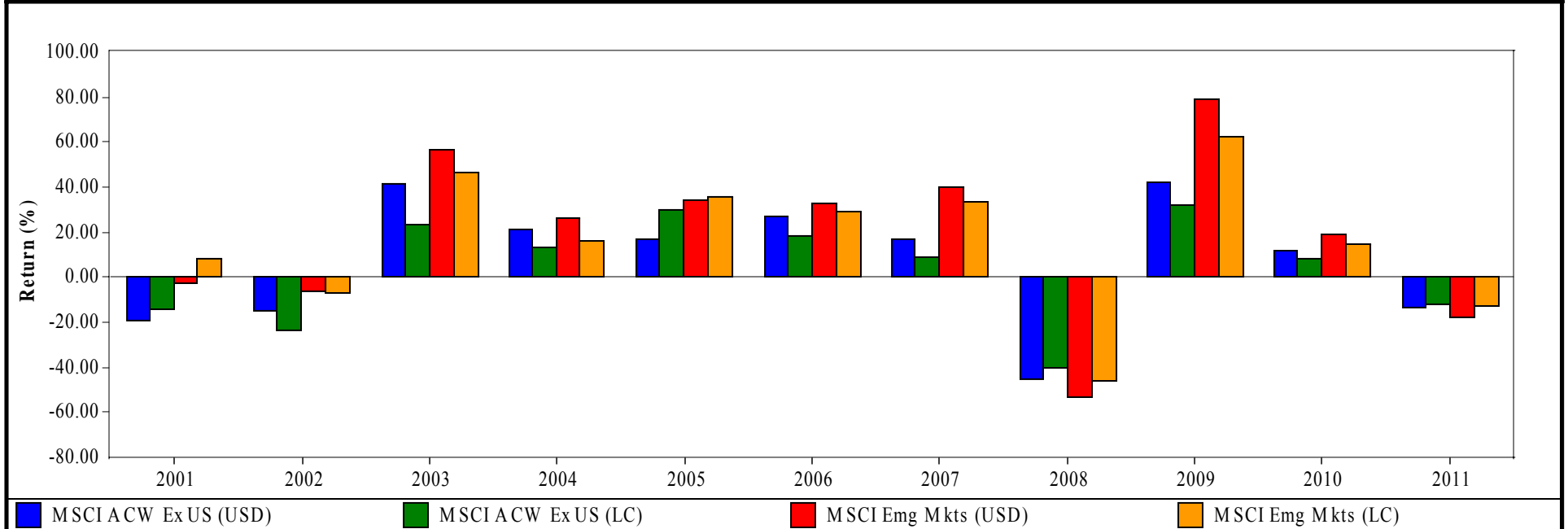
**Excess Return vs. Local Currency Index - Rolling 1-Year Periods**



**Excess Return vs. Local Currency Index - Rolling 1-Year Periods**



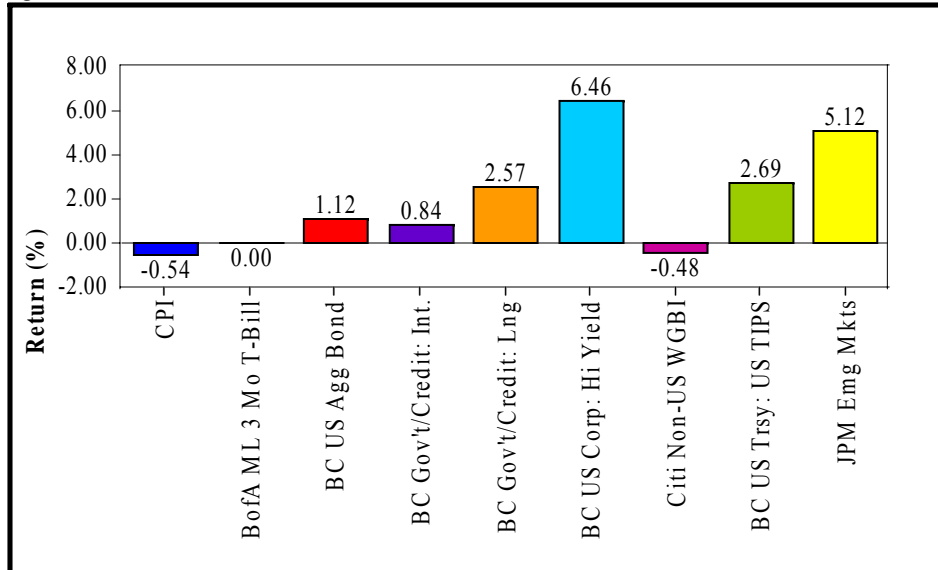
**Calendar Year Returns Comparison**



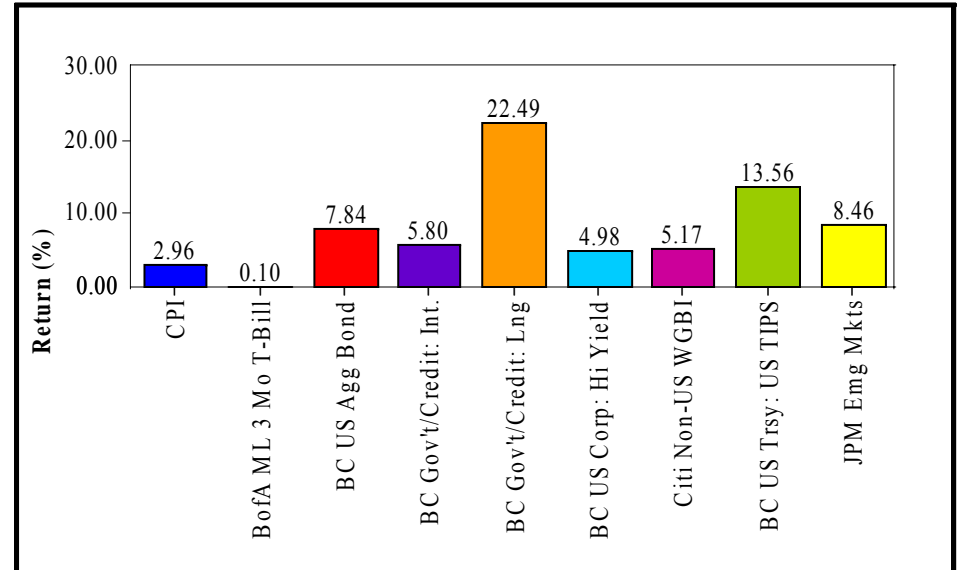
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All returns are shown gross of foreign taxes on dividends.

**Fixed Income Market Performance and Risk**  
As of December 31, 2011

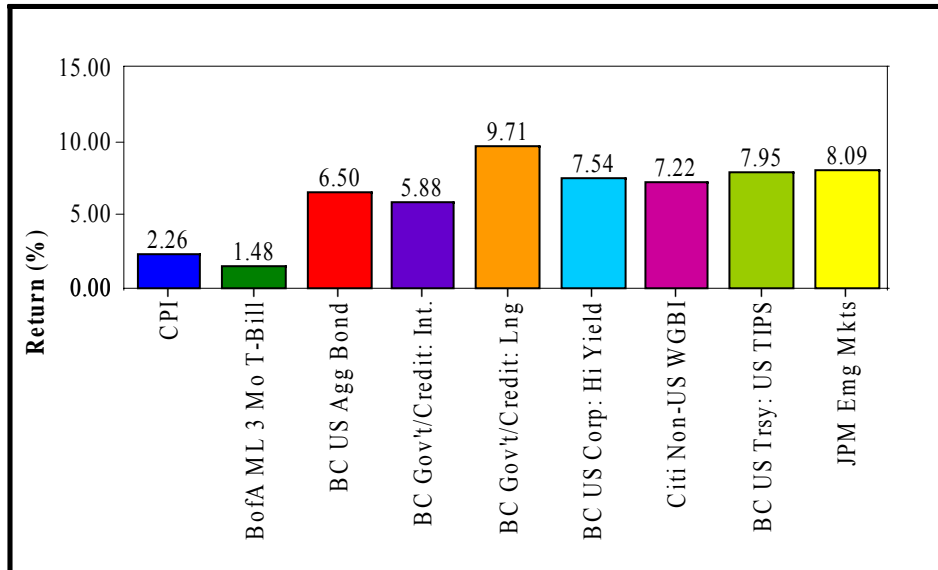
**QTD**



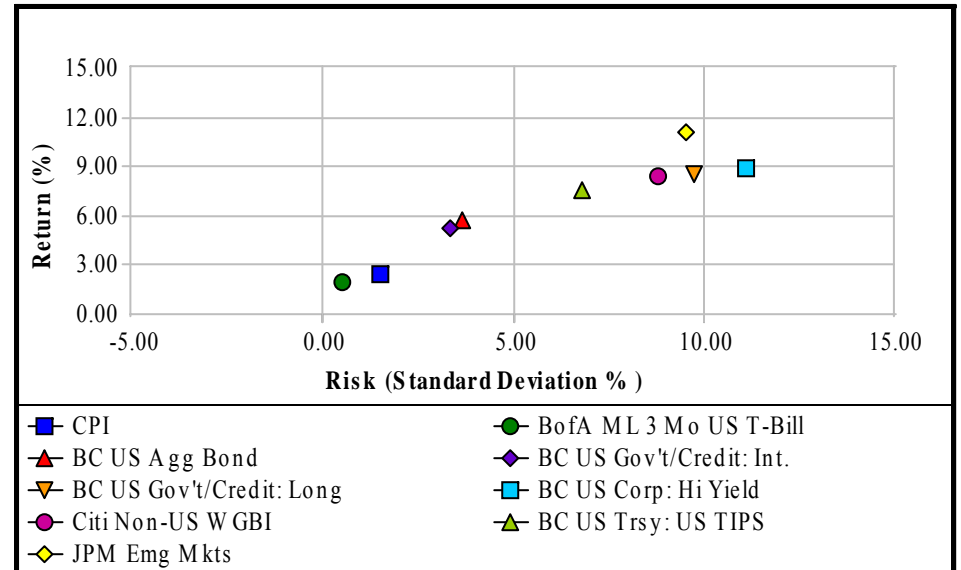
**1 Year**



**5 Years**



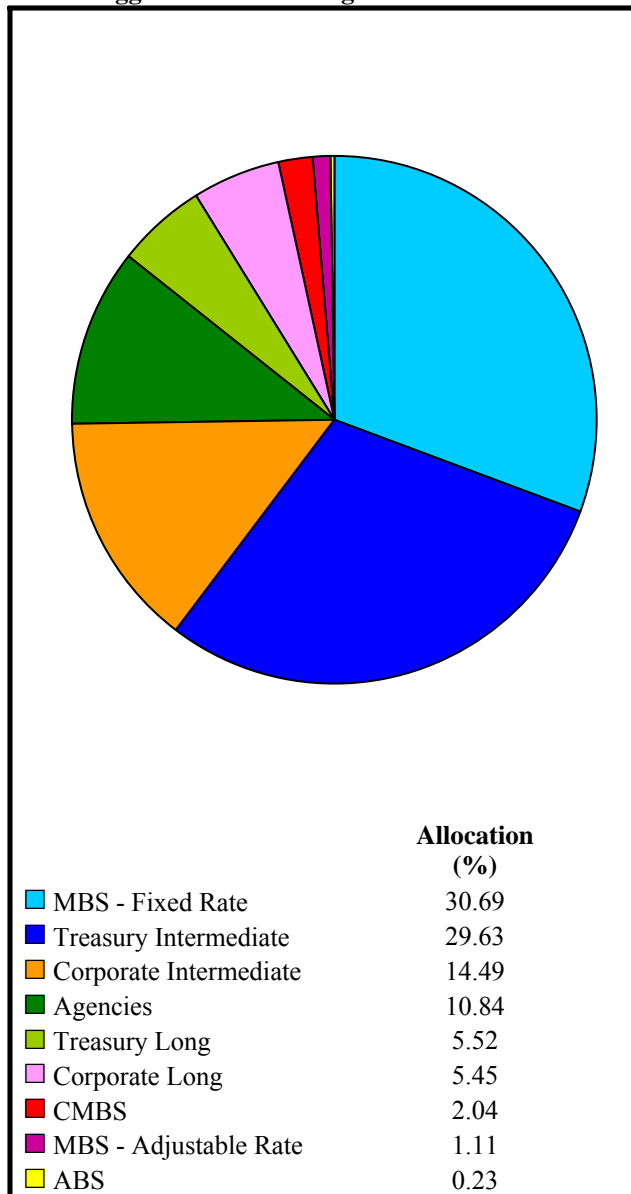
**Risk and Return - 10 Years**



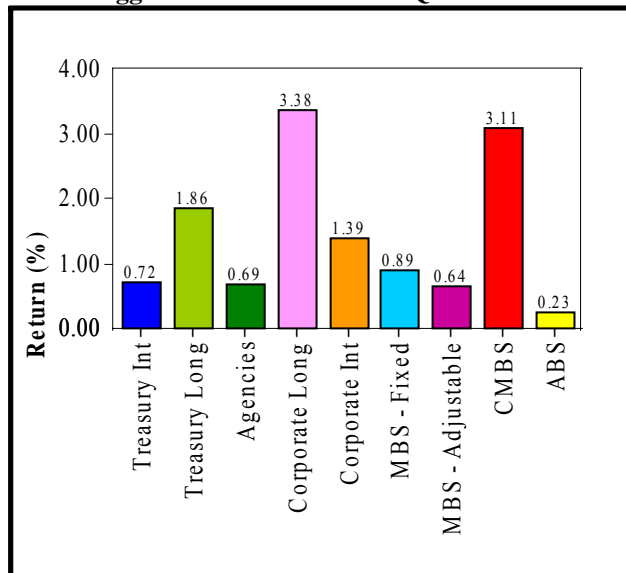
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

**Domestic Fixed Income Sector Weights and Returns  
As of December 31, 2011**

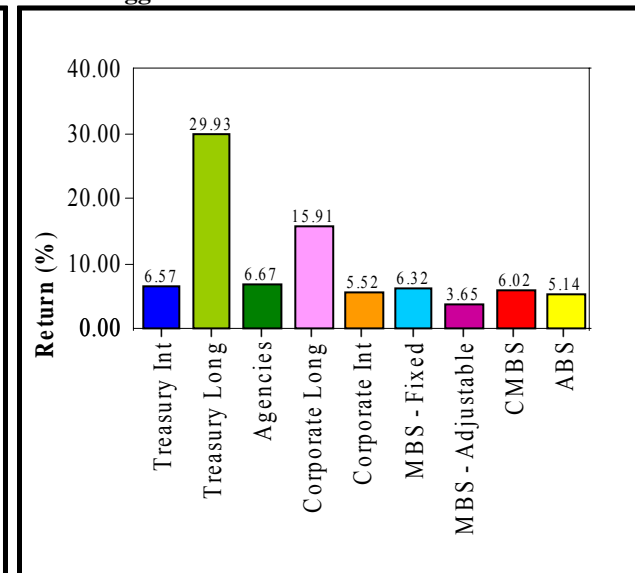
**BC US Agg Bond Sector Weights**



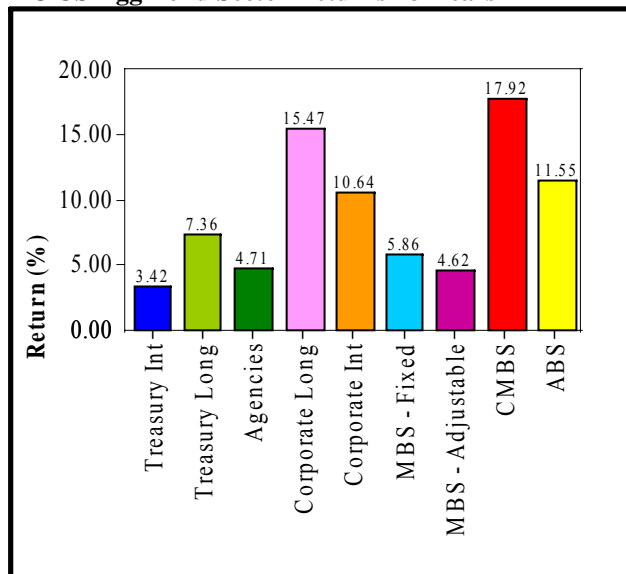
**BC US Agg Bond Sector Returns - QTD**



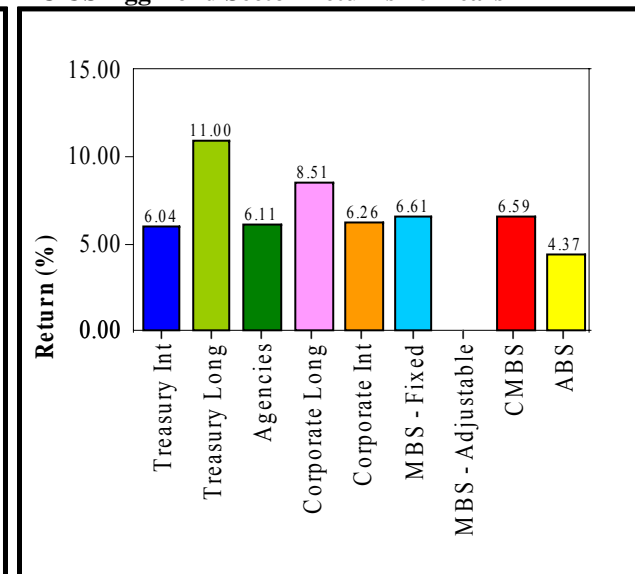
**BC US Agg Bond Sector Returns - 1 Year**



**BC US Agg Bond Sector Returns - 3 Years**



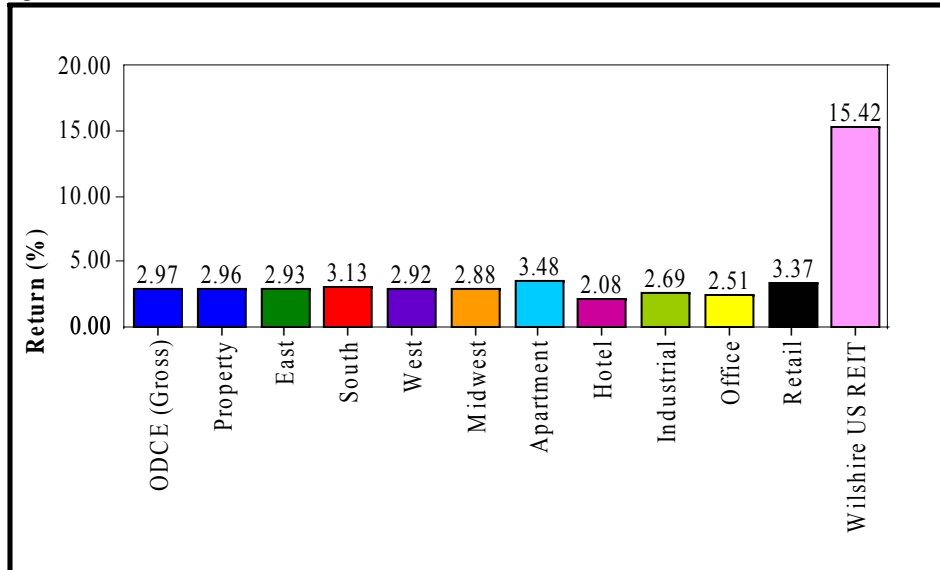
**BC US Agg Bond Sector Returns - 5 Years**



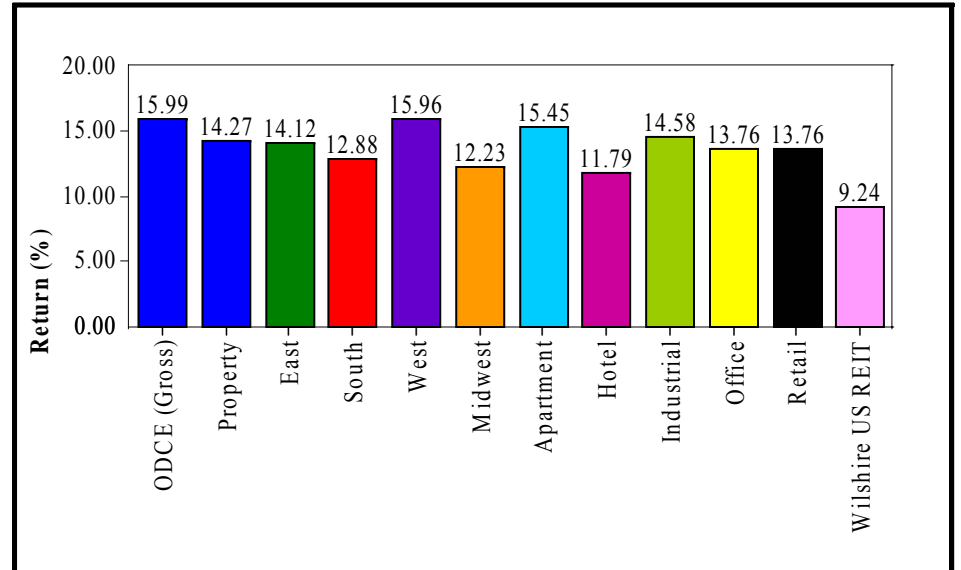
Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Returns and allocations provided by Barclays Capital Indices.

**Real Estate Market Performance and Risk  
As of December 31, 2011**

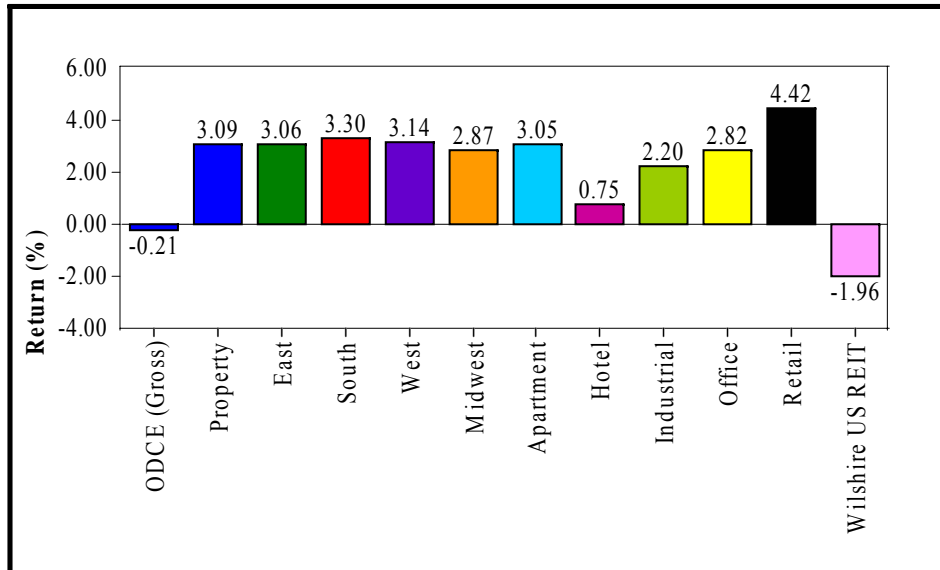
**QTD**



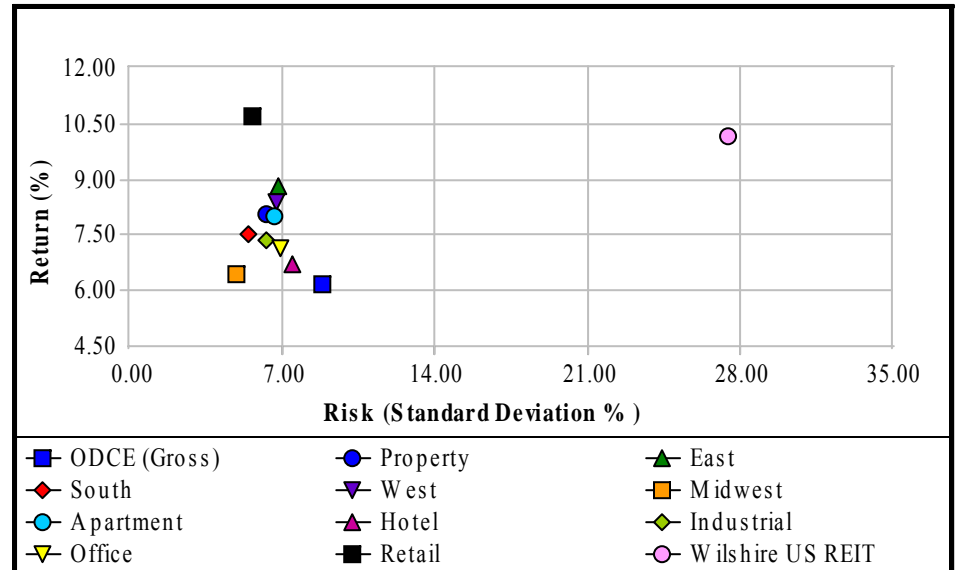
**1 Year**



**5 Years**



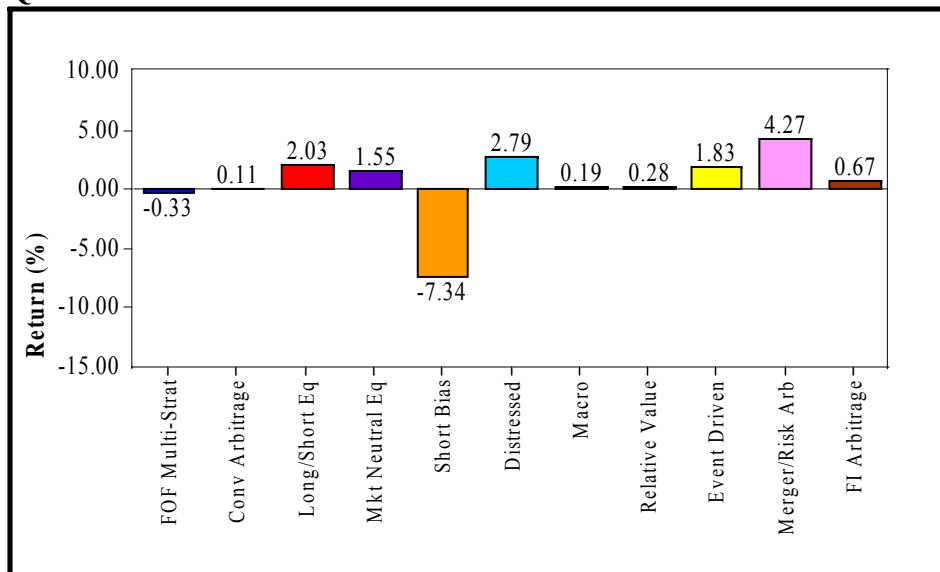
**Risk and Return - 10 Years**



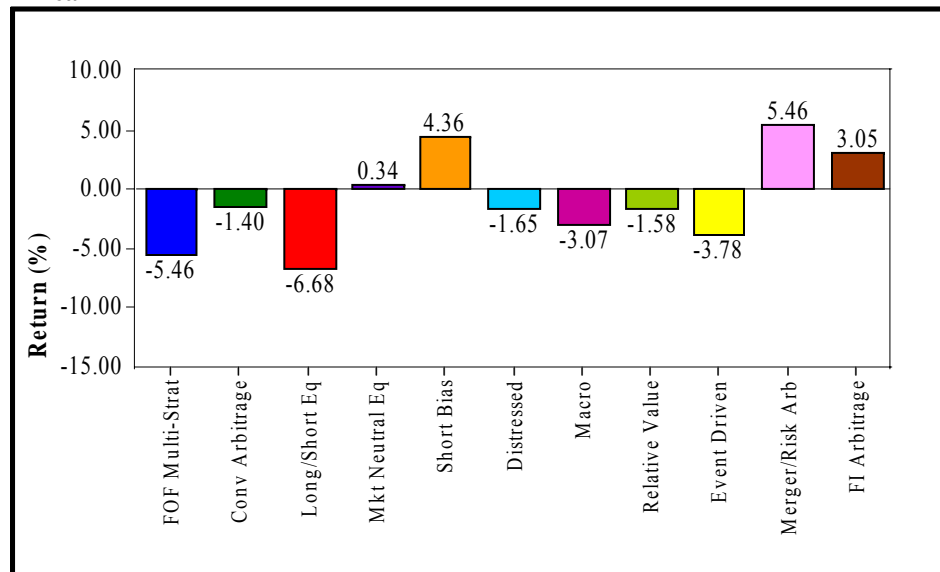
Performance is annualized for periods greater than one year. Calculation is based on quarterly periodicity.  
All data shown represent NCREIF indices unless otherwise noted. Region and sector data represent the Property Index.

## Hedge Fund Market Performance and Risk As of December 31, 2011

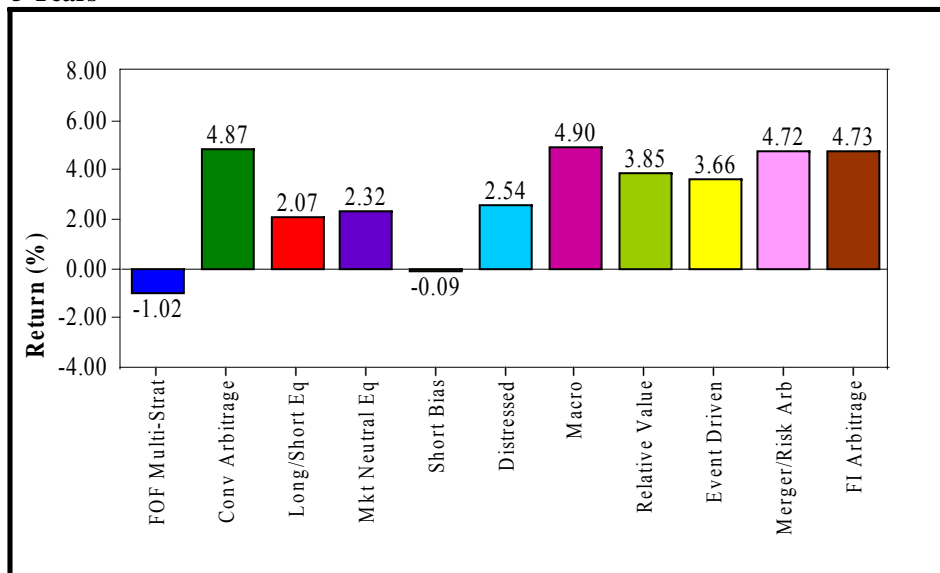
**QTD**



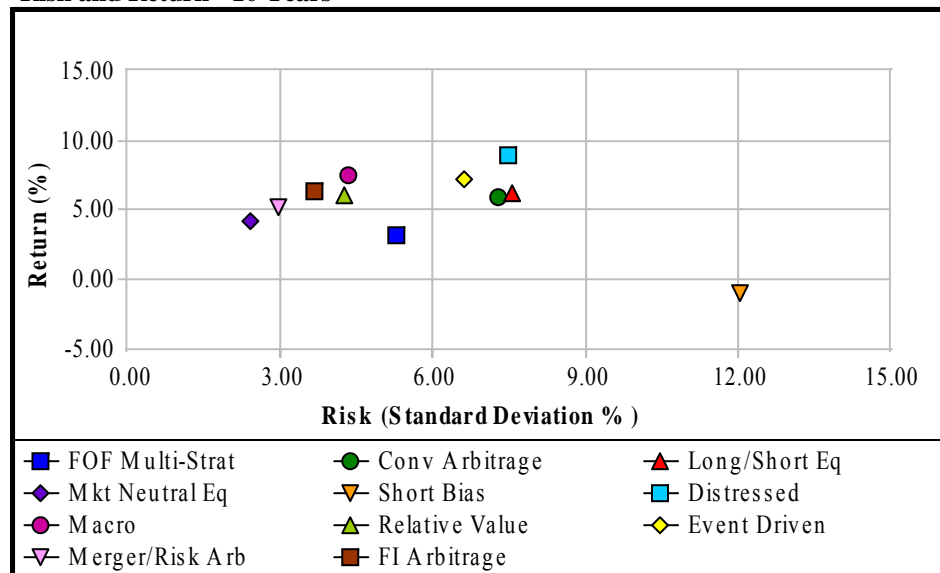
**1 Year**



**5 Years**



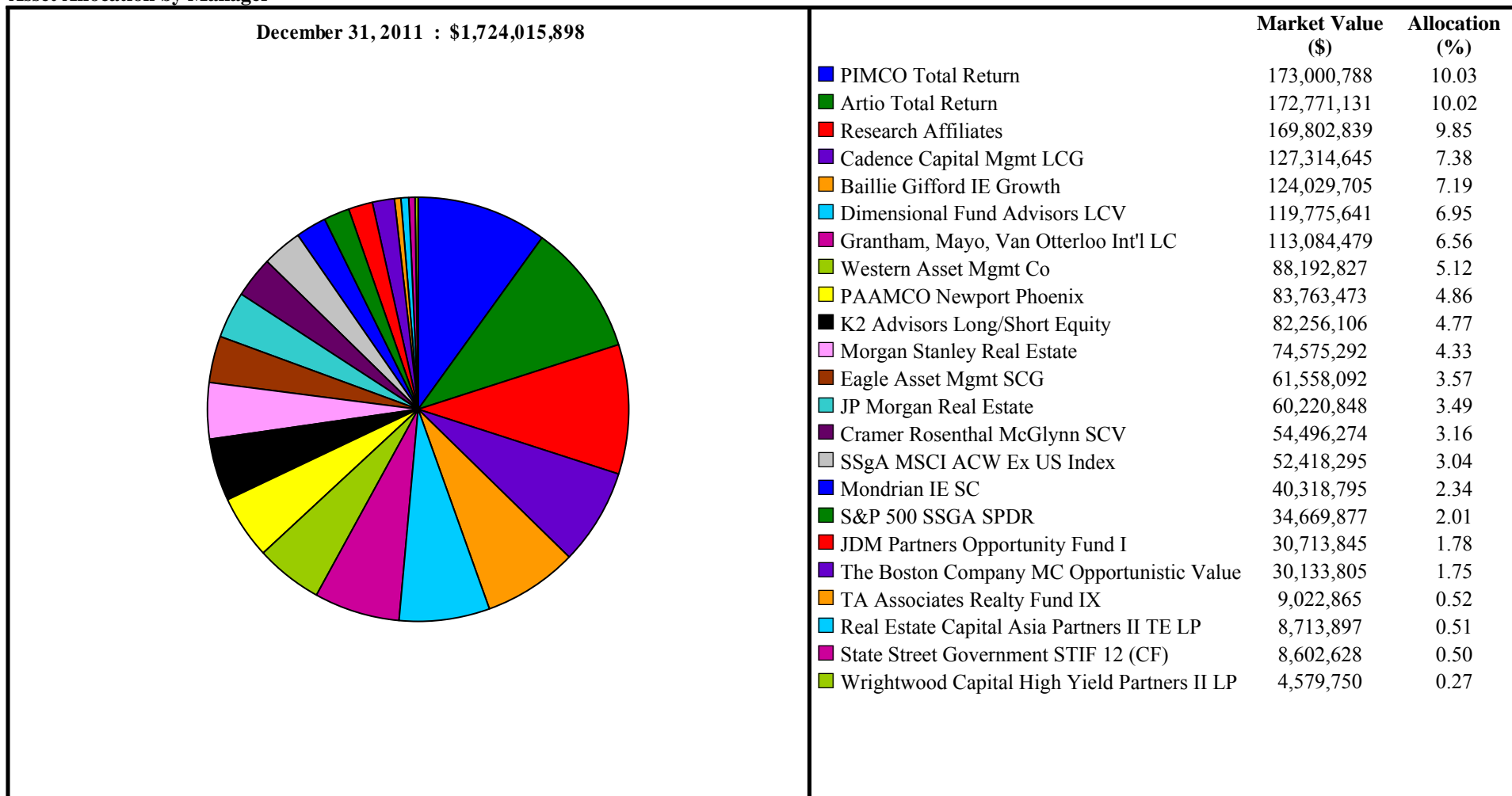
**Risk and Return - 10 Years**



Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All data shown represent HFN indices, net of fees. Values are preliminary and subject to change.

**City of Phoenix Employees' Retirement System**  
**Total Fund Composite**  
**Asset Allocation by Manager and Schedule of Investable Assets**  
**As of December 31, 2011**

**Asset Allocation by Manager**



**Schedule of Investable Assets**

<b>Periods</b>	<b>Beginning Market Value (\$)</b>	<b>Net Cash Flow (\$)</b>	<b>Gain/Loss (\$)</b>	<b>Ending Market Value (\$)</b>	<b>%Return</b>	<b>Unit Value</b>
<b>CYTD</b>	<b>1,743,182,754</b>	<b>-30,671,102</b>	<b>11,504,246</b>	<b>1,724,015,898</b>	<b>0.63</b>	<b>100.63</b>

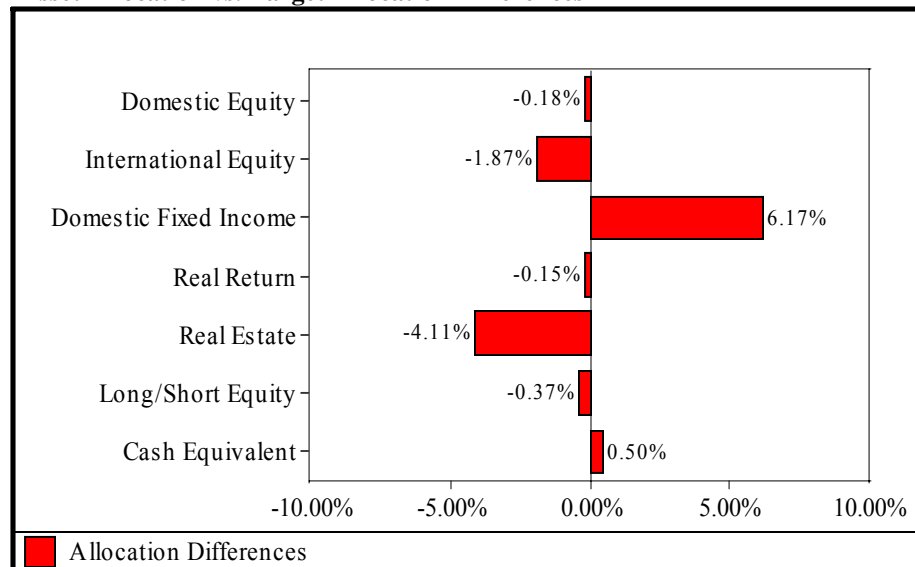
Performance shown is gross of fees. Allocation shown may not sum up to 100% exactly due to rounding.

**City of Phoenix Employees' Retirement System**  
**Total Fund Composite vs. All Pension Plans \$1B-\$5B (Custom Peer Group)**  
**Asset Allocation vs. Target and Plan Sponsor Peer Group**  
**As of December 31, 2011**

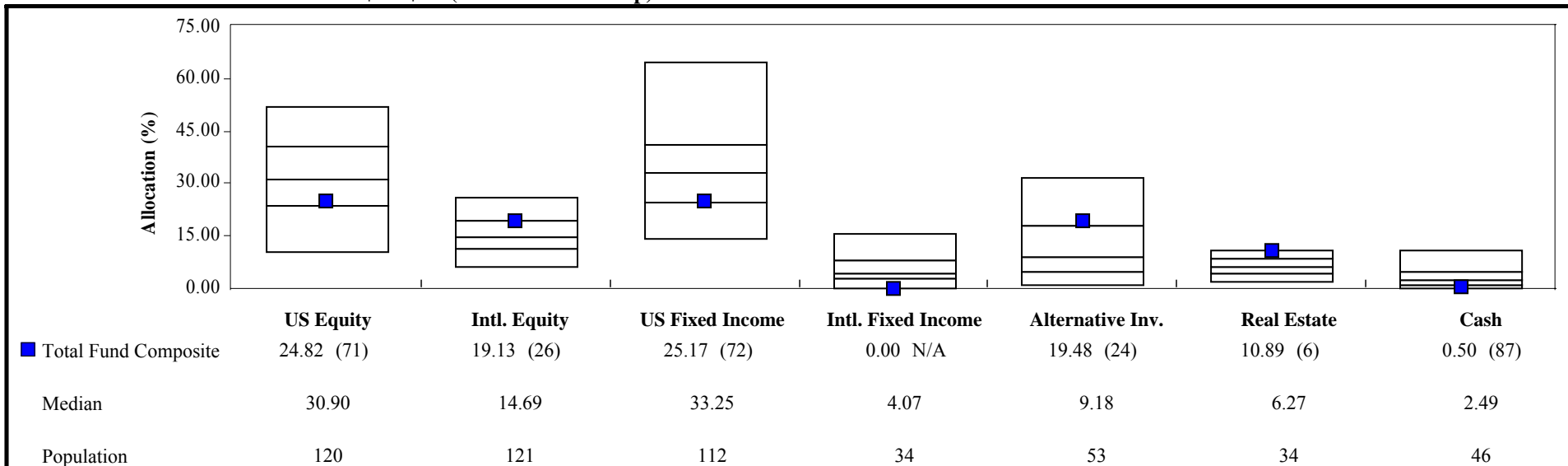
**Asset Allocation vs. Target Allocation**

	Market Value (\$)	Allocation (%)	Target (%)
Domestic Equity	427,948,334	24.82	25.00
International Equity	329,851,275	19.13	21.00
Domestic Fixed Income	433,964,745	25.17	19.00
Real Return	169,802,839	9.85	10.00
Real Estate	187,826,498	10.89	15.00
Long/Short Equity	166,019,579	9.63	10.00
Cash Equivalent	8,602,628	0.50	-
Total Fund	1,724,015,898	100.00	100.00

**Asset Allocation vs. Target Allocation Differences**



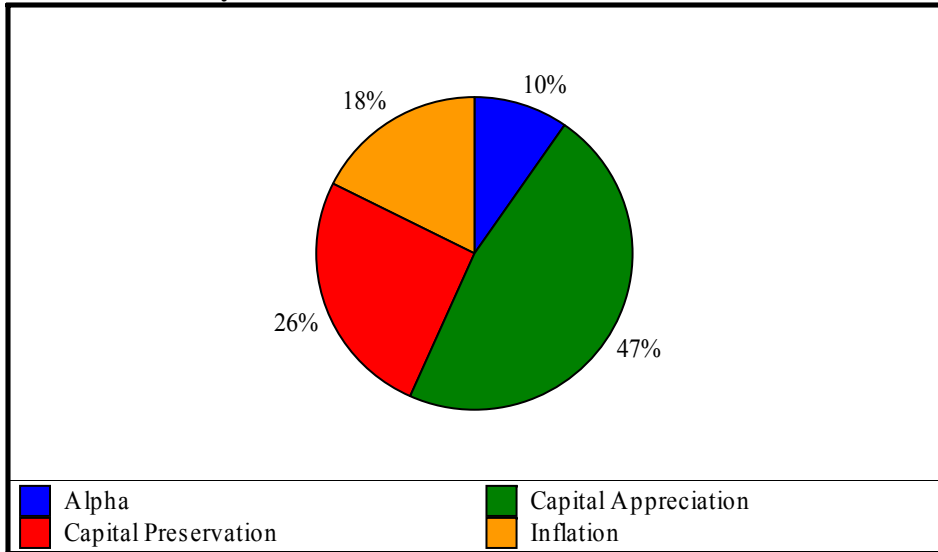
**Asset Allocation vs. All Pension Plans \$1B-\$5B (Custom Peer Group)**



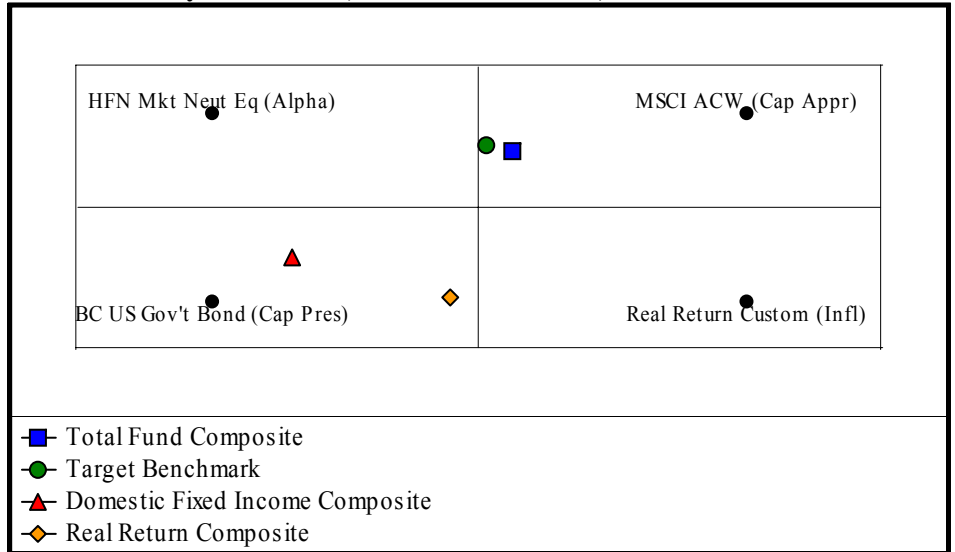
Parenteses contain percentile ranks. Allocation shown may not sum up to 100% exactly due to rounding.

