



ADVISED ASSETS  
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# Wisconsin Deferred Compensation Plan

*Second Quarter, 2015*



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# EXECUTIVE SUMMARY

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2Q2015

# FUND COMPLIANCE REPORT CARD – 6/30/15

Name	Total Ret 3 Month	Total Ret 1 Yr	Total Ret 3 Yr	Total Ret 5 Yr	Total Ret 10 Yr	Total Net Assets \$M	Expense Ratio
American Funds EuroPacific Gr R6	1.12	0.97	12.71	10.12	7.57	132,495	0.49
Morningstar Foreign Large Growth Average	1.46	-0.61	11.34	9.85	5.97	-	1.25
MSCI EAFE Index	0.62	-4.22	11.97	9.54	5.12	-	-
MSCI ACWI ex U.S.	0.53	-5.26	9.44	7.76	5.54	-	-
Blackrock EAFE Equity Index Coll T	0.74	-4.07	12.15	10.01	5.32	-	0.12
MSCI EAFE Index	0.62	-4.22	11.97	9.54	5.12	-	-
DFA US Micro Cap I	1.02	5.68	19.33	18.29	8.52	5,263	0.53
Morningstar Small Cap Blend Average	-0.12	3.42	16.72	15.95	7.91	-	1.27
Russell 2000 Index	0.42	6.49	17.81	17.08	8.40	-	-
Blackrock Russell 2000 Index Coll T	0.45	6.68	18.02	17.24	8.48	-	0.07
Russell 2000 Index	0.42	6.49	17.81	17.08	8.40	-	-
T. Rowe Price Mid-Cap Growth	1.29	14.87	20.92	19.35	11.59	26,081	0.77
Morningstar Mid Cap Growth Avg	0.44	8.92	17.53	16.81	8.89	-	1.32
Russell Mid Cap Growth Index	-1.14	9.45	19.24	18.69	9.69	-	-
S&P Midcap 400 Index	-1.06	6.40	18.60	17.82	9.74	-	-
Blackrock Midcap Equity Index Coll F	-1.05	6.46	18.64	17.84	9.78	-	0.04
S&P MidCap 400 Index	-1.06	6.40	18.60	17.82	9.74	-	-
Calvert Equity I	0.93	11.93	17.28	16.79	8.53	2,826	0.66
S&P 500 Index	0.28	7.42	17.31	17.34	7.89	-	-
Morningstar Socially Resp Large Cap Average*	0.12	6.23	16.53	15.59	7.29	-	1.06
Morningstar Large Cap Growth Avg	0.50	9.39	17.48	16.96	8.26	-	1.20
Fidelity Contrafund	1.00	10.29	17.42	17.11	9.85	111,797	0.64
Morningstar Large Cap Growth Average	0.50	9.39	17.48	16.96	8.26	-	1.20
Russell 1000 Growth Index	0.12	10.56	17.99	18.59	9.10	-	-
S&P 500 Index	0.28	7.42	17.31	17.34	7.89	-	-



= Actively managed options which have trailed their respective benchmarks over a five year period.

Gray bars indicate fund benchmarks; white indicates current funds

DATA SOURCE:  
Morningstar  
6/30/2015

\*This index is a compilation of all Large Cap Socially Conscious Funds in the Morningstar Data Base

# FUND COMPLIANCE REPORT CARD – 6/30/15

Name	Total Ret 3 Month	Total Ret 1 Yr	Total Ret 3 Yr	Total Ret 5 Yr	Total Ret 10 Yr	Total Net Assets \$M	Expense Ratio
Vanguard Institutional Index Instl PI	0.28	7.43	17.30	17.34	7.92	195,289	0.02
S&P 500 Index	0.28	7.42	17.31	17.34	7.89	-	-
Vanguard Wellington Admiral	-0.51	3.58	11.78	12.17	7.98	88,973	0.18
Morningstar Moderate Allocation Average	-0.53	2.06	10.08	10.38	5.98	-	1.24
Composite 65% S&P 500 / 35% Barclay's Aggregate	-0.41	5.48	11.89	12.44	6.68	-	-
Composite 65% S&P 500 / 35% Barclay's U.S. Credit A or Better Index	-0.87	5.31	12.32	13.02	6.80	-	-
Vanguard Long-Term Investment-Grade Admiral	-7.61	1.22	3.80	7.16	6.04	14,966	0.12
Barclay's LT Corporate A	-3.01	1.38	3.05	5.00	4.77	-	-
Morningstar Corp Bond	-2.63	0.34	3.38	5.28	5.07	-	0.87
Blackrock US Debt Index Fund Coll W	-1.67	1.94	1.92	3.42	4.49	-	0.05
BarCap US Agg Bond TR USD	-1.68	1.86	1.83	3.35	4.44	-	-
Federated US Government 2-5 Yr Instl	-0.61	0.48	0.06	1.11	3.21	521	0.58
Morningstar Short Government Average	-0.11	0.70	0.36	0.89	2.52	-	0.81
Barclay's US Treas/Agency 3-5 Yr	-0.20	2.12	1.11	2.26	4.01	-	-
BofA Merrill Lynch US Treas 3-5 Yr	-0.15	2.10	1.11	2.22	3.98	-	-
Vanguard Admiral Treasury Money Market Inv	0.00	0.01	0.01	0.01	1.34	9,542	0.09
Morningstar Taxable Money Market Average	0.00	0.01	0.02	0.02	1.36	-	0.55
U.S. Treasury 90-Day T-Bill	0.01	0.03	0.05	0.07	1.36	-	-
iMoney Net Average Treasury MM	0.00	0.00	0.00	0.00	1.04	-	-



= Actively managed options which have trailed their respective benchmarks over a five year period.

Gray bars indicate fund benchmarks; white indicates current funds

DATA SOURCE:  
Morningstar  
6/30/2015

# 3 YEAR QUARTILE RANKINGS – 6/30/15

Name	<u>2015</u>	<u>2015</u>	<u>2014</u>	<u>2014</u>	<u>2014</u>	<u>2014</u>	<u>2013</u>	<u>2013</u>	<u>2013</u>	<u>2013</u>	<u>2012</u>	<u>2012</u>
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
American Funds EuroPacific Gr R6	76	82	73	79	65	67	69	42	47	59	64	69
Calvert Equity I	42	38	43	21	16	30	40	23	46	63	69	51
DFA U.S. Micro Cap	79	78	82	77	87	86	90	92	87	86	89	83
Federated U.S. Govt: 2-5 Yr Instl	25	32	23	17	69	73	78	59	68	86	84	80
Fidelity Contrafund	44	58	47	50	75	71	67	53	52	81	74	78
T. Rowe Price Mid-Cap Growth	91	92	86	74	85	78	75	78	76	75	77	72
Vanguard Institutional Index Instl Pl	64	72	74	71	82	79	80	79	84	86	84	85
Vanguard Long-Term Inv Grade Adm	61	95	95	77	93	94	94	50	58	73	67	60
Vanguard Wellington Adm	82	88	85	89	93	94	91	88	88	88	84	83

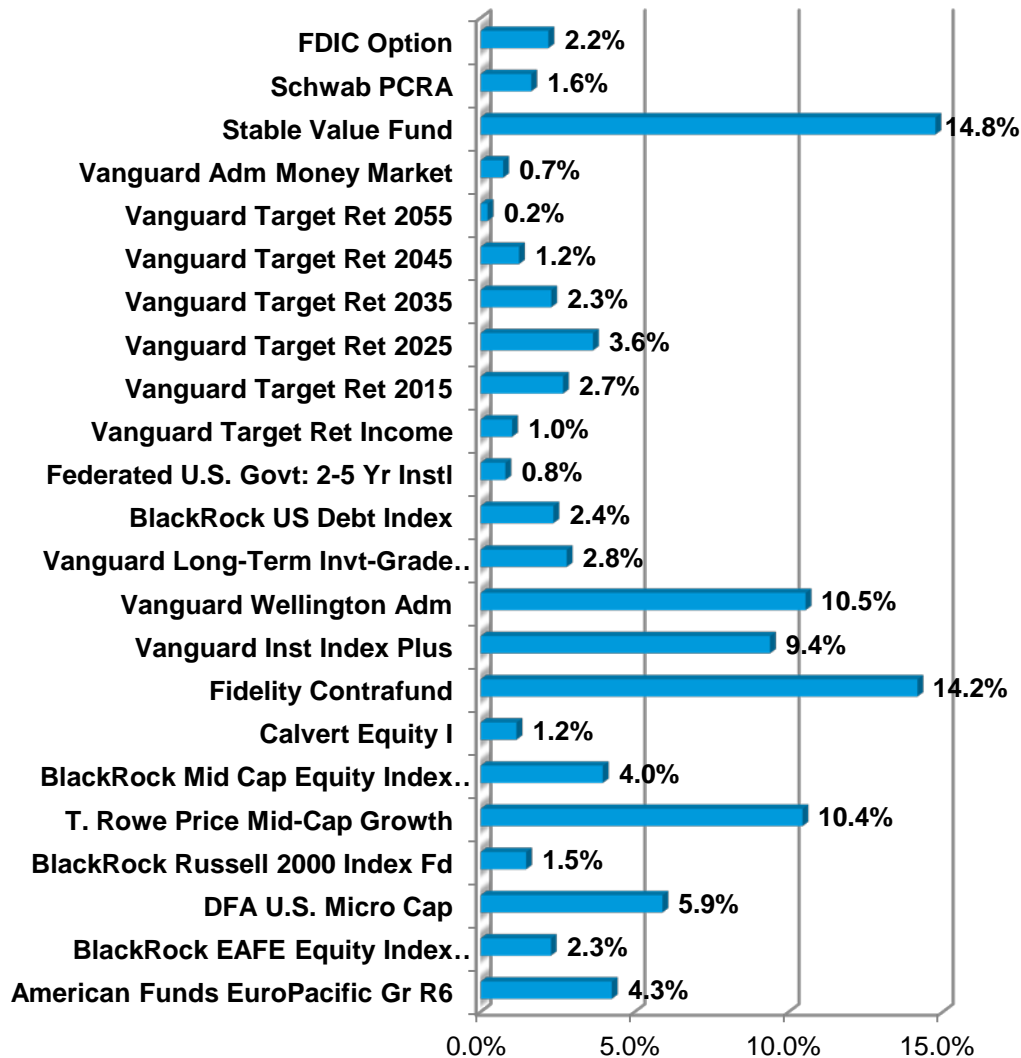
76-100	1st Quartile
51-75	2nd Quartile
26-50	3rd Quartile
1-25	4th Quartile