**City of Phoenix Employees' Retirement System**  
**Total Fund Composite - Thematic and Liquidity Analysis**  
As of December 31, 2011

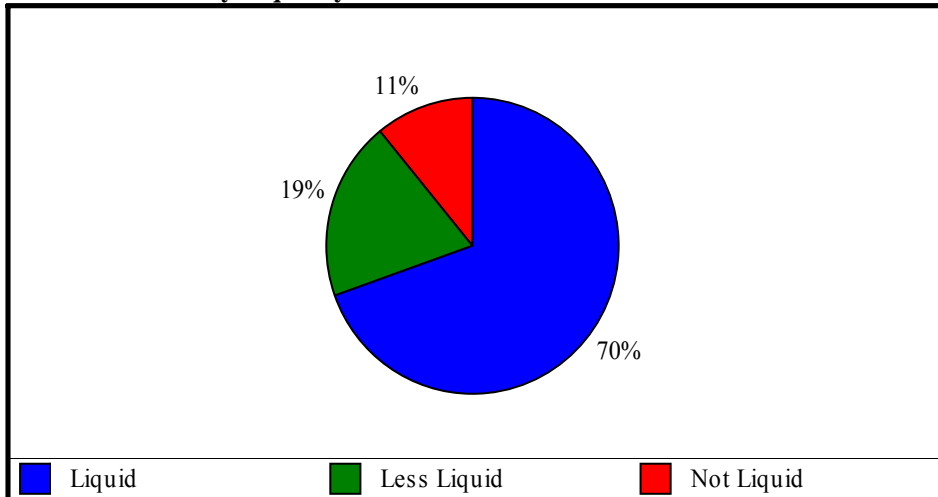
**Asset Allocation by Theme**



**Thematic Analysis - March 1, 2007 to December 31, 2011**



**Asset Allocation by Liquidity**



**RVK Liquidity Rating**

**73**

**Correlation Matrix - 10 Years**

	A	B	C	D
A	1.00			
B	0.52	1.00		
C	-0.18	-0.29	1.00	
D	0.59	0.77	0.00	1.00

- A = HFN Mkt Neut Eq Index (Alpha)
- B = MSCI ACW Index (Capital Appreciation)
- C = BC US Gov't Bond Index (Capital Preservation)
- D = Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic and custom index descriptions.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>4.76</b>	<b>-4.95</b>	<b>0.63</b>	<b>0.63</b>	<b>8.84</b>	<b>0.61</b>	<b>4.17</b>	<b>7.69</b>	<b>12/01/1987</b>
Target Allocation Benchmark			4.68	-3.38	1.68	1.68	8.84	0.51	4.18	8.60	
<i>Difference</i>			0.08	-1.57	-1.05	-1.05	0.00	0.10	-0.01	-0.91	
All Pension Plans \$1B-\$5B (Custom)			5.40	-3.44	1.91	1.91	11.98	2.43	5.69	9.04	
Percentile Rank			69	77	69	69	95	96	95	100	
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>4.76</b>	<b>-4.95</b>	<b>0.63</b>	<b>0.63</b>	<b>8.84</b>	<b>0.61</b>	<b>4.17</b>	<b>7.69</b>	<b>12/01/1987</b>
Actual Allocation Benchmark			4.32	-3.59	1.15	1.15	8.67	0.67	N/A	N/A	
<i>Difference</i>			0.44	-1.36	-0.52	-0.52	0.17	-0.06	N/A	N/A	
All Pension Plans \$1B-\$5B (Custom)			5.40	-3.44	1.91	1.91	11.98	2.43	5.69	9.04	
Percentile Rank			69	77	69	69	95	96	95	100	
<b>Domestic Equity Composite</b>	<b>427,948,334</b>	<b>24.82</b>	<b>11.35</b>	<b>-10.39</b>	<b>-3.46</b>	<b>-3.46</b>	<b>16.19</b>	<b>0.50</b>	<b>N/A</b>	<b>3.34</b>	<b>03/01/2005</b>
R 3000 Index			12.12	-5.01	1.03	1.03	14.88	-0.01	3.51	3.12	
<i>Difference</i>			-0.77	-5.38	-4.49	-4.49	1.31	0.51	N/A	0.22	
IM U.S. Equity (SA+CF)			12.30	-7.36	-0.54	-0.54	16.34	1.38	5.43	4.30	
Percentile Rank			67	75	71	71	52	63	N/A	68	
<b>Dimensional Fund Advisors LCV</b>	<b>119,775,641</b>	<b>6.95</b>	<b>13.57</b>	<b>-11.06</b>	<b>-3.38</b>	<b>-3.38</b>	<b>14.97</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.43</b>	<b>04/01/2007</b>
R 1000 Value Index			13.11	-5.22	0.39	0.39	11.54	-2.64	3.89	-3.03	
<i>Difference</i>			0.46	-5.84	-3.77	-3.77	3.43	N/A	N/A	-1.40	
IM U.S. Large Cap Value Equity (SA+CF)			12.35	-5.92	-0.11	-0.11	13.13	-0.67	4.69	-1.01	
Percentile Rank			22	91	75	75	28	N/A	N/A	94	
<b>S&amp;P 500 SSGA SPDR</b>	<b>34,669,877</b>	<b>2.01</b>	<b>11.28</b>	<b>-3.71</b>	<b>1.90</b>	<b>1.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.55</b>	<b>05/01/2010</b>
S&P 500 Index (Cap Wtd)			11.82	-3.69	2.11	2.11	14.11	-0.25	2.92	5.74	
<i>Difference</i>			-0.54	-0.02	-0.21	-0.21	N/A	N/A	N/A	-0.19	
IM U.S. Large Cap Core Equity (SA+CF)			11.80	-4.88	1.78	1.78	14.02	0.51	4.02	5.43	
Percentile Rank			66	34	49	49	N/A	N/A	N/A	49	

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Cadence Capital Mgmt LCG</b>	<b>127,314,645</b>	<b>7.38</b>	<b>7.68</b>	<b>-7.20</b>	<b>-1.78</b>	<b>-1.78</b>	<b>12.43</b>	<b>-0.32</b>	<b>2.73</b>	<b>4.18</b>	<b>02/01/1998</b>
R 1000 Growth Index			10.61	-3.92	2.64	2.64	18.02	2.50	2.60	2.61	
<i>Difference</i>			-2.93	-3.28	-4.42	-4.42	-5.59	-2.82	0.13	1.57	
IM U.S. Large Cap Growth Equity (SA+CF)			10.06	-6.38	-0.24	-0.24	16.00	1.91	3.53	4.82	
Percentile Rank			85	61	63	63	89	86	71	68	
<b>The Boston Company MC Opportunistic Value</b>	<b>30,133,805</b>	<b>1.75</b>	<b>17.09</b>	<b>-10.90</b>	<b>-3.84</b>	<b>-3.84</b>	<b>25.12</b>	<b>5.39</b>	<b>N/A</b>	<b>9.42</b>	<b>05/01/2002</b>
R Mid Cap Index			12.31	-8.91	-1.55	-1.55	20.17	1.41	6.99	7.00	
<i>Difference</i>			4.78	-1.99	-2.29	-2.29	4.95	3.98	N/A	2.42	
IM U.S. Mid Cap Equity (SA+CF)			11.93	-9.66	-1.80	-1.80	19.14	2.96	6.98	6.95	
Percentile Rank			2	59	63	63	7	17	N/A	7	
<b>Cramer Rosenthal McGlynn SCV</b>	<b>54,496,274</b>	<b>3.16</b>	<b>11.71</b>	<b>-15.40</b>	<b>-12.63</b>	<b>-12.63</b>	<b>13.87</b>	<b>N/A</b>	<b>N/A</b>	<b>1.88</b>	<b>02/01/2008</b>
R 2000 Value Index			15.97	-8.94	-5.50	-5.50	12.36	-1.87	6.40	1.29	
<i>Difference</i>			-4.26	-6.46	-7.13	-7.13	1.51	N/A	N/A	0.59	
IM U.S. Small Cap Value Equity (SA+CF)			15.41	-8.77	-3.50	-3.50	18.70	1.91	8.71	4.33	
Percentile Rank			88	94	93	93	90	N/A	N/A	79	
<b>Eagle Asset Mgmt SCG</b>	<b>61,558,092</b>	<b>3.57</b>	<b>12.00</b>	<b>-13.87</b>	<b>-1.58</b>	<b>-1.58</b>	<b>22.12</b>	<b>5.73</b>	<b>N/A</b>	<b>8.32</b>	<b>07/01/2005</b>
R 2000 Growth Index			14.99	-10.59	-2.91	-2.91	19.00	2.09	4.48	4.82	
<i>Difference</i>			-2.99	-3.28	1.33	1.33	3.12	3.64	N/A	3.50	
IM U.S. Small Cap Growth Equity (SA+CF)			13.89	-11.18	-2.11	-2.11	20.38	2.82	6.53	5.69	
Percentile Rank			73	75	46	46	38	19	N/A	12	
<b>Int'l Equity Composite</b>	<b>329,851,275</b>	<b>19.13</b>	<b>4.30</b>	<b>-15.89</b>	<b>-11.23</b>	<b>-11.23</b>	<b>8.04</b>	<b>-3.84</b>	<b>N/A</b>	<b>2.37</b>	<b>03/01/2005</b>
Int'l Equity Custom Benchmark			3.36	-17.10	-12.92	-12.92	7.67	-4.52	4.98	1.68	
<i>Difference</i>			0.94	1.21	1.69	1.69	0.37	0.68	N/A	0.69	
IM International Equity (SA+CF)			3.77	-16.94	-13.25	-13.25	11.79	-1.93	7.99	4.06	
Percentile Rank			40	38	36	36	75	73	N/A	73	

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Grantham, Mayo, Van Otterloo Int'l LC</b>	<b>113,084,479</b>	<b>6.56</b>	<b>3.57</b>	<b>-16.99</b>	<b>-11.58</b>	<b>-11.58</b>	<b>4.57</b>	<b>-4.63</b>	<b>N/A</b>	<b>1.61</b>	<b>08/01/2005</b>
GMO Custom Benchmark			3.77	-16.75	-13.33	-13.33	7.75	-4.48	5.00	1.86	
<i>Difference</i>			-0.20	-0.24	1.75	1.75	-3.18	-0.15	N/A	-0.25	
IM International Equity (SA+CF)			3.77	-16.94	-13.25	-13.25	11.79	-1.93	7.99	4.00	
Percentile Rank			54	52	39	39	92	81	N/A	83	
<b>SSgA MSCI ACW Ex US Index</b>	<b>52,418,295</b>	<b>3.04</b>	<b>3.76</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.65</b>	<b>08/01/2011</b>
MSCI ACW Ex US Index (Gross)			3.77	-16.75	-13.33	-13.33	11.20	-2.48	6.76	-15.63	
<i>Difference</i>			-0.01	N/A	N/A	N/A	N/A	N/A	N/A	-0.02	
IM International Equity (SA+CF)			3.77	-16.94	-13.25	-13.25	11.79	-1.93	7.99	-16.03	
Percentile Rank			51	N/A	N/A	N/A	N/A	N/A	N/A	47	
<b>Baillie Gifford IE Growth</b>	<b>124,029,705</b>	<b>7.19</b>	<b>5.67</b>	<b>-14.64</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-14.64</b>	<b>07/01/2011</b>
MSCI ACW Ex US Index (Gross)			3.77	-16.75	-13.33	-13.33	11.20	-2.48	6.76	-16.75	
<i>Difference</i>			1.90	2.11	N/A	N/A	N/A	N/A	N/A	2.11	
IM International Growth Equity (SA+CF)			3.95	-16.54	-12.53	-12.53	11.49	-2.05	6.84	-16.54	
Percentile Rank			26	25	N/A	N/A	N/A	N/A	N/A	25	
<b>Mondrian IE SC</b>	<b>40,318,795</b>	<b>2.34</b>	<b>2.94</b>	<b>-15.33</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.33</b>	<b>07/01/2011</b>
MSCI EAFE Small Cap Index (Gross)			-0.52	-18.97	-15.66	-15.66	15.00	-3.80	9.42	-18.97	
<i>Difference</i>			3.46	3.64	N/A	N/A	N/A	N/A	N/A	3.64	
IM International Small Cap Equity (SA+CF)			1.54	-17.24	-13.86	-13.86	16.24	-2.01	10.92	-17.24	
Percentile Rank			27	19	N/A	N/A	N/A	N/A	N/A	19	
<b>Domestic Fixed Income Composite</b>	<b>433,964,745</b>	<b>25.17</b>	<b>1.58</b>	<b>4.16</b>	<b>7.86</b>	<b>7.86</b>	<b>10.73</b>	<b>7.17</b>	<b>N/A</b>	<b>6.23</b>	<b>03/01/2005</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.73	
<i>Difference</i>			0.46	-0.82	0.02	0.02	3.96	0.67	N/A	0.50	
IM U.S. Broad Market Core Fixed Income (SA+CF)			1.27	4.66	7.85	7.85	8.39	6.87	6.07	6.04	
Percentile Rank			17	72	50	50	13	32	N/A	32	

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

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	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Western Asset Mgmt Co</b>	<b>88,192,827</b>	<b>5.12</b>	<b>0.52</b>	<b>4.15</b>	<b>7.98</b>	<b>7.98</b>	<b>11.93</b>	<b>6.36</b>	<b>N/A</b>	<b>5.62</b>	<b>02/01/2005</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.57	
<i>Difference</i>			<i>-0.60</i>	<i>-0.83</i>	<i>0.14</i>	<i>0.14</i>	<i>5.16</i>	<i>-0.14</i>	<i>N/A</i>	<i>0.05</i>	
IM U.S. Broad Market Core Fixed Income (SA+CF)			1.27	4.66	7.85	7.85	8.39	6.87	6.07	5.88	
Percentile Rank			99	72	39	39	6	73	N/A	70	
<b>Artio Total Return</b>	<b>172,771,131</b>	<b>10.02</b>	<b>1.61</b>	<b>4.47</b>	<b>8.19</b>	<b>8.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.78</b>	<b>07/01/2010</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.96	
<i>Difference</i>			<i>0.49</i>	<i>-0.51</i>	<i>0.35</i>	<i>0.35</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>0.82</i>	
IM U.S. Broad Market Core Fixed Income (SA+CF)			1.27	4.66	7.85	7.85	8.39	6.87	6.07	6.24	
Percentile Rank			15	58	25	25	N/A	N/A	N/A	21	
<b>PIMCO Total Return</b>	<b>173,000,788</b>	<b>10.03</b>	<b>2.10</b>	<b>3.84</b>	<b>7.46</b>	<b>7.46</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.33</b>	<b>07/01/2010</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.96	
<i>Difference</i>			<i>0.98</i>	<i>-1.14</i>	<i>-0.38</i>	<i>-0.38</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>0.37</i>	
IM U.S. Broad Market Core Fixed Income (SA+CF)			1.27	4.66	7.85	7.85	8.39	6.87	6.07	6.24	
Percentile Rank			2	82	67	67	N/A	N/A	N/A	44	
<b>Research Affiliates</b>	<b>169,802,839</b>	<b>9.85</b>	<b>3.70</b>	<b>-1.19</b>	<b>1.32</b>	<b>1.32</b>	<b>2.54</b>	<b>N/A</b>	<b>N/A</b>	<b>0.66</b>	<b>07/01/2007</b>
Consumer Price Index + 4%			0.44	1.96	7.08	7.08	6.49	6.35	6.58	5.86	
<i>Difference</i>			<i>3.26</i>	<i>-3.15</i>	<i>-5.76</i>	<i>-5.76</i>	<i>-3.95</i>	<i>N/A</i>	<i>N/A</i>	<i>-5.20</i>	
<b>Real Estate Composite</b>	<b>187,826,498</b>	<b>10.89</b>	<b>2.84</b>	<b>7.51</b>	<b>22.60</b>	<b>22.60</b>	<b>-0.74</b>	<b>1.61</b>	<b>N/A</b>	<b>2.41</b>	<b>12/01/2006</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			<i>-0.12</i>	<i>0.92</i>	<i>6.61</i>	<i>6.61</i>	<i>1.02</i>	<i>1.82</i>	<i>N/A</i>	<i>N/A</i>	
<b>Morgan Stanley Real Estate</b>	<b>74,575,292</b>	<b>4.33</b>	<b>3.30</b>	<b>9.07</b>	<b>17.74</b>	<b>17.74</b>	<b>-2.61</b>	<b>0.70</b>	<b>N/A</b>	<b>1.51</b>	<b>12/01/2006</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			<i>0.34</i>	<i>2.48</i>	<i>1.75</i>	<i>1.75</i>	<i>-0.85</i>	<i>0.91</i>	<i>N/A</i>	<i>N/A</i>	

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	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>JP Morgan Real Estate</b>	<b>60,220,848</b>	<b>3.49</b>	<b>3.05</b>	<b>6.36</b>	<b>15.96</b>	<b>15.96</b>	<b>-0.94</b>	N/A	N/A	<b>-0.10</b>	<b>05/01/2007</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			0.09	-0.23	-0.03	-0.03	0.82	N/A	N/A	N/A	
<b>Wrightwood Capital High Yield Partners II LP</b>	<b>4,579,750</b>	<b>0.27</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>02/01/2009</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>TA Associates Realty Fund IX</b>	<b>9,022,865</b>	<b>0.52</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>05/01/2010</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Real Estate Capital Asia Partners II TE LP</b>	<b>8,713,897</b>	<b>0.51</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>10/01/2009</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	12.47	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>JDM Partners Opportunity Fund I</b>	<b>30,713,845</b>	<b>1.78</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>02/01/2010</b>
NCREIF ODCE Index (Gross) (AWA)			2.97	6.59	15.99	15.99	-1.76	-0.21	6.18	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Long/Short Equity Composite</b>	<b>166,019,579</b>	<b>9.63</b>	<b>2.03</b>	<b>-4.29</b>	<b>-2.07</b>	<b>-2.07</b>	<b>2.88</b>	<b>N/A</b>	<b>N/A</b>	<b>2.88</b>	<b>01/01/2009</b>
Long/Short Equity Custom Benchmark			1.72	-6.74	-6.39	-6.39	6.27	N/A	N/A	6.27	
<i>Difference</i>			0.31	2.45	4.32	4.32	-3.39	N/A	N/A	-3.39	
<b>PAAMCO Newport Phoenix</b>	<b>83,763,473</b>	<b>4.86</b>	<b>2.10</b>	<b>-5.23</b>	<b>-1.66</b>	<b>-1.66</b>	<b>3.46</b>	<b>N/A</b>	<b>N/A</b>	<b>3.46</b>	<b>01/01/2009</b>
PAAMCO Newport Phoenix Custom Benchmark			1.42	-6.49	-6.11	-6.11	5.31	1.30	5.39	5.31	
<i>Difference</i>			0.68	1.26	4.45	4.45	-1.85	N/A	N/A	-1.85	
<b>K2 Advisors Long/Short Equity</b>	<b>82,256,106</b>	<b>4.77</b>	<b>1.97</b>	<b>-3.31</b>	<b>-2.48</b>	<b>-2.48</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.81</b>	<b>06/01/2009</b>
HFN Lng/Short Eq Index (Net)			2.03	-6.99	-6.68	-6.68	7.76	2.07	6.23	5.04	
<i>Difference</i>			-0.06	3.68	4.20	4.20	N/A	N/A	N/A	-3.23	
<b>State Street Government STIF 12 (CF)</b>	<b>8,602,628</b>	<b>0.50</b>	<b>0.81</b>	<b>2.19</b>	<b>5.97</b>	<b>5.97</b>	<b>2.46</b>	<b>2.95</b>	<b>4.69</b>	<b>4.68</b>	<b>09/01/2000</b>
BofA ML 3 Mo US T-Bill Index			0.00	0.02	0.10	0.10	0.14	1.48	1.95	2.30	
<i>Difference</i>			0.81	2.17	5.87	5.87	2.32	1.47	2.74	2.38	

The Target Benchmark is calculated monthly and currently consists of 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark.

The Actual Allocation Benchmark is calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.

The Int'l Equity Custom Benchmark consists of the MSCI EAFE Index (Gross) through May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

The GMO Custom Benchmark consists of the MSCI EAFE Index (Gross) through August 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

The Long/Short Equity Custom Benchmark is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark.

The PAAMCO Newport Phoenix Custom Benchmark consists of 70% HFRI Equity Hedge (Total) Index, 20% HFRI Equity Market Neutral Index and 10% HFRI Short Bias Index as of September 2009. Prior to September 2009, the benchmark consisted of 80% HFN Long/Short Equity Index and 20% HFN Market Neutral Equity Index.

Manager peer group names now include the abbreviation "IM" at the beginning of each name. "IM" is the acronym for Investment Metrics, the provider of peer group data used in ranking investment management performance.

RVK endorses GIPS and calculates performance for composites and investment managers using different methodologies.

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	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>0.63</b>	<b>12.65</b>	<b>13.76</b>	<b>-25.88</b>	<b>7.85</b>	<b>12.10</b>	<b>6.74</b>	<b>10.44</b>	<b>24.12</b>
Target Allocation Benchmark			1.68	12.75	12.47	-26.52	8.26	13.61	6.02	10.60	22.56
<i>Difference</i>			-1.05	-0.10	1.29	0.64	-0.41	-1.51	0.72	-0.16	1.56
All Pension Plans \$1B-\$5B (Custom)			1.91	13.95	20.09	-25.88	8.62	13.77	8.22	11.93	23.44
Percentile Rank			69	77	90	51	66	81	83	81	41
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>0.63</b>	<b>12.65</b>	<b>13.76</b>	<b>-25.88</b>	<b>7.85</b>	<b>12.10</b>	<b>6.74</b>	<b>10.44</b>	<b>24.12</b>
Actual Allocation Benchmark			1.15	11.66	13.63	-24.73	7.05	13.25	N/A	N/A	N/A
<i>Difference</i>			-0.52	0.99	0.13	-1.15	0.80	-1.15	N/A	N/A	N/A
All Pension Plans \$1B-\$5B (Custom)			1.91	13.95	20.09	-25.88	8.62	13.77	8.22	11.93	23.44
Percentile Rank			69	77	90	51	66	81	83	81	41
<b>Domestic Equity Composite</b>	<b>427,948,334</b>	<b>24.82</b>	<b>-3.46</b>	<b>22.93</b>	<b>32.16</b>	<b>-38.78</b>	<b>6.79</b>	<b>14.02</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 3000 Index			1.03	16.93	28.34	-37.31	5.14	15.72	6.12	11.95	31.06
<i>Difference</i>			-4.49	6.00	3.82	-1.47	1.65	-1.70	N/A	N/A	N/A
IM U.S. Equity (SA+CF)			-0.54	19.59	31.41	-36.98	6.64	15.15	8.34	14.69	33.58
Percentile Rank			71	40	48	64	50	58	N/A	N/A	N/A
<b>Dimensional Fund Advisors LCV</b>	<b>119,775,641</b>	<b>6.95</b>	<b>-3.38</b>	<b>20.89</b>	<b>30.11</b>	<b>-43.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 1000 Value Index			0.39	15.51	19.69	-36.85	-0.17	22.25	7.05	16.49	30.03
<i>Difference</i>			-3.77	5.38	10.42	-6.25	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Value Equity (SA+CF)			-0.11	14.51	25.77	-35.62	4.01	18.90	8.49	15.16	30.69
Percentile Rank			75	7	30	91	N/A	N/A	N/A	N/A	N/A
<b>S&amp;P 500 SSGA SPDR</b>	<b>34,669,877</b>	<b>2.01</b>	<b>1.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
S&P 500 Index (Cap Wtd)			2.11	15.06	26.46	-37.00	5.49	15.79	4.91	10.88	28.68
<i>Difference</i>			-0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Large Cap Core Equity (SA+CF)			1.78	14.88	26.45	-36.17	7.24	15.51	7.34	11.91	28.71
Percentile Rank			49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Cadence Capital Mgmt LCG</b>	<b>127,314,645</b>	<b>7.38</b>	<b>-1.78</b>	<b>16.76</b>	<b>23.91</b>	<b>-42.01</b>	<b>19.42</b>	<b>7.62</b>	<b>10.36</b>	<b>13.27</b>	<b>28.48</b>
R 1000 Growth Index			2.64	16.71	37.22	-38.44	11.81	9.07	5.26	6.30	29.75
<i>Difference</i>			-4.42	0.05	-13.31	-3.57	7.61	-1.45	5.10	6.97	-1.27
IM U.S. Large Cap Growth Equity (SA+CF)			-0.24	16.06	34.51	-38.55	13.33	9.29	7.47	9.29	28.56
Percentile Rank			63	45	87	76	24	65	29	21	51
<b>The Boston Company MC Opportunistic Value</b>	<b>30,133,805</b>	<b>1.75</b>	<b>-3.84</b>	<b>25.91</b>	<b>61.78</b>	<b>-37.67</b>	<b>6.52</b>	<b>11.05</b>	<b>10.79</b>	<b>19.54</b>	<b>72.62</b>
R Mid Cap Index			-1.55	25.47	40.48	-41.46	5.60	15.26	12.65	20.22	40.06
<i>Difference</i>			-2.29	0.44	21.30	3.79	0.92	-4.21	-1.86	-0.68	32.56
IM U.S. Mid Cap Equity (SA+CF)			-1.80	24.57	37.75	-40.64	10.14	13.48	12.55	18.12	36.77
Percentile Rank			63	38	5	36	66	63	61	38	1
<b>Cramer Rosenthal McGlynn SCV</b>	<b>54,496,274</b>	<b>3.16</b>	<b>-12.63</b>	<b>29.86</b>	<b>30.14</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 2000 Value Index			-5.50	24.50	20.58	-28.92	-9.78	23.48	4.71	22.25	46.03
<i>Difference</i>			-7.13	5.36	9.56	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Small Cap Value Equity (SA+CF)			-3.50	27.77	34.24	-32.96	-2.10	18.37	8.18	22.24	45.37
Percentile Rank			93	33	64	N/A	N/A	N/A	N/A	N/A	N/A
<b>Eagle Asset Mgmt SCG</b>	<b>61,558,092</b>	<b>3.57</b>	<b>-1.58</b>	<b>33.99</b>	<b>38.10</b>	<b>-35.70</b>	<b>12.81</b>	<b>21.43</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 2000 Growth Index			-2.91	29.09	34.47	-38.54	7.05	13.35	4.15	14.31	48.54
<i>Difference</i>			1.33	4.90	3.63	2.84	5.76	8.08	N/A	N/A	N/A
IM U.S. Small Cap Growth Equity (SA+CF)			-2.11	28.95	37.52	-41.60	11.02	12.46	7.80	13.64	48.06
Percentile Rank			46	23	49	15	41	7	N/A	N/A	N/A
<b>Int'l Equity Composite</b>	<b>329,851,275</b>	<b>19.13</b>	<b>-11.23</b>	<b>13.36</b>	<b>25.30</b>	<b>-41.70</b>	<b>11.87</b>	<b>24.88</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Int'l Equity Custom Benchmark			-12.92	8.21	32.46	-43.06	11.63	26.86	14.02	20.70	39.17
<i>Difference</i>			1.69	5.15	-7.16	1.36	0.24	-1.98	N/A	N/A	N/A
IM International Equity (SA+CF)			-13.25	15.02	38.61	-44.87	14.41	28.89	17.86	21.48	42.00
Percentile Rank			36	58	85	33	60	73	N/A	N/A	N/A

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	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Grantham, Mayo, Van Otterloo Int'l LC</b>	<b>113,084,479</b>	<b>6.56</b>	<b>-11.58</b>	<b>8.97</b>	<b>18.68</b>	<b>-38.51</b>	<b>12.19</b>	<b>26.21</b>	N/A	N/A	N/A
GMO Custom Benchmark			-13.33	8.96	32.46	-43.06	11.63	26.86	14.02	20.70	39.17
<i>Difference</i>			1.75	0.01	-13.78	4.55	0.56	-0.65	N/A	N/A	N/A
IM International Equity (SA+CF)			-13.25	15.02	38.61	-44.87	14.41	28.89	17.86	21.48	42.00
Percentile Rank			39	78	92	21	59	66	N/A	N/A	N/A
<b>SSgA MSCI ACW Ex US Index</b>	<b>52,418,295</b>	<b>3.04</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI ACW Ex US Index (Gross)			-13.33	11.60	42.14	-45.24	17.12	27.16	17.11	21.36	41.41
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM International Equity (SA+CF)			-13.25	15.02	38.61	-44.87	14.41	28.89	17.86	21.48	42.00
Percentile Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Baillie Gifford IE Growth</b>	<b>124,029,705</b>	<b>7.19</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI ACW Ex US Index (Gross)			-13.33	11.60	42.14	-45.24	17.12	27.16	17.11	21.36	41.41
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM International Growth Equity (SA+CF)			-12.53	14.54	37.53	-45.30	17.20	25.70	18.11	18.61	36.70
Percentile Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mondrian IE SC</b>	<b>40,318,795</b>	<b>2.34</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Small Cap Index (Gross)			-15.66	22.40	47.32	-46.78	1.79	19.67	26.65	31.27	62.14
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM International Small Cap Equity (SA+CF)			-13.86	23.50	44.93	-46.76	8.49	29.34	25.23	29.68	57.08
Percentile Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Domestic Fixed Income Composite</b>	<b>433,964,745</b>	<b>25.17</b>	<b>7.86</b>	<b>9.63</b>	<b>14.82</b>	<b>-1.65</b>	<b>5.85</b>	<b>4.49</b>	N/A	N/A	N/A
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			0.02	3.09	8.89	-6.89	-1.12	0.16	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (SA+CF)			7.85	7.25	9.81	2.98	6.86	4.49	2.72	4.53	4.52
Percentile Rank			50	9	16	69	79	50	N/A	N/A	N/A

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
As of December 31, 2011

	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Western Asset Mgmt Co</b>	<b>88,192,827</b>	<b>5.12</b>	<b>7.98</b>	<b>11.10</b>	<b>16.90</b>	<b>-6.88</b>	<b>4.22</b>	<b>5.04</b>	N/A	N/A	N/A
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>0.14</i>	<i>4.56</i>	<i>10.97</i>	<i>-12.12</i>	<i>-2.75</i>	<i>0.71</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
IM U.S. Broad Market Core Fixed Income (SA+CF)			7.85	7.25	9.81	2.98	6.86	4.49	2.72	4.53	4.52
Percentile Rank			39	3	9	89	94	11	N/A	N/A	N/A
<b>Artio Total Return</b>	<b>172,771,131</b>	<b>10.02</b>	<b>8.19</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>0.35</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
IM U.S. Broad Market Core Fixed Income (SA+CF)			7.85	7.25	9.81	2.98	6.86	4.49	2.72	4.53	4.52
Percentile Rank			25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PIMCO Total Return</b>	<b>173,000,788</b>	<b>10.03</b>	<b>7.46</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>-0.38</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
IM U.S. Broad Market Core Fixed Income (SA+CF)			7.85	7.25	9.81	2.98	6.86	4.49	2.72	4.53	4.52
Percentile Rank			67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Research Affiliates</b>	<b>169,802,839</b>	<b>9.85</b>	<b>1.32</b>	<b>3.78</b>	<b>2.52</b>	<b>-4.53</b>	N/A	N/A	N/A	N/A	N/A
Consumer Price Index + 4%			7.08	5.56	6.83	4.10	8.24	6.64	7.55	7.39	5.95
<i>Difference</i>			<i>-5.76</i>	<i>-1.78</i>	<i>-4.31</i>	<i>-8.63</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Real Estate Composite</b>	<b>187,826,498</b>	<b>10.89</b>	<b>22.60</b>	<b>13.66</b>	<b>-29.81</b>	<b>-5.75</b>	<b>17.52</b>	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			<i>6.61</i>	<i>-2.70</i>	<i>-0.05</i>	<i>4.26</i>	<i>1.55</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Morgan Stanley Real Estate</b>	<b>74,575,292</b>	<b>4.33</b>	<b>17.74</b>	<b>16.28</b>	<b>-32.52</b>	<b>-3.62</b>	<b>16.33</b>	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			<i>1.75</i>	<i>-0.08</i>	<i>-2.76</i>	<i>6.39</i>	<i>0.36</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	Year To Date	2010	2009	2008	2007	2006	2005	2004	2003
<b>JP Morgan Real Estate</b>	<b>60,220,848</b>	<b>3.49</b>	<b>15.96</b>	<b>14.13</b>	<b>-26.55</b>	<b>-8.09</b>	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			-0.03	-2.23	3.21	1.92	N/A	N/A	N/A	N/A	N/A
<b>Wrightwood Capital High Yield Partners II LP</b>	<b>4,579,750</b>	<b>0.27</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>TA Associates Realty Fund IX</b>	<b>9,022,865</b>	<b>0.52</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Estate Capital Asia Partners II TE LP</b>	<b>8,713,897</b>	<b>0.51</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>JDM Partners Opportunity Fund I</b>	<b>30,713,845</b>	<b>1.78</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Gross) (AWA)			15.99	16.36	-29.76	-10.01	15.97	16.32	21.39	13.06	9.28
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance**  
**As of December 31, 2011**

	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Long/Short Equity Composite</b>	<b>166,019,579</b>	<b>9.63</b>	<b>-2.07</b>	<b>3.96</b>	<b>6.94</b>	N/A	N/A	N/A	N/A	N/A	N/A
Long/Short Equity Custom Benchmark			-6.39	7.99	18.72	N/A	N/A	N/A	N/A	N/A	N/A
<i>Difference</i>			4.32	-4.03	-11.78	N/A	N/A	N/A	N/A	N/A	N/A
<b>PAAMCO Newport Phoenix</b>	<b>83,763,473</b>	<b>4.86</b>	<b>-1.66</b>	<b>4.64</b>	<b>7.62</b>	N/A	N/A	N/A	N/A	N/A	N/A
PAAMCO Newport Phoenix Custom Benchmark			-6.11	5.98	17.39	-17.26	10.35	11.00	10.62	8.53	18.31
<i>Difference</i>			4.45	-1.34	-9.77	N/A	N/A	N/A	N/A	N/A	N/A
<b>K2 Advisors Long/Short Equity</b>	<b>82,256,106</b>	<b>4.77</b>	<b>-2.48</b>	<b>3.26</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HFN Lng/Short Eq Index (Net)			-6.68	10.06	21.83	-20.47	11.35	12.10	11.80	9.31	21.71
<i>Difference</i>			4.20	-6.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>State Street Government STIF 12 (CF)</b>	<b>8,602,628</b>	<b>0.50</b>	<b>5.97</b>	<b>1.05</b>	<b>0.44</b>	<b>2.24</b>	<b>5.16</b>	<b>4.50</b>	<b>7.69</b>	<b>11.53</b>	<b>5.85</b>
BofA ML 3 Mo US T-Bill Index			0.10	0.13	0.21	2.06	5.00	4.85	3.07	1.33	1.15
<i>Difference</i>			5.87	0.92	0.23	0.18	0.16	-0.35	4.62	10.20	4.70

The Target Benchmark is calculated monthly and currently consists of 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark.

The Actual Allocation Benchmark is calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.

The Int'l Equity Custom Benchmark consists of the MSCI EAFE Index (Gross) through May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

The GMO Custom Benchmark consists of the MSCI EAFE Index (Gross) through August 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

The Long/Short Equity Custom Benchmark is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark.

The PAAMCO Newport Phoenix Custom Benchmark consists of 70% HFRI Equity Hedge (Total) Index, 20% HFRI Equity Market Neutral Index and 10% HFRI Short Bias Index as of September 2009. Prior to September 2009, the benchmark consisted of 80% HFN Long/Short Equity Index and 20% HFN Market Neutral Equity Index.

Manager peer group names now include the abbreviation "IM" at the beginning of each name. "IM" is the acronym for Investment Metrics, the provider of peer group data used in ranking investment management performance.

RVK endorses GIPS and calculates performance for composites and investment managers using different methodologies.

Performance shown is gross of fees with the exception of the Long/Short Equity Composite, PAAMCO, and K2, which are net of fees.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance (Net of Fees)**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>4.65</b>	<b>-5.14</b>	<b>0.24</b>	<b>0.24</b>	<b>8.39</b>	<b>0.18</b>	<b>3.82</b>	<b>7.48</b>	<b>12/01/1987</b>
Target Allocation Benchmark			4.68	-3.38	1.68	1.68	8.84	0.51	4.18	8.60	
<i>Difference</i>			-0.03	-1.76	-1.44	-1.44	-0.45	-0.33	-0.36	-1.12	
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>4.65</b>	<b>-5.14</b>	<b>0.24</b>	<b>0.24</b>	<b>8.39</b>	<b>0.18</b>	<b>3.82</b>	<b>7.48</b>	<b>12/01/1987</b>
Actual Allocation Benchmark			4.32	-3.59	1.15	1.15	8.67	0.67	N/A	N/A	
<i>Difference</i>			0.33	-1.55	-0.91	-0.91	-0.28	-0.49	N/A	N/A	
<b>Domestic Equity Composite</b>	<b>427,948,334</b>	<b>24.82</b>	<b>11.22</b>	<b>-10.61</b>	<b>-3.89</b>	<b>-3.89</b>	<b>15.65</b>	<b>0.07</b>	<b>N/A</b>	<b>2.94</b>	<b>03/01/2005</b>
R 3000 Index			12.12	-5.01	1.03	1.03	14.88	-0.01	3.51	3.12	
<i>Difference</i>			-0.90	-5.60	-4.92	-4.92	0.77	0.08	N/A	-0.18	
<b>Dimensional Fund Advisors LCV</b>	<b>119,775,641</b>	<b>6.95</b>	<b>13.50</b>	<b>-11.18</b>	<b>-3.62</b>	<b>-3.62</b>	<b>14.66</b>	<b>N/A</b>	<b>N/A</b>	<b>-4.65</b>	<b>04/01/2007</b>
R 1000 Value Index			13.11	-5.22	0.39	0.39	11.54	-2.64	3.89	-3.03	
<i>Difference</i>			0.39	-5.96	-4.01	-4.01	3.12	N/A	N/A	-1.62	
<b>S&amp;P 500 SSGA SPDR</b>	<b>34,669,877</b>	<b>2.01</b>	<b>11.26</b>	<b>-3.75</b>	<b>1.81</b>	<b>1.81</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.46</b>	<b>05/01/2010</b>
S&P 500 Index (Cap Wtd)			11.82	-3.69	2.11	2.11	14.11	-0.25	2.92	5.74	
<i>Difference</i>			-0.56	-0.06	-0.30	-0.30	N/A	N/A	N/A	-0.28	
<b>Cadence Capital Mgmt LCG</b>	<b>127,314,645</b>	<b>7.38</b>	<b>7.57</b>	<b>-7.38</b>	<b>-2.16</b>	<b>-2.16</b>	<b>11.97</b>	<b>-0.71</b>	<b>2.37</b>	<b>3.84</b>	<b>02/01/1998</b>
R 1000 Growth Index			10.61	-3.92	2.64	2.64	18.02	2.50	2.60	2.61	
<i>Difference</i>			-3.04	-3.46	-4.80	-4.80	-6.05	-3.21	-0.23	1.23	
<b>The Boston Company MC Opportunistic Value</b>	<b>30,133,805</b>	<b>1.75</b>	<b>16.89</b>	<b>-11.24</b>	<b>-4.55</b>	<b>-4.55</b>	<b>24.20</b>	<b>4.54</b>	<b>N/A</b>	<b>8.61</b>	<b>05/01/2002</b>
R Mid Cap Index			12.31	-8.91	-1.55	-1.55	20.17	1.41	6.99	7.00	
<i>Difference</i>			4.58	-2.33	-3.00	-3.00	4.03	3.13	N/A	1.61	
<b>Cramer Rosenthal McGlynn SCV</b>	<b>54,496,274</b>	<b>3.16</b>	<b>11.44</b>	<b>-15.85</b>	<b>-13.50</b>	<b>-13.50</b>	<b>12.75</b>	<b>N/A</b>	<b>N/A</b>	<b>0.91</b>	<b>02/01/2008</b>
R 2000 Value Index			15.97	-8.94	-5.50	-5.50	12.36	-1.87	6.40	1.29	
<i>Difference</i>			-4.53	-6.91	-8.00	-8.00	0.39	N/A	N/A	-0.38	

Performance shown is net of fees. Research Affiliates waived management fees for 2010 and the 3rd quarter 2011.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance (Net of Fees)**  
As of December 31, 2011

	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Eagle Asset Mgmt SCG</b>	<b>61,558,092</b>	<b>3.57</b>	<b>11.85</b>	<b>-14.12</b>	<b>-2.12</b>	<b>-2.12</b>	<b>21.44</b>	<b>5.07</b>	<b>N/A</b>	<b>7.71</b>	<b>07/01/2005</b>
R 2000 Growth Index			14.99	-10.59	-2.91	-2.91	19.00	2.09	4.48	4.82	
<i>Difference</i>			-3.14	-3.53	0.79	0.79	2.44	2.98	N/A	2.89	
<b>Int'l Equity Composite</b>	<b>329,851,275</b>	<b>19.13</b>	<b>4.15</b>	<b>-16.13</b>	<b>-11.69</b>	<b>-11.69</b>	<b>7.47</b>	<b>-4.35</b>	<b>N/A</b>	<b>1.81</b>	<b>03/01/2005</b>
Int'l Equity Custom Benchmark			3.36	-17.10	-12.92	-12.92	7.67	-4.52	4.98	1.68	
<i>Difference</i>			0.79	0.97	1.23	1.23	-0.20	0.17	N/A	0.13	
<b>Grantham, Mayo, Van Otterloo Int'l LC</b>	<b>113,084,479</b>	<b>6.56</b>	<b>3.38</b>	<b>-17.32</b>	<b>-12.18</b>	<b>-12.18</b>	<b>3.91</b>	<b>-5.24</b>	<b>N/A</b>	<b>0.96</b>	<b>08/01/2005</b>
GMO Custom Benchmark			3.77	-16.75	-13.33	-13.33	7.75	-4.48	5.00	1.86	
<i>Difference</i>			-0.39	-0.57	1.15	1.15	-3.84	-0.76	N/A	-0.90	
<b>SSgA MSCI ACW Ex US Index</b>	<b>52,418,295</b>	<b>3.04</b>	<b>3.76</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.65</b>	<b>08/01/2011</b>
MSCI ACW Ex US Index (Gross)			3.77	-16.75	-13.33	-13.33	11.20	-2.48	6.76	-15.63	
<i>Difference</i>			-0.01	N/A	N/A	N/A	N/A	N/A	N/A	-0.02	
<b>Baillie Gifford IE Growth</b>	<b>124,029,705</b>	<b>7.19</b>	<b>5.52</b>	<b>-14.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-14.90</b>	<b>07/01/2011</b>
MSCI ACW Ex US Index (Gross)			3.77	-16.75	-13.33	-13.33	11.20	-2.48	6.76	-16.75	
<i>Difference</i>			1.75	1.85	N/A	N/A	N/A	N/A	N/A	1.85	
<b>Mondrian IE SC</b>	<b>40,318,795</b>	<b>2.34</b>	<b>2.74</b>	<b>-15.55</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-15.55</b>	<b>07/01/2011</b>
MSCI EAFE Small Cap Index (Gross)			-0.52	-18.97	-15.66	-15.66	15.00	-3.80	9.42	-18.97	
<i>Difference</i>			3.26	3.42	N/A	N/A	N/A	N/A	N/A	3.42	
<b>Domestic Fixed Income Composite</b>	<b>433,964,745</b>	<b>25.17</b>	<b>1.51</b>	<b>4.01</b>	<b>7.52</b>	<b>7.52</b>	<b>10.46</b>	<b>6.92</b>	<b>N/A</b>	<b>6.02</b>	<b>03/01/2005</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.73	
<i>Difference</i>			0.39	-0.97	-0.32	-0.32	3.69	0.42	N/A	0.29	

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	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Western Asset Mgmt Co</b>	<b>88,192,827</b>	<b>5.12</b>	<b>0.44</b>	<b>4.00</b>	<b>7.66</b>	<b>7.66</b>	<b>11.63</b>	<b>6.09</b>	N/A	<b>5.34</b>	<b>02/01/2005</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.57	
<i>Difference</i>			<i>-0.68</i>	<i>-0.98</i>	<i>-0.18</i>	<i>-0.18</i>	4.86	<i>-0.41</i>	N/A	<i>-0.23</i>	
<b>Artio Total Return</b>	<b>172,771,131</b>	<b>10.02</b>	<b>1.54</b>	<b>4.34</b>	<b>7.82</b>	<b>7.82</b>	N/A	N/A	N/A	<b>6.52</b>	<b>07/01/2010</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.96	
<i>Difference</i>			<i>0.42</i>	<i>-0.64</i>	<i>-0.02</i>	<i>-0.02</i>	N/A	N/A	N/A	<i>0.56</i>	
<b>PIMCO Total Return</b>	<b>173,000,788</b>	<b>10.03</b>	<b>2.03</b>	<b>3.69</b>	<b>7.15</b>	<b>7.15</b>	N/A	N/A	N/A	<b>6.05</b>	<b>07/01/2010</b>
BC US Agg Bond Index			1.12	4.98	7.84	7.84	6.77	6.50	5.78	5.96	
<i>Difference</i>			<i>0.91</i>	<i>-1.29</i>	<i>-0.69</i>	<i>-0.69</i>	N/A	N/A	N/A	<i>0.09</i>	
<b>Research Affiliates</b>	<b>169,802,839</b>	<b>9.85</b>	<b>3.70</b>	<b>-1.19</b>	<b>1.26</b>	<b>1.26</b>	<b>2.26</b>	N/A	N/A	<b>0.26</b>	<b>07/01/2007</b>
Consumer Price Index + 4%			0.44	1.96	7.08	7.08	6.49	6.35	6.58	5.86	
<i>Difference</i>			<i>3.26</i>	<i>-3.15</i>	<i>-5.82</i>	<i>-5.82</i>	<i>-4.23</i>	N/A	N/A	<i>-5.60</i>	
<b>Real Estate Composite</b>	<b>187,826,498</b>	<b>10.89</b>	<b>2.62</b>	<b>7.05</b>	<b>21.60</b>	<b>21.60</b>	<b>-1.63</b>	<b>0.70</b>	N/A	<b>1.42</b>	<b>12/01/2006</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	<i>-2.66</i>	<i>-1.11</i>	5.21	N/A	
<i>Difference</i>			<i>-0.09</i>	<i>0.94</i>	<i>6.64</i>	<i>6.64</i>	<i>1.03</i>	<i>1.81</i>	N/A	N/A	
<b>Morgan Stanley Real Estate</b>	<b>74,575,292</b>	<b>4.33</b>	<b>2.93</b>	<b>8.31</b>	<b>16.34</b>	<b>16.34</b>	<b>-3.62</b>	<b>-0.36</b>	N/A	<b>0.37</b>	<b>12/01/2006</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	<i>-2.66</i>	<i>-1.11</i>	5.21	N/A	
<i>Difference</i>			<i>0.22</i>	<i>2.20</i>	<i>1.38</i>	<i>1.38</i>	<i>-0.96</i>	<i>0.75</i>	N/A	N/A	

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	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>JP Morgan Real Estate</b>	<b>60,220,848</b>	<b>3.49</b>	<b>2.79</b>	<b>5.84</b>	<b>14.83</b>	<b>14.83</b>	<b>-1.98</b>	<b>N/A</b>	<b>N/A</b>	<b>-1.02</b>	<b>05/01/2007</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	-2.66	-1.11	5.21	N/A	
<i>Difference</i>			0.08	-0.27	-0.13	-0.13	0.68	N/A	N/A	N/A	
<b>Wrightwood Capital High Yield Partners II LP</b>	<b>4,579,750</b>	<b>0.27</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2009</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	-2.66	-1.11	5.21	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>TA Associates Realty Fund IX</b>	<b>9,022,865</b>	<b>0.52</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>05/01/2010</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	-2.66	-1.11	5.21	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Real Estate Capital Asia Partners II TE LP</b>	<b>8,713,897</b>	<b>0.51</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10/01/2009</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	-2.66	-1.11	5.21	11.44	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>JDM Partners Opportunity Fund I</b>	<b>30,713,845</b>	<b>1.78</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>02/01/2010</b>
NCREIF ODCE Index (Net) (AWA)			2.71	6.11	14.96	14.96	-2.66	-1.11	5.21	N/A	
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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	Allocation		Performance %								
	Market Values (\$)	%	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Long/Short Equity Composite</b>	<b>166,019,579</b>	<b>9.63</b>	<b>2.03</b>	<b>-4.29</b>	<b>-2.07</b>	<b>-2.07</b>	<b>2.66</b>	<b>N/A</b>	<b>N/A</b>	<b>2.66</b>	<b>01/01/2009</b>
Long/Short Equity Custom Benchmark			1.72	-6.74	-6.39	-6.39	6.27	N/A	N/A	6.27	
<i>Difference</i>			0.31	2.45	4.32	4.32	-3.61	N/A	N/A	-3.61	
<b>PAAMCO Newport Phoenix</b>	<b>83,763,473</b>	<b>4.86</b>	<b>2.10</b>	<b>-5.23</b>	<b>-1.66</b>	<b>-1.66</b>	<b>3.46</b>	<b>N/A</b>	<b>N/A</b>	<b>3.46</b>	<b>01/01/2009</b>
PAAMCO Newport Phoenix Custom Benchmark			1.42	-6.49	-6.11	-6.11	5.31	1.30	5.39	5.31	
<i>Difference</i>			0.68	1.26	4.45	4.45	-1.85	N/A	N/A	-1.85	
<b>K2 Advisors Long/Short Equity</b>	<b>82,256,106</b>	<b>4.77</b>	<b>1.97</b>	<b>-3.31</b>	<b>-2.48</b>	<b>-2.48</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.71</b>	<b>06/01/2009</b>
HFN Lng/Short Eq Index (Net)			2.03	-6.99	-6.68	-6.68	7.76	2.07	6.23	5.04	
<i>Difference</i>			-0.06	3.68	4.20	4.20	N/A	N/A	N/A	-3.33	
<b>State Street Government STIF 12 (CF)</b>	<b>8,602,628</b>	<b>0.50</b>	<b>0.81</b>	<b>2.19</b>	<b>5.97</b>	<b>5.97</b>	<b>2.46</b>	<b>2.95</b>	<b>2.82</b>	<b>2.82</b>	<b>09/01/2000</b>
BofA ML 3 Mo US T-Bill Index			0.00	0.02	0.10	0.10	0.14	1.48	1.95	2.30	
<i>Difference</i>			0.81	2.17	5.87	5.87	2.32	1.47	0.87	0.52	

The Target Benchmark is calculated monthly and currently consists of 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark.

The Actual Allocation Benchmark is calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.

The Int'l Equity Custom Benchmark consists of the MSCI EAFE Index (Gross) through May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

The GMO Custom Benchmark consists of the MSCI EAFE Index (Gross) through August 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

The Long/Short Equity Custom Benchmark is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark.

The PAAMCO Newport Phoenix Custom Benchmark consists of 70% HFRI Equity Hedge (Total) Index, 20% HFRI Equity Market Neutral Index and 10% HFRI Short Bias Index as of September 2009. Prior to September 2009, the benchmark consisted of 80% HFN Long/Short Equity Index and 20% HFN Market Neutral Equity Index.

RVK endorses GIPS and calculates performance for composites and investment managers using different methodologies.

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	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>0.24</b>	<b>12.25</b>	<b>13.18</b>	<b>-26.26</b>	<b>7.48</b>	<b>11.81</b>	<b>6.47</b>	<b>10.19</b>	<b>23.85</b>
Target Allocation Benchmark			1.68	12.75	12.47	-26.52	8.26	13.61	6.02	10.60	22.56
<i>Difference</i>			-1.44	-0.50	0.71	0.26	-0.78	-1.80	0.45	-0.41	1.29
<b>Total Fund Composite</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>0.24</b>	<b>12.25</b>	<b>13.18</b>	<b>-26.26</b>	<b>7.48</b>	<b>11.81</b>	<b>6.47</b>	<b>10.19</b>	<b>23.85</b>
Actual Allocation Benchmark			1.15	11.66	13.63	-24.73	7.05	13.25	N/A	N/A	N/A
<i>Difference</i>			-0.91	0.59	-0.45	-1.53	0.43	-1.44	N/A	N/A	N/A
<b>Domestic Equity Composite</b>	<b>427,948,334</b>	<b>24.82</b>	<b>-3.89</b>	<b>22.36</b>	<b>31.53</b>	<b>-39.05</b>	<b>6.46</b>	<b>13.72</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 3000 Index			1.03	16.93	28.34	-37.31	5.14	15.72	6.12	11.95	31.06
<i>Difference</i>			-4.92	5.43	3.19	-1.74	1.32	-2.00	N/A	N/A	N/A
<b>Dimensional Fund Advisors LCV</b>	<b>119,775,641</b>	<b>6.95</b>	<b>-3.62</b>	<b>20.57</b>	<b>29.72</b>	<b>-43.21</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 1000 Value Index			0.39	15.51	19.69	-36.85	-0.17	22.25	7.05	16.49	30.03
<i>Difference</i>			-4.01	5.06	10.03	-6.36	N/A	N/A	N/A	N/A	N/A
<b>S&amp;P 500 SSGA SPDR</b>	<b>34,669,877</b>	<b>2.01</b>	<b>1.81</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
S&P 500 Index (Cap Wtd)			2.11	15.06	26.46	-37.00	5.49	15.79	4.91	10.88	28.68
<i>Difference</i>			-0.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Cadence Capital Mgmt LCG</b>	<b>127,314,645</b>	<b>7.38</b>	<b>-2.16</b>	<b>16.29</b>	<b>23.37</b>	<b>-42.24</b>	<b>19.01</b>	<b>7.32</b>	<b>10.06</b>	<b>12.93</b>	<b>28.08</b>
R 1000 Growth Index			2.64	16.71	37.22	-38.44	11.81	9.07	5.26	6.30	29.75
<i>Difference</i>			-4.80	-0.42	-13.85	-3.80	7.20	-1.75	4.80	6.63	-1.67
<b>The Boston Company MC Opportunistic Value</b>	<b>30,133,805</b>	<b>1.75</b>	<b>-4.55</b>	<b>25.01</b>	<b>60.56</b>	<b>-38.38</b>	<b>5.77</b>	<b>10.26</b>	<b>10.01</b>	<b>18.71</b>	<b>71.59</b>
R Mid Cap Index			-1.55	25.47	40.48	-41.46	5.60	15.26	12.65	20.22	40.06
<i>Difference</i>			-3.00	-0.46	20.08	3.08	0.17	-5.00	-2.64	-1.51	31.53
<b>Cramer Rosenthal McGlynn SCV</b>	<b>54,496,274</b>	<b>3.16</b>	<b>-13.50</b>	<b>28.65</b>	<b>28.82</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 2000 Value Index			-5.50	24.50	20.58	-28.92	-9.78	23.48	4.71	22.25	46.03
<i>Difference</i>			-8.00	4.15	8.24	N/A	N/A	N/A	N/A	N/A	N/A

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	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Eagle Asset Mgmt SCG</b>	<b>61,558,092</b>	<b>3.57</b>	<b>-2.12</b>	<b>33.26</b>	<b>37.32</b>	<b>-36.23</b>	<b>12.10</b>	<b>20.81</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
R 2000 Growth Index			-2.91	29.09	34.47	-38.54	7.05	13.35	4.15	14.31	48.54
<i>Difference</i>			0.79	4.17	2.85	2.31	5.05	7.46	N/A	N/A	N/A
<b>Int'l Equity Composite</b>	<b>329,851,275</b>	<b>19.13</b>	<b>-11.69</b>	<b>12.78</b>	<b>24.61</b>	<b>-42.06</b>	<b>11.32</b>	<b>24.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Int'l Equity Custom Benchmark			-12.92	8.21	32.46	-43.06	11.63	26.86	14.02	20.70	39.17
<i>Difference</i>			1.23	4.57	-7.85	1.00	-0.31	-2.71	N/A	N/A	N/A
<b>Grantham, Mayo, Van Otterloo Int'l LC</b>	<b>113,084,479</b>	<b>6.56</b>	<b>-12.18</b>	<b>8.33</b>	<b>17.92</b>	<b>-38.90</b>	<b>11.49</b>	<b>25.35</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
GMO Custom Benchmark			-13.33	8.96	32.46	-43.06	11.63	26.86	14.02	20.70	39.17
<i>Difference</i>			1.15	-0.63	-14.54	4.16	-0.14	-1.51	N/A	N/A	N/A
<b>SSgA MSCI ACW Ex US Index</b>	<b>52,418,295</b>	<b>3.04</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
MSCI ACW Ex US Index (Gross)			-13.33	11.60	42.14	-45.24	17.12	27.16	17.11	21.36	41.41
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Baillie Gifford IE Growth</b>	<b>124,029,705</b>	<b>7.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
MSCI ACW Ex US Index (Gross)			-13.33	11.60	42.14	-45.24	17.12	27.16	17.11	21.36	41.41
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mondrian IE SC</b>	<b>40,318,795</b>	<b>2.34</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
MSCI EAFE Small Cap Index (Gross)			-15.66	22.40	47.32	-46.78	1.79	19.67	26.65	31.27	62.14
<i>Difference</i>			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Domestic Fixed Income Composite</b>	<b>433,964,745</b>	<b>25.17</b>	<b>7.52</b>	<b>9.42</b>	<b>14.57</b>	<b>-1.87</b>	<b>5.66</b>	<b>4.34</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			-0.32	2.88	8.64	-7.11	-1.31	0.01	N/A	N/A	N/A

Performance shown is net of fees. Research Affiliates waived management fees for 2010 and the 3rd quarter 2011.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance (Net of Fees)**  
**As of December 31, 2011**

	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Western Asset Mgmt Co</b>	<b>88,192,827</b>	<b>5.12</b>	<b>7.66</b>	<b>10.78</b>	<b>16.62</b>	<b>-7.10</b>	<b>3.98</b>	<b>4.78</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>-0.18</i>	<i>4.24</i>	<i>10.69</i>	<i>-12.34</i>	<i>-2.99</i>	<i>0.45</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Artio Total Return</b>	<b>172,771,131</b>	<b>10.02</b>	<b>7.82</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>-0.02</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>PIMCO Total Return</b>	<b>173,000,788</b>	<b>10.03</b>	<b>7.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
BC US Agg Bond Index			7.84	6.54	5.93	5.24	6.97	4.33	2.43	4.34	4.10
<i>Difference</i>			<i>-0.69</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Research Affiliates</b>	<b>169,802,839</b>	<b>9.85</b>	<b>1.26</b>	<b>3.78</b>	<b>1.75</b>	<b>-5.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Consumer Price Index + 4%			7.08	5.56	6.83	4.10	8.24	6.64	7.55	7.39	5.95
<i>Difference</i>			<i>-5.82</i>	<i>-1.78</i>	<i>-5.08</i>	<i>-9.25</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Real Estate Composite</b>	<b>187,826,498</b>	<b>10.89</b>	<b>21.60</b>	<b>12.71</b>	<b>-30.54</b>	<b>-6.72</b>	<b>16.61</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>6.64</i>	<i>-2.55</i>	<i>-0.14</i>	<i>3.98</i>	<i>1.77</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Morgan Stanley Real Estate</b>	<b>74,575,292</b>	<b>4.33</b>	<b>16.34</b>	<b>15.15</b>	<b>-33.18</b>	<b>-4.71</b>	<b>15.13</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>1.38</i>	<i>-0.11</i>	<i>-2.78</i>	<i>5.99</i>	<i>0.29</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

Performance shown is net of fees. Research Affiliates waived management fees for 2010 and the 3rd quarter 2011.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance (Net of Fees)**  
**As of December 31, 2011**

	Allocation		Performance %								
	Market Values (\$)	%	Year To Date	2010	2009	2008	2007	2006	2005	2004	2003
<b>JP Morgan Real Estate</b>	<b>60,220,848</b>	<b>3.49</b>	<b>14.83</b>	<b>12.95</b>	<b>-27.38</b>	<b>-8.93</b>	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>-0.13</i>	<i>-2.31</i>	<i>3.02</i>	<i>1.77</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Wrightwood Capital High Yield Partners II LP</b>	<b>4,579,750</b>	<b>0.27</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>TA Associates Realty Fund IX</b>	<b>9,022,865</b>	<b>0.52</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Real Estate Capital Asia Partners II TE LP</b>	<b>8,713,897</b>	<b>0.51</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>JDM Partners Opportunity Fund I</b>	<b>30,713,845</b>	<b>1.78</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE Index (Net) (AWA)			14.96	15.26	-30.40	-10.70	14.84	15.27	20.15	12.00	8.28
<i>Difference</i>			<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

Performance shown is net of fees. Research Affiliates waived management fees for 2010 and the 3rd quarter 2011.

**City of Phoenix Employees' Retirement System**  
**Asset Allocation & Performance (Net of Fees)**  
**As of December 31, 2011**

	Allocation		Year To Date	Performance %							
	Market Values (\$)	%		2010	2009	2008	2007	2006	2005	2004	2003
<b>Long/Short Equity Composite</b>	<b>166,019,579</b>	<b>9.63</b>	<b>-2.07</b>	<b>3.96</b>	<b>6.28</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Long/Short Equity Custom Benchmark			-6.39	7.99	18.72	N/A	N/A	N/A	N/A	N/A	N/A
<i>Difference</i>			4.32	-4.03	-12.44	N/A	N/A	N/A	N/A	N/A	N/A
<b>PAAMCO Newport Phoenix</b>	<b>83,763,473</b>	<b>4.86</b>	<b>-1.66</b>	<b>4.64</b>	<b>7.62</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
PAAMCO Newport Phoenix Custom Benchmark			-6.11	5.98	17.39	-17.26	10.35	11.00	10.62	8.53	18.31
<i>Difference</i>			4.45	-1.34	-9.77	N/A	N/A	N/A	N/A	N/A	N/A
<b>K2 Advisors Long/Short Equity</b>	<b>82,256,106</b>	<b>4.77</b>	<b>-2.48</b>	<b>3.26</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
HFN Lng/Short Eq Index (Net)			-6.68	10.06	21.83	-20.47	11.35	12.10	11.80	9.31	21.71
<i>Difference</i>			4.20	-6.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>State Street Government STIF 12 (CF)</b>	<b>8,602,628</b>	<b>0.50</b>	<b>5.97</b>	<b>1.05</b>	<b>0.44</b>	<b>2.24</b>	<b>5.16</b>	<b>4.37</b>	<b>4.82</b>	<b>0.64</b>	<b>2.82</b>
BofA ML 3 Mo US T-Bill Index			0.10	0.13	0.21	2.06	5.00	4.85	3.07	1.33	1.15
<i>Difference</i>			5.87	0.92	0.23	0.18	0.16	-0.48	1.75	-0.69	1.67

The Target Benchmark is calculated monthly and currently consists of 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark.

The Actual Allocation Benchmark is calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.

The Int'l Equity Custom Benchmark consists of the MSCI EAFE Index (Gross) through May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

The GMO Custom Benchmark consists of the MSCI EAFE Index (Gross) through August 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

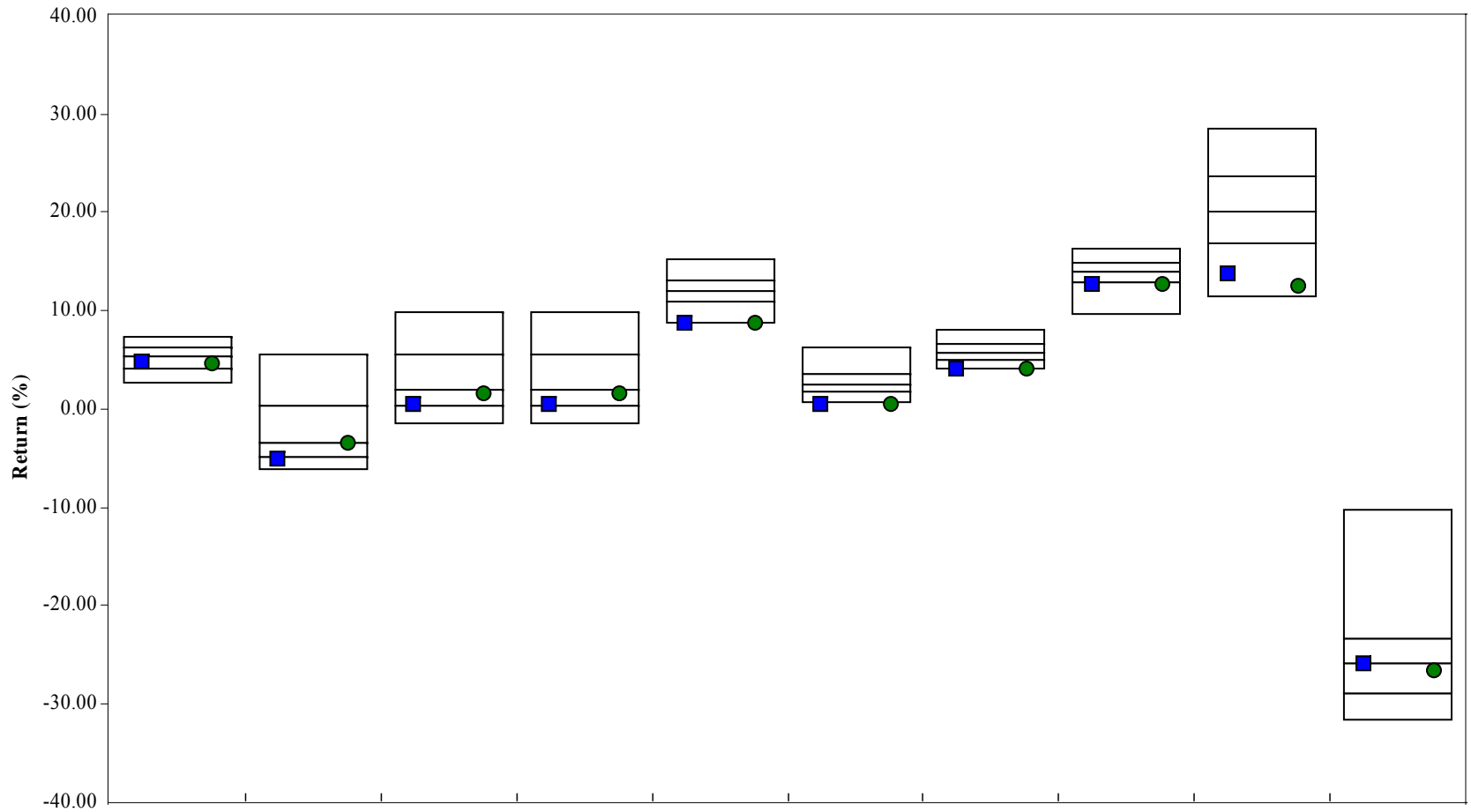
The Long/Short Equity Custom Benchmark is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark.

The PAAMCO Newport Phoenix Custom Benchmark consists of 70% HFRI Equity Hedge (Total) Index, 20% HFRI Equity Market Neutral Index and 10% HFRI Short Bias Index as of September 2009. Prior to September 2009, the benchmark consisted of 80% HFN Long/Short Equity Index and 20% HFN Market Neutral Equity Index.

RVK endorses GIPS and calculates performance for composites and investment managers using different methodologies.

Performance shown is net of fees. Research Affiliates waived management fees for 2010 and the 3rd quarter 2011.

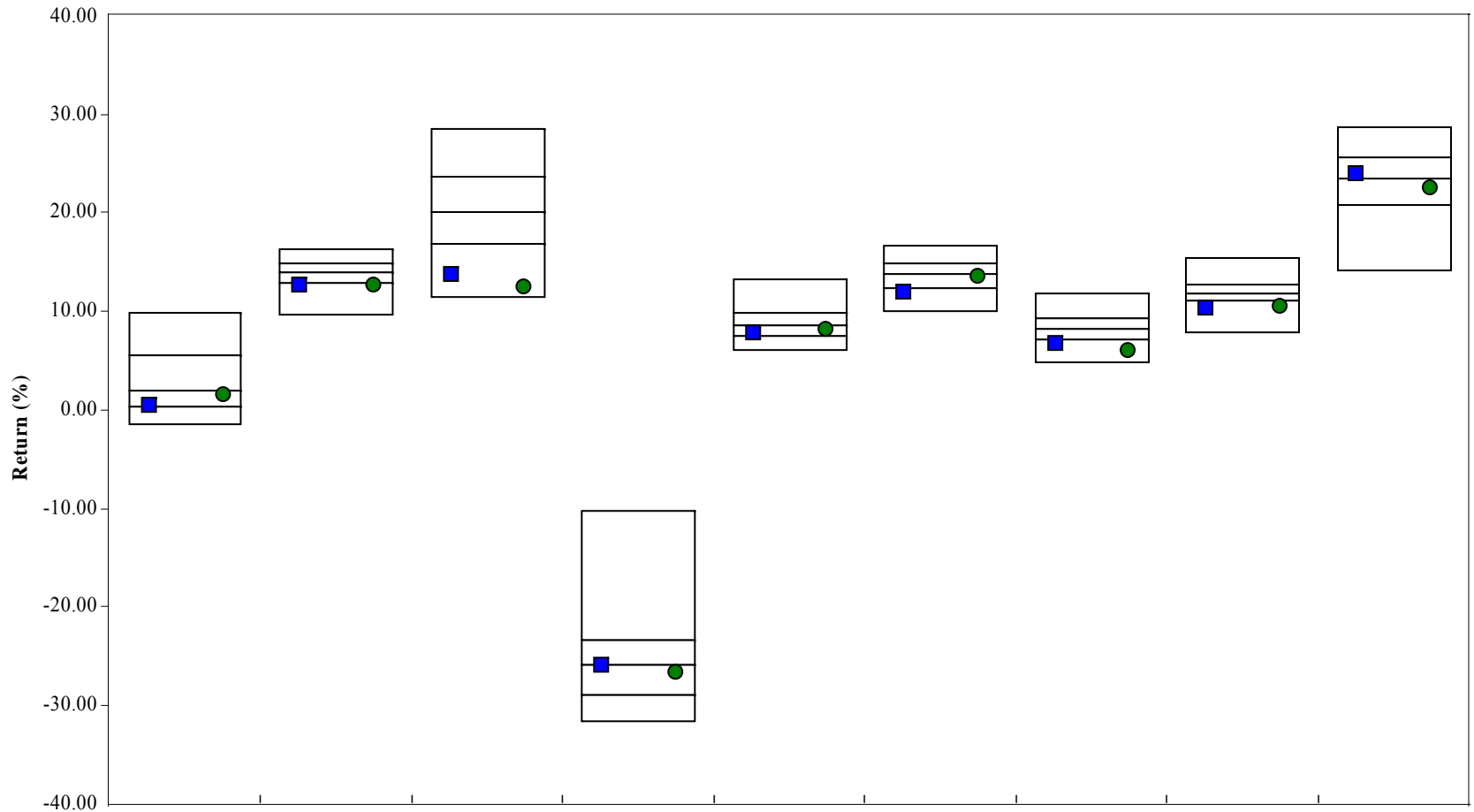
**City of Phoenix Employees' Retirement System  
All Pension Plans \$1B-\$5B (Custom Peer Group)  
Plan Sponsor Peer Group Analysis  
As of December 31, 2011**



	1 Quarter	Jul-2011 To Dec-2011	Year To Date	1 Year	3 Years	5 Years	10 Years	2010	2009	2008
■ Total Fund Composite	4.76 (69)	-4.95 (77)	0.63 (69)	0.63 (69)	8.84 (95)	0.61 (96)	4.17 (95)	12.65 (77)	13.76 (90)	-25.88 (51)
● Target Allocation Benchmark	4.68 (69)	-3.38 (50)	1.68 (52)	1.68 (52)	8.84 (95)	0.51 (98)	4.18 (95)	12.75 (76)	12.47 (94)	-26.52 (57)
Median	5.40	-3.44	1.91	1.91	11.98	2.43	5.69	13.95	20.09	-25.88
Population	146	143	141	141	139	135	118	140	140	139

Performance shown is gross of fees. Parentheses contain percentile ranks.

**City of Phoenix Employees' Retirement System**  
**All Pension Plans \$1B-\$5B (Custom Peer Group)**  
**Plan Sponsor Peer Group Analysis**  
**As of December 31, 2011**

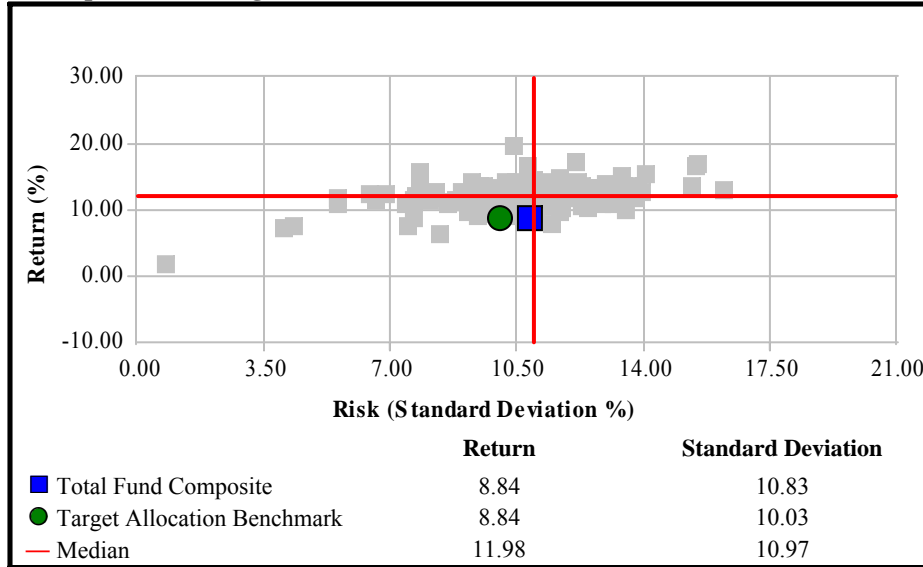


	Year To Date	2010	2009	2008	2007	2006	2005	2004	2003
■ Total Fund Composite	0.63 (69)	12.65 (77)	13.76 (90)	-25.88 (51)	7.85 (66)	12.10 (81)	6.74 (83)	10.44 (81)	24.12 (41)
● Target Allocation Benchmark	1.68 (52)	12.75 (76)	12.47 (94)	-26.52 (57)	8.26 (57)	13.61 (56)	6.02 (89)	10.60 (80)	22.56 (62)
Median	1.91	13.95	20.09	-25.88	8.62	13.77	8.22	11.93	23.44
Population	141	140	140	139	137	137	136	127	127

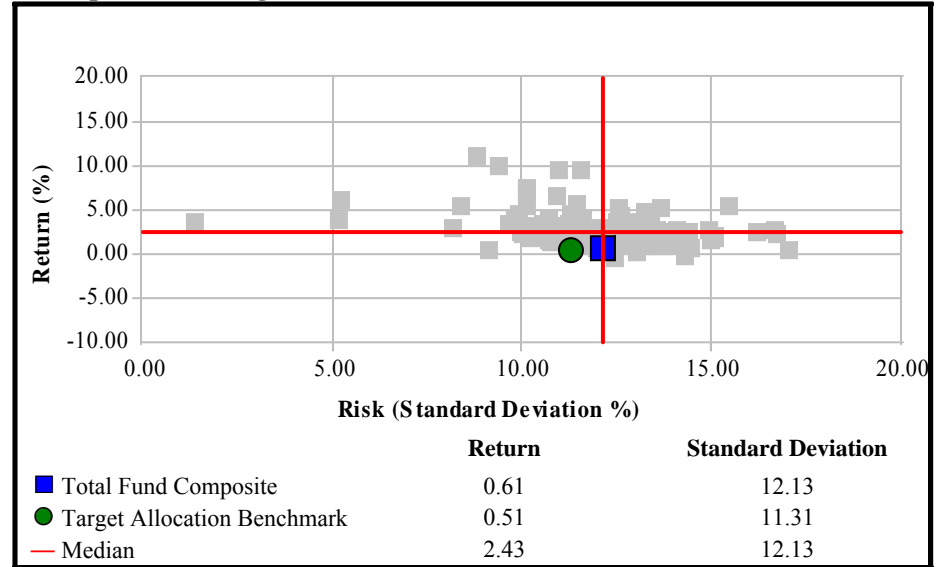
Performance shown is gross of fees. Parentheses contain percentile ranks.

**City of Phoenix Employees' Retirement System  
All Pension Plans \$1B-\$5B (Custom Peer Group)  
As of December 31, 2011**

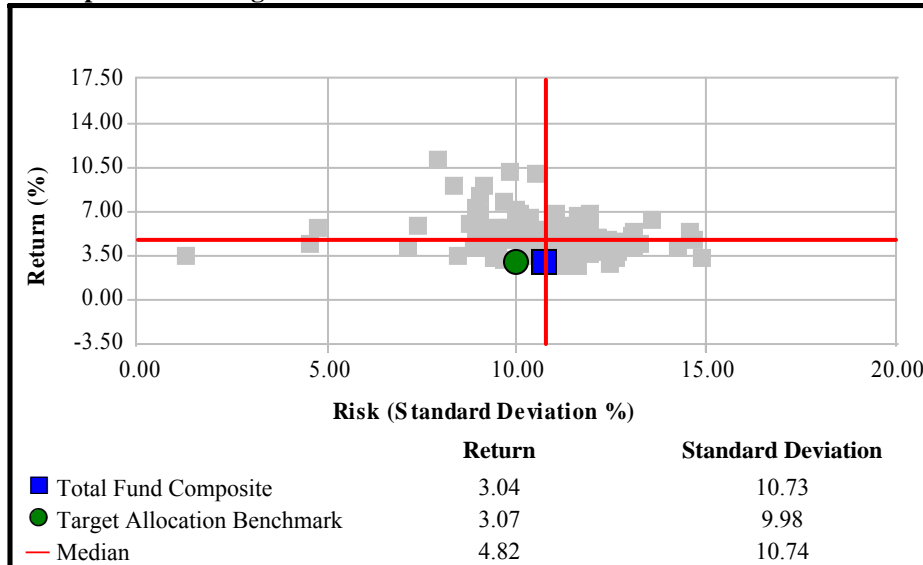
**Plan Sponsor Scattergram - 3 Years**



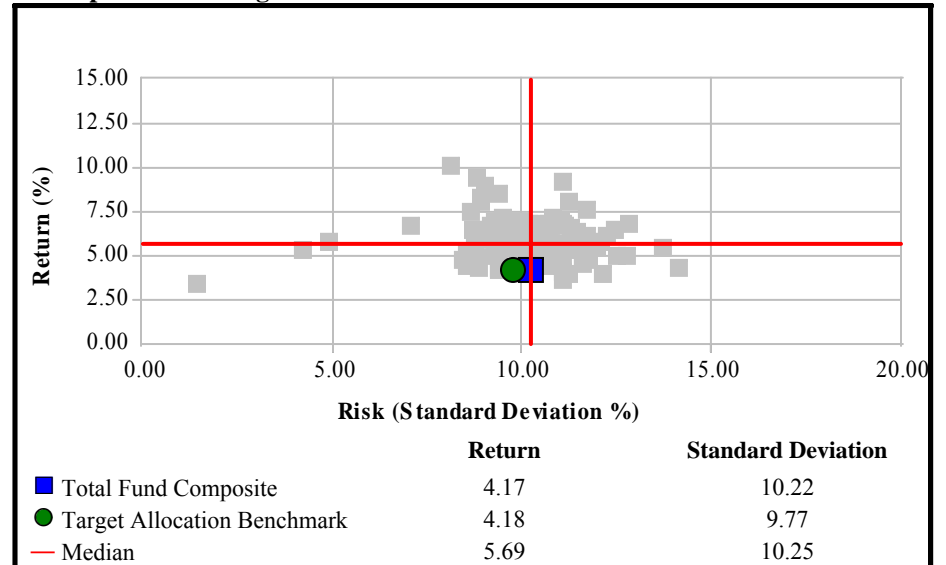
**Plan Sponsor Scattergram - 5 Years**



**Plan Sponsor Scattergram - 7 Years**



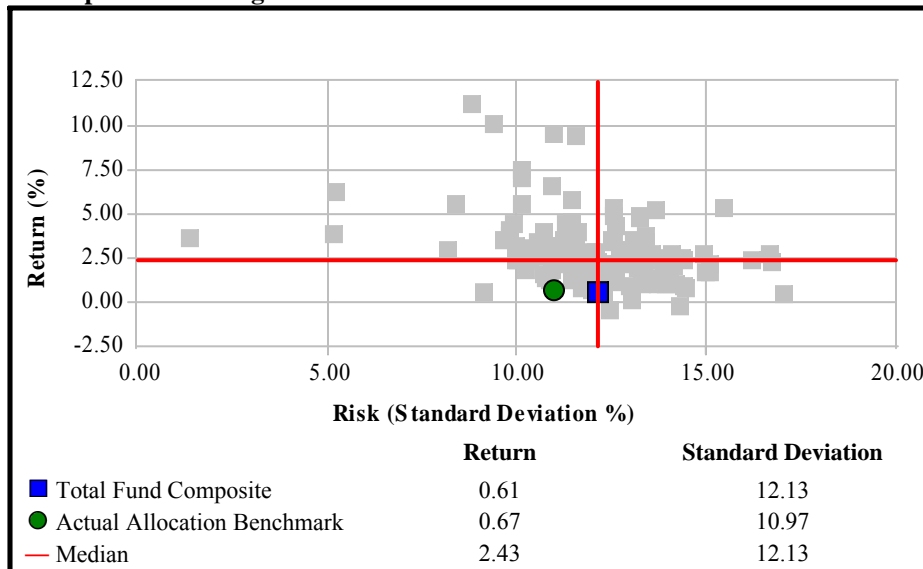
**Plan Sponsor Scattergram - 10 Years**



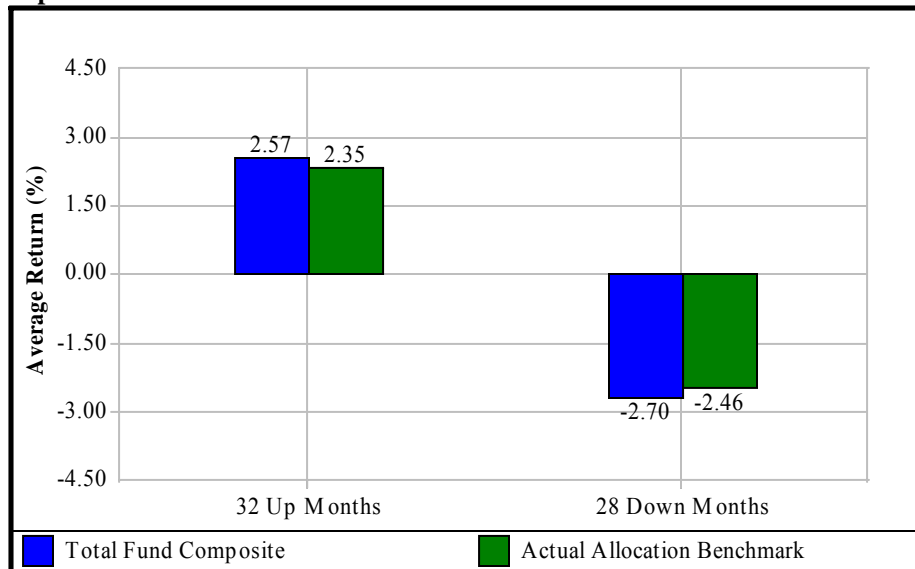
Performance shown is gross of fees.