# PLAN ASSET SUMMARY – 6/30/15

	Plan Inception Date	Fund Net Assets	WDC Assets in Fund	WDC as a Percentage of Fund Assets	Fund as a Percentage of WDC Assets	Number of Participants	Percentage of WDC Participants Utilizing Fund
American Funds EuroPacific Gr R6	1/28/2005	\$132,495,270,745	\$172,891,594	0.13%	4.26%	19,884	34.85%
BlackRock EAFE Equity Index Fund W	2/1/2001	N/A	\$92,609,549	N/A	2.28%	14,413	25.26%
DFA U.S. Micro Cap	2/1/1997	\$5,263,050,018	\$239,653,368	4.55%	5.90%	22,473	39.39%
BlackRock Russell 2000 Index Fd	2/20/2004	N/A	\$59,977,622	N/A	1.48%	4,963	8.70%
T. Rowe Price Mid-Cap Growth	2/1/1998	\$26,081,291,062	\$424,113,201	1.63%	10.44%	18,163	31.83%
BlackRock Mid Cap Equity Index Fund W	2/1/2001	N/A	\$161,041,719	N/A	3.97%	16,440	28.81%
Calvert Equity I	4/18/2003	\$2,825,915,377	\$47,187,871	1.67%	1.16%	3,186	5.58%
Fidelity Contrafund	1/31/1994	\$111,796,786,453	\$575,586,595	0.51%	14.18%	24,230	42.47%
Vanguard Inst Index Plus	9/9/1990	\$195,289,451,004	\$381,326,236	0.20%	9.39%	22,547	39.52%
Vanguard Wellington Adm	10/26/2001	\$88,972,949,974	\$428,172,540	0.48%	10.54%	23,214	40.69%
Vanguard Long-Term Invst-Grade Adm	10/26/2001	\$14,965,789,871	\$113,408,606	0.76%	2.79%	11,446	20.06%
BlackRock US Debt Index	2/1/2001	N/A	\$95,862,557	N/A	2.36%	11,963	20.97%
Federated U.S. Govt: 2-5 Yr Instl	2/3/1992	\$520,817,573	\$32,727,097	6.28%	0.81%	6,787	11.90%
Vanguard Target Ret Income	7/29/2005	\$11,636,570,004	\$41,429,747	0.36%	1.02%	1,309	2.29%
Vanguard Target Ret 2015	7/29/2005	\$22,141,737,240	\$108,500,805	0.49%	2.67%	2,965	5.20%
Vanguard Target Ret 2025	7/29/2005	\$35,271,819,614	\$148,093,633	0.42%	3.65%	5,808	10.18%
Vanguard Target Ret 2035	7/29/2005	\$26,926,407,586	\$93,080,033	0.35%	2.29%	5,516	9.67%
Vanguard Target Ret 2045	7/29/2005	\$16,748,906,787	\$50,716,917	0.30%	1.25%	4,850	8.50%
Vanguard Target Ret 2055	8/18/2010	\$2,501,195,410	\$9,207,631	0.37%	0.23%	1,691	2.96%
Vanguard Adm Money Market	10/1/1993	\$9,541,700,000	\$29,672,594	0.31%	0.73%	7,330	12.85%
Stable Value Fund	9/1/1996	N/A	\$599,319,744	N/A	14.76%	20,681	36.25%
Schwab PCRA	2/17/2000	N/A	\$66,662,308	N/A	1.64%	1,360	2.38%
FDIC Option	12/31/1996	N/A	\$89,322,264	N/A	2.20%	3,373	5.91%
			\$4,060,564,232			254,592	

# ASSET CHART – 6/30/15

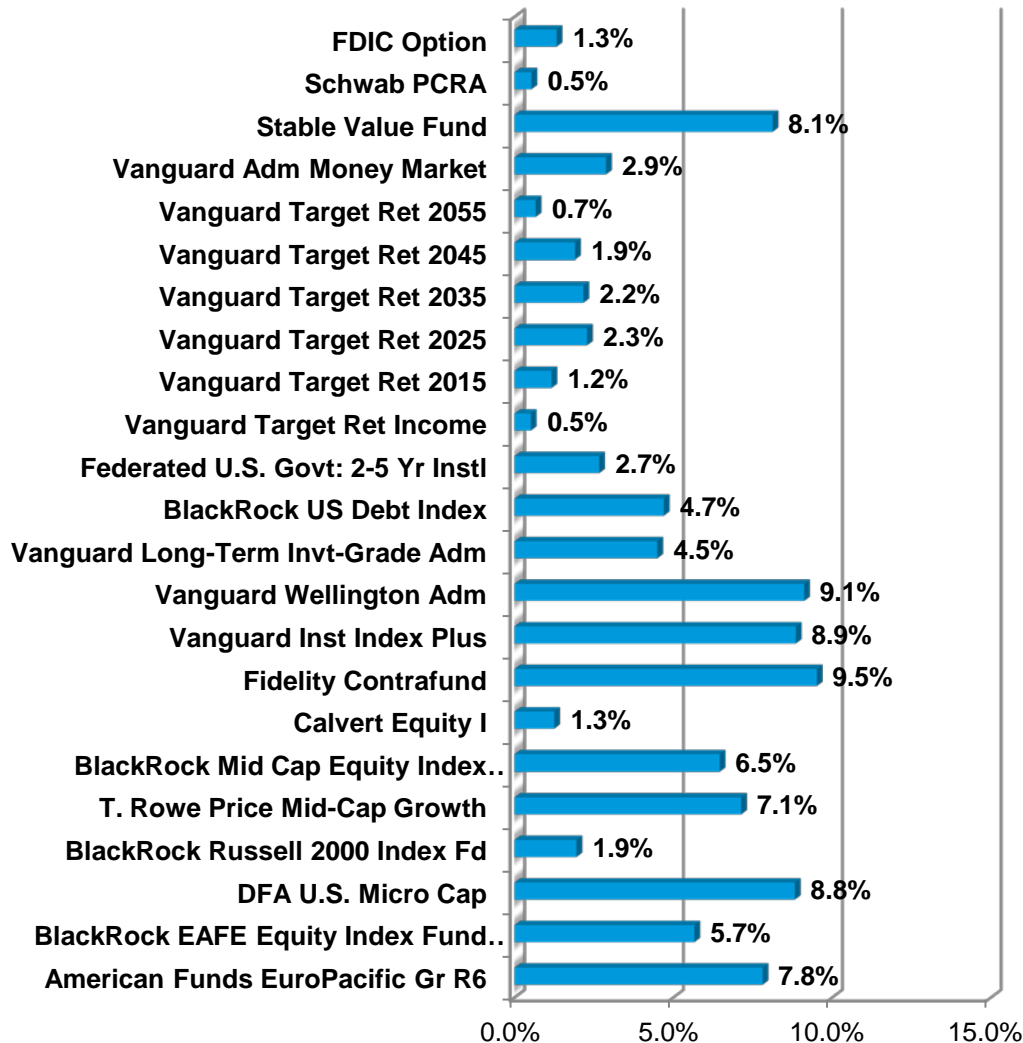


Total WDC Assets  
(as of 6/30/2015)