**City of Phoenix Employees' Retirement System**  
**Total Fund Composite vs. All Pension Plans \$1B-\$5B (Custom Peer Group)**  
 As of December 31, 2011

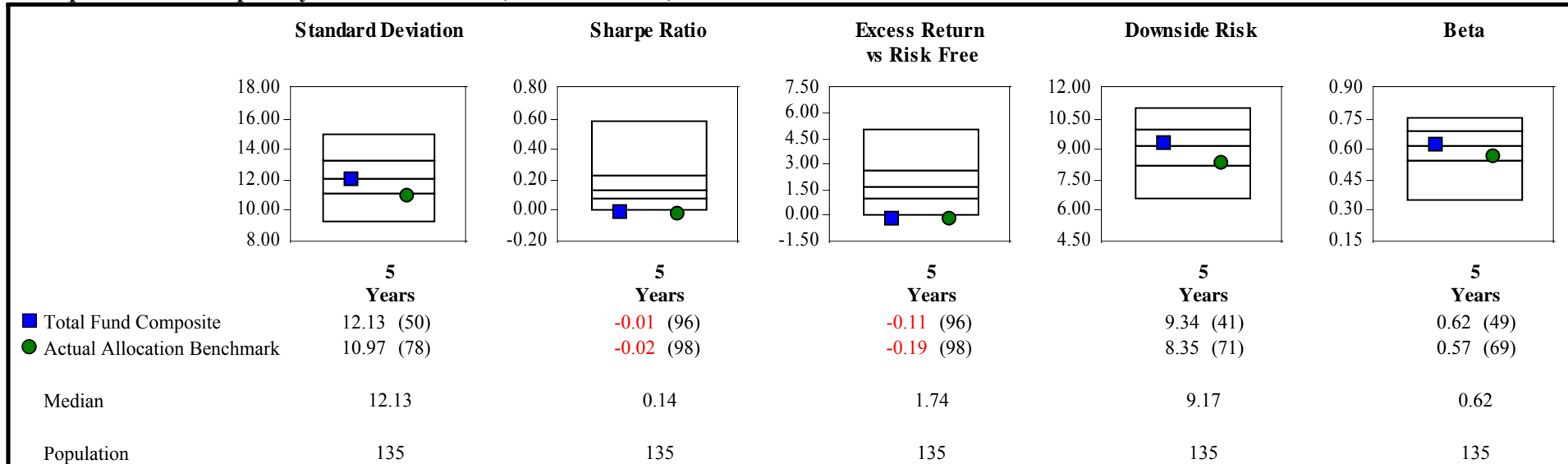
**Plan Sponsor Scattergram - 5 Years**



**Up/Down Markets - 5 Years**



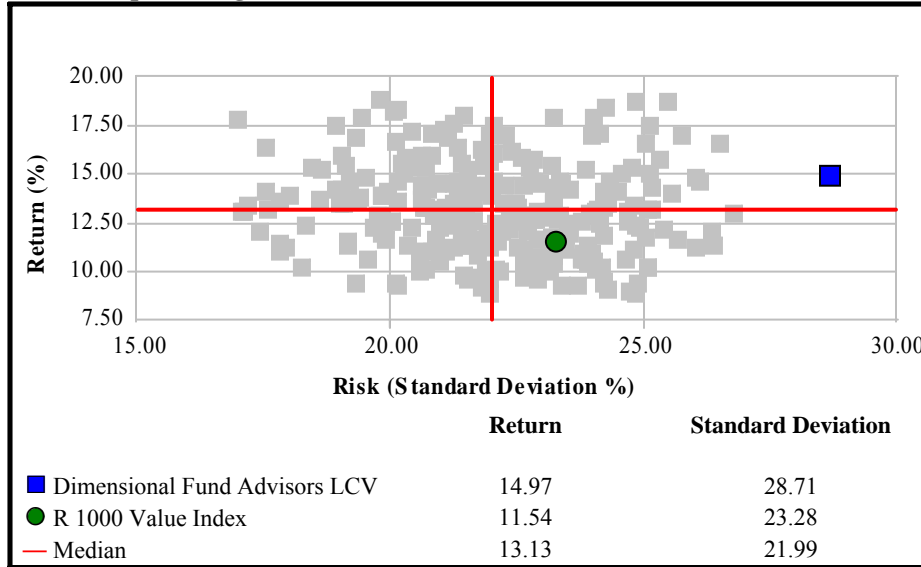
**Plan Sponsor Peer Group Analysis - Multi Statistics (Beta vs. S&P 500)**



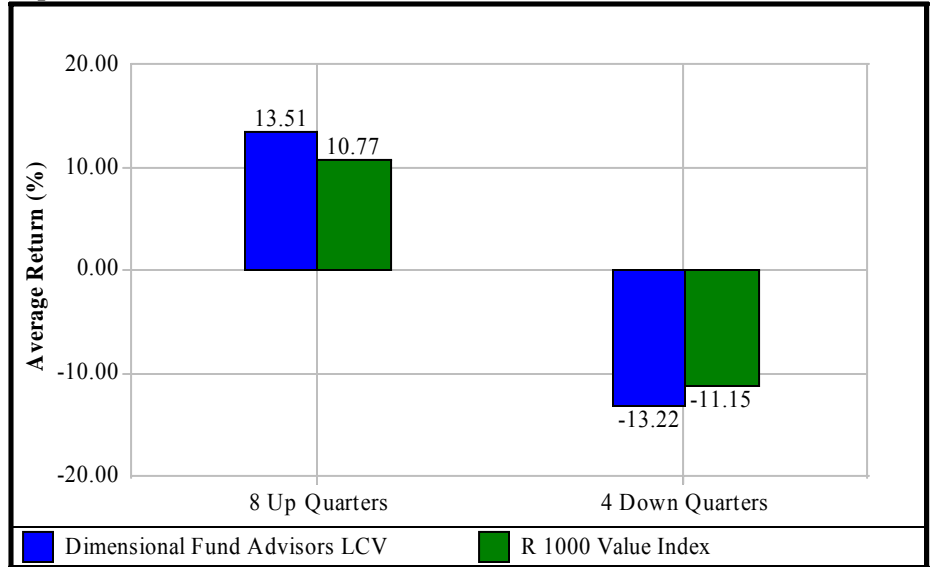
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

**City of Phoenix Employees' Retirement System**  
**Dimensional Fund Advisors LCV vs. IM U.S. Large Cap Value Equity (SA+CF)**  
**As of December 31, 2011**

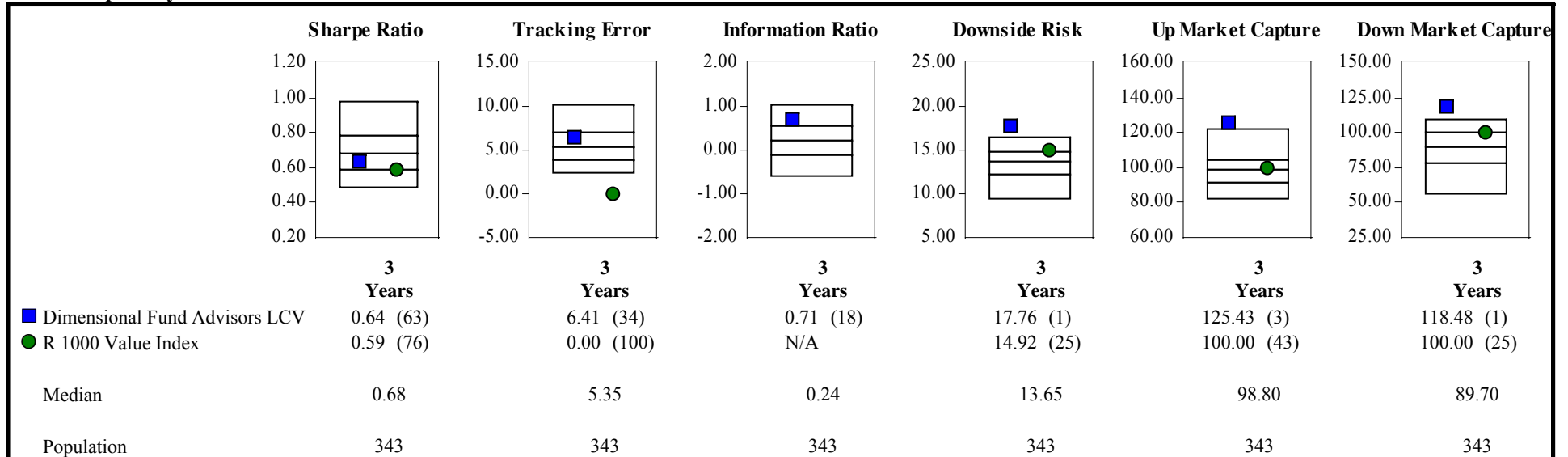
**Peer Group Scattergram - 3 Years**



**Up/Down Markets - 3 Years**



**Peer Group Analysis - Multi Statistics**

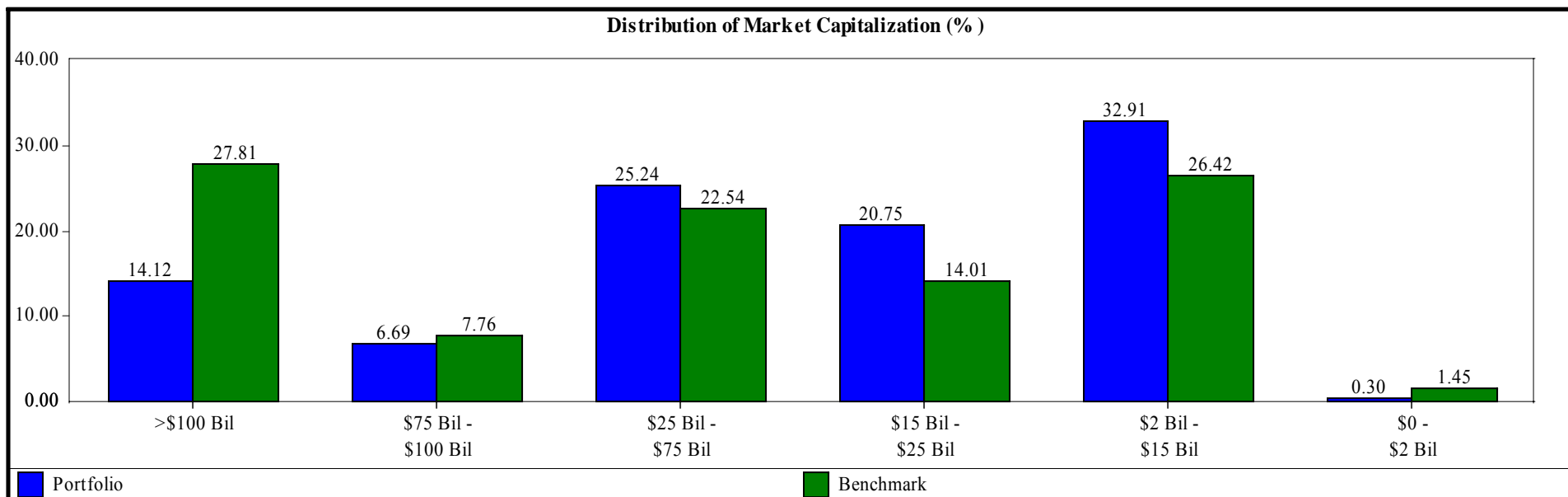


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

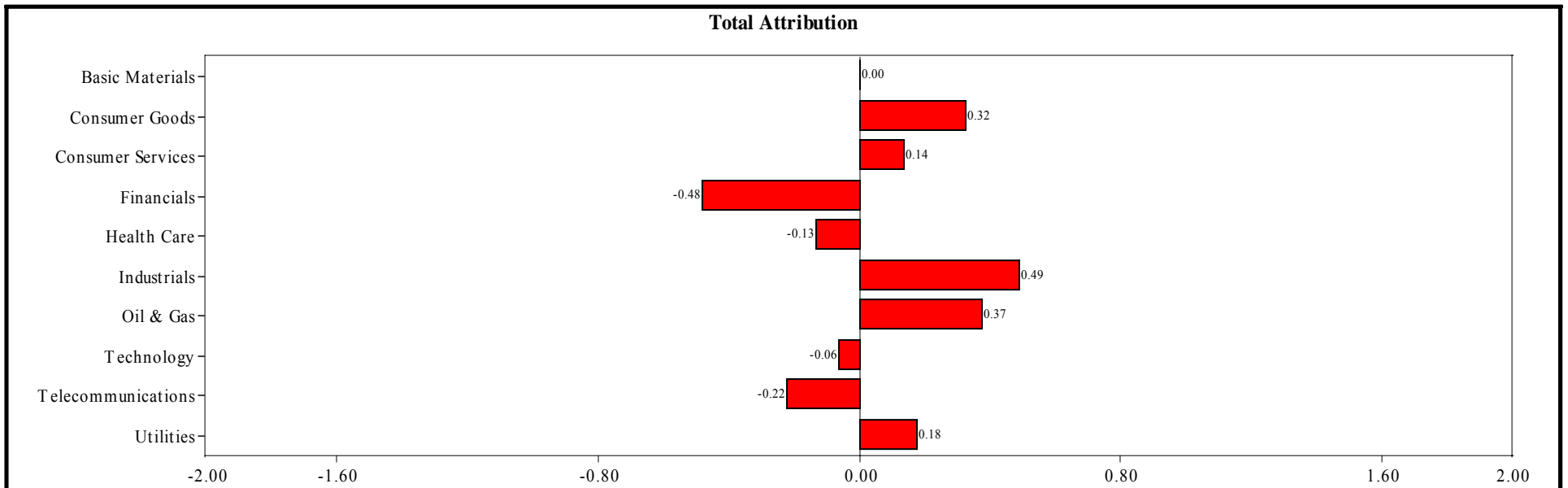
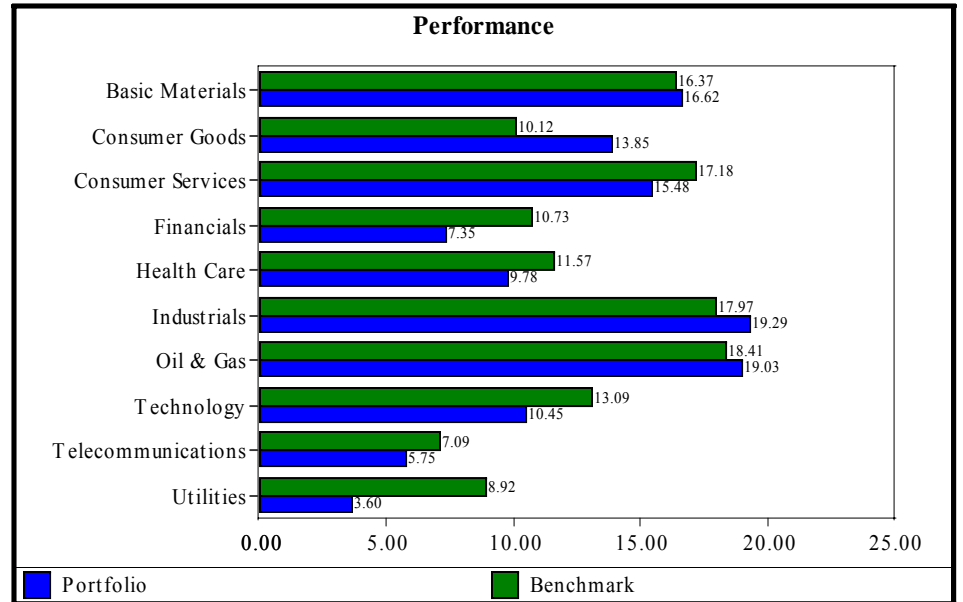
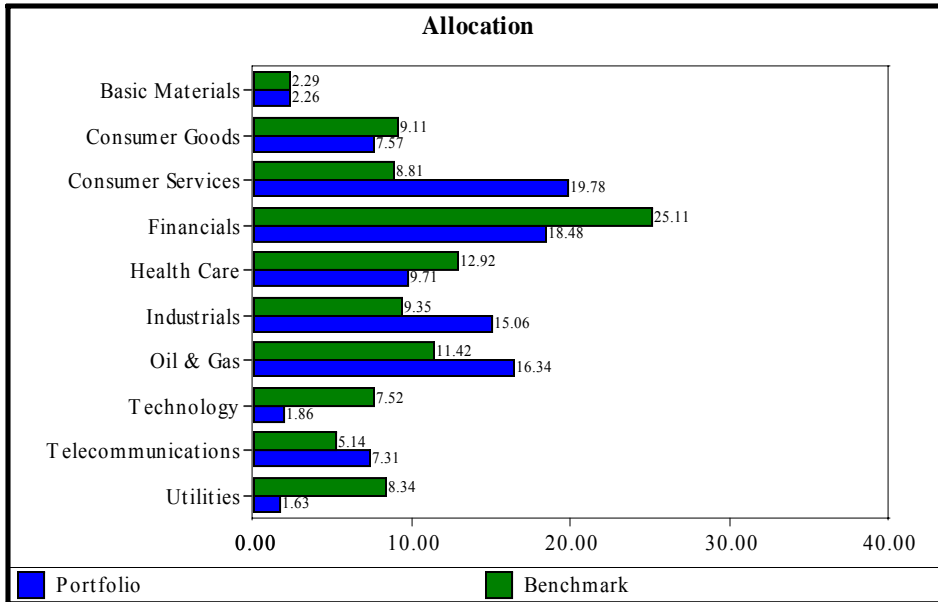
**City of Phoenix Employees' Retirement System**  
**Dimensional Fund Advisors LCV vs. R 1000 Value Index**  
**Portfolio Characteristics**  
**As of December 31, 2011**

<b>Top Ten Equity Holdings</b>	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
AT&T INC.	4.52	2.77	1.75	7.59
CONOCOPHILLIPS	4.38	1.50	2.88	16.17
PFIZER INC.	3.83	2.65	1.18	23.62
GENERAL ELECTRIC COMPANY	3.73	2.94	0.79	18.79
CVS CORPORATION	3.30	0.86	2.44	21.82
UNION PACIFIC CORPORATION	2.71	0.67	2.04	30.47
KRAFT FOODS INC.	2.67	0.96	1.71	12.12
COMCAST CORPORATION	2.54	0.57	1.97	14.42
ANADARKO PETROLEUM	2.44	0.50	1.95	21.21
CITIGROUP INC.	2.31	1.18	1.12	2.72
% of Portfolio	32.43	14.60		

<b>Portfolio Characteristics</b>	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	49,279	71,495
Median Mkt. Cap. (\$M)	6,191	4,607
Price/Earnings ratio	11.67	12.37
Price/Book ratio	1.49	1.76
5 Yr. EPS Growth Rate (%)	4.38	4.66
Current Yield (%)	2.23	2.70
Beta (3 yrs, monthly periodicity)	1.22	1.00
Number of Stocks	202	656



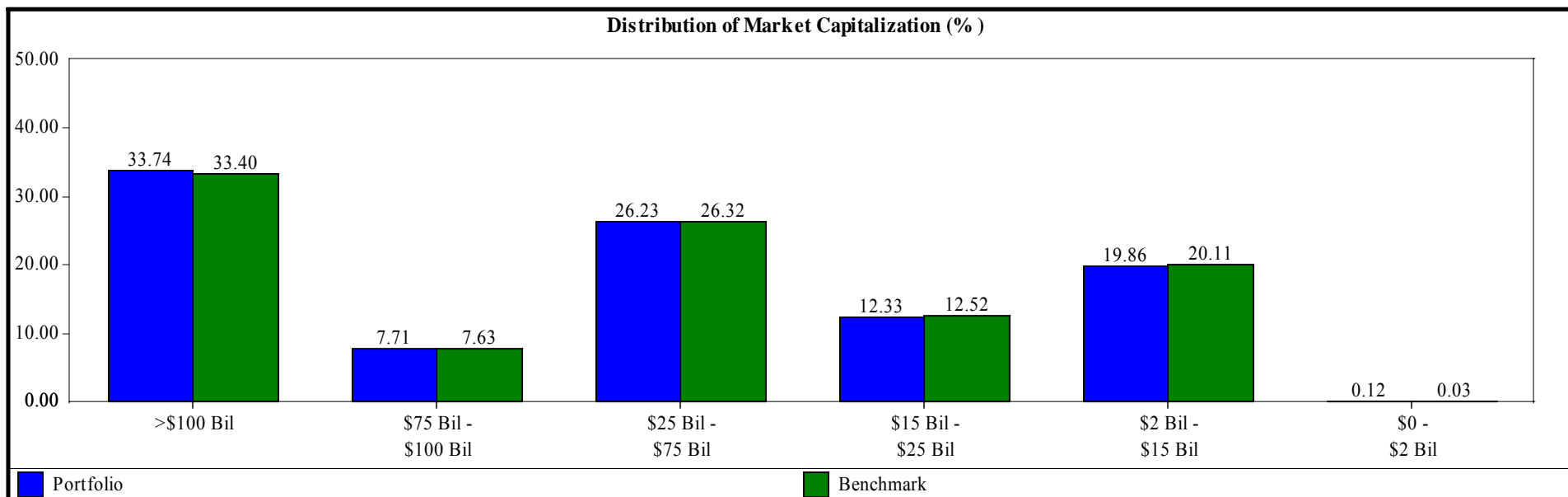
**City of Phoenix Employees' Retirement System  
Dimensional Fund Advisors LCV vs. R 1000 Value Index  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**



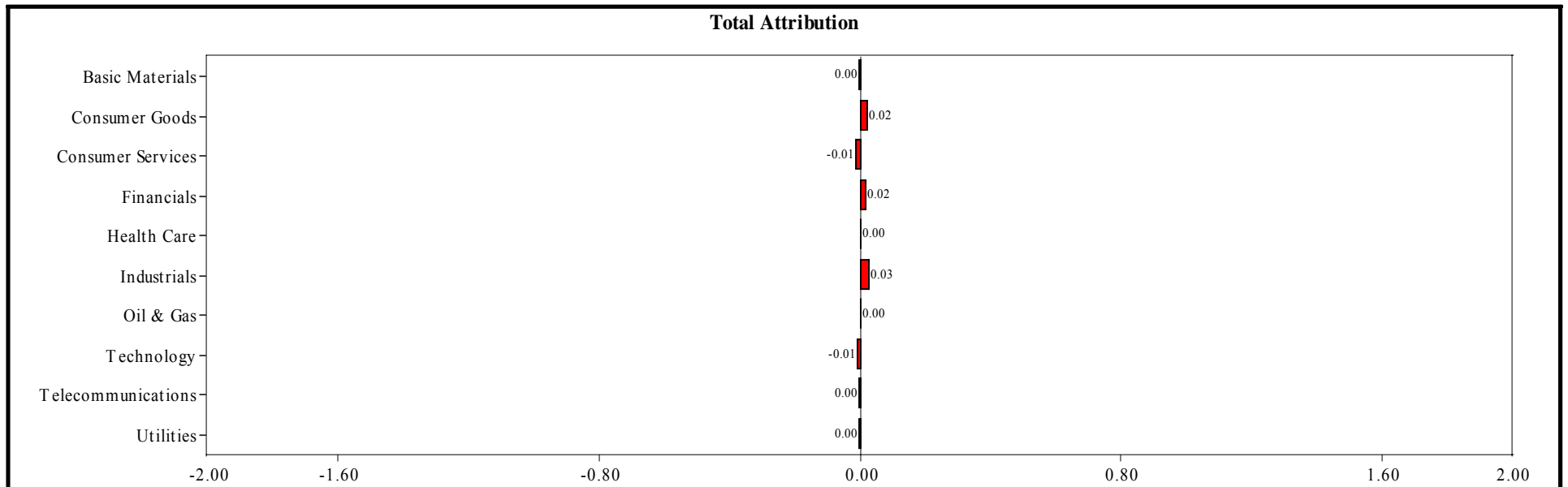
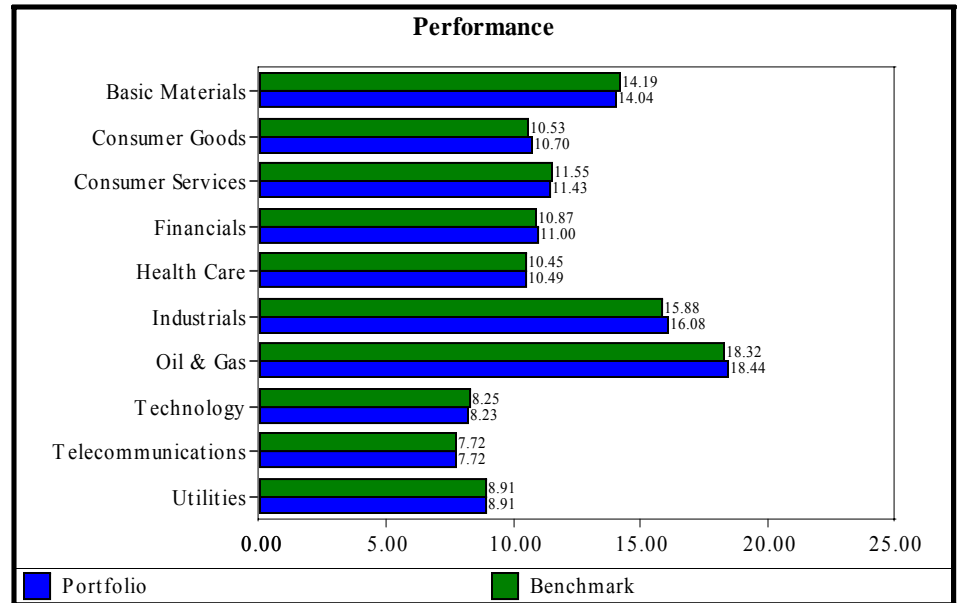
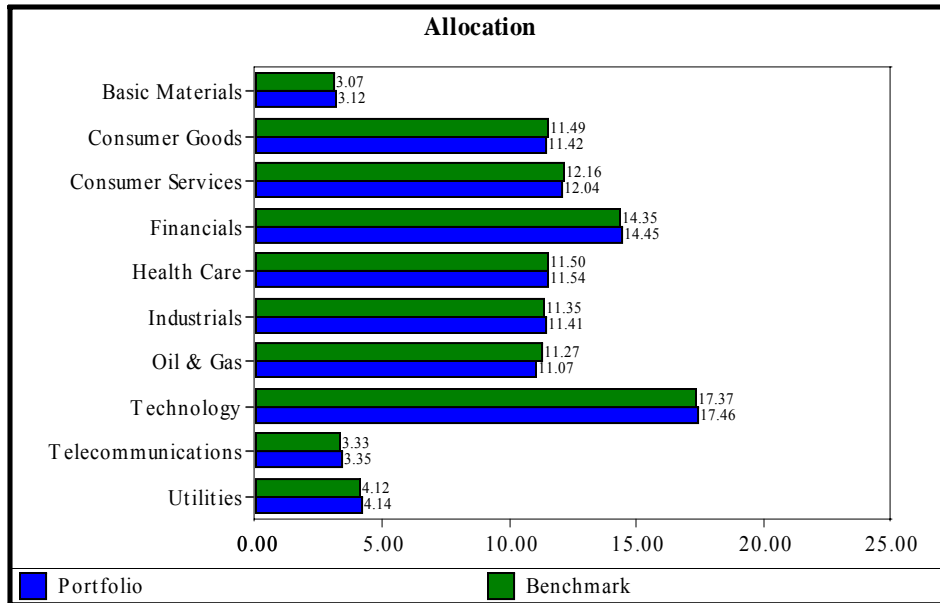
**City of Phoenix Employees' Retirement System**  
**S&P 500 SSGA SPDR vs. S&P 500 Index (Cap Wtd)**  
**Portfolio Characteristics**  
**As of December 31, 2011**

<b>Top Ten Equity Holdings</b>	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
EXXON MOBIL CORPORATION	3.63	3.57	0.05	17.38
APPLE COMPUTER, INC.	3.31	3.31	0.00	6.21
INT'L BUSINESS MACHS	1.93	1.91	0.03	5.57
CHEVRONTEXACO CORPORATION	1.88	1.86	0.01	15.82
MICROSOFT CORPORATION	1.70	1.71	-0.01	5.11
GENERAL ELECTRIC COMPANY	1.67	1.66	0.01	18.79
PROCTER & GAMBLE CO (THE)	1.61	1.61	0.00	6.45
AT&T INC.	1.58	1.58	0.00	7.59
JOHNSON & JOHNSON	1.58	1.58	0.01	3.87
PFIZER INC.	1.49	1.46	0.02	23.62
% of Portfolio	20.38	20.25		

<b>Portfolio Characteristics</b>	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	94,751	94,165
Median Mkt. Cap. (\$M)	10,942	11,126
Price/Earnings ratio	13.72	13.76
Price/Book ratio	2.46	2.47
5 Yr. EPS Growth Rate (%)	9.42	9.75
Current Yield (%)	2.56	2.44
Beta (5 yrs, monthly periodicity)	1.00	1.00
Number of Stocks	500	499

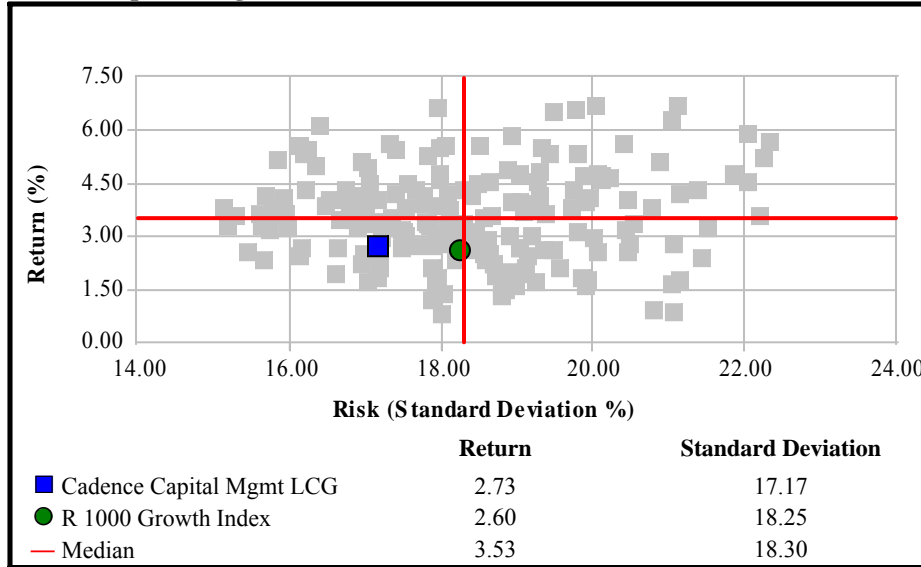


**City of Phoenix Employees' Retirement System  
S&P 500 SSGA SPDR vs. S&P 500 Index (Cap Wtd)  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**

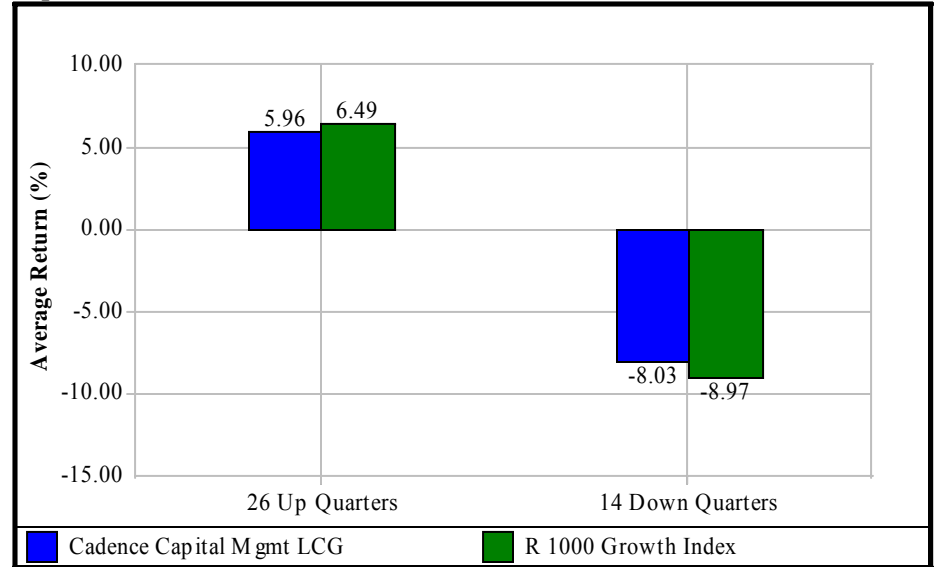


**City of Phoenix Employees' Retirement System**  
**Cadence Capital Mgmt LCG vs. IM U.S. Large Cap Growth Equity (SA+CF)**  
 As of December 31, 2011

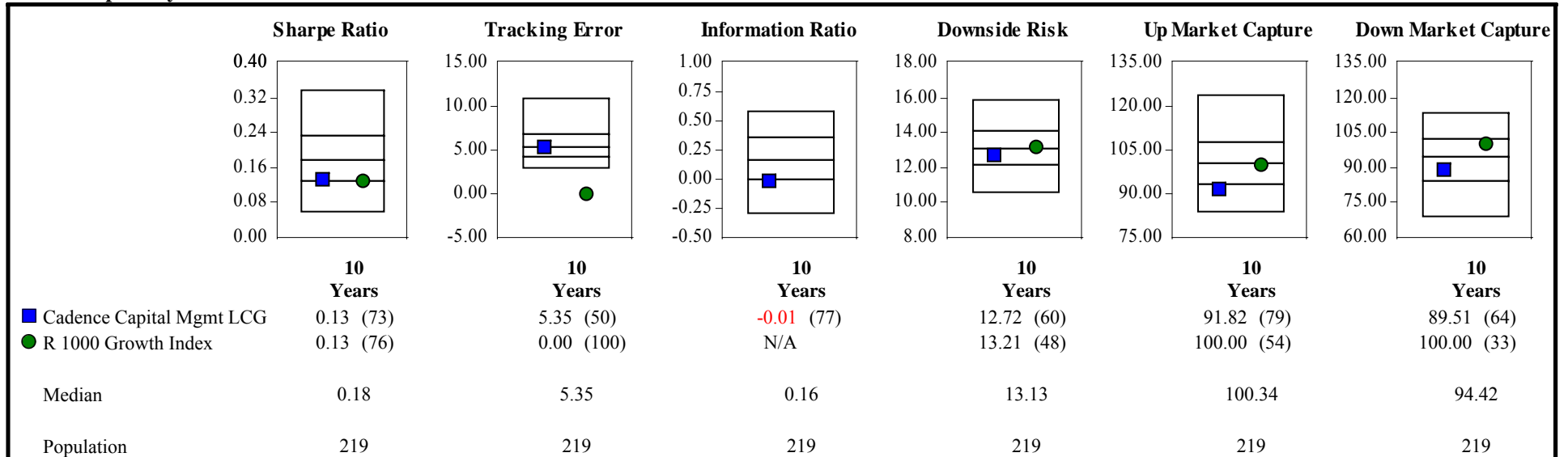
**Peer Group Scattergram - 10 Years**



**Up/Down Markets - 10 Years**



**Peer Group Analysis - Multi Statistics**

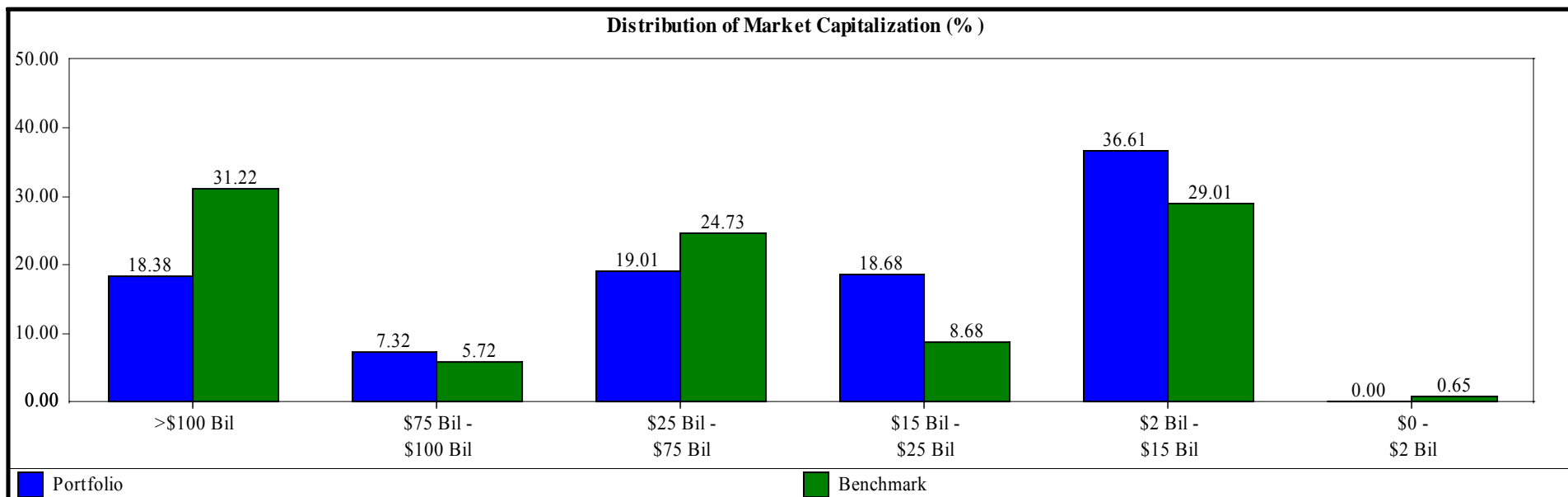


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

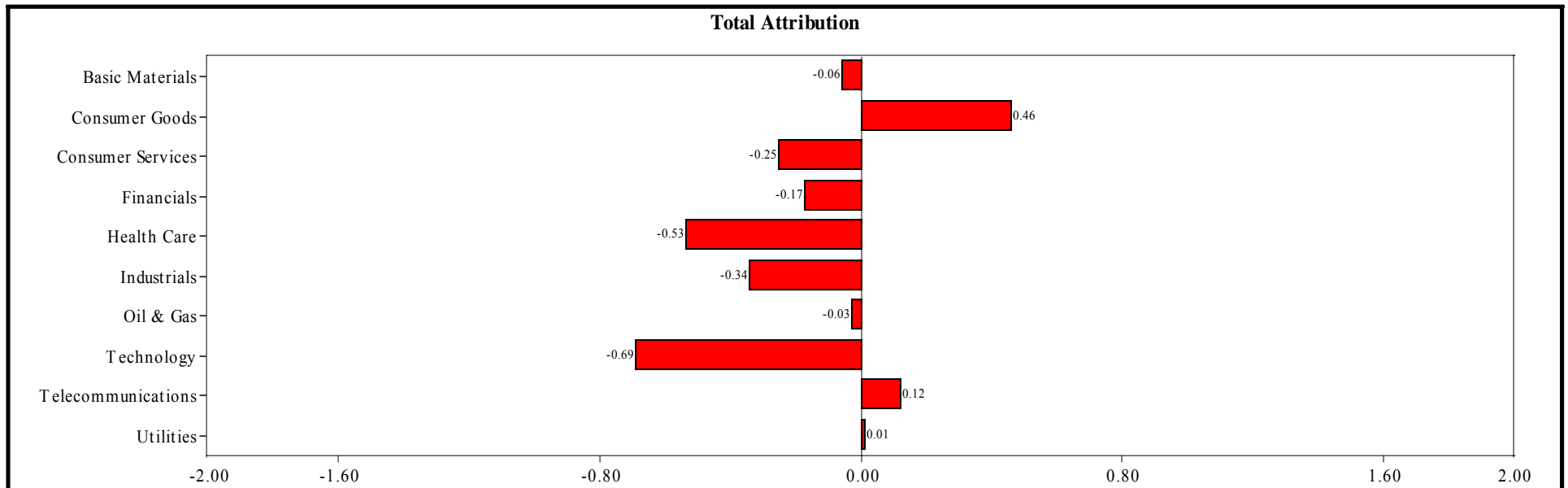
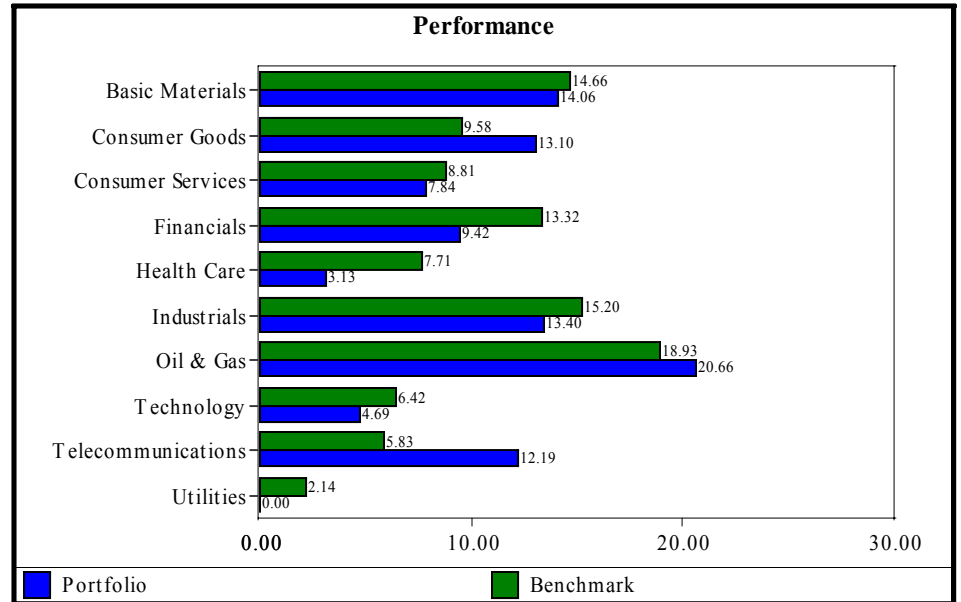
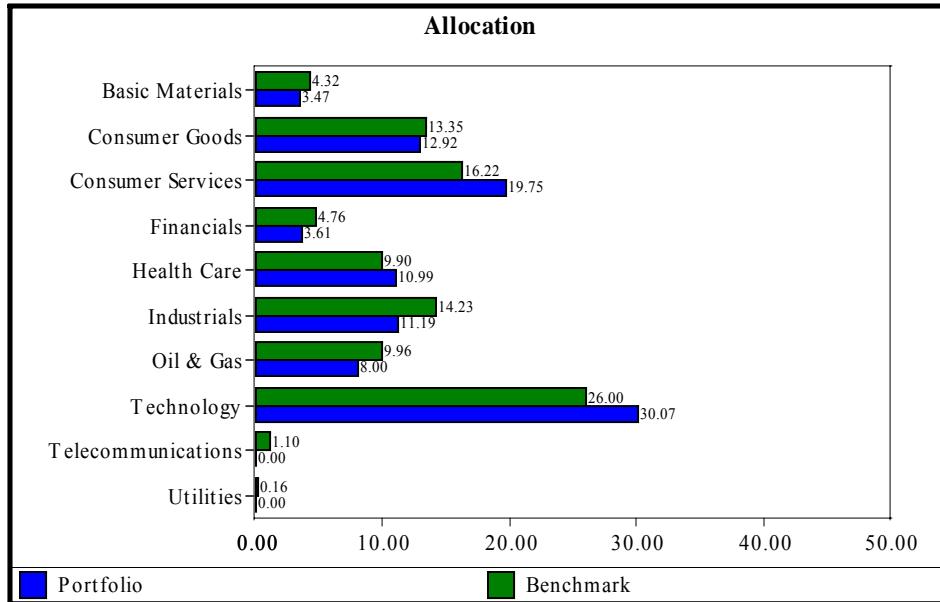
**City of Phoenix Employees' Retirement System**  
**Cadence Capital Mgmt LCG vs. R 1000 Growth Index**  
**Portfolio Characteristics**  
**As of December 31, 2011**