**\$4,060,564,232**

Domestic Equity	\$1,888,886,612	47%
Intl Equity	\$265,501,143	7%
Asset Allocation	\$879,201,307	22%
Fixed Income	\$241,998,260	6%
Cash Equiv.	\$718,314,601	18%
Self-Directed Brok.	\$66,662,308	2%

# PARTICIPANT ACCOUNT CHART – 6/30/15



Total WDC Participant  
Accounts  
(as of 6/30/2015)

**254,592**

Total # Of WDC  
Participants  
(as of 6/30/2015)

**57,054**

# FUND EXPENSE VS. CATEGORY – 6/30/15

Name	Expense Ratio
American Funds EuroPacific Gr R6	0.49
Cat: Foreign Large Blend	1.25
Blackrock EAFE Equity Index Fund W	0.12
Cat: Foreign Large Blend Index	0.65
DFA U.S. Micro Cap	0.53
Cat: Small Blend	1.27
Blackrock Russell 2000 Index Fd	0.07
Cat: Small Cap Blend Index	0.65
T. Rowe Price Mid-Cap Growth	0.77
Cat: Mid Growth	1.32
Blackrock Mid Cap Equity Index Fund W	0.04
Cat: Mid Cap Blend Index	0.55
Calvert Equity I	0.66
Cat: Socially Resp Large Cap Index	0.75
Fidelity Contrafund	0.64
Cat: Large Growth	1.20
Vanguard Inst Index Plus	0.02
Cat: Large Cap Blend Index	0.58
Vanguard Wellington Adm	0.18
Cat: Moderate Allocation	1.24
Stable Value Fund	0.37
Cat: Stable Value*	0.72

Name	Expense Ratio
Vanguard Target Retirement 2055 Inv	0.18
Cat: Target Date 2050+	0.95
Vanguard Target Retirement 2045 Inv	0.18
Cat: Target Date 2041-2045	0.97
Vanguard Target Retirement 2035 Inv	0.18
Cat: Target Date 2031-2035	0.95
Vanguard Target Retirement 2025 Inv	0.17
Cat: Target Date 2021-2025	0.92
Vanguard Target Retirement 2015 Inv	0.16
Cat: Target Date 2011-2015	0.90
Vanguard Target Retirement Income Inv	0.16
Cat: Retirement Income	0.92
Vanguard Long-Term Invmt-Grade Adm	0.12
Cat: Corporate Bond	0.87
Blackrock US Debt Index	0.05
Cat: Intermediate Bond Index	0.39
Federated U.S. Govt: 2-5 Yr Instl	0.58
Cat: Short Government	0.84
Vanguard Adm Money Market	0.09
Average US Taxable Money Market Fund	0.55

**Asset-Weighted Average Expense Ratio: 0.29%**

\*This index is a compilation of all Stable Value Funds in the Morningstar Data Base that have a listed expense ratio.

# FUND RESTRICTIONS – 6/30/15

Name	Category	Restrictions
American Funds EuroPacific Gr R6	Foreign Large Blend	30 day roundtrip restriction on participant initiated exchanges over \$5000
Blackrock EAFE Equity Index Fund W	Foreign Large Blend Index	N/A
DFA U.S. Micro Cap	Small Blend	N/A
Blackrock Russell 2000 Index Fund	Small Cap Blend Index	N/A
T. Rowe Price Mid-Cap Growth	Mid Growth	N/A
Blackrock Mid Cap Equity Index Fund W	Mid Cap Blend Index	N/A
Calvert Equity I	Socially Responsible Large Cap Index	N/A
Fidelity Contrafund	Large Growth	N/A
Vanguard Inst Index Plus	Large Cap Blend Index	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Wellington Adm	Moderate Allocation	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement 2055 Inv	Target Date 2050+	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement 2045 Inv	Target Date 2041-2045	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement 2035 Inv	Target Date 2031-2035	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement 2025 Inv	Target Date 2021-2025	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement 2015 Inv	Target Date 2011-2015	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Target Retirement Income Inv	Retirement Income	60 day roundtrip restriction on all funds for participant initiated exchanges
Vanguard Long-Term Invmt-Grade Adm	Long-Term Bond	60 day roundtrip restriction on all funds for participant initiated exchanges
Blackrock US Debt Index	Intermediate Bond Index	N/A
Federated U.S. Govt: 2-5 Yr Instl	Short Government	N/A
Vanguard Adm Money Market	Average US Taxable Money Market Fund	N/A

# PARTICIPANT WEIGHTED AVERAGE RETURN – 6/30/15

- The 1 year asset-weighted return for the WDC plan as of 6/30/2015 was 5.77%.
- Much of this can be attributed to a 14.2% weighting in Fidelity Contrafund which returned 10.29%.

Other contributing factors were:

- An 9.4% weighting to Vanguard Institutional Index, which had a return of 7.43%
- An 10.5% weighting to the Vanguard Wellington Fund which returned 3.58%.
- An 10.4% weighting to the T. Rowe Price Midcap Growth Fund, which returned 14.87%.
- Note: Participant weighted average return excludes the self directed brokerage accounts