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
GOOGLE INC.	4.40	2.53	1.88	25.41
APPLE COMPUTER, INC.	4.36	5.82	-1.46	6.21
ORACLE CORPORATION	2.92	1.53	1.39	-10.59
QUALCOMM INCORPORATED	2.53	1.42	1.11	12.92
AMAZON.COM, INC.	2.31	0.98	1.33	-19.95
HALLIBURTON COMPANY	1.98	0.49	1.49	13.35
JOHNSON & JOHNSON	1.90	0.57	1.33	3.87
WAL-MART STORES, INC.	1.83	1.25	0.58	15.85
NORDSTROM INC	1.66	0.13	1.54	9.38
DISCOVER FINANCIAL SERVICES	1.58	0.02	1.56	4.89
% of Portfolio	25.47	14.74		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	61,983	96,546
Median Mkt. Cap. (\$M)	20,014	5,660
Price/Earnings ratio	16.34	15.69
Price/Book ratio	3.44	3.65
5 Yr. EPS Growth Rate (%)	16.71	15.36
Current Yield (%)	1.63	2.16
Beta (5 yrs, monthly periodicity)	0.98	1.00
Number of Stocks	73	588

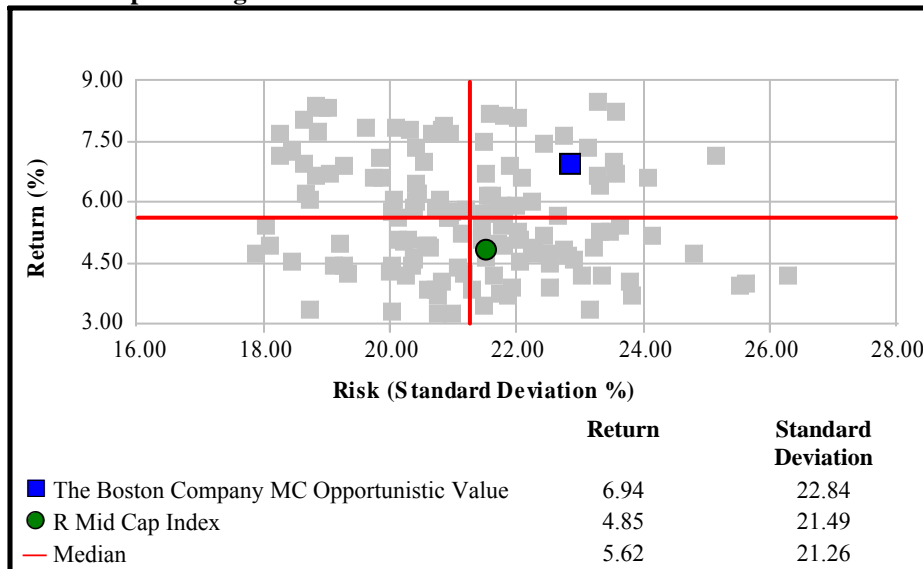


**City of Phoenix Employees' Retirement System  
Cadence Capital Mgmt LCG vs. R 1000 Growth Index  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**

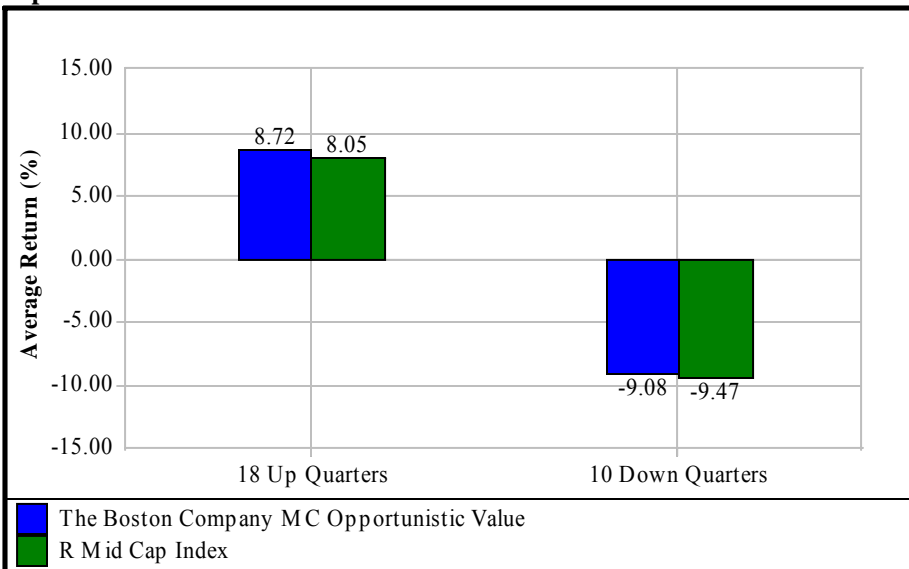


**City of Phoenix Employees' Retirement System**  
**The Boston Company MC Opportunistic Value vs. IM U.S. Mid Cap Equity (SA+CF)**  
 As of December 31, 2011

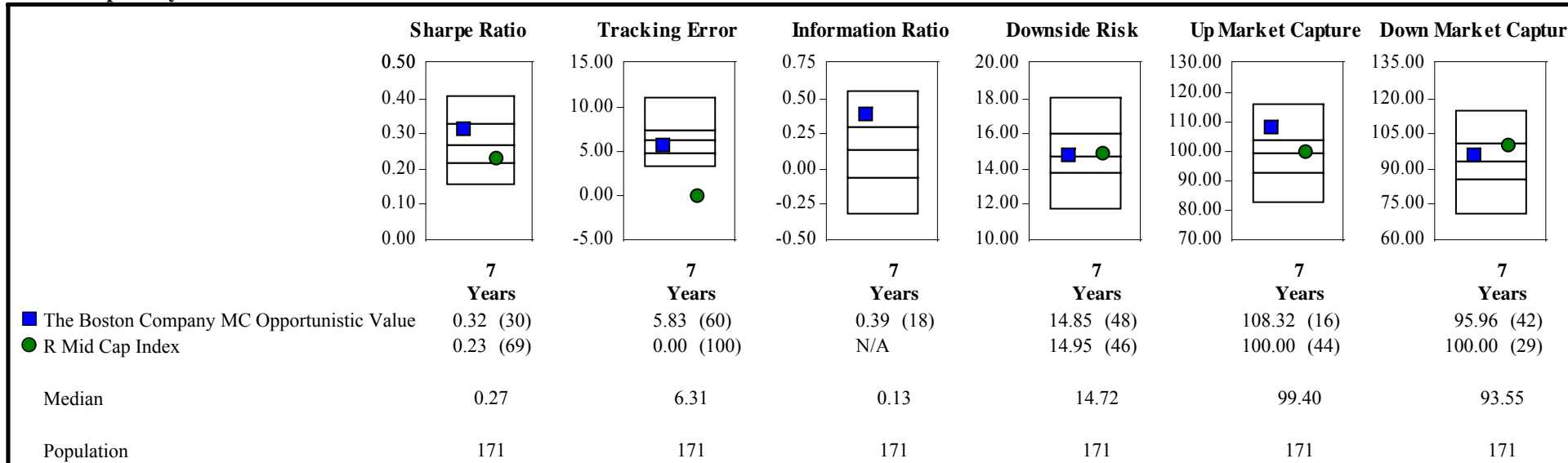
**Peer Group Scattergram - 7 Years**



**Up/Down Markets - 7 Years**



**Peer Group Analysis - Multi Statistics**

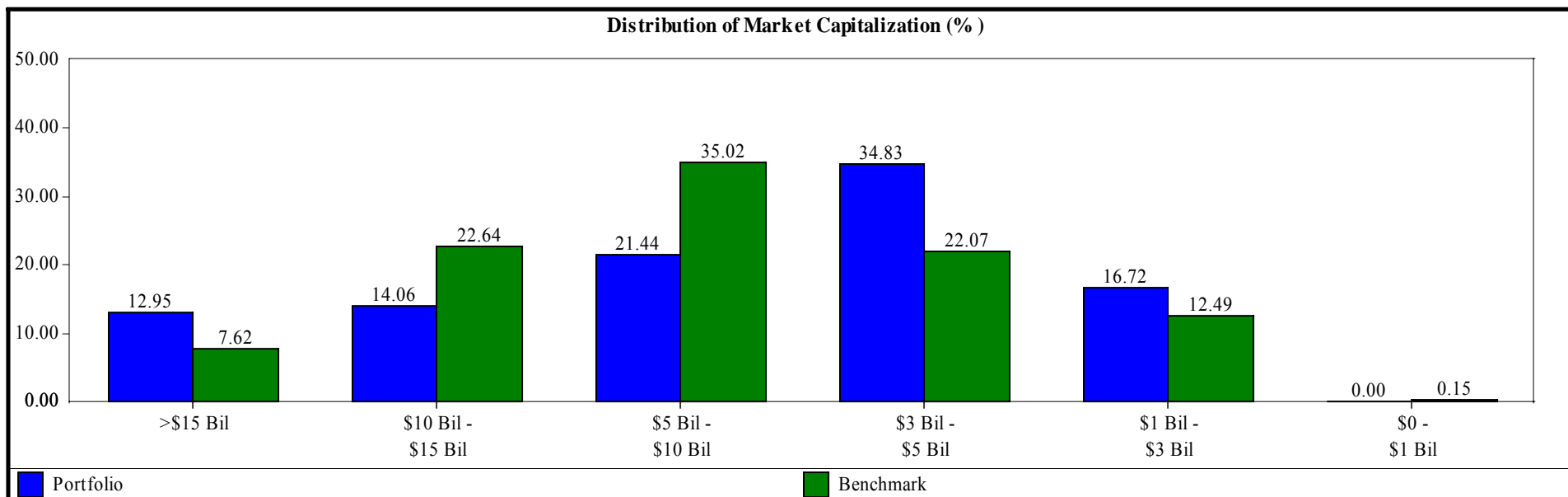


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

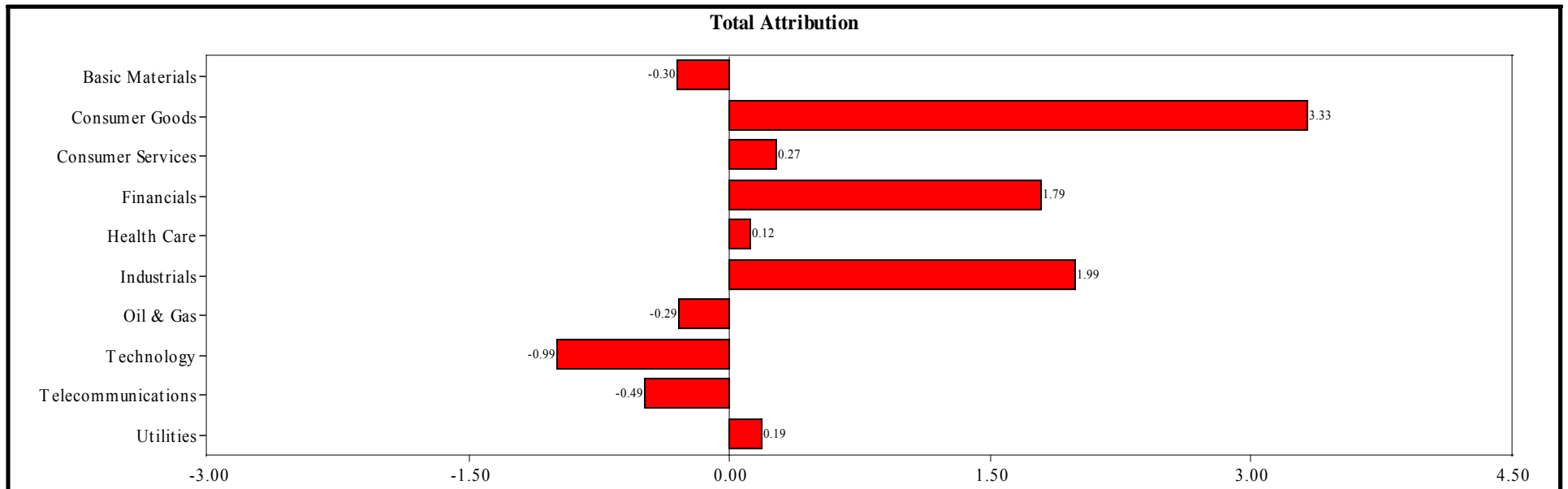
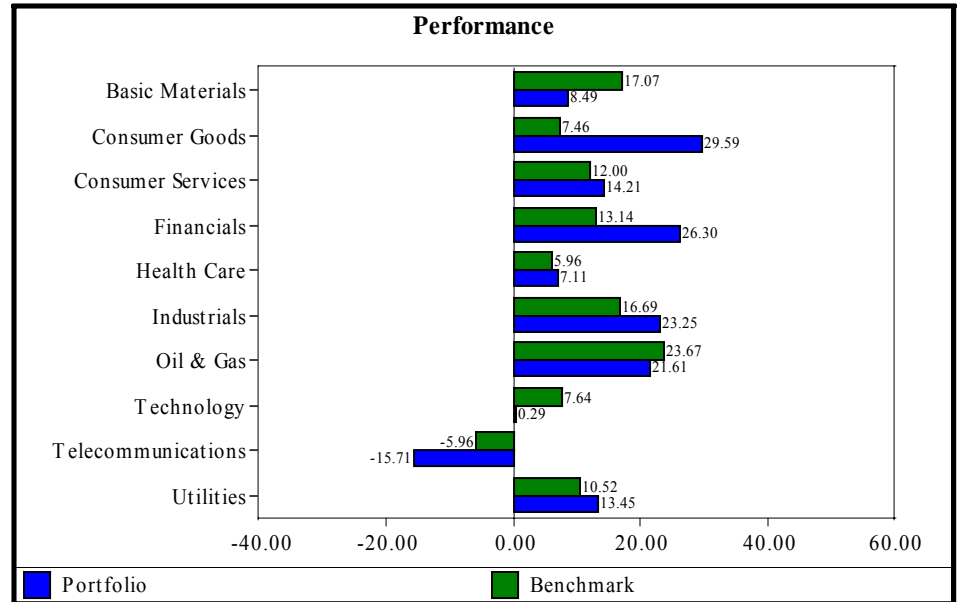
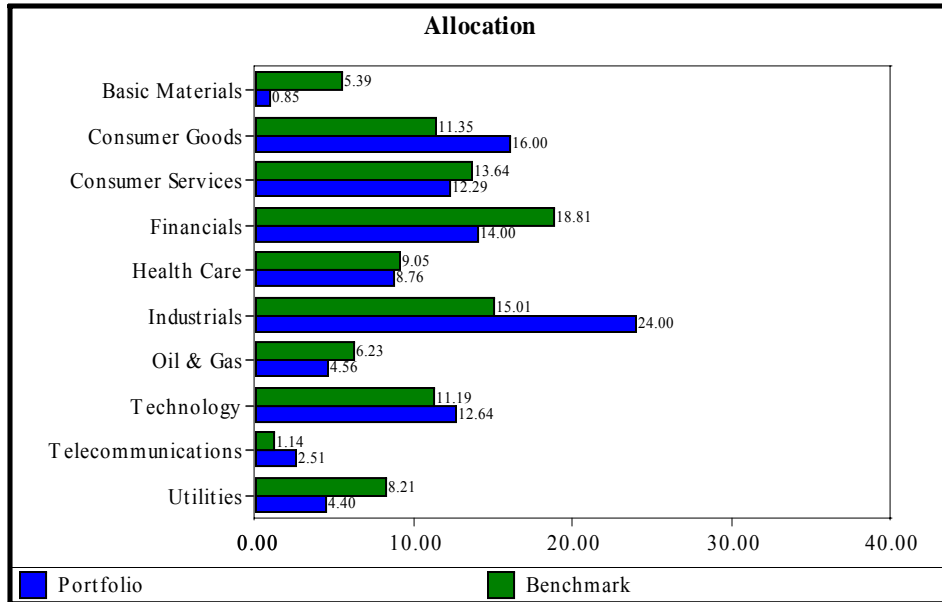
**City of Phoenix Employees' Retirement System**  
**The Boston Company MC Opportunistic Value vs. R Mid Cap Index**  
**Portfolio Characteristics**  
**As of December 31, 2011**

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
MOHAWK INDUSTRIES, INC.	3.65	0.09	3.56	39.48
D.R. HORTON, INC	3.35	0.09	3.25	39.93
LOWE'S COMPANIES, INC.	3.28	0.00	3.28	32.10
NEWELL RUBBERMAID	3.26	0.13	3.13	36.77
INT'L GAME TECH	2.99	0.14	2.85	18.79
STANLEY BLACK	2.89	0.30	2.59	38.54
CIGNA CORPORATION	2.67	0.32	2.35	0.14
INTUIT INC.	2.66	0.42	2.24	10.86
ARTHUR J. GALLAGHER & CO.	2.65	0.10	2.55	28.40
ROBERT HALF INTL INC	2.51	0.11	2.40	34.83
% of Portfolio	29.91	1.70		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	7,567	7,831
Median Mkt. Cap. (\$M)	4,997	3,939
Price/Earnings ratio	18.05	15.42
Price/Book ratio	2.09	2.34
5 Yr. EPS Growth Rate (%)	-1.83	8.93
Current Yield (%)	2.17	2.48
Beta (5 yrs, monthly periodicity)	1.07	1.00
Number of Stocks	71	783

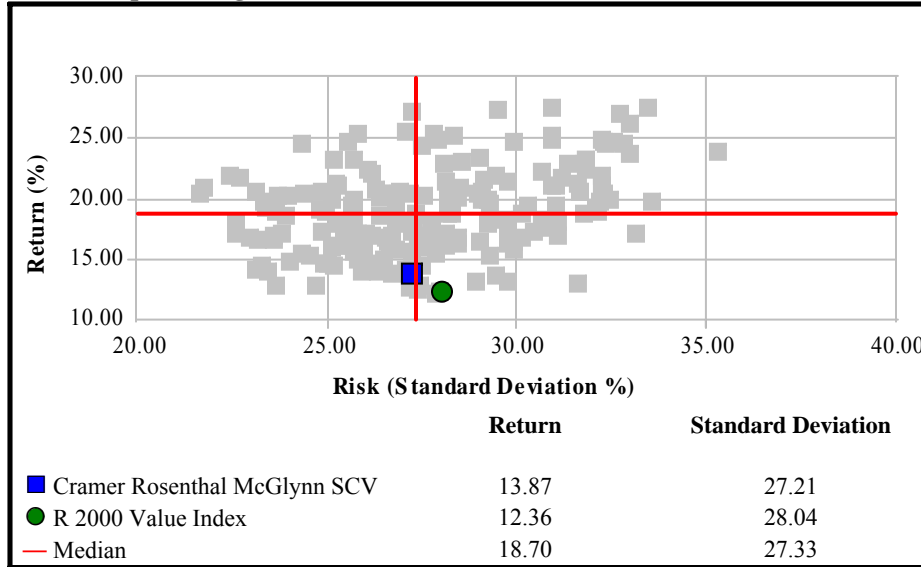


**City of Phoenix Employees' Retirement System**  
**The Boston Company MC Opportunistic Value vs. R Mid Cap Index**  
**Buy and Hold Sector Attribution Graph**  
**1 Quarter Ending December 31, 2011**

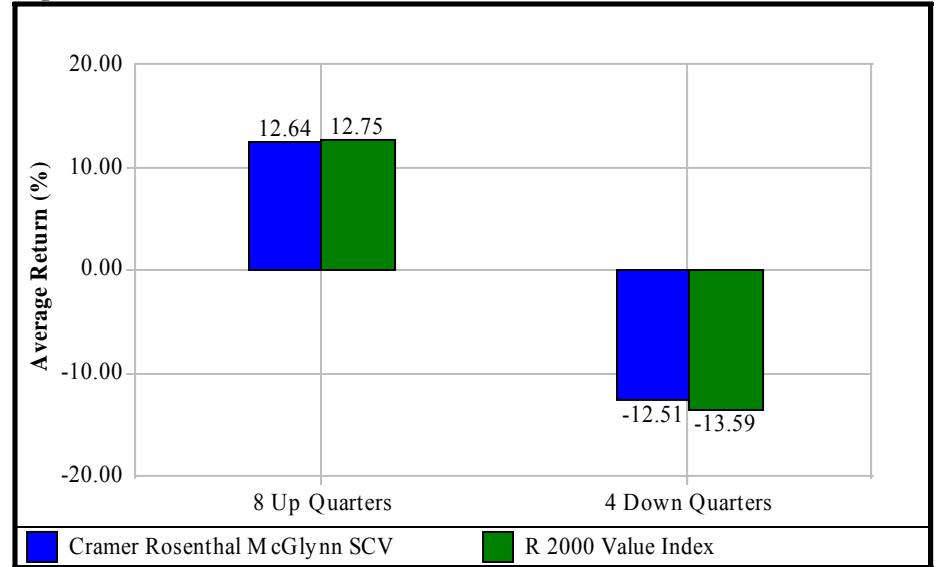


**City of Phoenix Employees' Retirement System**  
**Cramer Rosenthal McGlynn SCV vs. IM U.S. Small Cap Value Equity (SA+CF)**  
 As of December 31, 2011

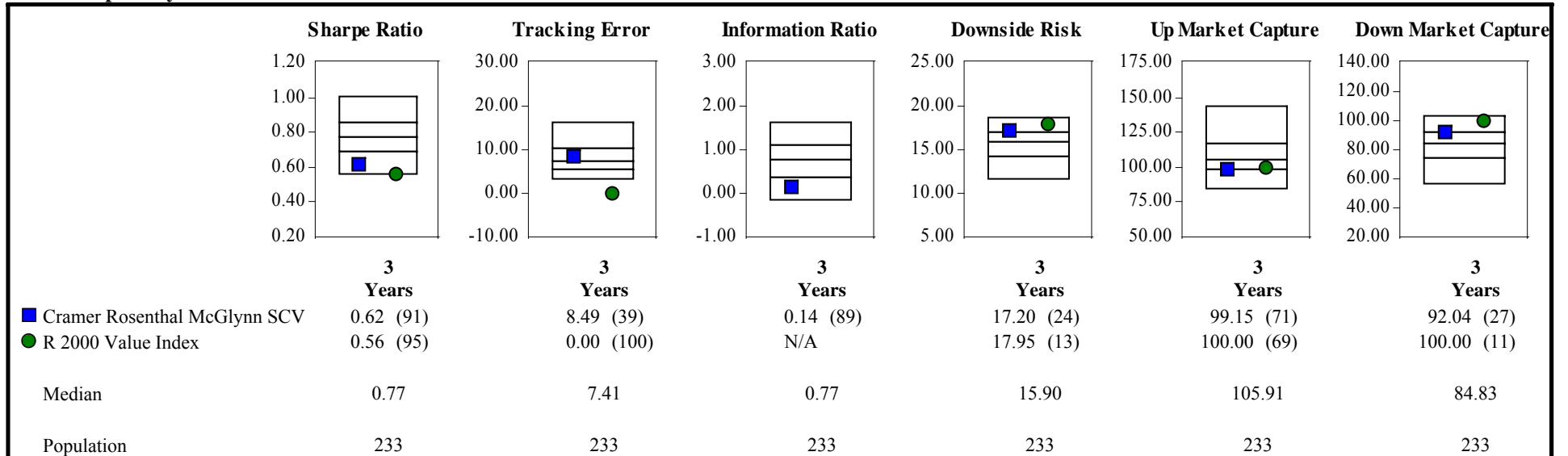
**Peer Group Scattergram - 3 Years**



**Up/Down Markets - 3 Years**



**Peer Group Analysis - Multi Statistics**

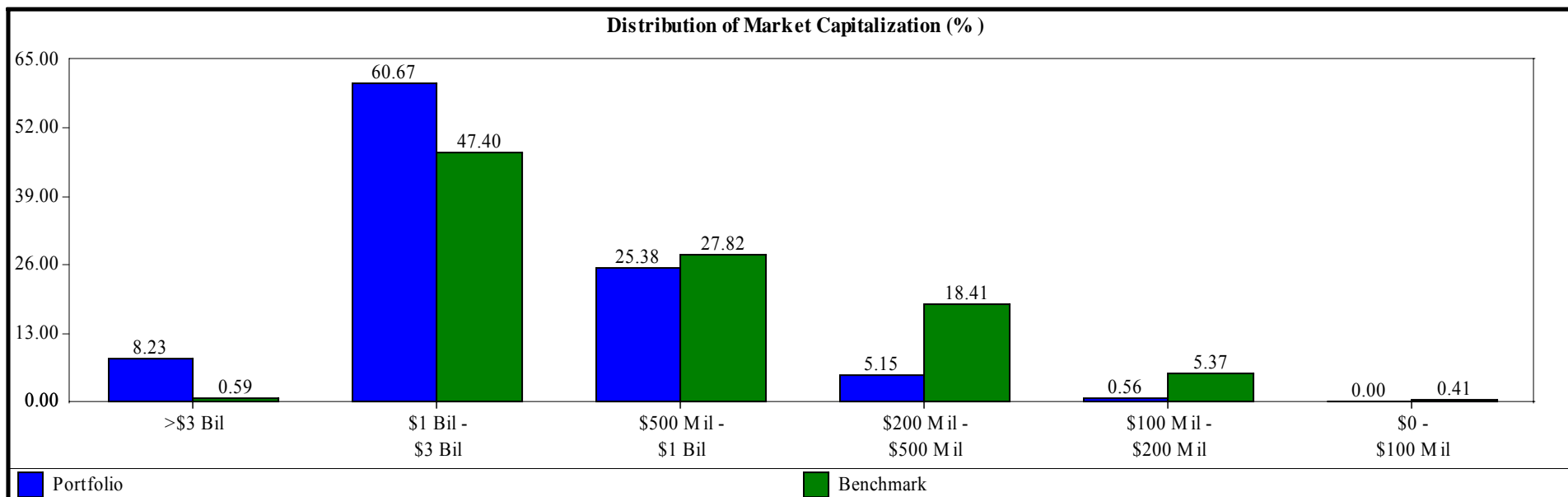


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

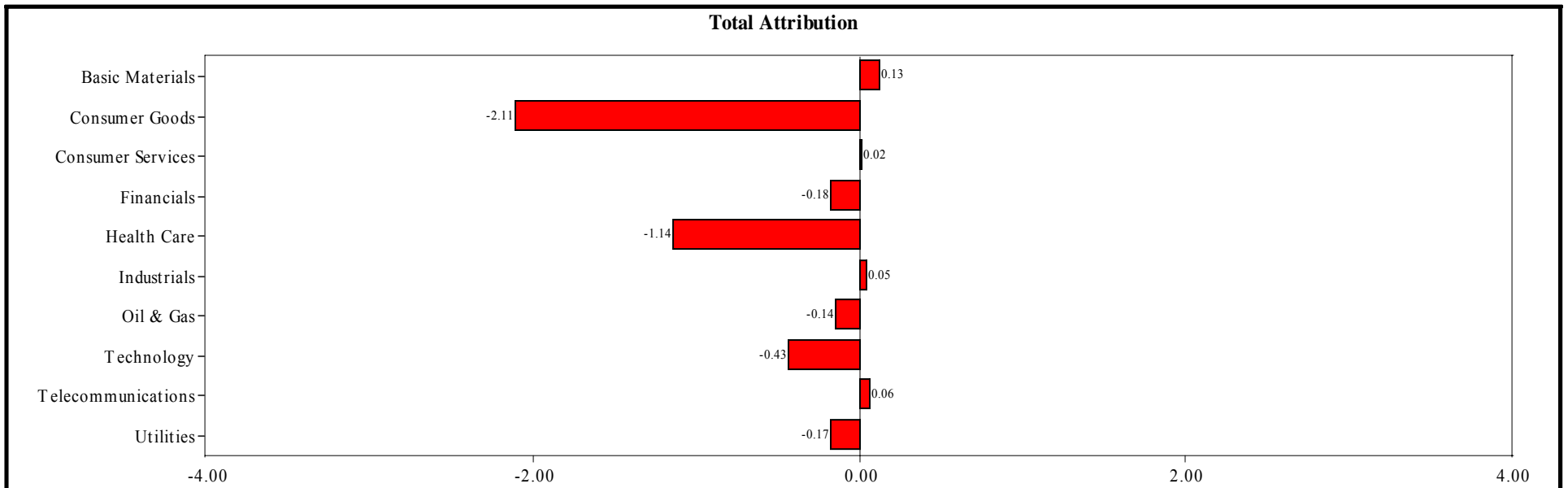
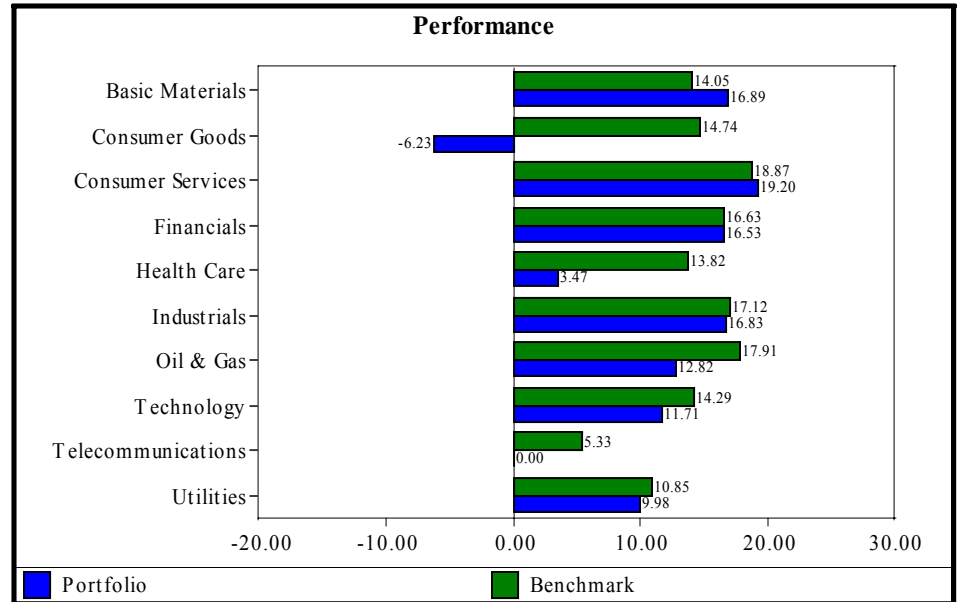
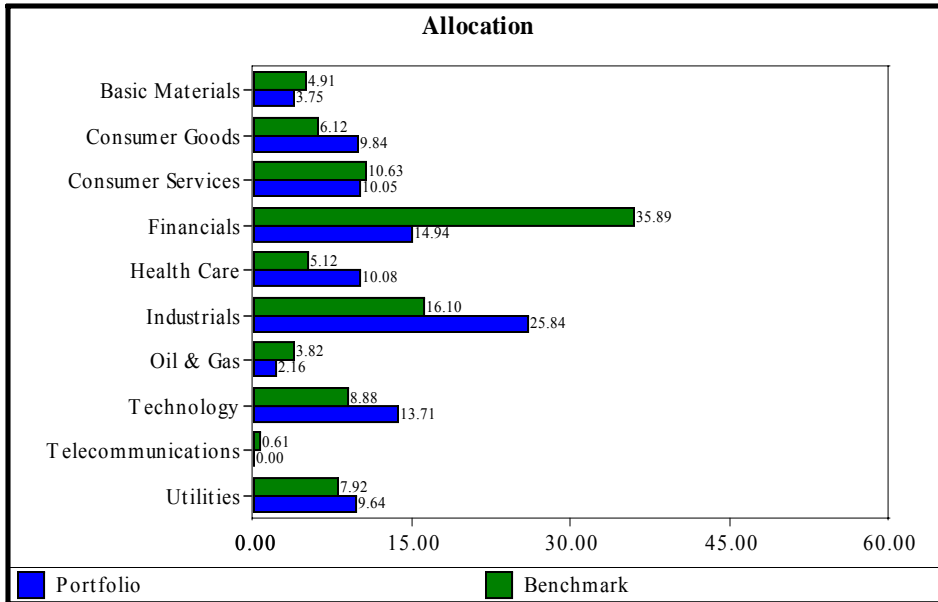
**City of Phoenix Employees' Retirement System**  
**Cramer Rosenthal McGlynn SCV vs. R 2000 Value Index**  
**Portfolio Characteristics**  
**As of December 31, 2011**

<b>Top Ten Equity Holdings</b>	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
CONMED CORPORATION	3.48	0.13	3.34	11.56
GROUP 1 AUTOMOTIVE, INC.	2.58	0.21	2.37	46.10
NORTHWESTERN CORPORATION	2.49	0.24	2.26	13.18
INNOPHOS HOLDINGS INC	2.44	0.00	2.44	22.46
MAX RE CAPITAL LTD	2.42	0.39	2.03	25.33
GEO GROUP, INC. (THE)	2.39	0.20	2.19	-9.75
ULTRATECH, INC.	2.19	0.00	2.19	43.27
SAPIENT CORPORATION	2.18	0.00	2.18	24.26
BIOMARIN PHARMACEUTICAL INC	2.16	0.00	2.16	7.88
COOPER COMPANIES INC	2.13	0.00	2.13	-10.90
% of Portfolio	24.46	1.17		

<b>Portfolio Characteristics</b>	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	1,482	1,087
Median Mkt. Cap. (\$M)	1,286	409
Price/Earnings ratio	17.56	13.95
Price/Book ratio	1.86	1.52
5 Yr. EPS Growth Rate (%)	9.60	2.57
Current Yield (%)	1.79	3.38
Beta (3 yrs, monthly periodicity)	0.90	1.00
Number of Stocks	62	1354

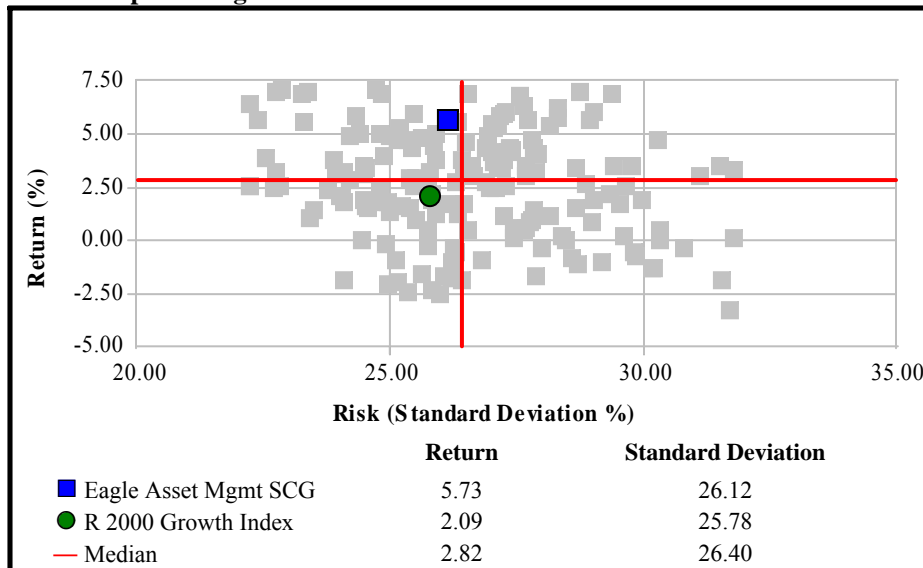


**City of Phoenix Employees' Retirement System  
Cramer Rosenthal McGlynn SCV vs. R 2000 Value Index  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**

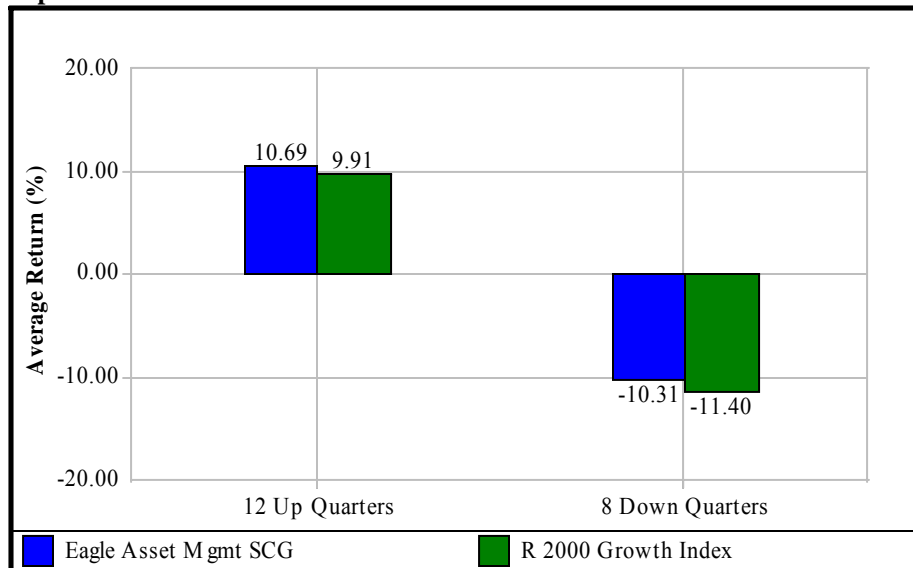


**City of Phoenix Employees' Retirement System**  
**Eagle Asset Mgmt SCG vs. IM U.S. Small Cap Growth Equity (SA+CF)**  
 As of December 31, 2011

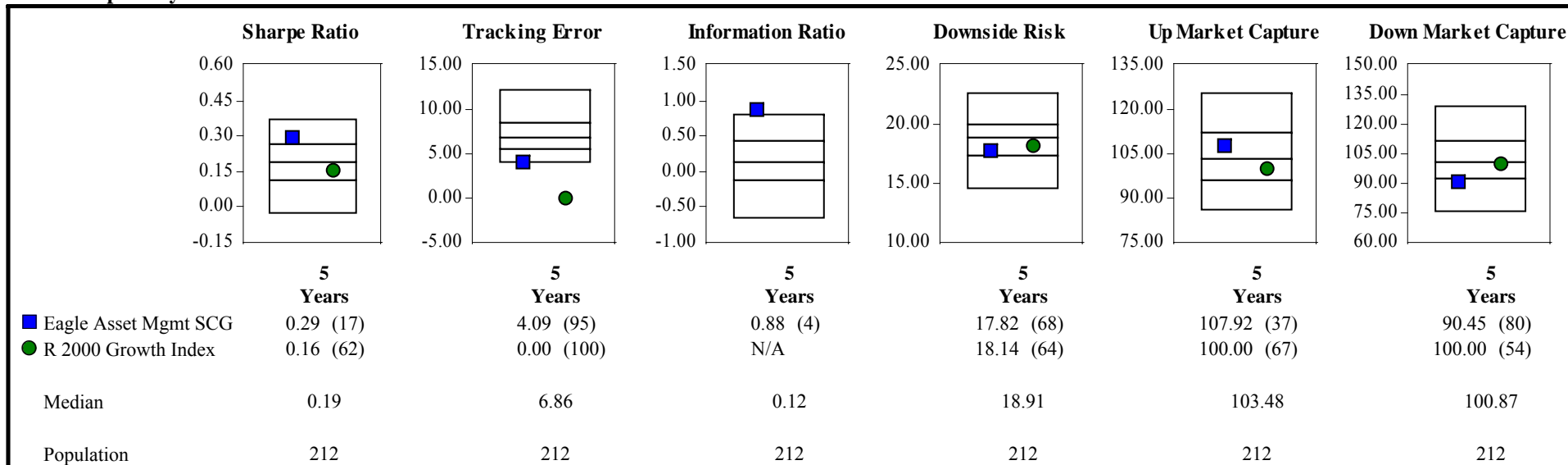
**Peer Group Scattergram - 5 Years**



**Up/Down Markets - 5 Years**



**Peer Group Analysis - Multi Statistics**

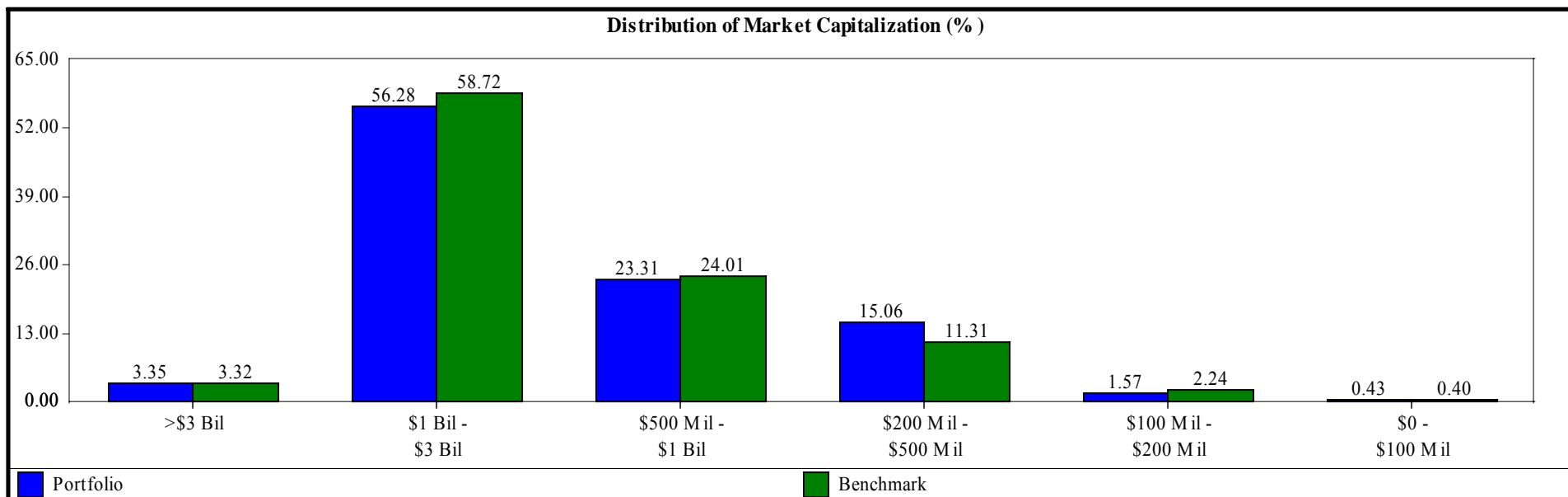


Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

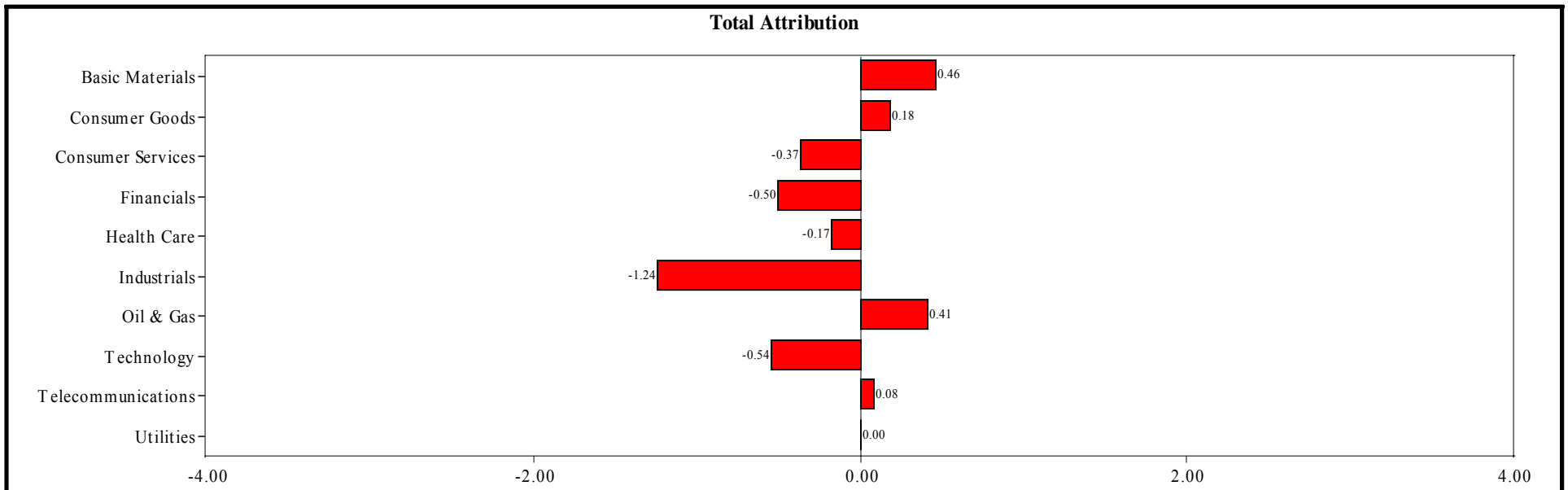
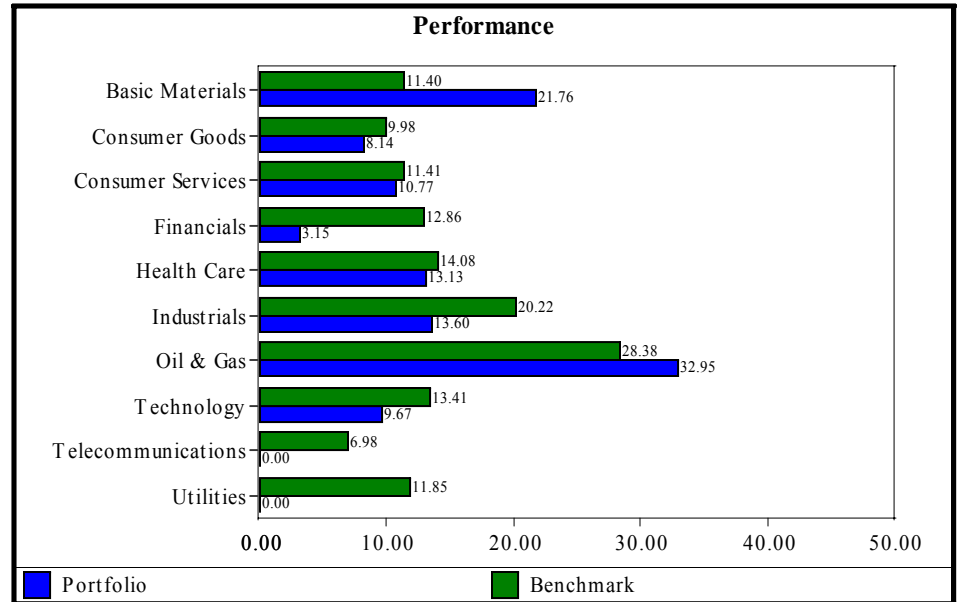
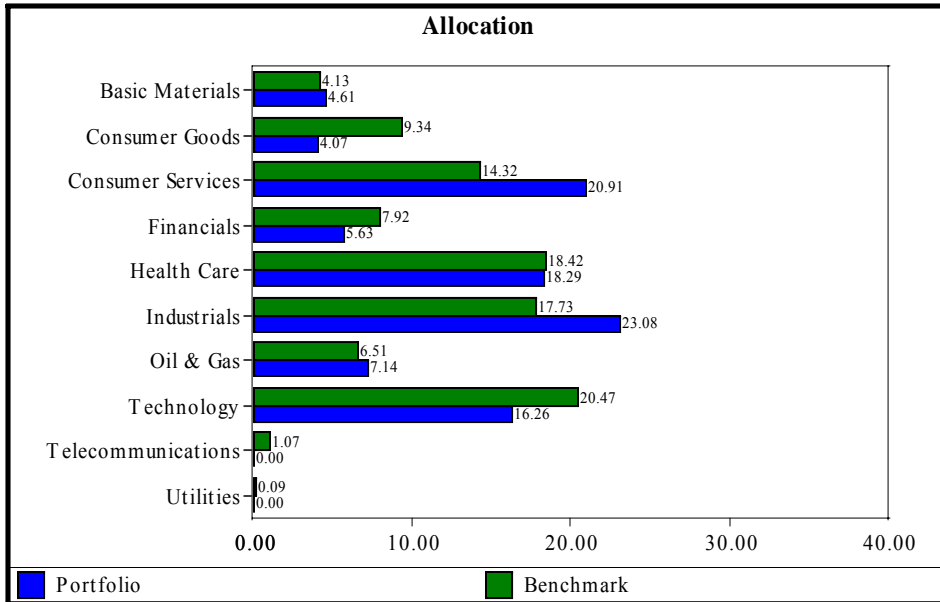
**City of Phoenix Employees' Retirement System  
Eagle Asset Mgmt SCG vs. R 2000 Growth Index  
Portfolio Characteristics  
As of December 31, 2011**

<b>Top Ten Equity Holdings</b>	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
GENESCO INC	4.77	0.03	4.74	19.81
LUFKIN INDUSTRIES	3.28	0.37	2.91	26.72
HURON CONSULTING GROUP INC.	2.53	0.15	2.38	24.45
GENOMED, INC.	2.44	0.00	2.44	11.71
QUALITY SYSTEMS, INC.	2.37	0.26	2.10	-23.37
ROBBINS & MYERS, INC.	2.28	0.00	2.28	40.01
VITAMIN SHOPPE INCORPORATION	2.23	0.18	2.05	6.52
COHERENT INCORPORATED	2.21	0.16	2.05	21.67
CENTENE CORPORATION	2.18	0.23	1.95	38.09
QUAKER CHEMICAL CORPORATION	2.13	0.07	2.06	51.07
% of Portfolio	26.42	1.45		

<b>Portfolio Characteristics</b>	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	1,313	1,388
Median Mkt. Cap. (\$M)	1,108	530
Price/Earnings ratio	18.50	18.98
Price/Book ratio	2.40	3.05
5 Yr. EPS Growth Rate (%)	15.20	11.35
Current Yield (%)	1.25	2.06
Beta (5 yrs, monthly periodicity)	0.97	1.00
Number of Stocks	93	1162

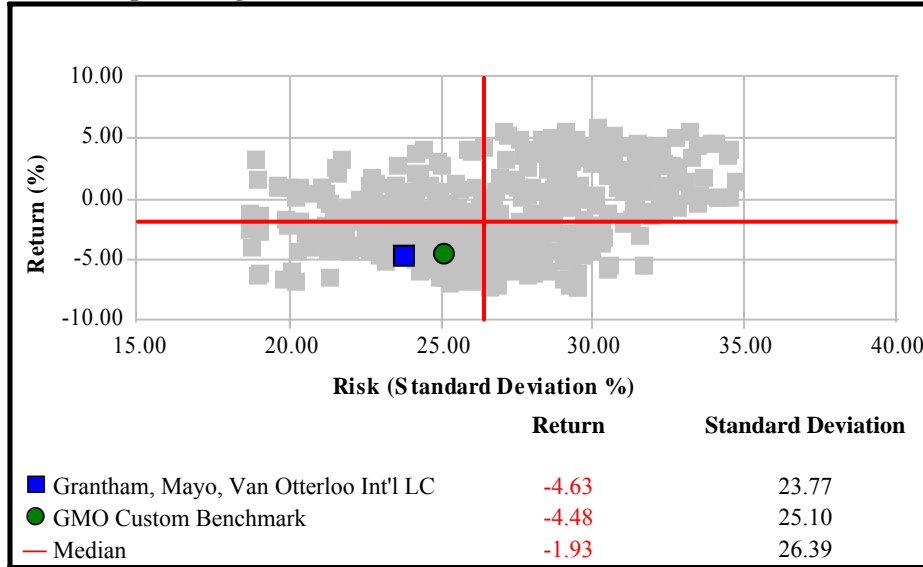


**City of Phoenix Employees' Retirement System  
Eagle Asset Mgmt SCG vs. R 2000 Growth Index  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**

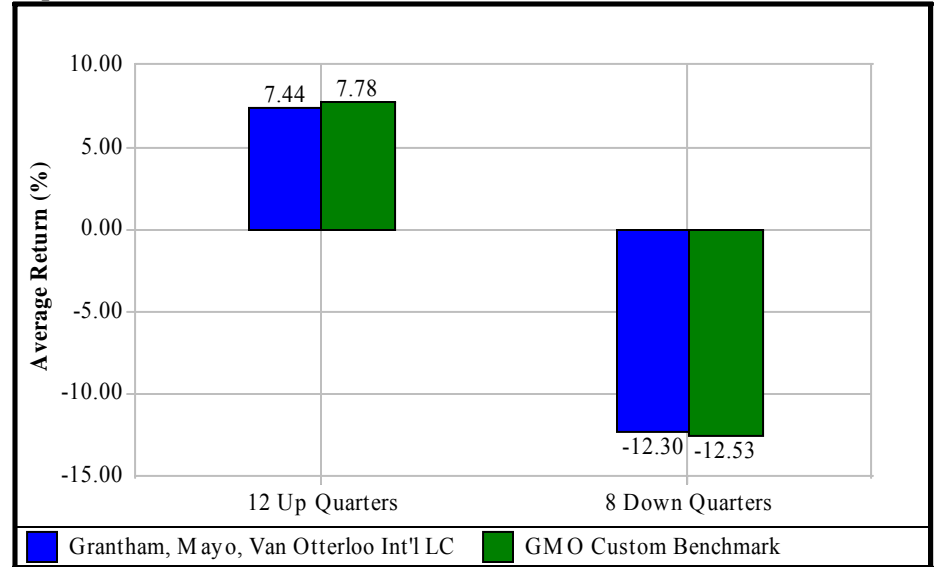


**City of Phoenix Employees' Retirement System**  
**Grantham, Mayo, Van Otterloo Int'l LC vs. IM International Equity (SA+CF)**  
 As of December 31, 2011

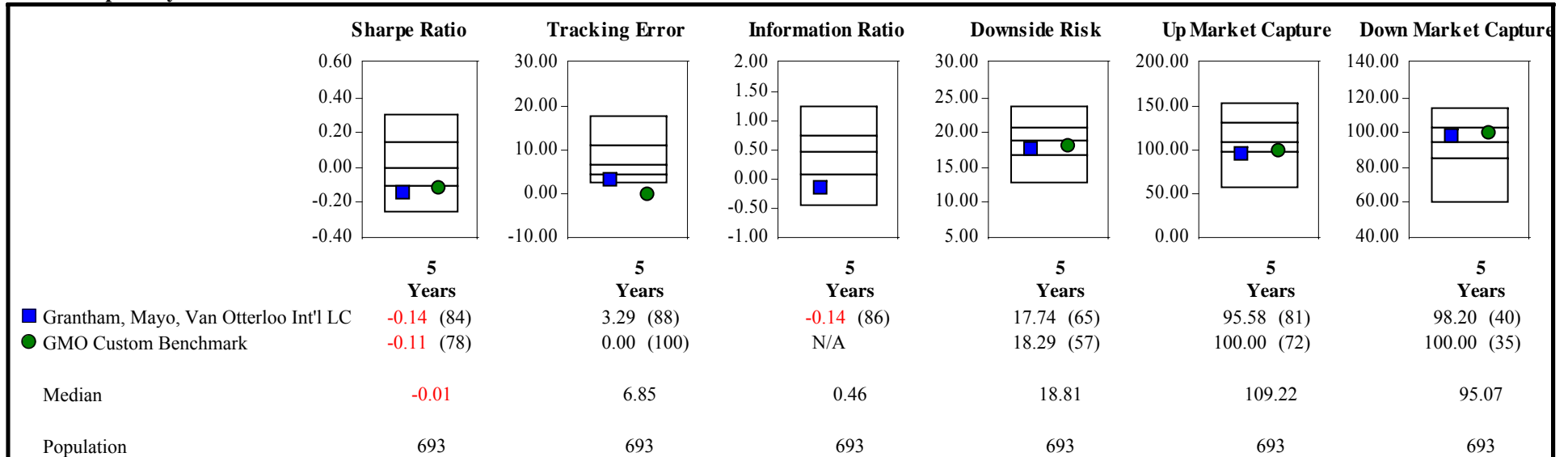
**Peer Group Scattergram - 5 Years**



**Up/Down Markets - 5 Years**



**Peer Group Analysis - Multi Statistics**

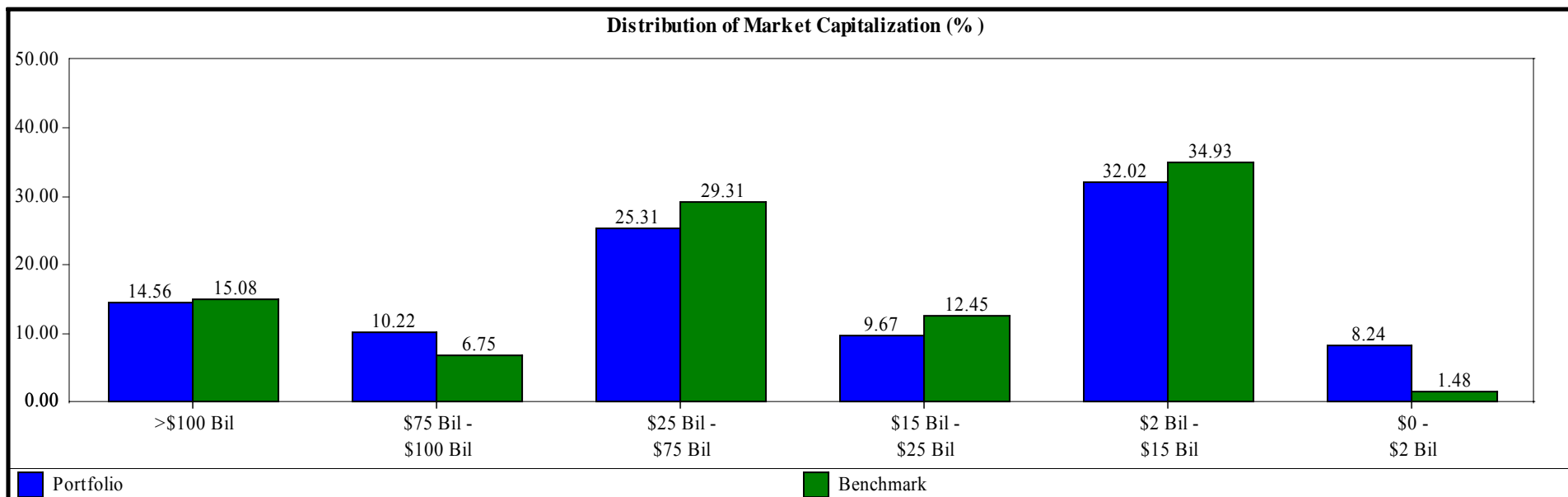


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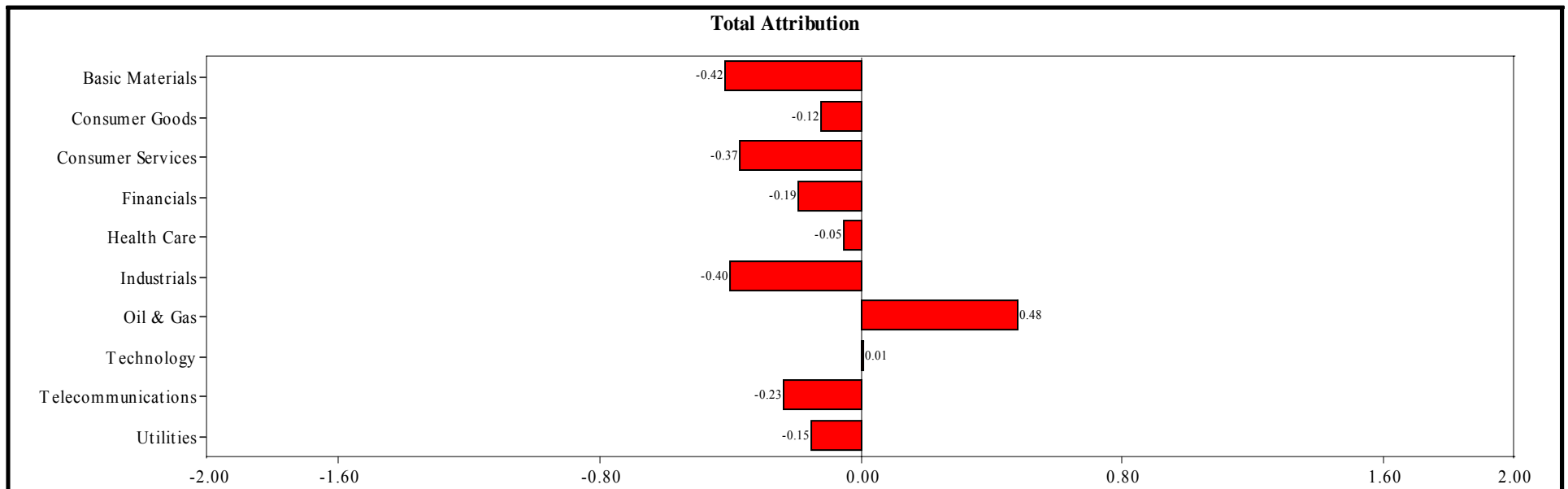
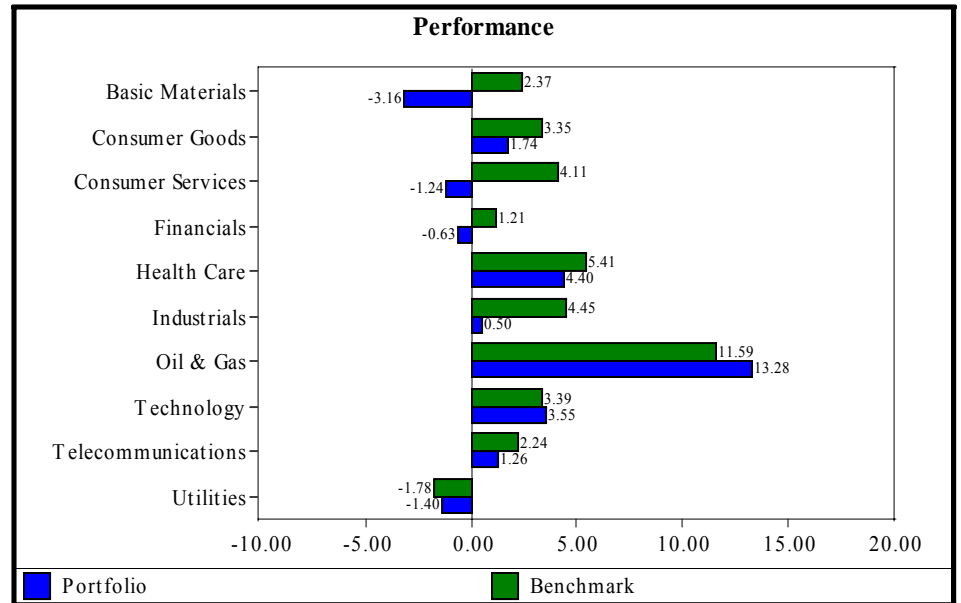
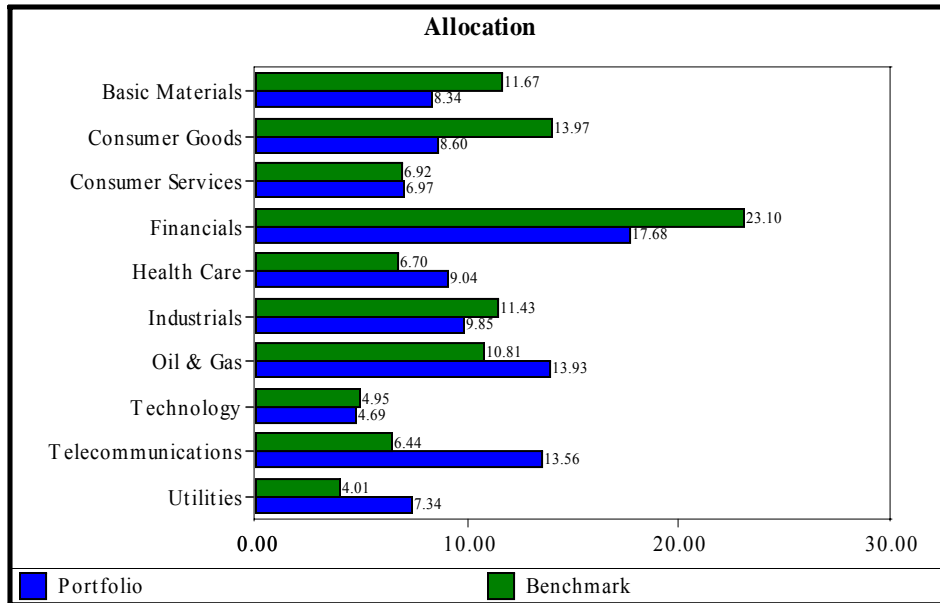
**City of Phoenix Employees' Retirement System**  
**Grantham, Mayo, Van Otterloo Int'l LC vs. MSCI ACW Ex US Index (Gross)**  
**Portfolio Characteristics**  
**As of December 31, 2011**

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
SANOFI-AVENTIS	4.28	0.61	3.67	11.27
TOTAL SA	4.23	0.78	3.44	16.66
ENI GROUP	2.09	0.36	1.73	17.18
ROYAL DUTCH SHELL PLC	1.92	0.74	1.18	22.85
E.ON AG	1.89	0.28	1.61	-1.37
ENEL SOCIETA PER AZIONI	1.71	0.19	1.52	-5.52
NOVARTIS AG	1.64	0.97	0.68	2.33
VODAFONE GROUP PLC	1.46	1.02	0.43	11.66
TELEFONICA SA	1.44	0.51	0.93	-5.27
TAKEDA PHAR CO LTD	1.42	0.25	1.17	-8.08
% of Portfolio	22.08	5.71		

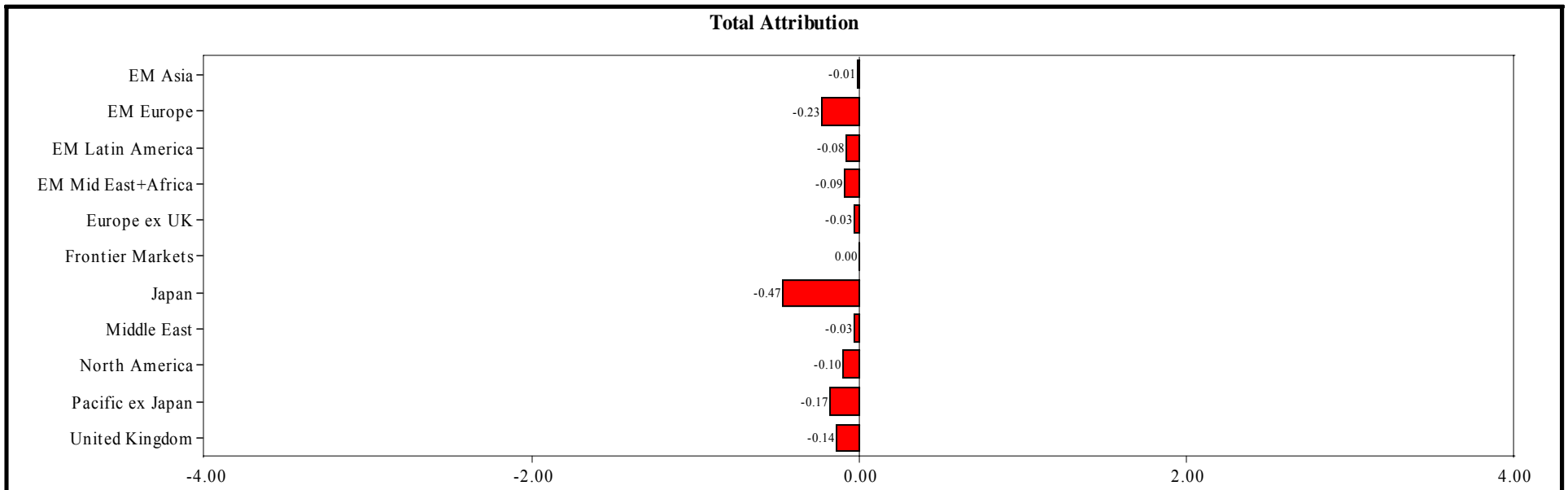
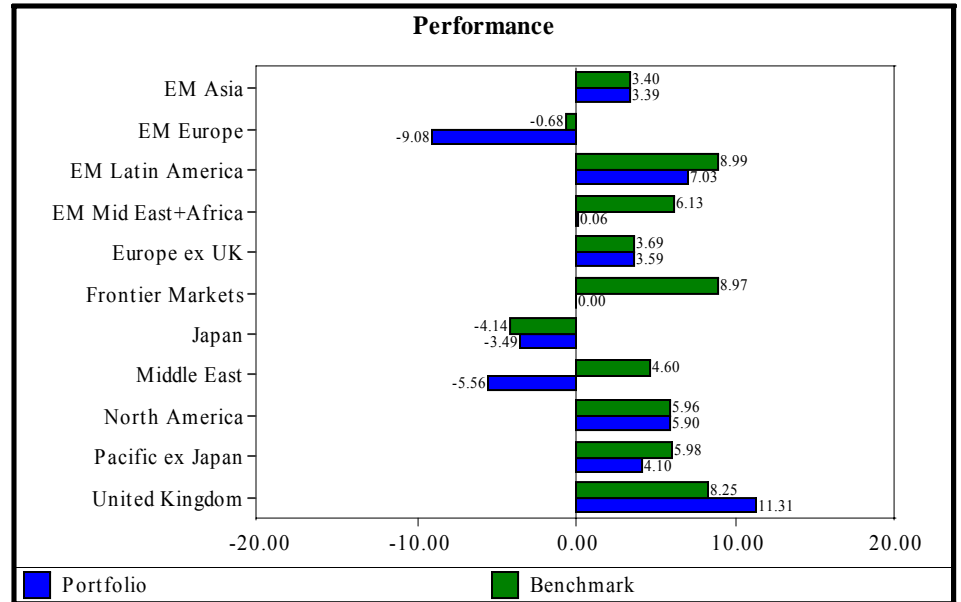
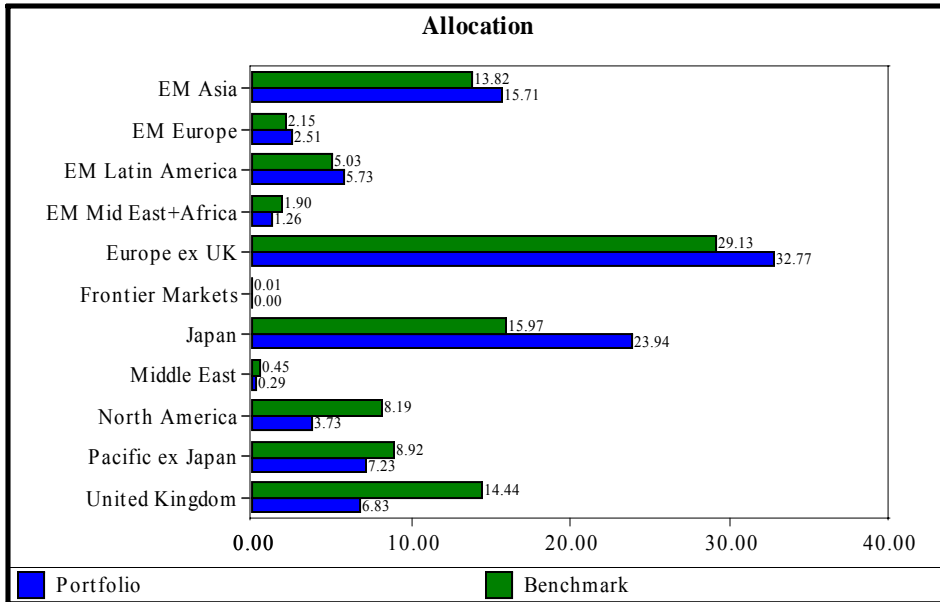
Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	44,465	46,404
Median Mkt. Cap. (\$M)	2,684	5,408
Price/Earnings ratio	9.33	10.92
Price/Book ratio	1.72	1.98
5 Yr. EPS Growth Rate (%)	5.45	7.04
Current Yield (%)	4.57	3.67
Beta (5 yrs, monthly periodicity)	0.92	1.00
Number of Stocks	1229	1845



**City of Phoenix Employees' Retirement System  
 Grantham, Mayo, Van Otterloo Int'l LC vs. MSCI ACW Ex US Index (Gross)  
 Buy and Hold Sector Attribution Graph  
 1 Quarter Ending December 31, 2011**



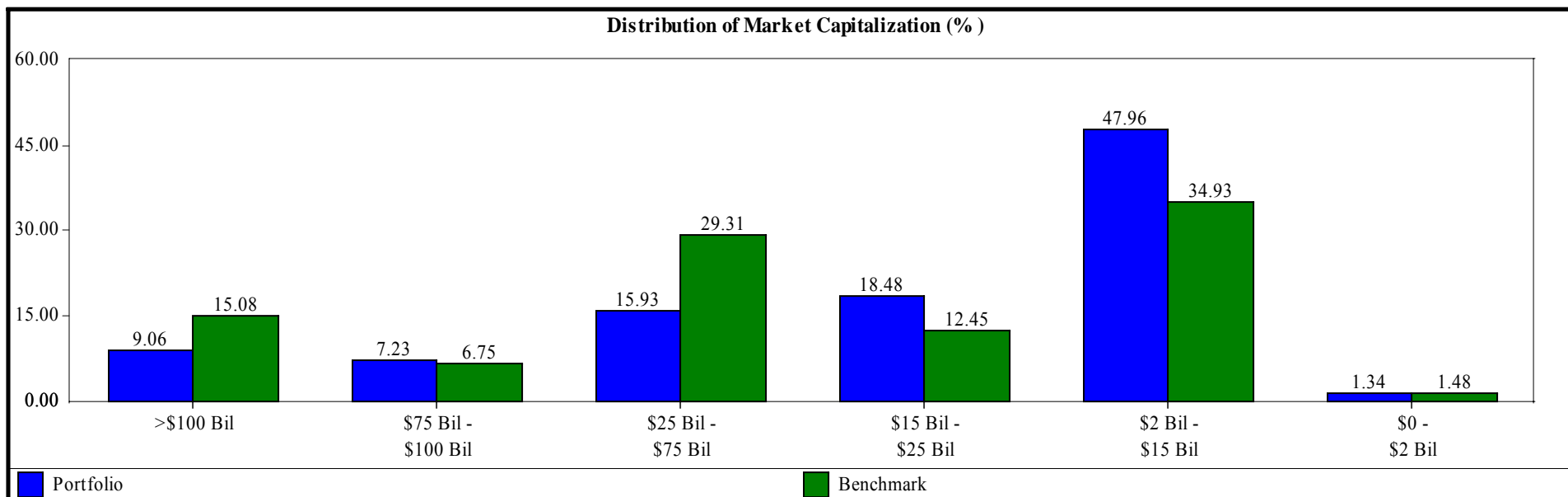
**City of Phoenix Employees' Retirement System  
 Grantham, Mayo, Van Otterloo Int'l LC vs. MSCI ACW Ex US Index (Gross)  
 Buy and Hold Region Attribution Graph  
 1 Quarter Ending December 31, 2011**



**City of Phoenix Employees' Retirement System**  
**Baillie Gifford IE Growth vs. MSCI ACW Ex US Index (Gross)**  
**Portfolio Characteristics**  
**As of December 31, 2011**