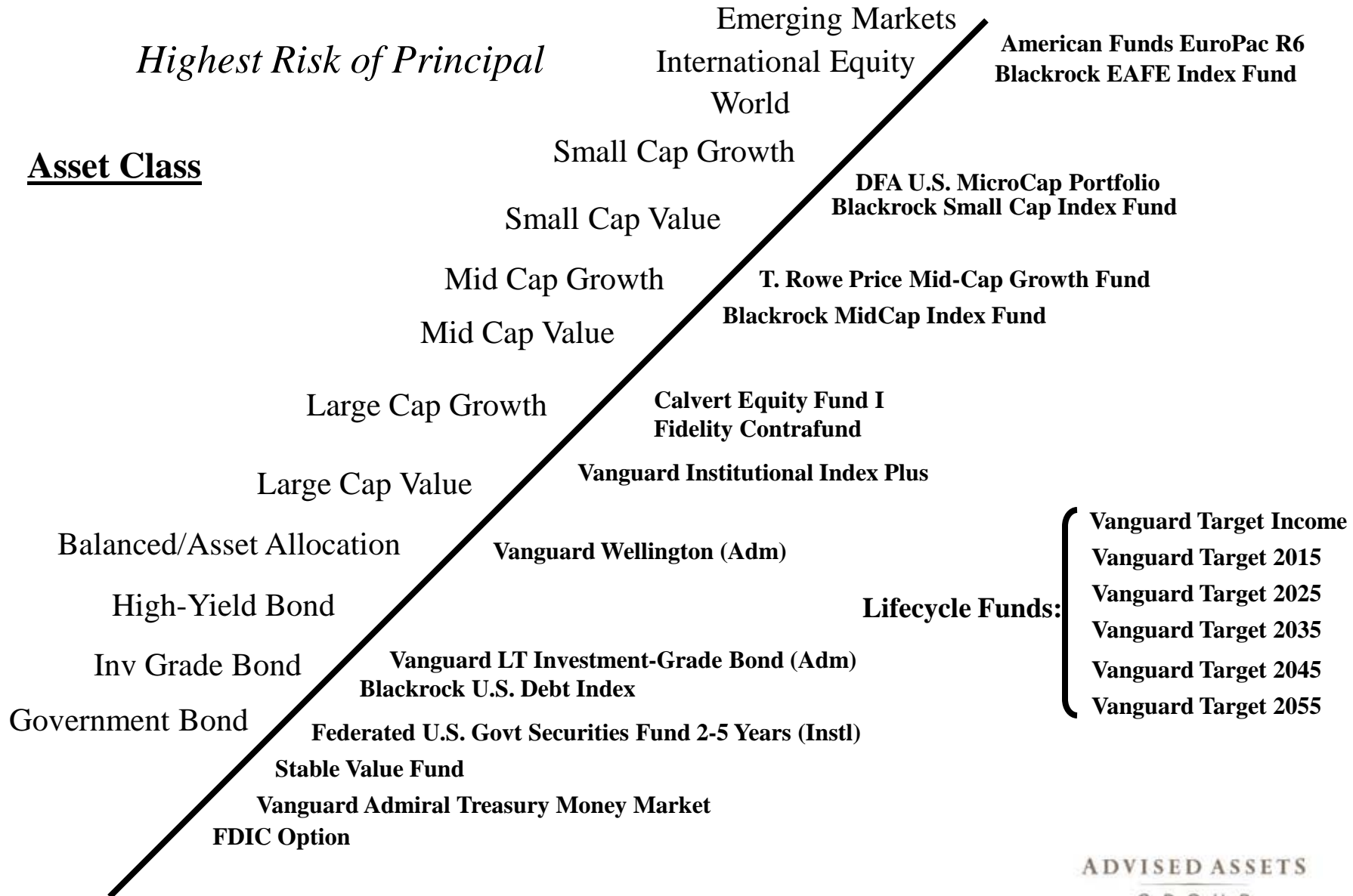


# FUND HIGHLIGHTS & OBSERVATIONS

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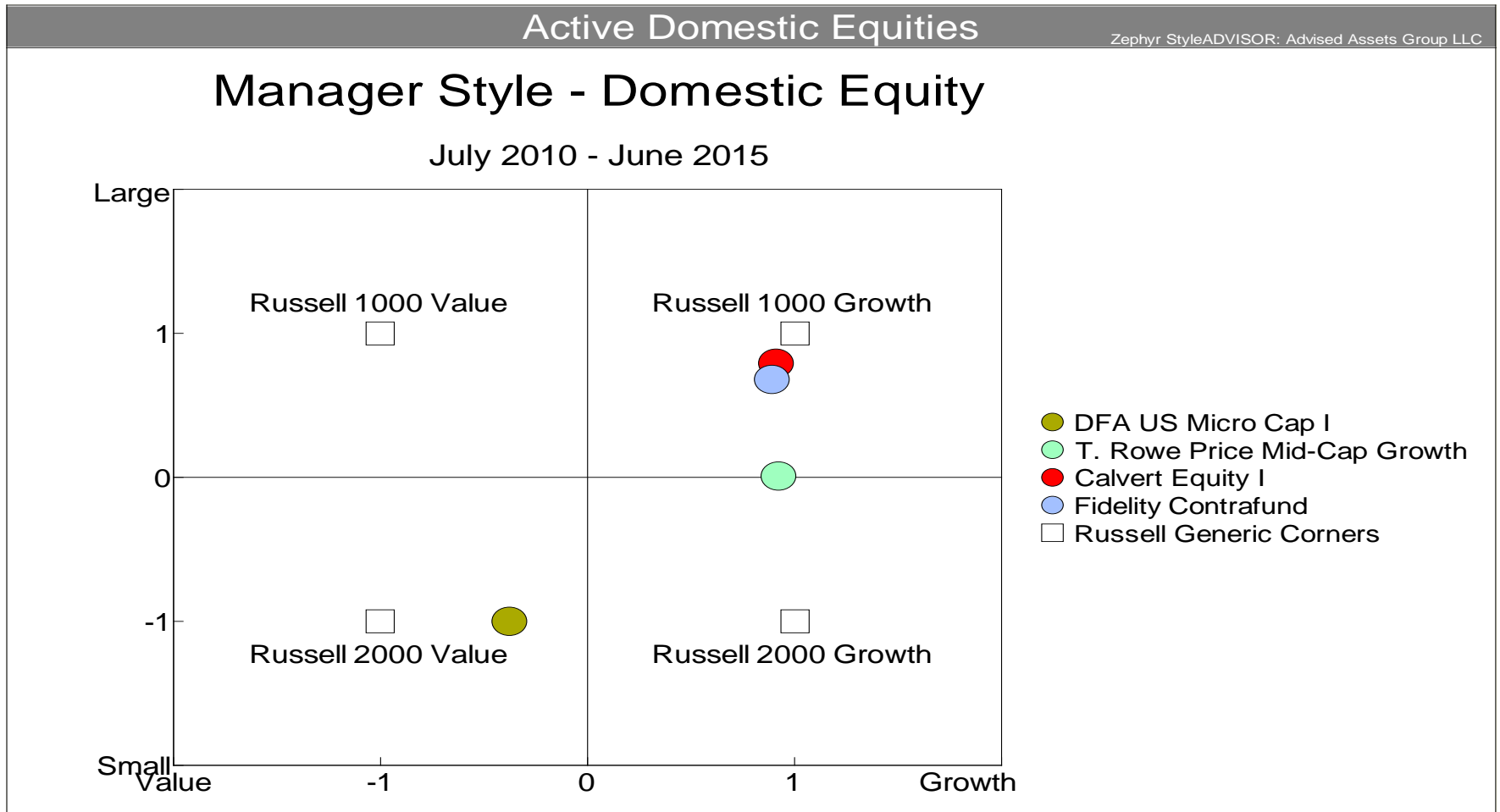
# WISCONSIN PLAN OPTIONS – 6/30/15





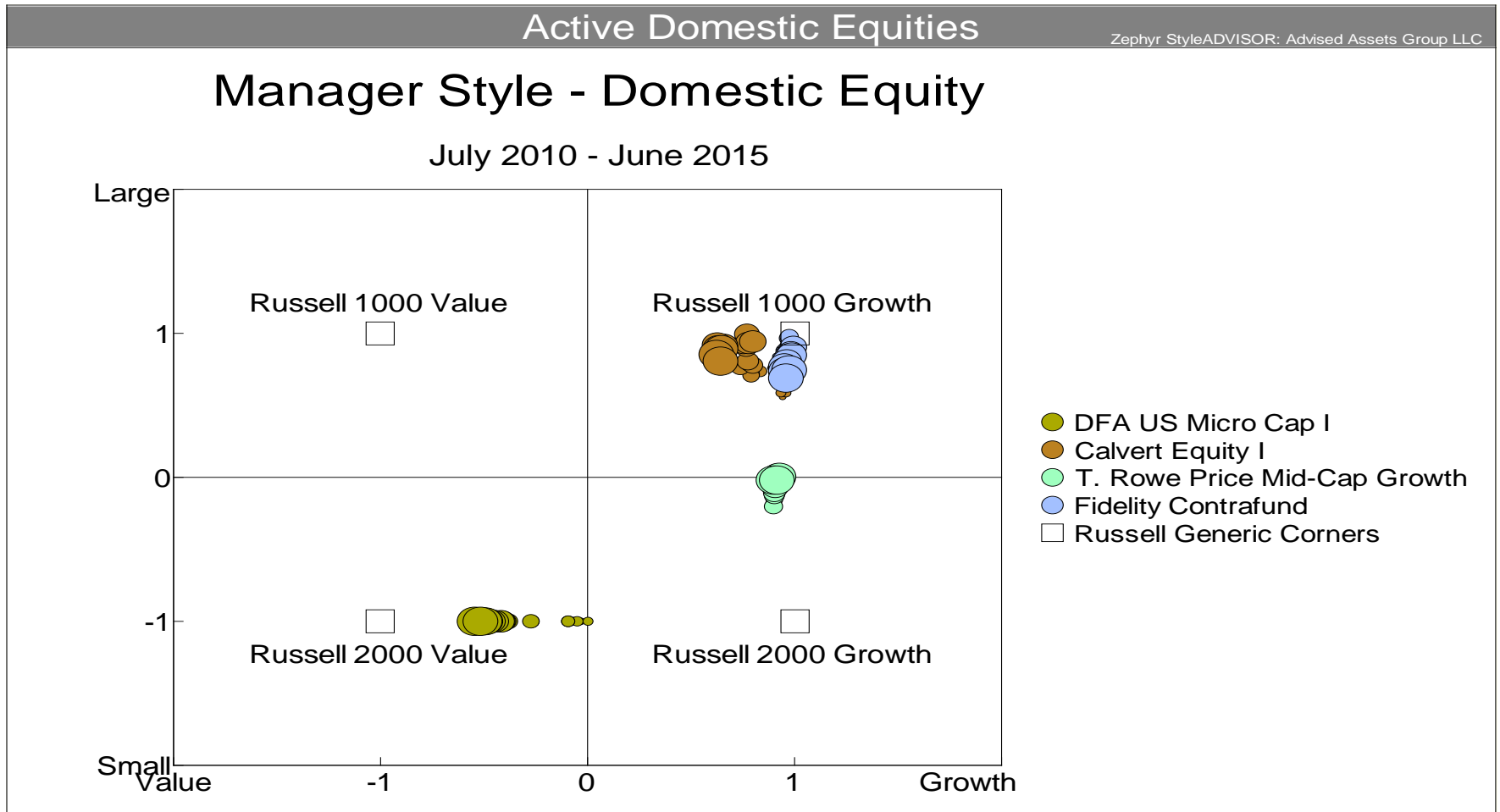
# MANAGER STYLE

**Manager Style Graph:** Each quadrant of the graph represents one of the four major domestic equity components of the market. From top left working clockwise the quadrants include Large Value, Large Growth, Small Growth and Small Value.



# MANAGER STYLE

**Manager Style Graph:** Each quadrant of the graph represents one of the four major domestic equity components of the market. From top left working clockwise the quadrants include Large Value, Large Growth, Small Growth and Small Value.