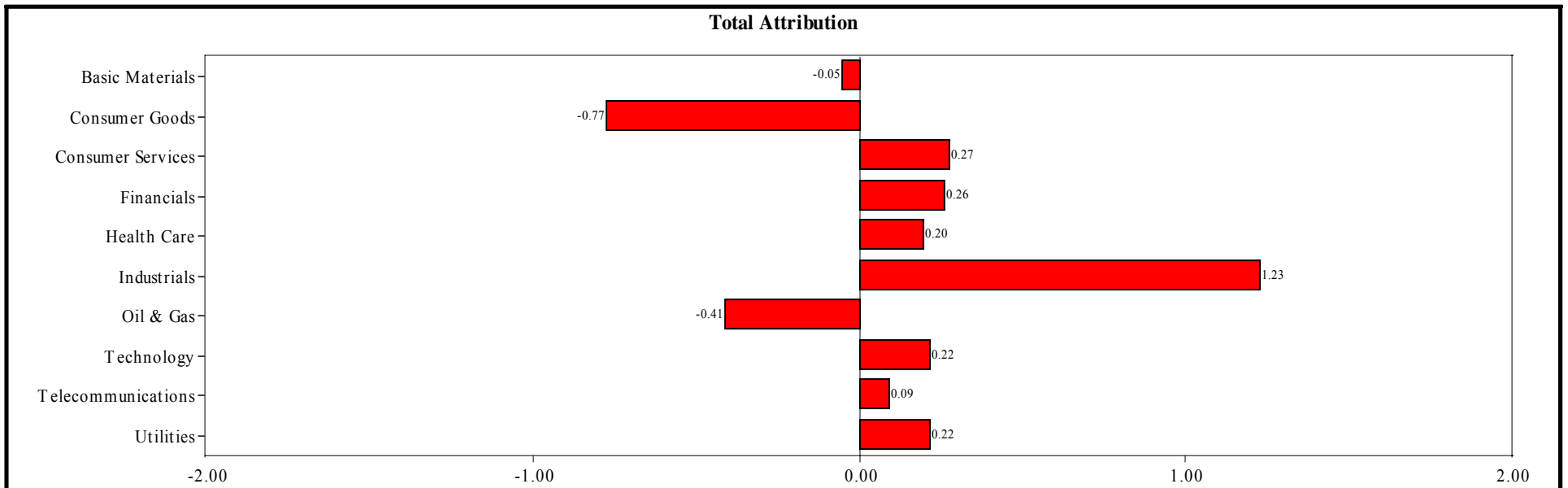
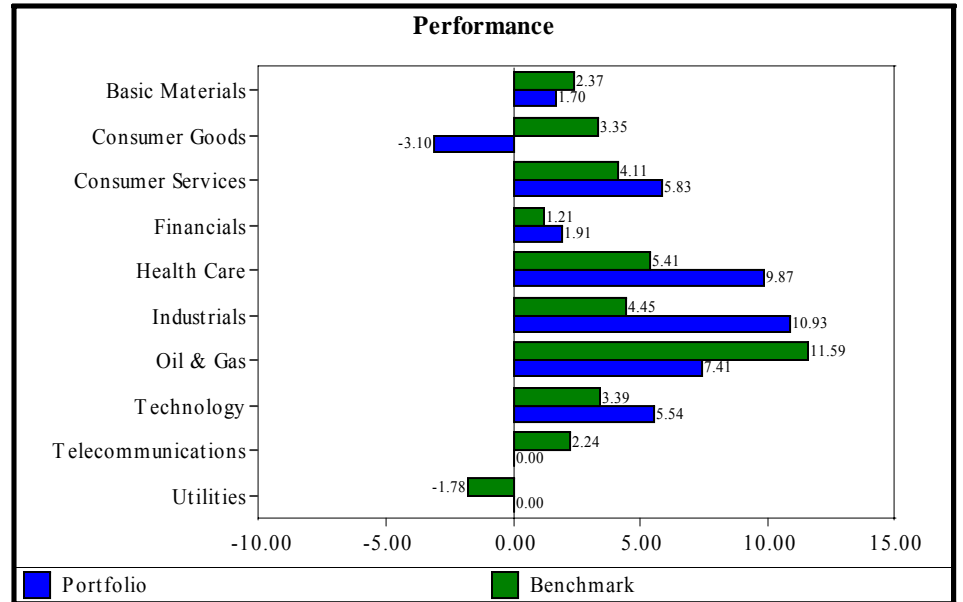
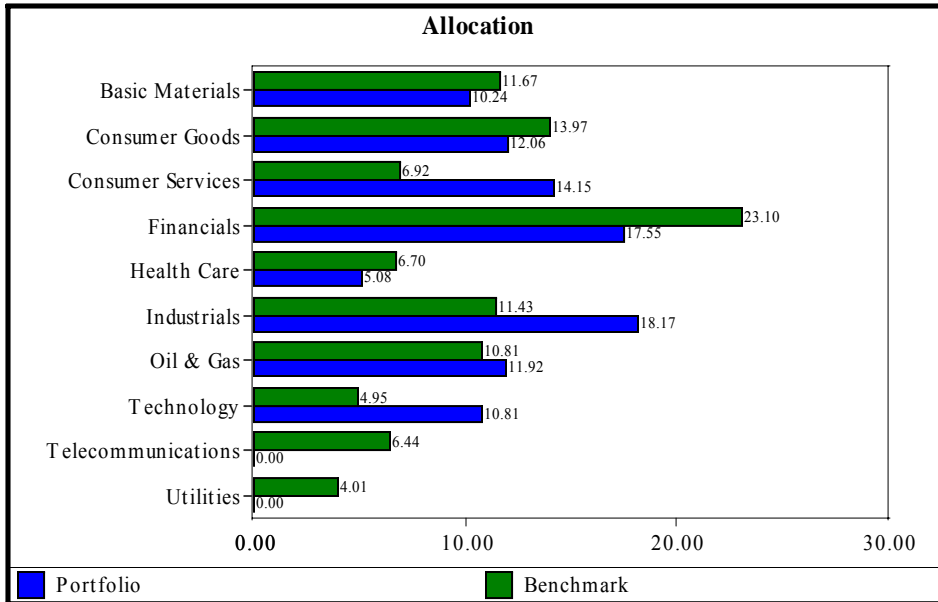
Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
NESTLE S.A.	3.82	1.37	2.45	4.34
ATLAS COPCO AB	3.10	0.05	3.04	19.68
SAMSUNG ELECTRONICS	2.61	0.73	1.88	28.33
BRITISH AMERICAN TOB	2.48	0.68	1.81	11.64
TAIWAN SEMICON	2.41	0.00	2.41	12.95
FAIRFAX FIN'L HLDGS	2.40	0.06	2.33	11.96
SVENSKA HANDELSBANKEN AB	2.38	0.09	2.29	2.32
RIO TINTO PLC	2.32	0.49	1.83	7.85
BRAMBLES LIMITED	1.97	0.08	1.90	17.12
VALE S.A.	1.95	0.00	1.95	-1.67
% of Portfolio	25.44	3.55		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	35,746	46,404
Median Mkt. Cap. (\$M)	13,227	5,408
Price/Earnings ratio	13.96	10.92
Price/Book ratio	2.62	1.98
5 Yr. EPS Growth Rate (%)	13.67	7.04
Current Yield (%)	2.91	3.67
Beta	-	1.00
Number of Stocks	87	1845

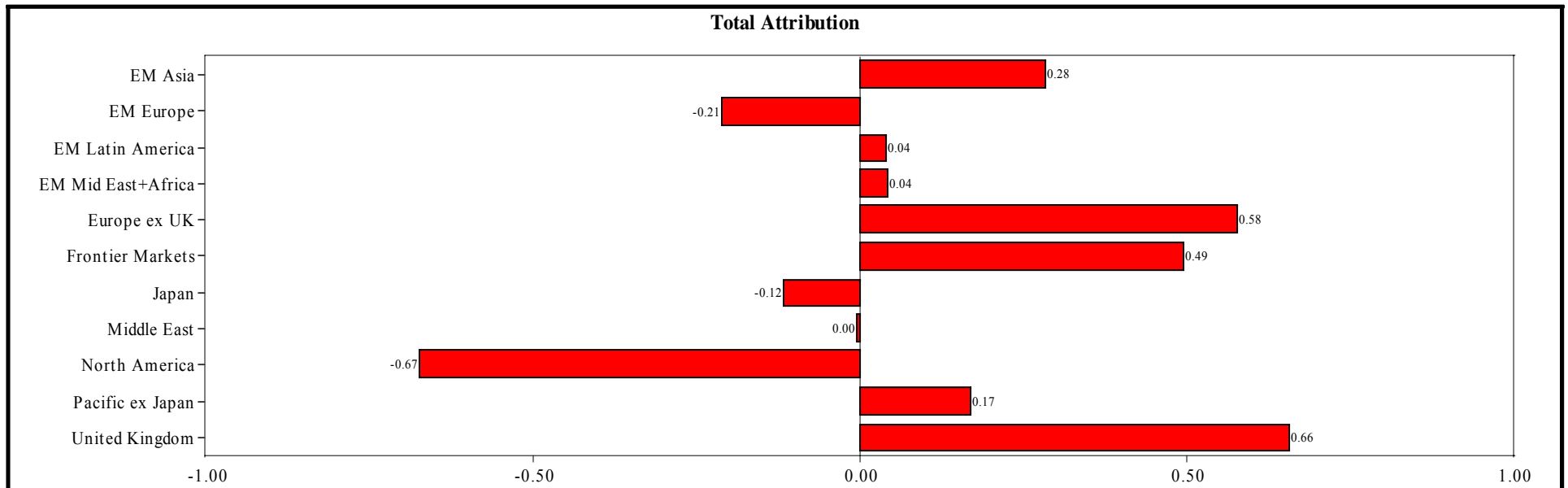
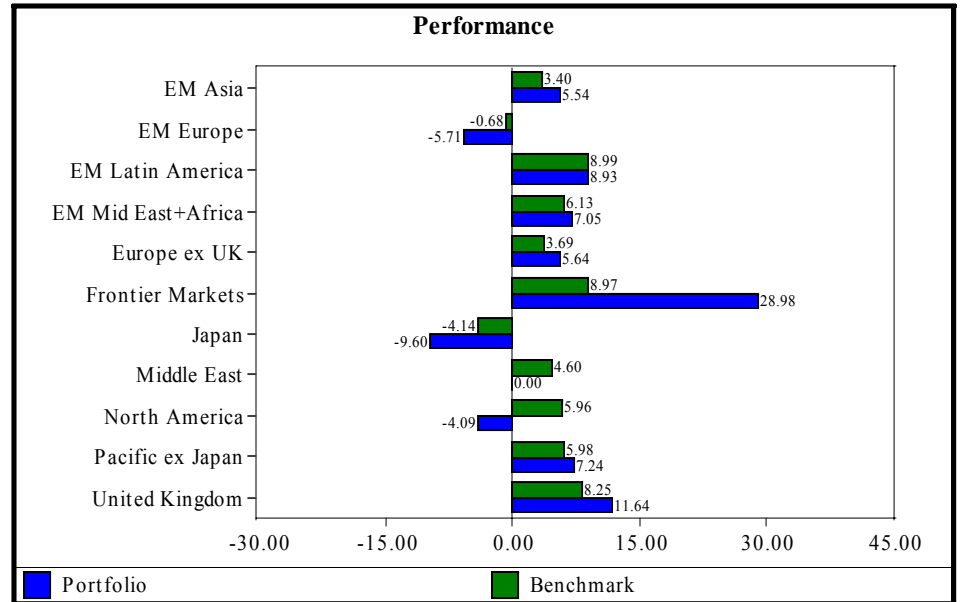
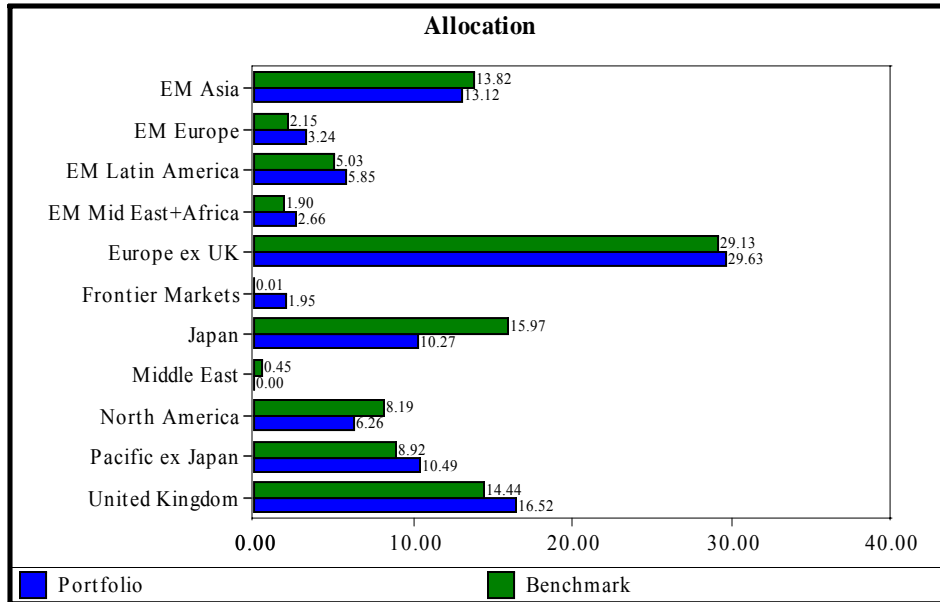


Beta calculation requires three years of monthly performance to calculate.

**City of Phoenix Employees' Retirement System  
Baillie Gifford IE Growth vs. MSCI ACW Ex US Index (Gross)  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**



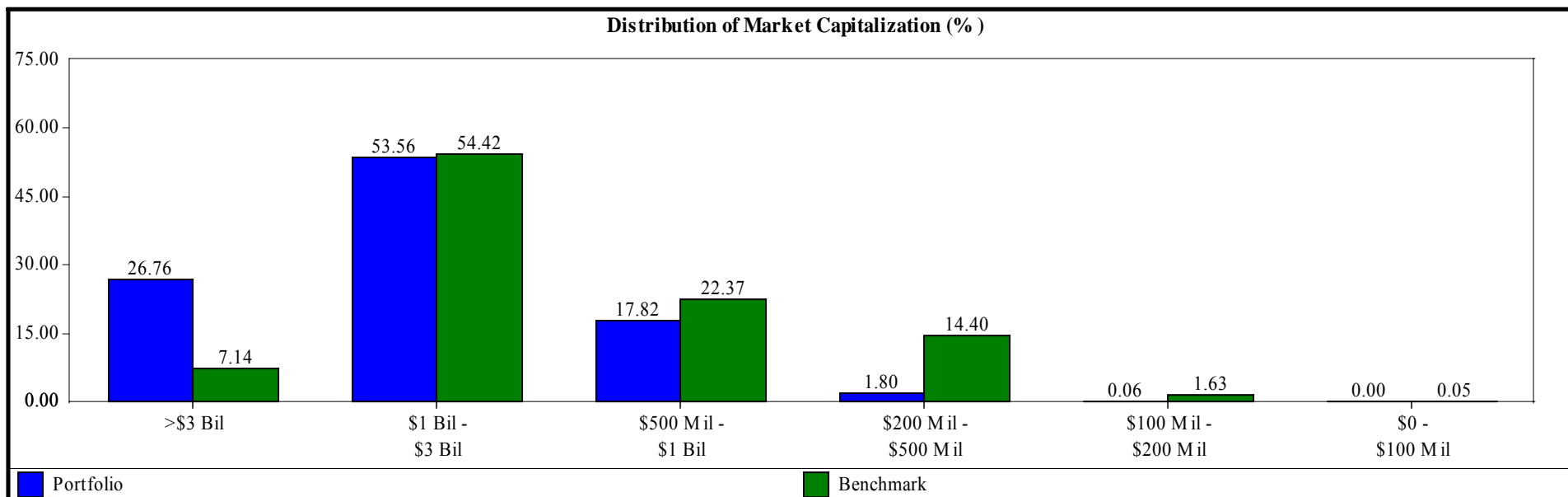
**City of Phoenix Employees' Retirement System  
Baillie Gifford IE Growth vs. MSCI ACW Ex US Index (Gross)  
Buy and Hold Region Attribution Graph  
1 Quarter Ending December 31, 2011**



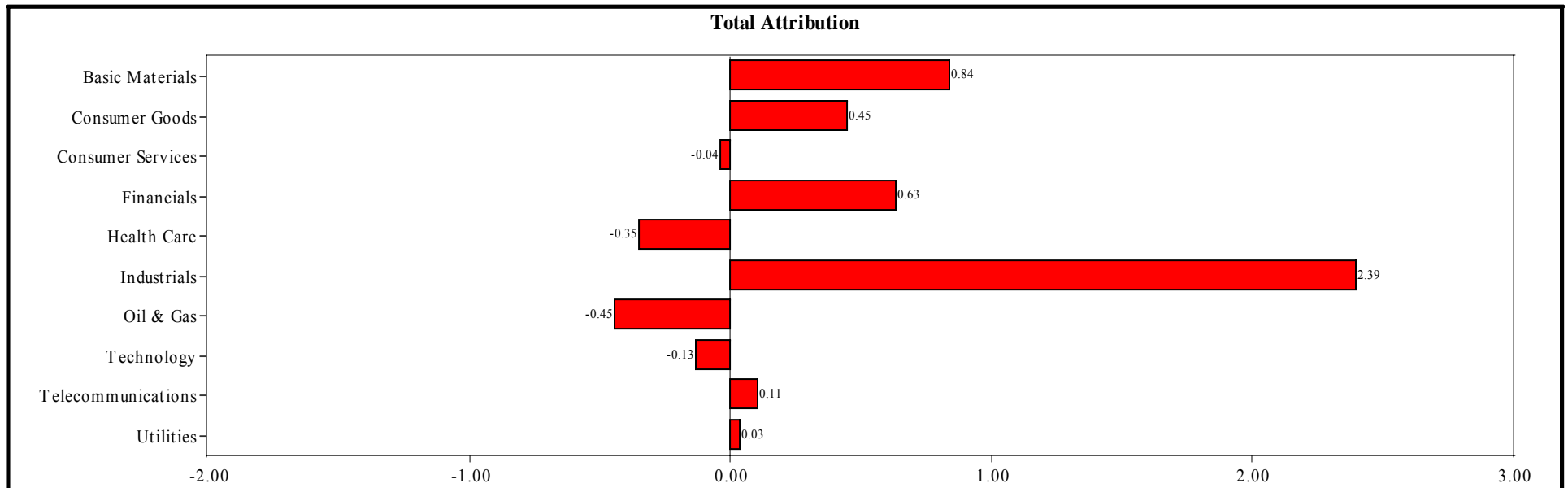
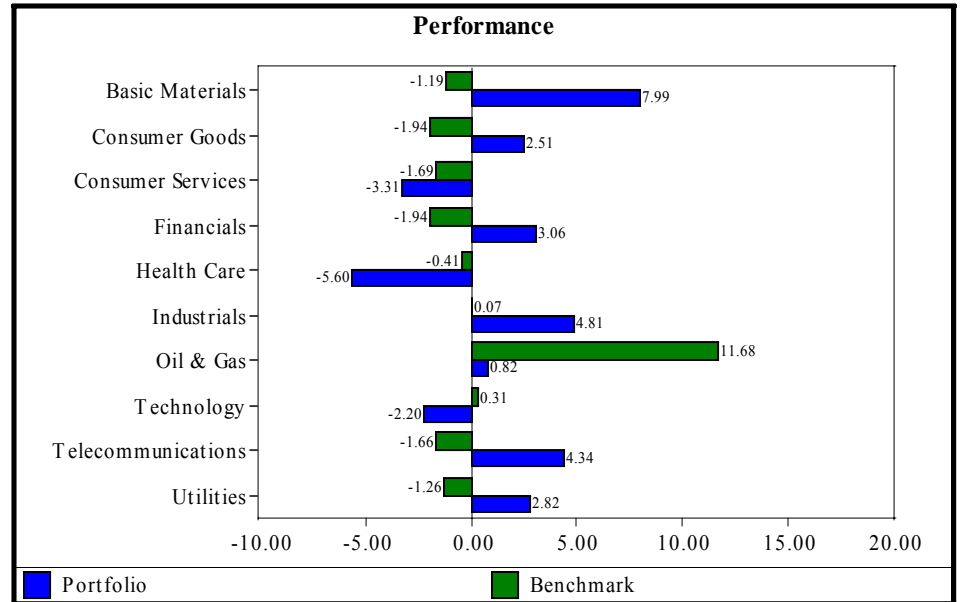
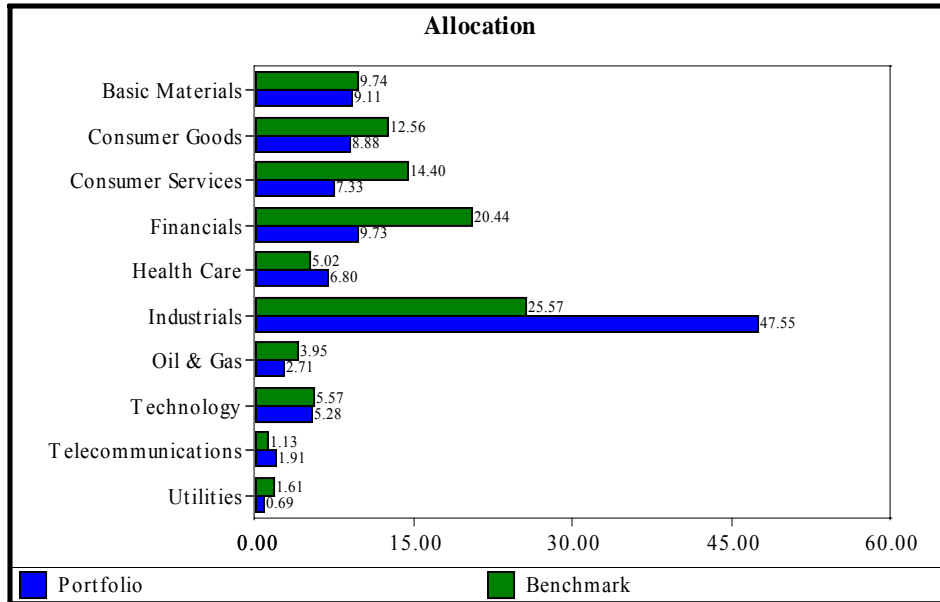
**City of Phoenix Employees' Retirement System**  
**Mondrian IE SC vs. MSCI EAFE Small Cap Index (Gross)**  
**Portfolio Characteristics**  
**As of December 31, 2011**

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
KON. BOSKALIS WESTM.	3.97	0.00	3.97	18.23
ROTORK P.L.C.	3.87	0.21	3.66	23.89
COMMONWEALTH PROP	3.25	0.19	3.06	12.92
CRODA INTERNATIONAL PLC	3.13	0.30	2.83	8.99
REXAM PLC	3.12	0.00	3.12	13.16
SYMRISE AG	3.09	0.24	2.85	14.34
NEOPOST S.A.	3.08	0.00	3.08	-8.48
CAPITAMALL TRUST	2.73	0.00	2.73	-5.45
NIFCO INC	2.63	0.10	2.53	7.47
DE LA RUE PLC	2.37	0.11	2.26	6.31
% of Portfolio	31.24	1.15		

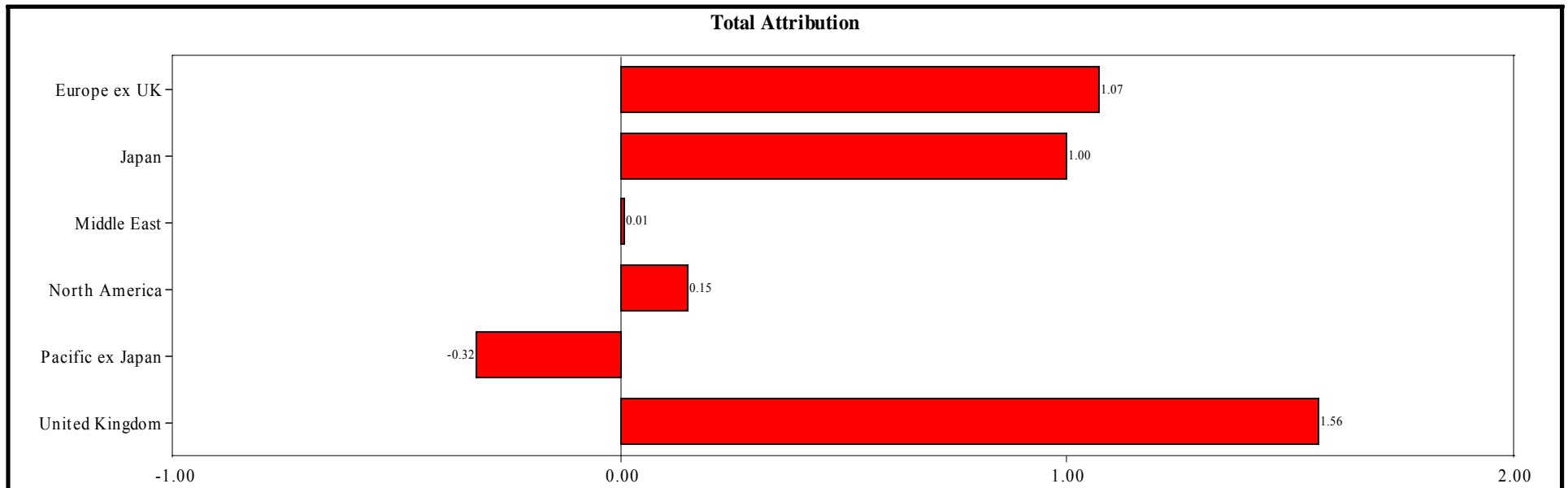
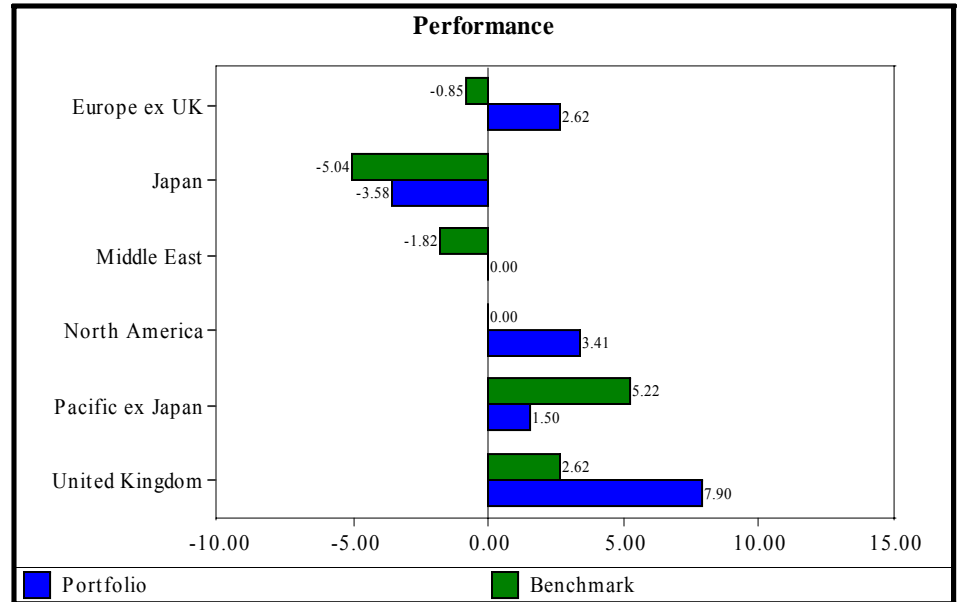
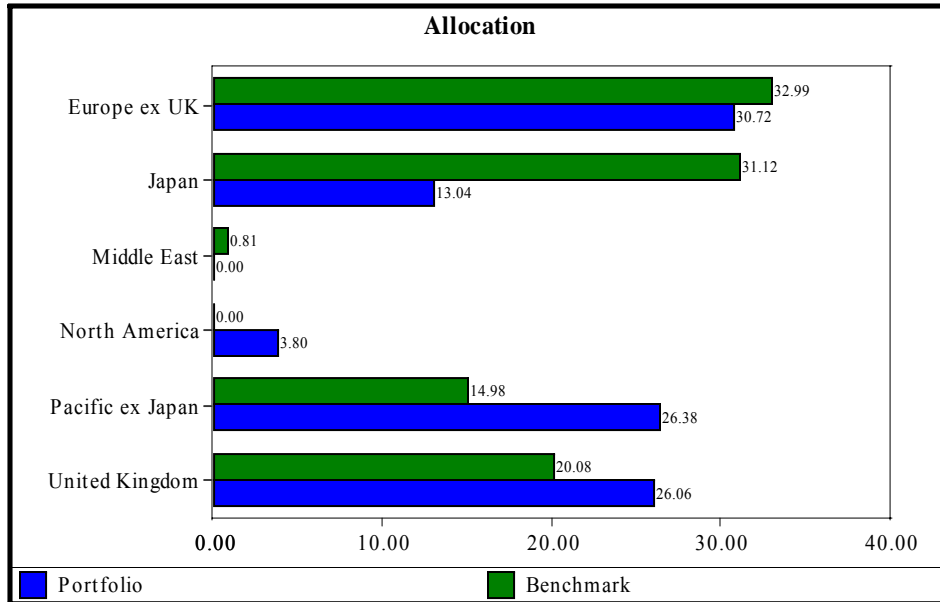
Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	2,191	1,409
Median Mkt. Cap. (\$M)	1,557	567
Price/Earnings ratio	13.62	10.86
Price/Book ratio	2.07	1.88
5 Yr. EPS Growth Rate (%)	7.64	4.99
Current Yield (%)	3.77	3.76
Beta (5 yrs, monthly periodicity)	0.87	1.00
Number of Stocks	76	2362



**City of Phoenix Employees' Retirement System  
Mondrian IE SC vs. MSCI EAFE Small Cap Index (Gross)  
Buy and Hold Sector Attribution Graph  
1 Quarter Ending December 31, 2011**

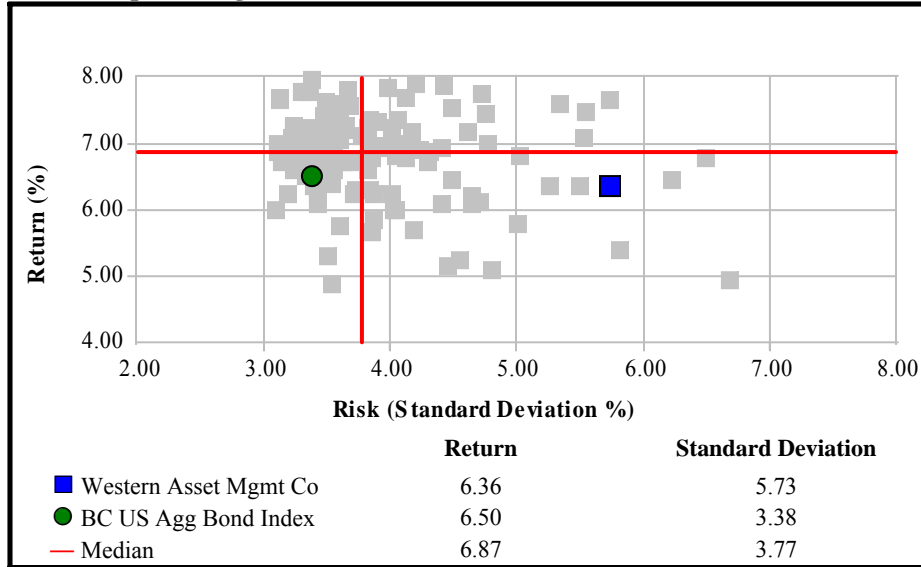


**City of Phoenix Employees' Retirement System  
Mondrian IE SC vs. MSCI EAFE Small Cap Index (Gross)  
Buy and Hold Region Attribution Graph  
1 Quarter Ending December 31, 2011**

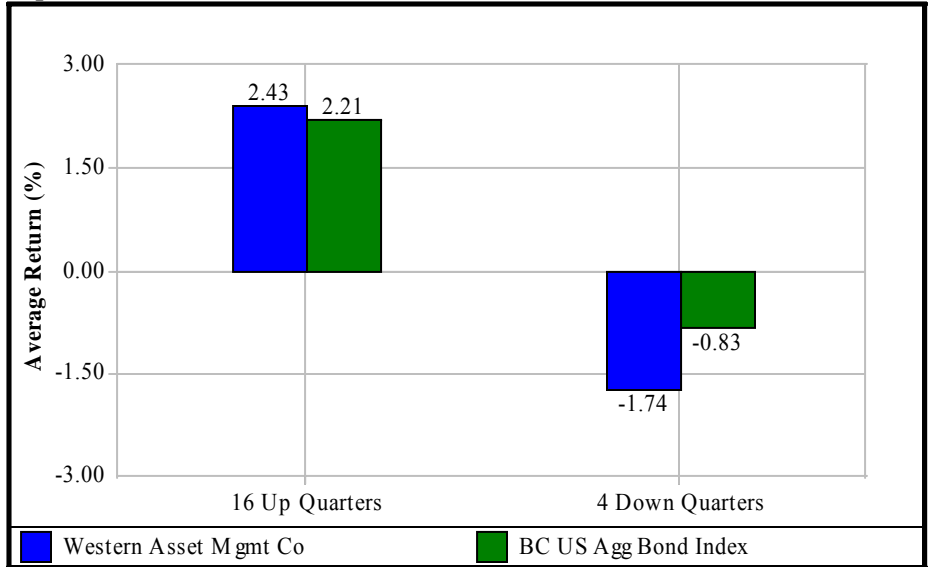


**City of Phoenix Employees' Retirement System**  
**Western Asset Mgmt Co vs. IM U.S. Broad Market Core Fixed Income (SA+CF)**  
 As of December 31, 2011

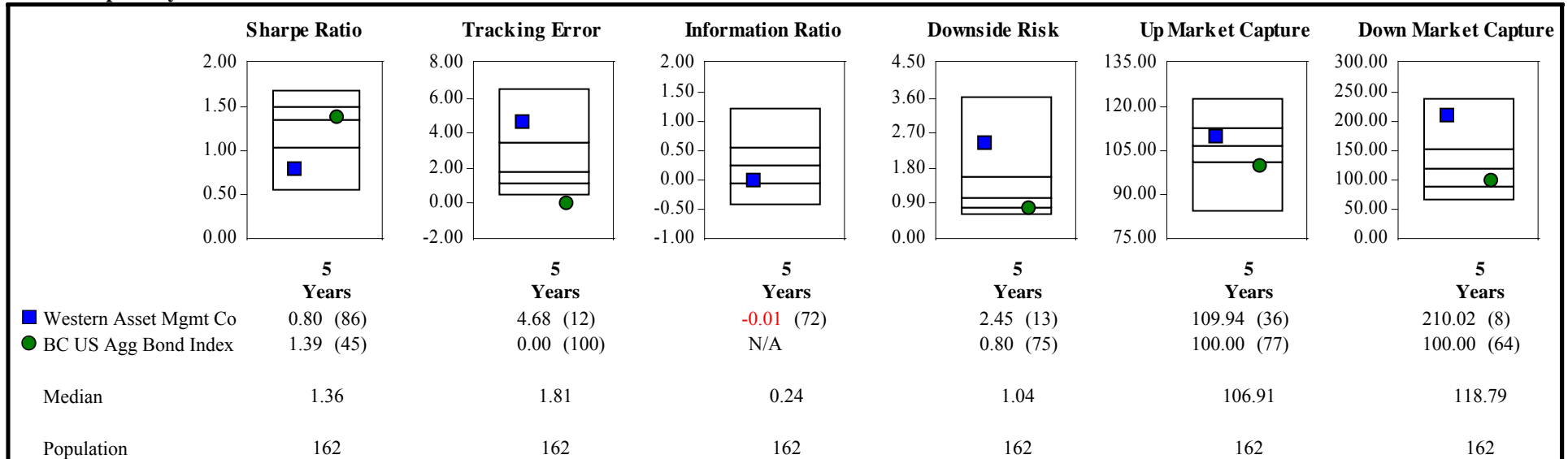
**Peer Group Scattergram - 5 Years**



**Up/Down Markets - 5 Years**



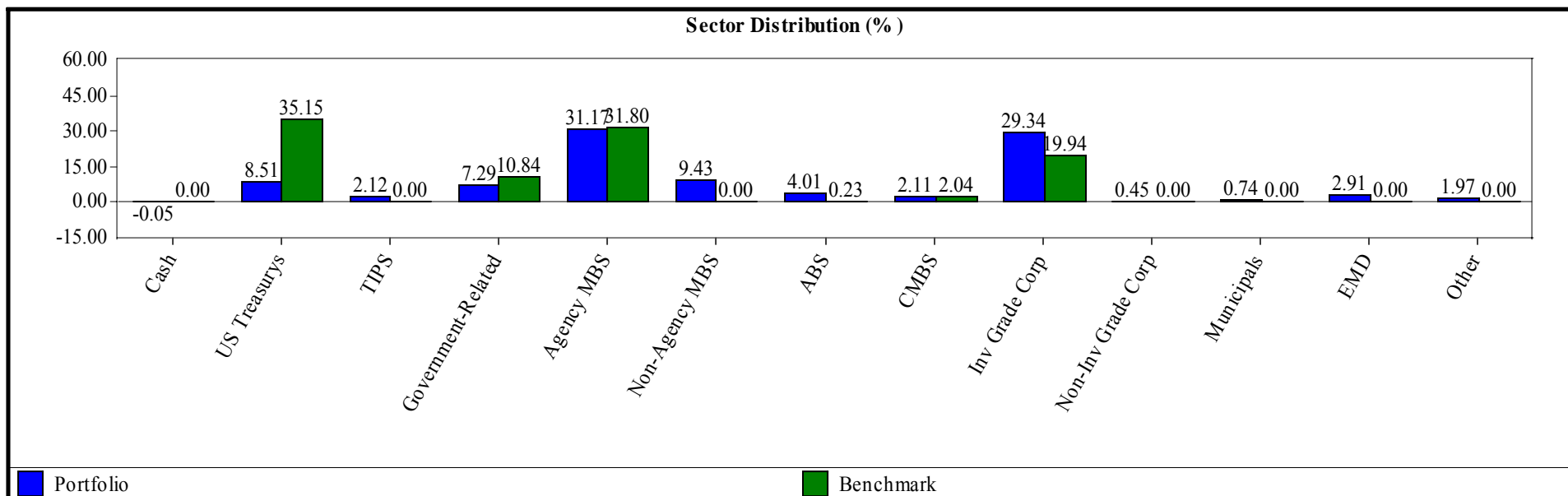
**Peer Group Analysis - Multi Statistics**



Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

**City of Phoenix Employees' Retirement System  
Western Asset Mgmt Co vs. BC US Agg Bond Index  
Portfolio Characteristics  
As of December 31, 2011**

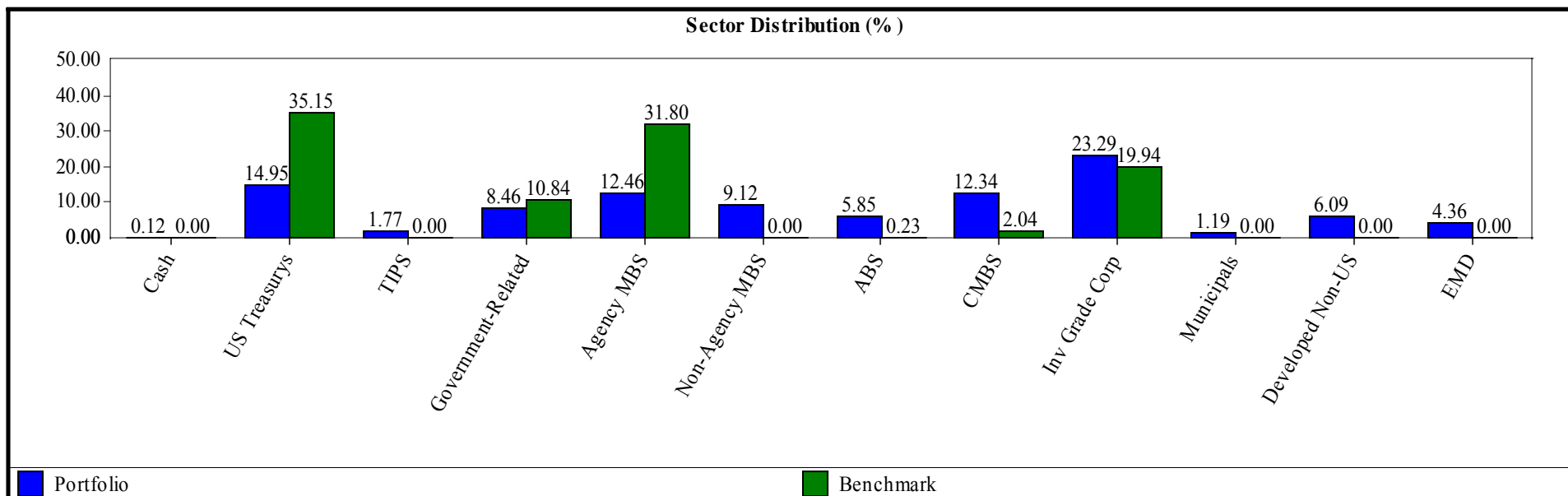
	<b>Portfolio</b>	<b>Benchmark</b>
<b>Portfolio Characteristics</b>		
Effective Duration	4.51	4.95
Spread Duration	4.34	5.17
Convexity	<b>-0.25</b>	<b>-0.44</b>
Avg. Maturity	7.13	7.14
Avg. Quality	A+	AA1/AA2
Yield To Maturity	3.25%	2.29%
Yield To Worst	3.25%	2.29%
Coupon Rate	4.49%	4.05%
Current Yield	4.62%	-



Negative sector allocation represents manager's use of derivatives. Portfolio allocation to "Other" represents the commingled Western Asset Opportunistic International Investment Grade Securities Portfolio.

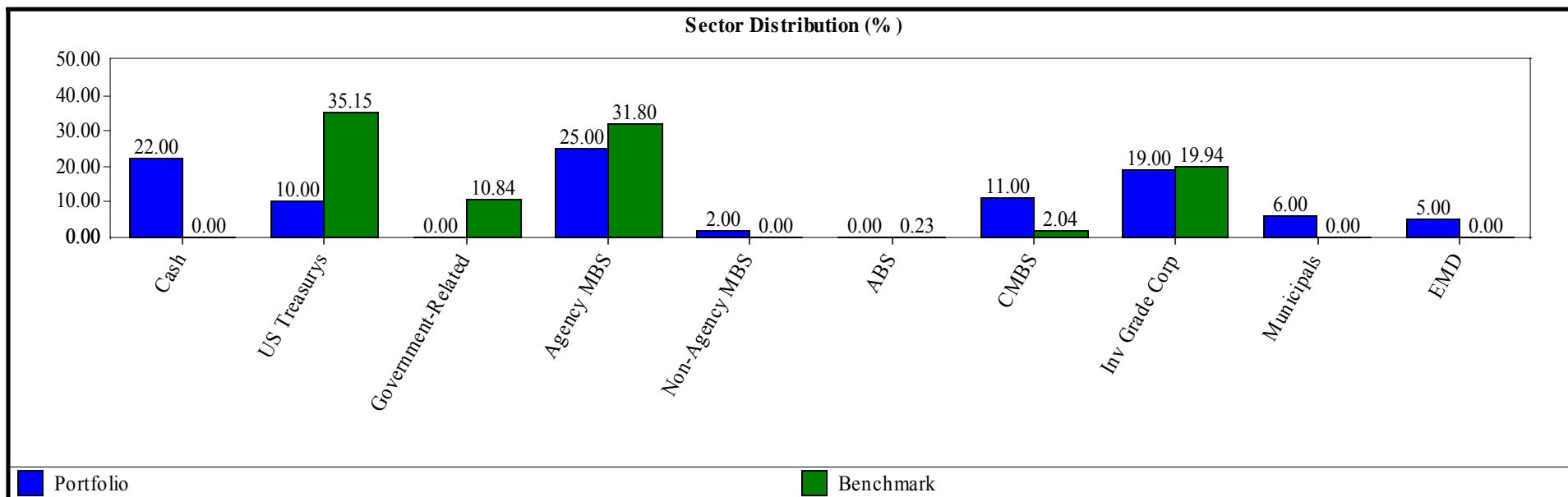
**City of Phoenix Employees' Retirement System**  
**Artio Total Return vs. BC US Agg Bond Index**  
**Portfolio Characteristics**  
**As of December 31, 2011**

	<b>Portfolio</b>	<b>Benchmark</b>
<b>Portfolio Characteristics</b>		
Effective Duration	5.49	4.95
Convexity	0.24	<b>-0.44</b>
Avg. Maturity	7.95	7.14
Avg. Quality	Aa3	AA1/AA2
Yield To Maturity	3.34%	2.29%
Yield To Worst	3.34%	2.29%
Coupon Rate	4.21%	4.05%
Current Yield	3.87%	-



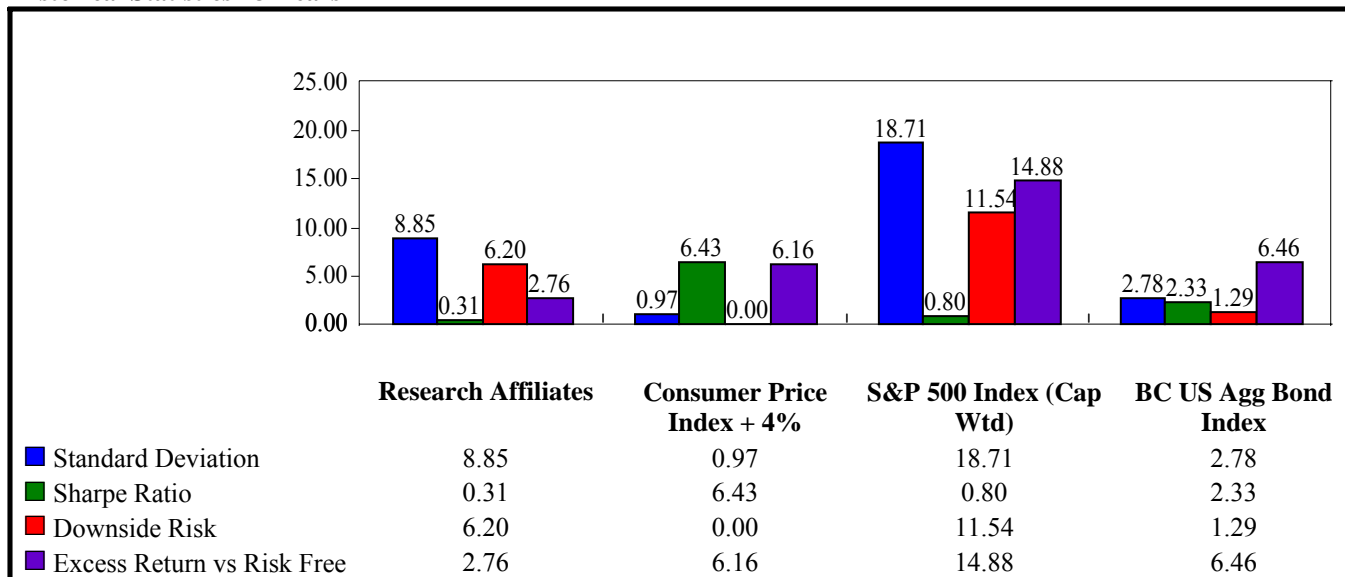
**City of Phoenix Employees' Retirement System  
PIMCO Total Return vs. BC US Agg Bond Index  
Portfolio Characteristics  
As of December 31, 2011**

	<b>Portfolio</b>	<b>Benchmark</b>
<b>Portfolio Characteristics</b>		
Effective Duration	4.32	4.95
Spread Duration	3.29	5.17
Avg. Maturity	6.22	7.14
Avg. Quality	AA-	AA1/AA2
Yield To Maturity	2.77%	2.29%
Coupon Rate	4.40%	4.05%
Current Yield	3.71%	-



**City of Phoenix Employees' Retirement System  
Research Affiliates  
As of December 31, 2011**

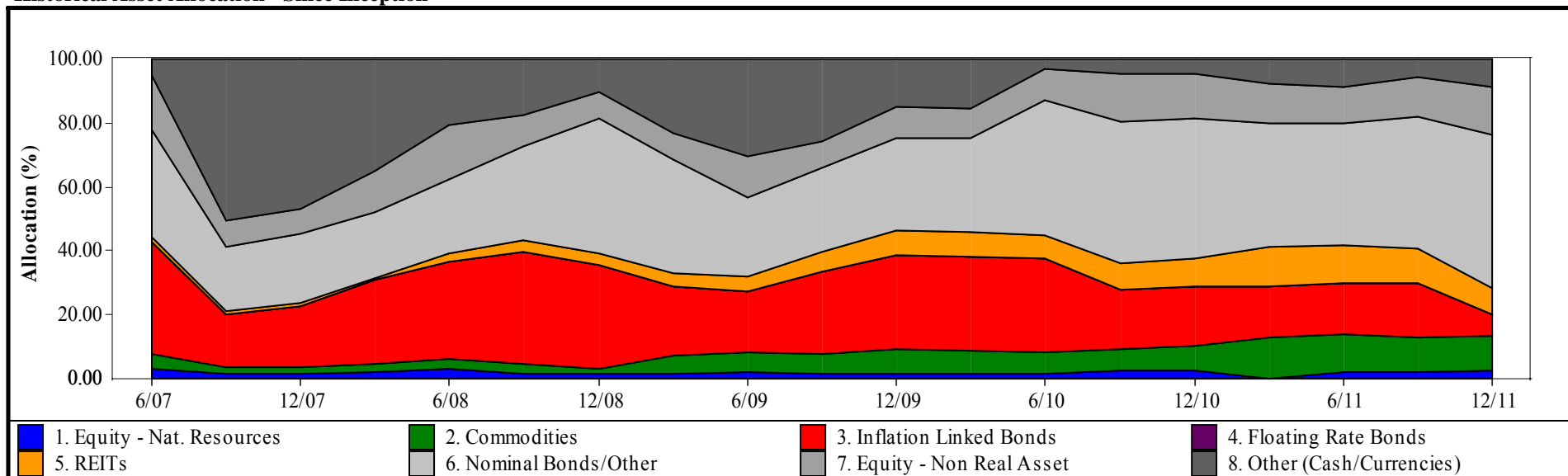
**Historical Statistics - 3 Years**



**Historical Statistics - 3 Years**

	Actual Correlation
Consumer Price Index + 4%	-0.05
S&P 500 Index (Cap Wtd)	0.56
R 2000 Index	0.49
MSCI EAFE Index (Gross)	0.53
MSCI Emg Mkts Index (Gross)	0.57
BC US Agg Bond Index	0.46
BC US Trsy: US TIPS Index	0.67
Wilshire US REIT Index	0.55
HFN FOF Multi-Strat Index (Net)	0.30
DJ-UBS Cmnty Index (TR)	0.47
BofA ML 3 Mo US T-Bill Index	0.24

**Historical Asset Allocation - Since Inception**



Primary Real Return strategies and asset classes are represented by the colored shades and are denoted by categories 1 through 5.

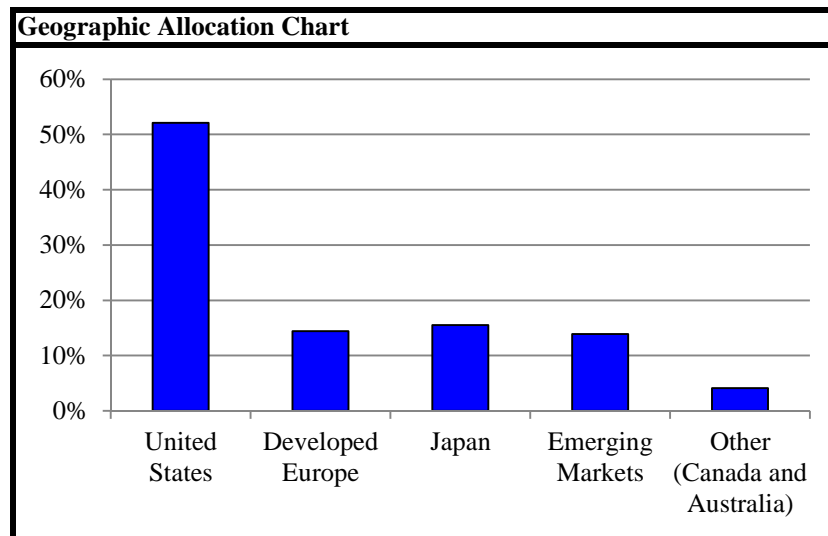
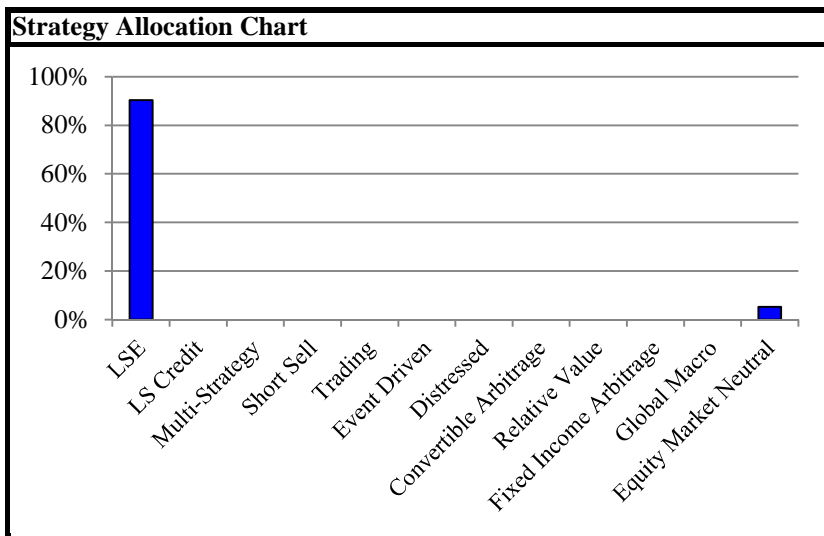
**City of Phoenix Employees' Retirement System  
PAAMCO Newport Phoenix  
Absolute Return Statistics  
December 31, 2011**

<b>Firm Statistics</b>	
Year Firm Established	2000
Firm AUM (\$M)	\$8,245
Percentage Employee Owned	73%
Account Inception	1/1/2009

<b>Fund Statistics</b>	
Number of Underlying Managers	16
Maximum Weighting of an Underlying Manager	14.40%
Current Leverage (Assets/Equity)	1.00
Net Long Percentage	93.00%
Equity Beta	0.20
Annual Manager Turnover	22.00%

**Most Recent Quarter Performance Manager Commentary**

The market environment in Q4 improved from Q3, but still posed challenges due to the continuing uncertainty in Europe. During Q4, market participants perceived an improvement to several risks that had previously weighed on the market, as improving U.S. economic data lent credence to a strengthening domestic recovery story. Exposures to small-cap equities and the financial and healthcare sectors benefitted Long/Short Equity, and offset mostly negative contributions from exposures to Asia and Europe. Merger arbitrage spread compression for one manager and a position in an entertainment company for another also drove performance. The book benefitted from positions in two oil and gas exploration companies during the quarter. One manager's exposure to the technology sector detracted from performance. Statistical arbitrage models worked strongly in October, benefitting Equity Market Neutral, which also had positive attribution from factor and behavioral models during the quarter.



Fund statistics and commentary shown are provided by the investment manager.  
\* No leverage is employed at the account level; underlying managers may employ leverage.  
LSE: Long Short Equity

**City of Phoenix Employees' Retirement System  
K2 Advisors Long/Short Equity  
Absolute Return Statistics  
December 31, 2011**

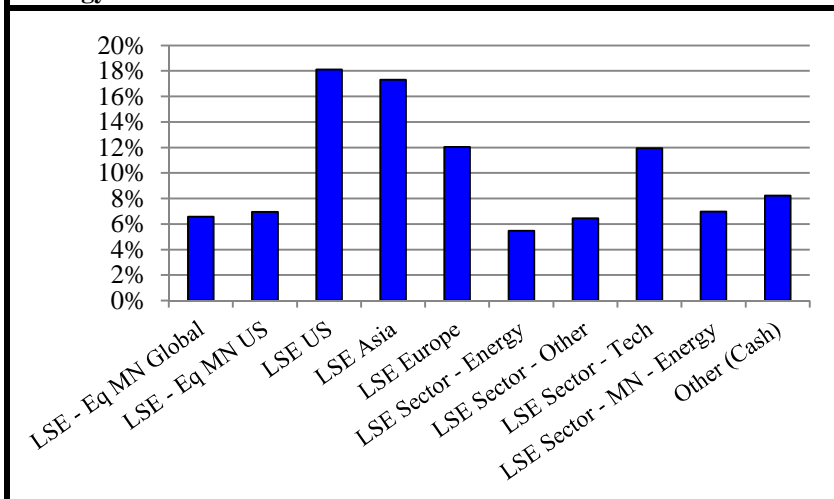
<b>Firm Statistics</b>	
Year Firm Established	1994
Firm AUM (\$M)	\$9,972
Percentage Employee Owned	51%
Account Inception	6/1/2009

<b>Fund Statistics</b>	
Number of Underlying Managers	16
Maximum Weighting of an Underlying Manager	6.97%
Current Leverage (Assets/Equity)	1.40
Net Long Percentage	84.98%
Equity Beta	1.22
Annual Manager Turnover	20-25%

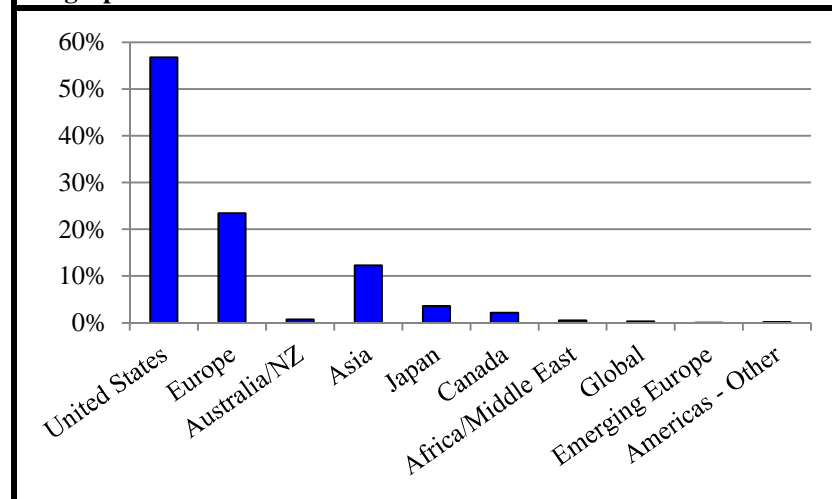
**Most Recent Quarter Performance Manager Commentary**

In aggregate, K2's underlying long/short managers were modestly negative, with only our activist funds generating gains in December. The largest declines were felt by our underlying long/short commodity managers and those focused on Asia, while U.S. focused and equity market neutral funds were generally flat. In terms of sectors, utilities, consumer staples, and consumer discretionary generally outperformed; while materials, financials, energy, and technology stocks underperformed. Financials were especially impacted by macro factors throughout the year, making stock picking in the space difficult. Alternatively, healthcare stocks, which more recently have been utilized as a defensive position in portfolios, began to demonstrate more fundamentally driven trading behavior in December. Looking ahead, managers are maintaining relatively low beta exposure pending signs of further broad market stabilization. In the near term, the focus is typically on especially cheap valuation opportunities, idiosyncratic catalysts, and pairs trading.

**Strategy Allocation Chart**



**Geographic Allocation Chart**



Fund statistics and commentary shown are provided by the investment manager.  
LSE: Long Short Equity Eq MN: Equity Market Neutral

**City of Phoenix Employees' Retirement System**  
**Addendum**  
**As of December 31, 2011**

RVK began monitoring the assets of City of Phoenix Employees' Retirement System as of April 1, 2005. Historical data was provided by the previous investment consultant.

Performance and market value data shown for the real estate investments and Long/Short Equity is provided by State Street.

**Performance Comments**

Performance shown is gross of fees, unless otherwise noted.

Research Affiliates waived management fees for the calendar year 2010 and the 3rd quarter 2011.

Performance for the State Street Government STIF 12 (CF) reflects securities litigation income from AXA Rosenberg in April 2011 and securities lending income.

**Manager Comments**

J.P Morgan Real Estate was incepted in April 2007.

Research Affiliates was incepted in June 2007.

Northern Trust Fixed Income was liquidated during October 2007.

Cramer Rosenthal McGlynn Small Cap Value was incepted during January 2008.

PAAMCO Newport Phoenix was incepted in December 2008.

Wrightwood Capital was incepted in January 2009.

K2 Advisors Long/Short Equity was incepted in May 2009.

Real Estate Capital Asia Partners was incepted in September 2009.

JDM Partners was incepted in January 2010.

Northern Trust Equity LCC was liquidated in April 2010.

S&P 500 SSGA SPDR was incepted April 2010.

TA Associates Realty Fund IX was incepted April 2010.

iShares:MSCI EAFE SmCp was incepted May 2010.

**City of Phoenix Employees' Retirement System**  
**Addendum**  
**As of December 31, 2011**

Artio Total Return and PIMCO Total Return were inceptioned in June 2010.

Fidelity (Pyramis) was liquidated in June 2011.

iShares:MSCI EAFE SmCp was liquidated July 2011.

Baillie Gifford and Mondrian were inceptioned June 2011.

SSgA MSCI ACW Ex US Index was inceptioned July 2011.

**Custom Index Comments**

The Target Benchmark is calculated monthly and currently consists of 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark.

The Actual Allocation Benchmark is calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.

The Int'l Equity Custom Benchmark consists of the MSCI EAFE Index (Gross) through May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

The GMO Custom Benchmark consists of the MSCI EAFE Index (Gross) through August 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

The Long/Short Equity Custom Benchmark is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark.

**Miscellaneous Comments**

Manager peer group names now include the abbreviation "IM" at the beginning of each name. "IM" is the acronym for Investment Metrics, the provider of peer group data used in ranking investment management performance.

## Glossary

**Alpha** - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

**Alpha Ratio** - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

**Average Quality** - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. There are two primary rating agencies in the U.S. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers) such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>
<b>Higher Credit Quality - Investment Grade</b>		
AAA	Aaa	Prime/Highest credit quality
AA+	Aa1	High credit quality
AA	Aa2	
AA-	Aa3	
A+	A1	Upper-medium credit quality
A	A2	
A-	A3	
BBB+	Baa1	Lower-medium credit quality
BBB	Baa2	
BBB-	Baa3	
<b>Lower Credit Quality - Below Investment Grade</b>		
BB+	Ba1	Speculative/Low credit quality
BB	Ba2	
BB-	Ba3	
B+	B1	Highly speculative
B	B2	
B-	B3	
CCC+	Caa1	Substantial credit/default risk
CCC	Caa2	Extremely speculative
CCC-	Caa3	
CC	Ca	Vulnerable to default
C	Ca	
D	C	In default

**Beta** - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

## Glossary

**Buy and Hold Attribution** - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Buy and hold attribution may also understate emerging markets and small cap exposure due to limited pricing availability from Worldscope. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

**Sector** - Attribution is calculated using the Industry Classification Benchmark (ICB), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector, as defined by Worldscope data.

**Country/Region** - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by Worldscope data.

**Style** - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by Worldscope. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

### Capital Markets Review -

**Baltic Dry Index** - Measures the demand for shipping capacity versus the supply of dry bulk carriers. As the supply of cargo ships is inelastic, the Baltic Dry Index provides an assessment of the price of moving major raw materials by sea.

**Breakeven Inflation** - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

**Capacity Utilization** - Measures the extent to which a country efficiently utilizes installed productive capacity. It measures the difference between the output that is produced using the installed equipment versus the output that *could* be produced using the installed equipment.

**Consumer Confidence** - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

**Consumer Price Index (CPI)** - Measures the change in the price level of consumer goods and services.

**Disposable Producer Price Index (PPI)** - Measures the average change in selling prices received by US producers for their output.

**M2** - Measures the amount of money in circulation and is often used as an indicator for forecasting inflation.

**Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

**Personal Consumption Expenditures** - Measures the average increase in prices for all domestic personal consumption.

**Personal Income** - The difference between total personal income and personal income tax payments.

**Personal Savings** - Percentage of personal saving within the US as a percentage of disposable personal income.

**Purchasing Managers Index** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

**Relative Strength Index (RSI)** - Measures the current and historical strength or weakness of a stock market based on the closing prices of the most recent 14-day period. RSI is classified as a momentum oscillator and measures the velocity and magnitude of directional price movements. RSI levels at or above 70 may indicate that a market is "overbought" while RSI levels below 30 may indicate that a market is "oversold."

**Shiller 20 City YoY** - Measures the monthly change in housing prices for 20 major metropolitan areas within the United States.

## Glossary

### **US Credit Market Debt as a Percentage of GDP -**

**Business** - Non-financial corporate business and non-corporate business.

**Financials** - Commercial banks, savings institutions and credit unions, government-sponsored enterprises, agency- and GSE-backed mortgage pools, ABS issuers, life insurance companies, REITs, and financial companies.

**Foreign** - US credit market instruments owed by non-US entities and debt issued by foreign companies in the US.

**Government** - Savings bonds, Treasury securities, budget agency securities, insurance reserves, and non-marketable securities held by retirement plans.

**Household** - Home mortgages, consumer credit, municipal securities, bank loans, and commercial mortgages.

**US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

**VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

**Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

**Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

**Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.

**Current Yield** - The annual income of a security divided by the security's current price.

**Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.

**Downside Risk** - A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.

**Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

**Effective Duration** - The weighted average duration of all the bonds in a given portfolio, weighted by their dollar values.

**Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

**Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

**Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk free return.

**Expense Ratios** - Morningstar is the source for mutual fund expense ratios.

**Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

## Glossary

**Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability and/or completeness.

**Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.

**Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.

**Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.

**Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.

**Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.

**Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.

**Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

**Modified Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.

**Net Cash Flow** - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

### Peer Groups -

**Plan Sponsor Peer Groups** - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client returns compiled from consultant and custodial data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 1,273 plans which include corporate, endowment, foundation, public, and Taft Hartley plans, across 6 standard peer groups. Plan Sponsor Peer Groups are gross of fees.

**Separate Account (SA) and Commingled Fund (CF) Peer Groups** - RVK utilizes the Investment Metrics Separate Account and Commingled Fund Manager Peer Groups for peer comparison and rankings. The Separate Account and Commingled Fund Peer Group database includes performance and other quantitative data for over 1,009 investment management firms, 4,999 investment products, across 148 standard peer groups. Separate Account and Commingled Fund Peer Groups are gross of fees.

**Mutual Fund (MF) Peer Groups** - RVK utilizes the Lipper Mutual Fund Manager Peer Groups for peer comparison and rankings. The Lipper Manager Peer Group database includes performance and other quantitative data for over 636 investment management firms, 23,637 investment products, across 127 standard peer groups. Mutual Fund Peer Groups are net of fees.

## Glossary

**Percentile Rankings** - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value

100 - Lowest Statistical Value

*Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4<sup>th</sup> percentile within the US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.*

**Performance Methodology** - RVK endorses the Global Investment Performance Standards (GIPS) and calculates performance for investment managers and composites using different methodologies. Investment manager performance is calculated by revaluing the portfolio on the date of all large external cash flows while composite performance is calculated using the Modified Dietz calculation methodology. According to the CFA Institute, "Only investment management firms that actually manage assets can claim compliance with the Standards. Plan Sponsors and consultants cannot make a claim of compliance unless they actually manage assets for which they are making a claim of compliance. They can claim to endorse the Standards and/or require that their investment managers comply with the Standards."

**Investment Managers** - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of  $\geq 10\%$  of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

**Composites** - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

**Portfolio Characteristics** - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

**Region Attribution** - Calculated using the Morgan Stanley Capital International (MSCI) region standards.

**Return** - Compounded rate of return for the period.

**%Return** - The time-weighted rate of return of a portfolio for a given period.

**R-Squared** - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

**Risk Free Benchmark** - BofA ML 3 Mo US T-Bill Index unless specified otherwise.

## Glossary

**RVK Liquidity Rating** - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
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<b><u>Liquid Investments</u></b>	
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T-Bills and Treasurys	100
Cash Equivalents	98
TIPS	95
US Large Cap Equity	95
Stable Value	91
Non-US Large Cap Equity	90
US Small Cap Equity	85
REITS	85
Non-US Small Cap Equity	85
Non-US Emerging Markets Equity	85
Core Fixed Income	85
Core Plus Fixed Income	80

<b><u>Less Liquid Investments</u></b>	
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Fixed Income Plus Sector	50
Diversified Real Return	50
Absolute Return Strategies	35

<b><u>Not Liquid Investments</u></b>	
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Core Real Estate	25
Core Plus Real Estate	15
Plus Only Real Estate	5
Private Equity Funds of Funds	5

**Sector Attribution** - Calculated using the Industry Classification Benchmark (ICB).

**Sharpe Ratio** - Represents the excess rate of return over the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

**Simple Alpha** - The difference between the manager's return and the benchmark's return.

**Spread Duration** - A measure of the price sensitivity of a bond to a 100 basis-point movement of the bond's spread relative to Treasurys.

**Standard Deviation** - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

## Glossary

**Time Period Abbreviations** - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

**Thematic Classification** - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Core Real Estate
	Preferred Securities	Asset Backed Fixed Income	Real Return
	High Yield	Domestic Core Plus Fixed Income	Inflation Hedges
	Convertible Fixed Income	Mortgage Backed Fixed Income	REITS
	TALF Funds	International Developed Fixed Income	Commodities
	Distressed Debt	Cash Equivalents	
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

**Total Fund Attribution** - A method for identifying the sources of a total fund's over- or underperformance relative to its benchmark. The calculation identifies the contributions of positive or negative total fund excess return caused by allocation differences relative to the total fund's custom benchmark, and performance differences of the investment managers relative to the benchmark components that represent them.

### **Total Fund Performance -**

**Total Fund** - The percentage return of the total fund for the specified time period.

**Total Fund Benchmark** - The percentage return of the total fund benchmark for the specified time period; calculated using the target asset allocation and the corresponding benchmark returns.

**Total Value Added** - The percentage of over- or underperformance of the total fund as compared to the total fund benchmark.

### **Total Value Added -**

**Asset Allocation** - Shows how the variance of the total fund's actual allocation from its target allocation added to or subtracted from fund performance.

**Manager Value Added** - The portion of the total value added attributable to the outperformance or underperformance of the fund's investment managers, relative to the individual benchmarks that represent them in the total fund benchmark.

**Market Timing/Other** - The contribution of other residual factors, including estimation error and transaction timing.

**Total Fund Beta** - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

**Tracking Error** - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

**Treynor Ratio** - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

**Unit Value** - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

## Glossary

**Up Market Capture** - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolios return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

**Yield to Maturity** - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return.

**Yield to Worst** - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

**City of Phoenix Employees' Retirement System  
Actual Allocation vs. Target Allocation  
As of December 31, 2011**

**Custom Benchmark Comments:**

The COPERS Total Fund is evaluated versus two custom benchmarks -- the Target Allocation Benchmark and the Actual Allocation Benchmark.

The Target Allocation Benchmark illustrates how the Total Fund would have performed if its allocation were exactly in-line with the established targets, and if the managers performed exactly as their benchmarks did. As such, the Target Allocation Benchmark represents the combined effect of two contributors to plan performance: 1) short-term variations of the plan's actual asset allocation vs. the constant allocation of the plan's target allocation, and 2) individual manager performance over their specific benchmarks. It is calculated monthly using the plan's target allocation, and currently consists of: 25% Russell 3000 Index, 21% MSCI ACW Ex US IM Index (Gross), 19% BC US Aggregate Bond Index, 15% NCREIF ODCE Index (Gross) (AWA), 10% Consumer Price Index + 4%, and 10% Long/Short Equity Custom Benchmark. The right-hand column labeled "Target" on the table below shows the percentages that comprise the target portfolio.

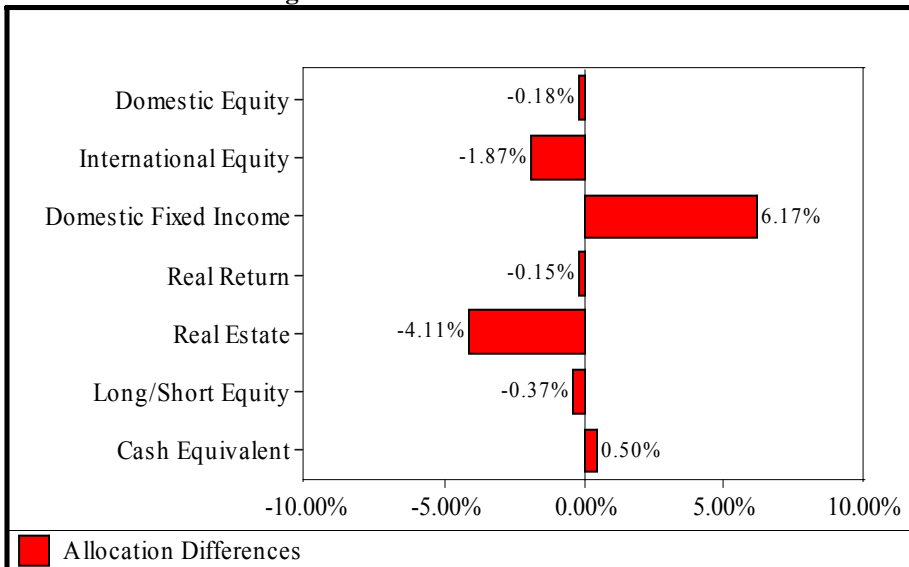
The Actual Allocation Benchmark isolates the impact of manager over- or underperformance and its contribution to overall plan performance. The Actual Allocation methodology isolates manager performance relative to benchmarks and negates the performance effect of allocation disparities relative to the target asset allocation. The Actual Allocation Custom Benchmark is calculated monthly based on the beginning-period weight of each asset class and its corresponding primary benchmark. The portfolio's actual allocation, shown in the column labeled "Allocation" in the table below, changes as markets fluctuate and the plan moves assets incrementally toward its long-term target. In periods of divergent market performance, asset class weights can vary significantly from their targets. Evaluating the total fund against the actual allocation benchmark removes the effect of these fluctuating asset class weights by applying the same weight to the benchmark calculation that is present in the actual portfolio. The Actual Allocation Benchmark is especially useful in periods when the plan's allocation varies significantly from its target.

**Asset Allocation vs. Target Allocation**

	<b>Market Value (\$)</b>	<b>Allocation (%)</b>	<b>Target (%)</b>
Domestic Equity	427,948,334	24.82	25.00
International Equity	329,851,275	19.13	21.00
Domestic Fixed Income	433,964,745	25.17	19.00
Real Return	169,802,839	9.85	10.00
Real Estate	187,826,498	10.89	15.00
Long/Short Equity	166,019,579	9.63	10.00
Cash Equivalent	8,602,628	0.50	-
<b>Total Fund</b>	<b>1,724,015,898</b>	<b>100.00</b>	<b>100.00</b>

Allocation shown may not sum up to 100% exactly due to rounding.

**Asset Allocation vs. Target Allocation Differences**



**City of Phoenix Employees' Retirement System**  
**Manager Summaries**  
**As of December 31, 2011**

**Dimensional Fund Advisors** is a large cap value separate account with exposure to U.S. value stocks. The manager's style will lead to a portfolio that displays more "value" characteristics, and smaller capitalization, than its benchmark.

**S&P 500 SSGA SPDR** is a large cap core exchange traded fund that seeks to track the S&P 500 Index.

**Cadence Capital Management** is a large cap growth separate account investing in U.S growth stocks. The manager's style is conservative, and the portfolio expected to underperform in sharp upward markets but outperform in downward markets.

**The Boston Company Mid-cap Opportunistic Value** separate account is the System's mid cap manager and invests in mid-cap U.S. equity. The manager's style is diverse, with wide latitude to invest the portfolio along the growth and value spectrum as it sees it.

**Cramer Rosenthal McGlynn** is a small cap value separate account with exposure to U.S. Value stocks. The manager's style is relative value, meaning that its portfolio will not be as "value"-oriented as the benchmark.

**Eagle Asset Management** is a small cap growth separate account investing in U.S. growth stocks. The manager's style is growth at a reasonable price (GARP), meaning that it's portfolio will not be as "growth"-oriented as the benchmark.

**Grantham, Mayo, Van Otterloo** is an international large cap equity mutual fund with exposure to developed- and emerging-market large cap international stocks. The manager employs a value style.

**SSgA MSCI ACW Ex US Index** is an international equity commingled fund that seeks to track the MSCI ACW Ex US Index.

**Baillie Gifford IE Growth** is an international large/all cap equity commingled fund with exposure to developed- and emerging-market stocks. The manager employs a growth style.

**Mondrian IE SC** is an international small cap equity commingled fund with exposure to mostly developed-market small cap stocks. However, the manager does invest in companies which derive significant revenue from emerging market countries.

**Western Asset Management Co.** is a core fixed income separate account with exposure to benchmark sectors in addition to sectors within the spread sectors. The manager employs an aggressive spread-management style that will lead it to outperform the benchmark in environments when fixed income yield spreads are declining, and to underperform it in environments when yield spreads are rising.

**Artio Total Return** is a core fixed income commingled fund centered on fundamental analysis of macroeconomic factors across the globe, including current and nominal interest rates, country-specific monetary and fiscal policies, inflation expectations, trade and current account balances, and budgets and political environments.

**City of Phoenix Employees' Retirement System**  
**Manager Summaries**  
**As of December 31, 2011**

**PIMCO Total Return** is a core fixed income separate account that adds value through the use of both top-down and bottom-up strategies. The portfolio is constructed by first looking at the long run macroeconomic factors and then selecting the underlying securities that will incur acceptable levels of portfolio risk. The manager's philosophy revolves around the principle of diversification and believes that no single risk should dominate returns.

**Research Affiliates** is a separate account investing in real return strategies and seeks to outperform the Consumer Price Index plus a premium. The manager employs a tactical asset allocation (TAA) strategy employing mostly indexed exposure to a wide variety of asset classes in an effort to respond to inflation and provide return that is uncorrelated to major markets.

**Morgan Stanley Real Estate** is an open-ended commingled core real estate fund investing in a diversified pool of real estate properties in the United States.

**JP Morgan Real Estate** is an open-ended commingled core real estate fund investing in a diversified pool of real estate properties in the United States.

**Wrightwood High Yield Partners** is a closed-ended, value-added commingled fund investing in structured real estate debt with a focus on mezzanine debt, preferred equity, and first mortgage participating interests.

**TA Associates Realty Fund IX** is a closed-ended, value added commingled fund focused on acquisition of underperforming real estate assets in the major US markets. The fund will focus on all major property types with specific focus on office and industrial assets.

**Real Estate Capital Asia Partners** is a closed-ended, opportunistic commingled fund investing in equity and structured real estate debt assets in the major property types, such as multifamily, office, industrial and retail properties, across Asia.

**JDM Partners Opportunity Fund I** is a closed-end, opportunistic commingled fund investing in equity and non-performing real estate debt secured by underperforming class A, income-producing assets in the Southwest U.S., with focus on the Arizona and California markets.

**PAAMCO Newport Phoenix** is a Long/Short Equity separate account with exposure to a portfolio of long/short hedge funds. The managers of the strategy provide exposure to both long and short positions in equity securities across capitalizations and the style spectrum.

**K2 Advisors** is a Long/Short Equity commingled fund with exposure to a portfolio of long/short hedge funds. The managers of the strategy provide exposure to both long and short positions in equity securities across capitalizations and the style spectrum.

**State Street Government STIF 12** commingled fund is the System's cash account.

**City of Phoenix Employees' Retirement System**  
**Asset Class Index Glossary**  
**As of December 31, 2011**

**Russell 3000 Index:** The R 3000 Index measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market.

**Russell 1000 Value Index:** The R 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

**S&P 500 Index:** The S&P 500 Index measures the performance of the largest 500 U.S. equities.

**Russell 1000 Growth Index:** The R 1000 Growth Index measures the performance of the large-cap growth segment of largest 1,000 U.S. equities. Growth stocks are securities of companies that have been growing rapidly or show signs that they will do so soon. These stocks will often have little or no dividend because assets are needed to invest in expansion.

**Russell Mid Cap Index:** The R Mid Cap Index measures the middle capitalization segment of U.S. equities, which are the 800 smallest companies in the R 1000 Index.

**Russell 2000 Value Index:** The R 2000 Value Index measures the performance of the small-cap value segment within the 2,000 smallest U.S. companies in the R 3000 Index. Value stocks are securities of companies that have lower price-to-book and price earnings, higher dividend yields, and lower forecasted growth rates than growth companies.

**Russell 2000 Growth Index:** The R 2000 Growth Index measures the performance of the small-cap growth segment within the 2,000 smallest U.S. companies in the R 3000 Index. Growth stocks are securities of companies that have been growing rapidly or show signs that they will do so soon. These stocks will often have little or no dividend because assets are needed to invest in expansion.

**MSCI ACW Ex US IM Index:** The MSCI ACW Ex US IM (Investable Market) Index is similar to the MSCI ACW Ex US Index, but also includes small cap stocks in both the developed and emerging countries listed below.

**MSCI ACW Ex US Index:** The MSCI ACW Ex US (All Country World excluding US) is designed to measure equity market performance in global developed and emerging markets, excluding the US. The 23 developed countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom. The emerging market countries are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

**MSCI ACW Ex US Small Cap Index:** The MSCI ACW Ex US Small Cap Index is designed to measure equity market performance of small cap companies in global developed and emerging markets, excluding the US. The 23 developed countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom. The emerging market countries are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

**City of Phoenix Employees' Retirement System**  
**Asset Class Index Glossary**  
**As of December 31, 2011**

**MSCI EAFE Index:** The MSCI EAFE Index (Europe, Australasia, Far East) is designed to measure equity market performance of 22 developed countries, excluding the US & Canada: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

**Int'l Equity Custom Benchmark:** Consists of the MSCI EAFE Index (Gross) until May 2011 and the MSCI ACW Ex US IM Index (Gross) thereafter.

**GMO Custom Benchmark:** Consists of the MSCI EAFE Index (Gross) until September 2010 and the MSCI ACW Ex US Index (Gross) thereafter.

**MSCI EAFE Small Cap:** The objective of the MSCI Small Cap Indices is to represent the business activities of small cap companies across international developed markets. MSCI selects the most liquid securities relative to their market capitalization, and targets for index inclusion 40% of the full market capitalization of the eligible small cap universe within each industry group, within each country. Effective after the close of trading on September 28, 2001, MSCI broadened the eligible companies' full market capitalization range from USD 200 ~ 800 million to USD 200 ~1,500 million and free float adjusted the market capitalization of the index constituents.

**Barclays Capital U.S. Aggregate Bond Index:** The BC Aggregate Bond Index is a comprehensive measure of the U.S. investment-grade, fixed-rate, taxable bond market representing U.S. Treasury and agency bonds, corporate debt, mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities.

**Consumer Price Index +4%:** The Consumer Price Index is a national inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The 4% represents the premium above the rate of inflation that the Plan's real return manager, Research Affiliates, targets to achieve.

**NCREIF ODCE Index:** The National Council of Real Estate Investment Fiduciaries Open-End Diversified Core Equity Fund Index is a compilation of the quarterly performance of 26 open-end commingled real estate funds, all employing a core investment strategy.

**PAAMCO Custom Index:**

**HFRI Equity Hedge (Total) Index:** The Hedge Fund Research, Inc. Equity Hedge (Total) Index measures the performance of funds that maintain both long and short positions in equity securities.

**HFRI Equity Market Neutral Index:** The Hedge Fund Research, Inc. Equity Market Neutral Index measures the performance of funds that attempt to exploit relative pricing inefficiencies between equity securities, neutralizing exposure to market risk.

**HFRI Short Biased Index:** The Hedge Fund Research, Inc. Short Biased Index measures the performance of funds that maintain a net short position in equity securities.

**BofA ML 3 Mo US T-Bill Index:** The BofA Merrill Lynch 3-Month T-Bill Index measures the performance of newly issued 90-day Treasury bills.

**City of Phoenix Employees' Retirement System**  
**Asset Class Index Glossary**  
**As of December 31, 2011**

**Open-ended real estate** funds may generate income through rental agreements of high quality, well leased properties. Debt interest may be gained via the purchase of whole mortgages or portions of mortgages and other real estate debt (e.g. commercial mortgage backed securities, or mortgage backed securities). Open-ended commingled funds typically provide quarterly liquidity, subject to certain conditions and possible redemption queues.

**Closed-ended real estate** investment properties can vary by quality, occupancy, leverage, and income. Closed-ended funds are considered higher risk due to generally higher levels of leverage and the potential of developments, improvements or re-positioning efforts not being successful. Closed-ended funds are typically less liquid investments due to a required commitment period.

**City of Phoenix Employees' Retirement System**  
**Summary of Investment Policy**  
**As of December 31, 2011**

**Objectives**

- Maintain or reduce the combined (employer plus employee) contribution rate of the System over time.
- Progress toward a 100%, or higher, funding of the System's Pension Benefit Obligation over time.
- Within the framework of prudent risk limitations, the minimum investment objective is to achieve an average long-term total rate of return which satisfies the actuarial assumed rate of return. The actuarial rate of return is set at 8.0%.
- The System shall also strive to achieve investment performance that exceeds the rate of inflation over time thereby providing a real rate of return.
- The System's assets shall earn a sufficient total rate of return over time to meet all benefit and expense obligations.

**Asset Allocation Strategy**

The Board of Trustees recognizes that the most important determinant of long-term return and volatility is the asset allocation decision. The System's asset allocation policy is intended to reflect, and be consistent with, the return objective and risk tolerance expressed in this Investment Policy Statement. It is designed to provide the highest probability of meeting or exceeding the System's objectives at a controlled level of risk and liquidity that is acceptable to the Board. In establishing its risk tolerance, the Board considers its ability to withstand short and intermediate-term volatility in investment performance and fluctuations in the financial condition of the fund. It will be the Board's policy to review the appropriateness of the asset allocation strategy at least annually.

**Distinction of Board Responsibilities**

The Board of Trustees has the responsibility of establishing and maintaining broad policies and objectives for all aspects of the System's operation. The Board is responsible for prudent investment and expenditure of the System's assets. Specifically with regard to investments, the Board takes action on recommendations that come from its Investment Committee, Investment Consultant and Staff. The Board may also originate its own agenda items

**Rebalancing**

COPERS' staff will have the responsibility of assessing, on a quarterly basis, whether an asset class or investment manager requires rebalancing and undertaking that rebalancing if necessary. Any necessary rebalancing will take place no later than 45 days after each quarter's end.