# FUND OBSERVATIONS – 6/30/15

- » **American Funds EuroPacific Growth R6** underperformed the Morningstar Foreign Large Growth Peer Group in the 2<sup>nd</sup> quarter of 2015 with a return of 1.12% vs. 1.46%. The fund, however, is outperforming the same peer group across the 1, 3, 5, & 10-year time periods. The fund maintains lower than average volatility and expenses. American Funds manages this fund using a multi-manager structure that combines both growth and value investing styles, some exposure to emerging markets, and low turnover. In addition, it sports one of the lowest expense ratios in the category.
- » **Blackrock EAFE Equity Index Fund** outperformed its index by .15 bps (net of fees) over the past 1 year period.
- » **DFA U.S. Microcap** outperformed the Morningstar Small Cap Blend Peer Group in the 2<sup>nd</sup> quarter of 2015 with a return of 1.02% vs. -0.12%. The fund is outperforming the Morningstar Small Cap Blend peer group over the 1-year time period, but trailing the Russell 2000 Index. The fund outpacing both benchmarks over the 3, 5, and 10-year time periods. The fund typically invests in the smallest 4% of U.S. exchange listed stocks with an average market cap of \$467 million. The fund contained 1,713 holdings which gives the fund an index-like approach to investing.
- » **Blackrock Russell 2000 Index Fund** outperformed its index by .19 bps (net of fees) over the past 12 months.

## FUND OBSERVATIONS – 6/30/15

- » **T. Rowe Price Mid Cap Growth Fund** outperformed its Morningstar Mid Cap Growth Peer Group in the 2<sup>nd</sup> quarter (1.29% vs. 0.44%). The fund is also outpacing the peer group over the 1, 3, 5, & 10-year time periods. It is currently in the top 10% for performance in the Morningstar Mid Cap Growth peer group over those time periods. The fund also continues to outperform the S&P 400 Mid Cap Index which returned 6.40% vs. the funds 15.58% return over the past 12 months. The fund will generally offer favorable protection when markets are volatile, however, the style will typically trail when markets advance aggressively.
- » **Blackrock Mid-Cap Equity Index** outperformed the S&P 400 Mid Cap Index returning 6.46% (net of fees) vs. 6.40% or (0.06 bps) over the past 12 months.
- » **Calvert Equity** is beating the Morningstar Socially Responsible Large Cap Fund Average on a 1, 3, 5, & 10-year basis. The fund also outperformed the Morningstar Large Growth Peer Group in the 2<sup>nd</sup> quarter (0.93% vs. 0.12%). The fund is also outperforming the peer group on a 1, 3, 5, & 10-year basis. This concentrated, socially conscious fund looks for companies with solid balance sheets and strong earnings growth while being mindful of valuations.
- » **Fidelity Contrafund** outperformed the Morningstar Large Cap Growth Peer Group in the 2<sup>nd</sup> quarter of 2015 (1.00% vs. 0.50%). The fund continues to outpace the peer group over the 1, & 10-year time periods; however, it is currently trailing across the 3 & 5 year time periods. The fund continues to be a solid performing funds in the category over longer-term time periods.

## FUND OBSERVATIONS – 6/30/15

- » **Vanguard Instl Index Plus Fund** equaled the pace of the S&P 500 Index with a return of 0.28% vs. the index's return of 0.28% in the 2<sup>nd</sup> quarter of 2015. The fund is slightly ahead of the index over the 1-year time period with a return of 7.43% vs. the S&P 500 Index's return of 7.42%.
- » **Vanguard Wellington** outperformed the Morningstar Moderate Allocation peer group in the 2<sup>nd</sup> quarter with a return of -0.51% vs. -0.53%. The fund is also outperforming the peer group over the 1, 3, 5, & 10 year time periods as well. This fund practices a value oriented, long-term investing style. The low expense ratio is also a distinct advantage for this fund.
- » **Vanguard Long-Term Investment Grade Bond** underperformed the Morningstar Corporate Bond Peer Group in the 2<sup>nd</sup> quarter with a loss of -7.61% vs. -2.63%; the fund, however, continues to outpace the peer group over the 1, 3, 5, & 10 year time frames. The fund is currently overweight in Corporate, Municipals.
- » **Blackrock US Debt Index** outperformed its index (net of fees) with a return of 1.94% vs. 1.86% over the past 12 months.

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# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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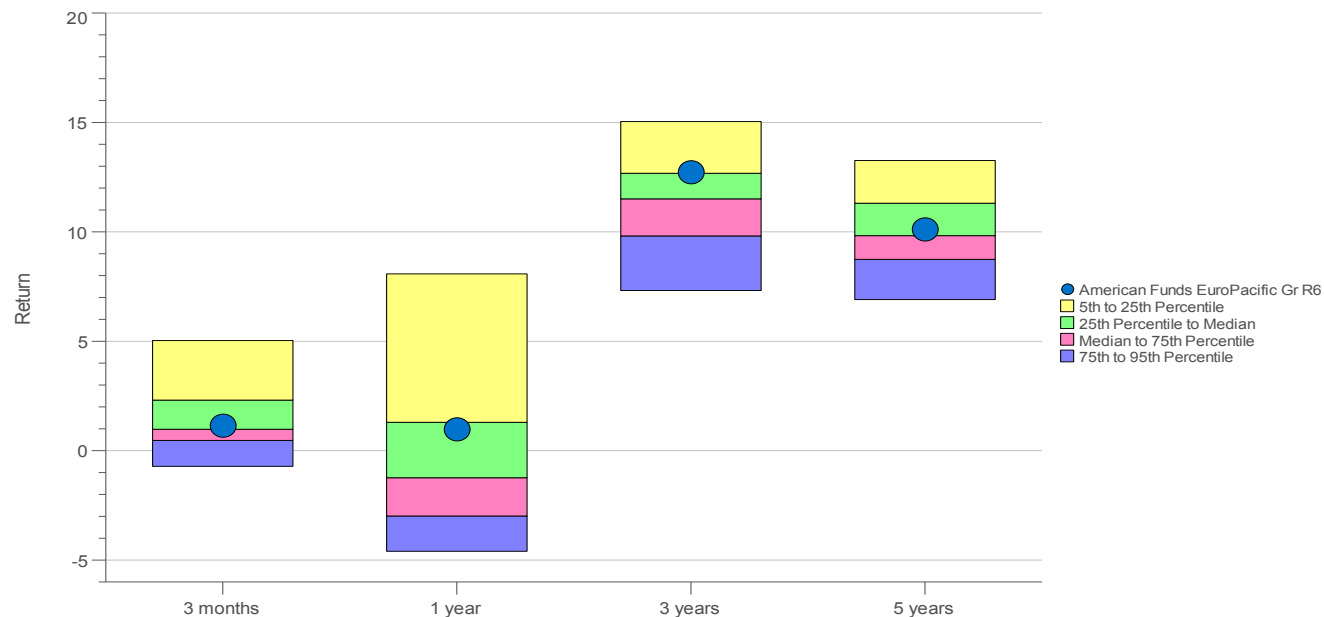
Zephyr StyleADVISOR: Advised Assets Group LLC

## American Funds EuroPacific Growth R6

American Funds EuroPacific Growth Fund seeks long-term growth of capital. The fund normally invests at least 65% of assets in equity securities of issuers domiciled in Europe or the Pacific Basin. It may invest up to 20% of assets in securities issued in developing countries. Various factors will be considered when determining whether a country is part of Europe; a country will be considered part of the Pacific Basin if any of its borders touches the Pacific Basin.

## Manager vs Morningstar Foreign Large Growth: Return

July 2010 - June 2015 (not annualized if less than 1 year)



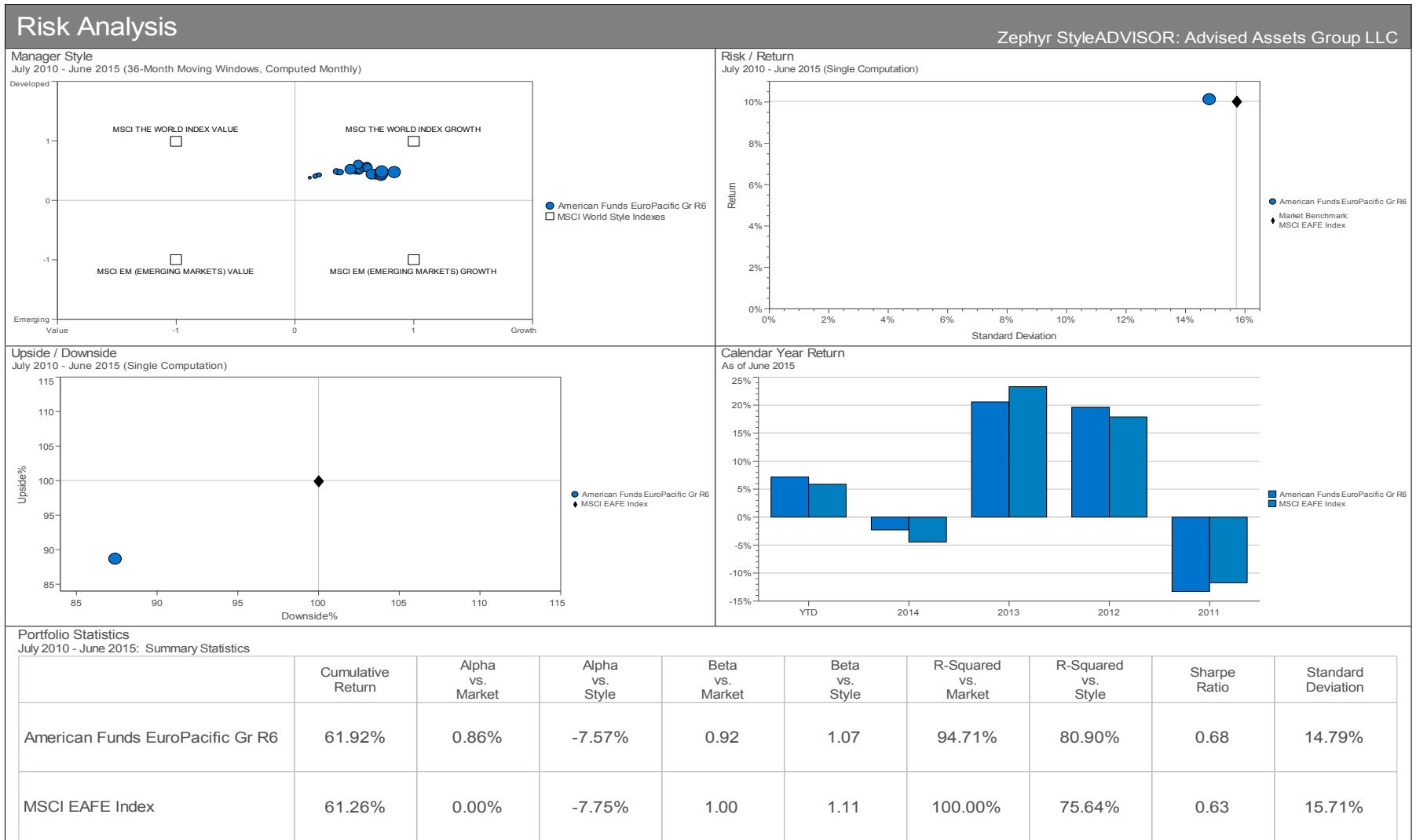
## Manager vs Benchmark: Return

July 2010 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years
American Funds EuroPacific Gr R6	1.12%	7.16%	0.97%	12.71%	10.12%
Morningstar Foreign Large Growth	1.47%	6.63%	-0.73%	10.75%	9.49%



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

Zephyr StyleADVISOR

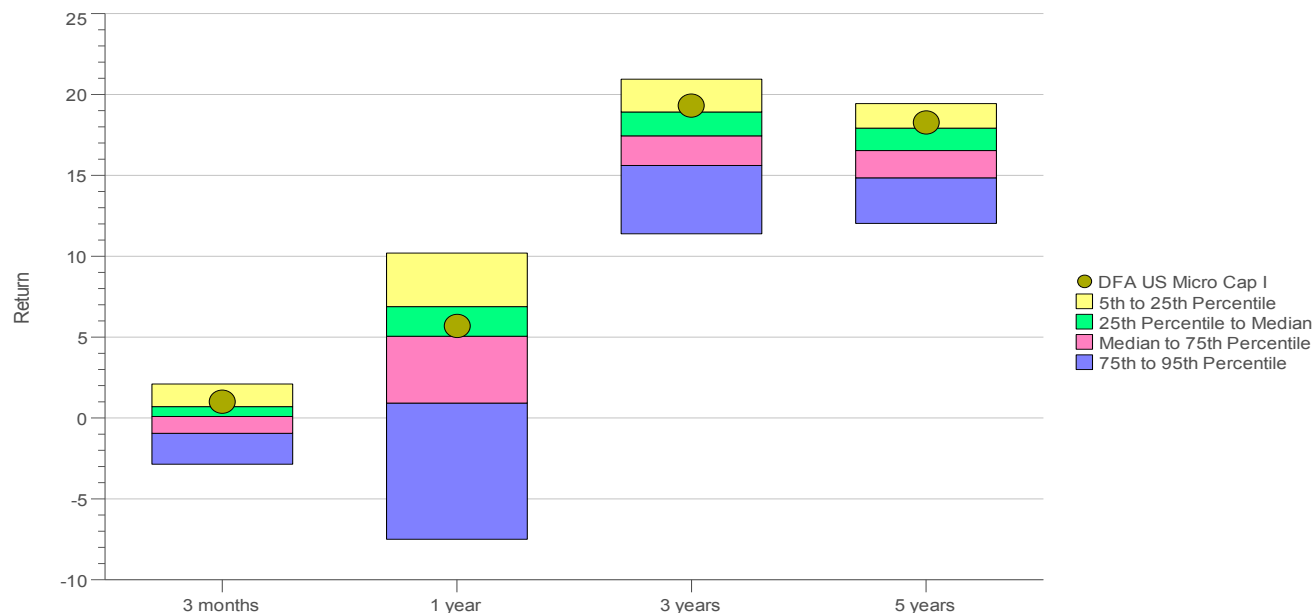
Zephyr StyleADVISOR: Advised Assets Group LLC

## DFA U.S. Microcap I

DFA U.S. Microcap seeks long-term capital appreciation. The fund invests in a diverse group of small companies with readily marketable securities. These companies may be traded on the NYSE, the AMEX, or over-the-counter market, but their market capitalizations must be comparable with those in the smallest quartile of the NYSE. The portfolio is re-balanced at least semiannually.

## Manager vs Morningstar Small Blend: Return

July 2010 - June 2015 (not annualized if less than 1 year)



## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
DFA US Micro Cap I	1.02%	4.18%	5.68%	19.33%	18.29%	8.52%
Morningstar Small Blend	-0.13%	3.48%	3.52%	16.87%	15.96%	7.54%

# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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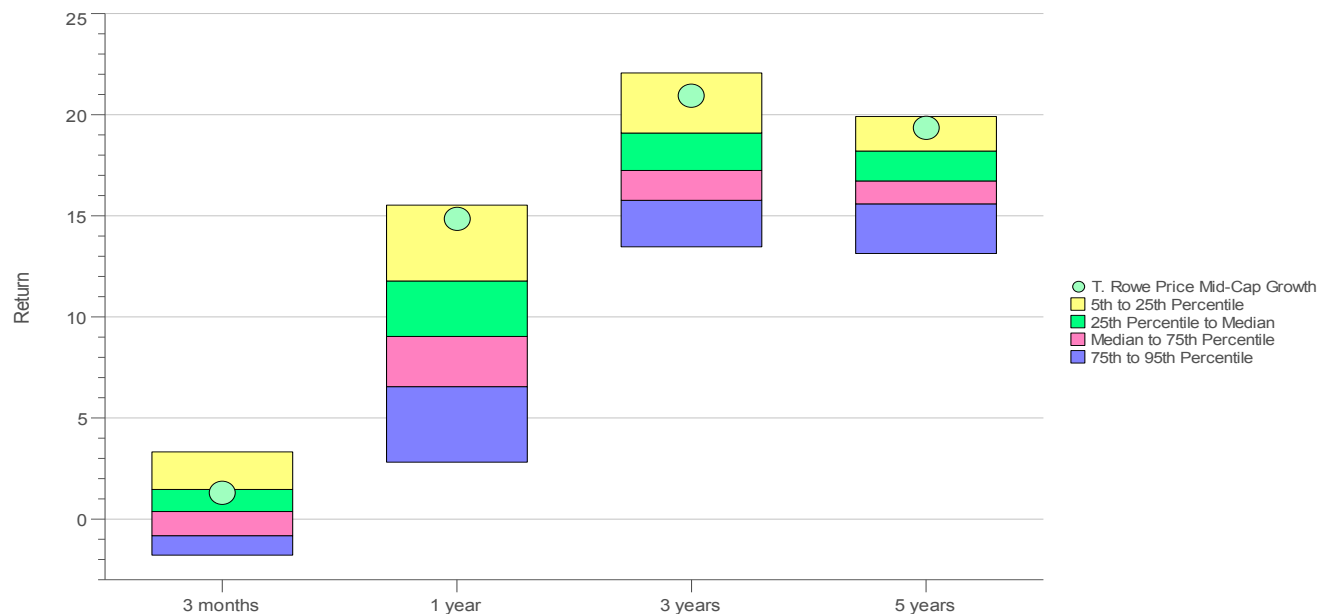
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## T. Rowe Price Mid-Cap Growth

T. Rowe Price Mid Cap Growth Fund seeks long-term capital appreciation. The fund normally invests at least 80% of assets in mid-cap common stocks with above-average growth potential. The advisor seeks companies that offer proven products or services, have an above-average historical record of earnings growth, have the potential for sustaining growth, operate in industries experiencing increasing demand, or are reasonably valued.

## Manager vs Morningstar Mid-Cap Growth: Return

July 2010 - June 2015 (not annualized if less than 1 year)



## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
T. Rowe Price Mid-Cap Growth	1.29%	7.90%	14.87%	20.92%	19.35%	11.59%
Morningstar Mid-Cap Growth	0.44%	5.81%	8.71%	17.29%	16.57%	8.30%

# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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## Calvert Equity I

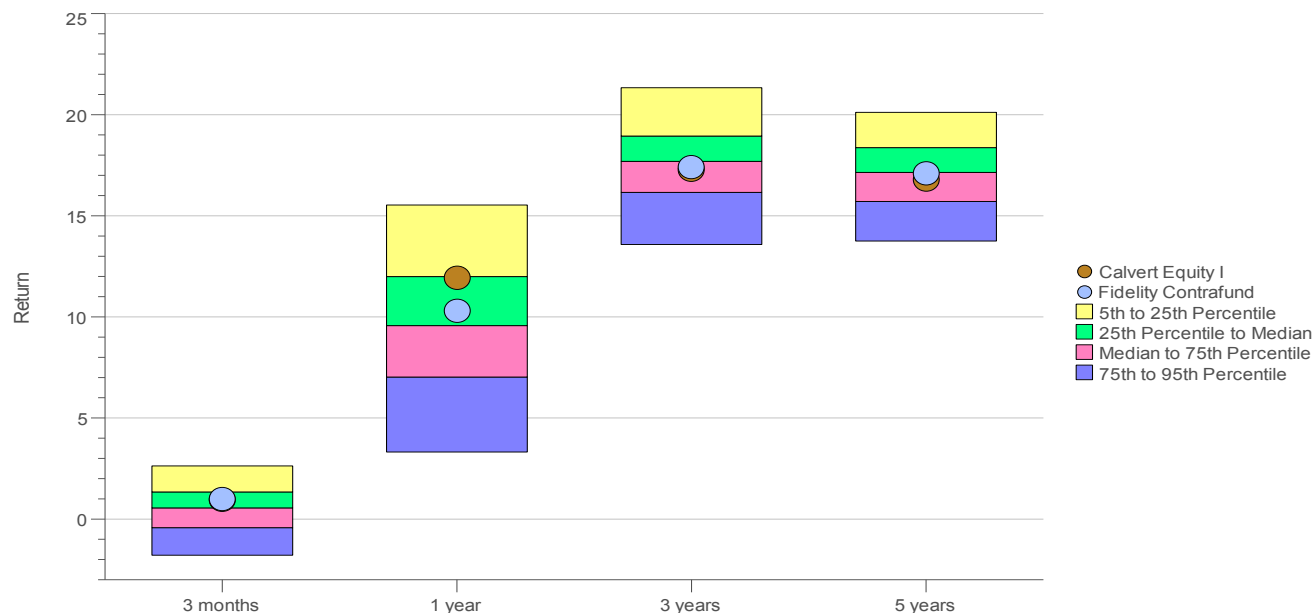
Calvert Social Investment Fund seeks growth of capital. The fund invests with the philosophy that long-term rewards to investors come from those organizations whose products, services, and methods enhance the human condition and the traditional American values of individual initiative, equality of opportunity, and cooperative effort.

## Fidelity Contrafund

Fidelity Contrafund seeks capital appreciation. The fund invests primarily in the common stocks of companies believed to be undervalued. The types of companies in which the fund may invest include companies experiencing positive fundamental change such as new management team or product launch or companies that are undervalued in relation to securities of other companies in the same industry.

## Manager vs Morningstar Large Growth: Return

July 2010 - June 2015 (not annualized if less than 1 year)



## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
Calvert Equity I	0.93%	3.73%	11.93%	17.28%	16.79%	8.53%
Fidelity Contrafund	1.00%	5.09%	10.29%	17.42%	17.11%	9.85%
Morningstar Large Growth	0.52%	3.99%	9.30%	17.36%	16.69%	7.62%

# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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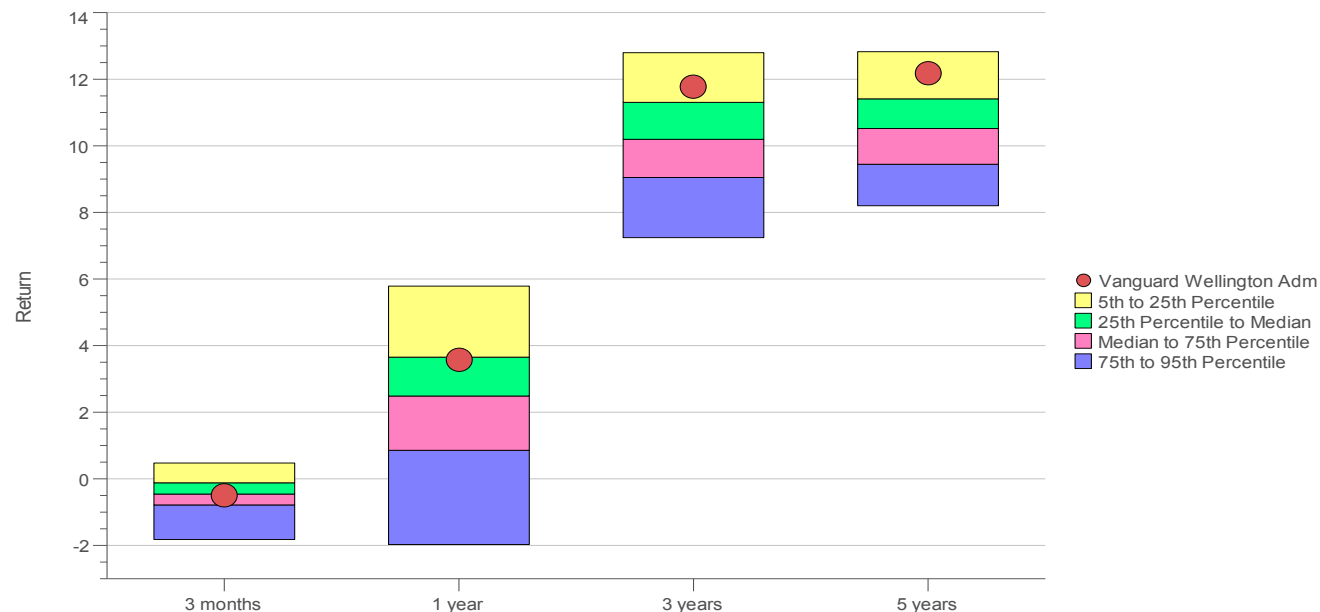
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## Vanguard Wellington

Vanguard Wellington seeks moderate long-term capital growth and current income. The fund invests at least 60-70% of assets in dividend-paying value stocks, and to a lesser extent, non-dividend paying stocks of established medium-size and large-size companies. It may also invest 30-40% of assets in the following securities: high quality intermediate, long-term corporate, and U.S. government bonds with an average maturity of 5 to 15 years.

## Manager vs Morningstar Moderate Allocation: Return

July 2010 - June 2015 (not annualized if less than 1 year)



## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
Vanguard Wellington Adm	-0.51%	0.35%	3.58%	11.78%	12.17%	7.98%
Morningstar Moderate Allocation	-0.52%	1.27%	1.81%	9.60%	9.84%	5.46%



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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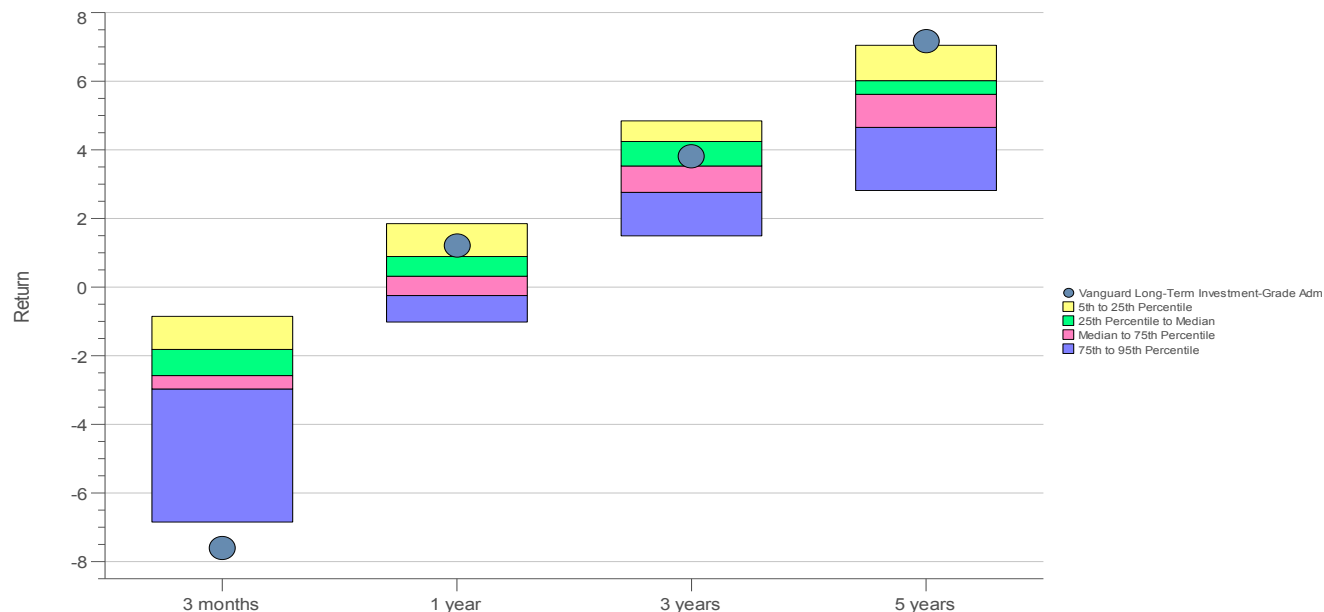
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## Vanguard Long-Term Investment-Grade Bond Adm

Vanguard Long-Term Investment-Grade Bond Fund seeks current income consistent with maintenance of principal and liquidity. The fund typically invests at least 80% of assets in high-quality corporate bonds; it invests at least 80% of assets in a combination of U.S. government securities and investment-grade corporate bonds. The average weighted maturity generally ranges from 15 to 25 years

## Manager vs Morningstar Corporate Bond: Return

July 2010 - June 2015 (not annualized if less than 1 year)

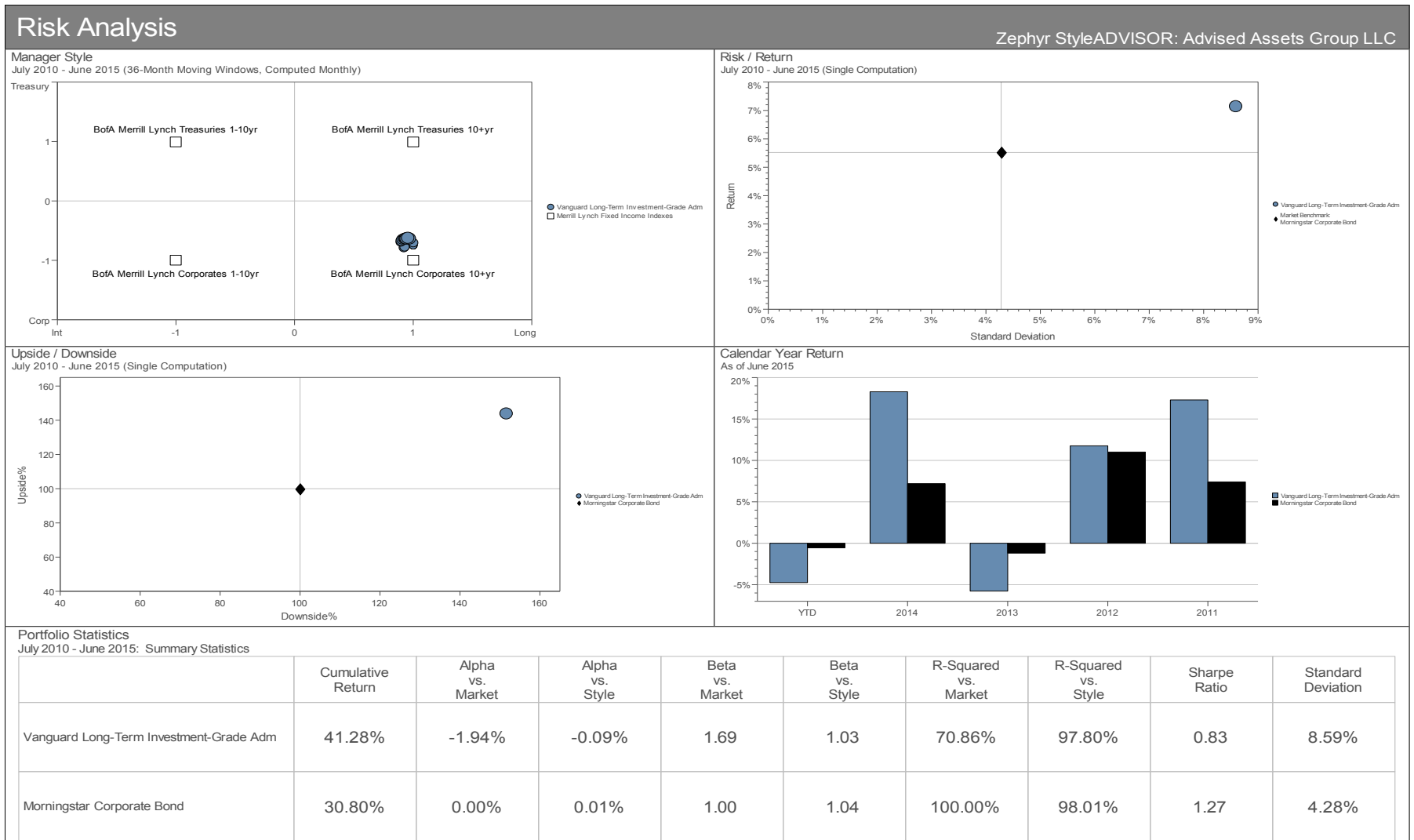


## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
Vanguard Long-Term Investment-Grade Adm	-7.61%	-4.75%	1.22%	3.80%	7.16%	6.04%
Morningstar Corporate Bond	-2.67%	-0.55%	0.38%	3.56%	5.52%	5.31%

# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS

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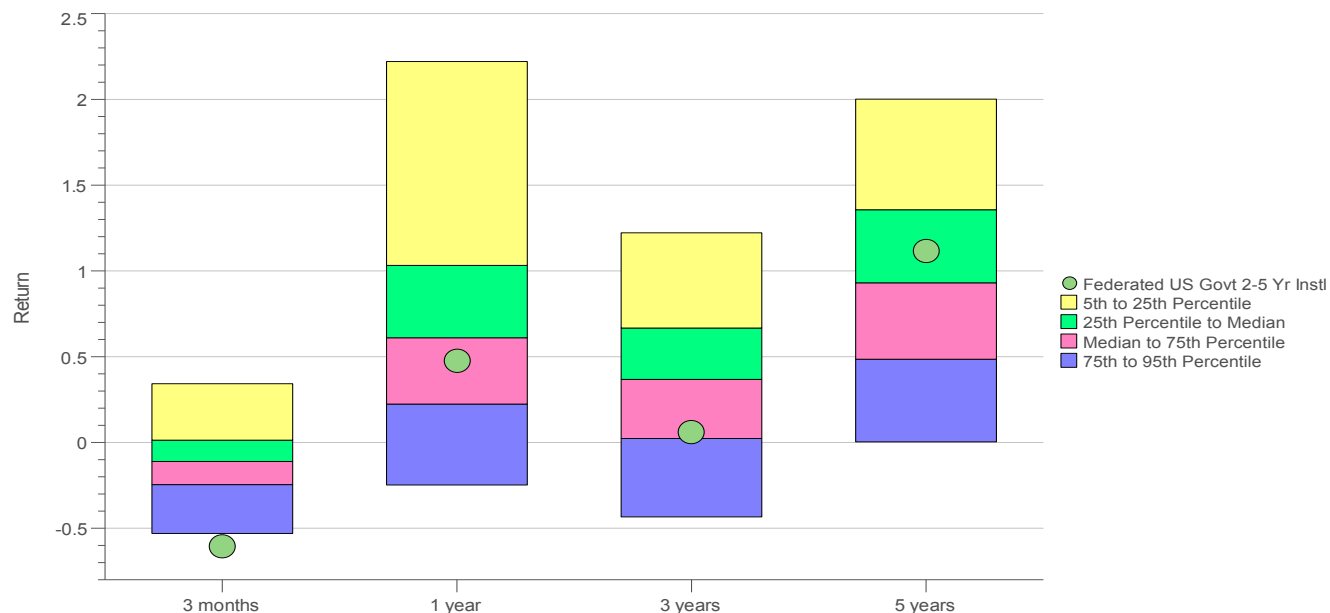
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## Federated US Govt 2-5 Yr Instl

The Federated US Govt 2-5 Yr fund seeks current income. The fund buys and sells portfolio securities based primarily on its market outlook and analysis of how securities may perform under different market conditions. It may also use derivative contracts and/or hybrid instruments to implement elements of its strategies. The fund may also purchase bonds from the U.S. government backed by the FDIC.

## Manager vs Morningstar Short Government: Return

July 2010 - June 2015 (not annualized if less than 1 year)



## Manager vs Benchmark: Return

July 2005 - June 2015 (not annualized if less than 1 year)

	3 months	YTD	1 year	3 years	5 years	10 years
Federated US Govt 2-5 Yr Instl	-0.61%	0.50%	0.48%	0.06%	1.11%	3.21%
Morningstar Short Government	-0.11%	0.47%	0.59%	0.30%	0.84%	2.38%

# PERFORMANCE BENCHMARKING OF ACTIVE OPTIONS



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ADVISED ASSETS  
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# LIFE CYCLE OPTIONS

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2Q2015

# LIFE CYCLE OPTIONS – 6/30/2015

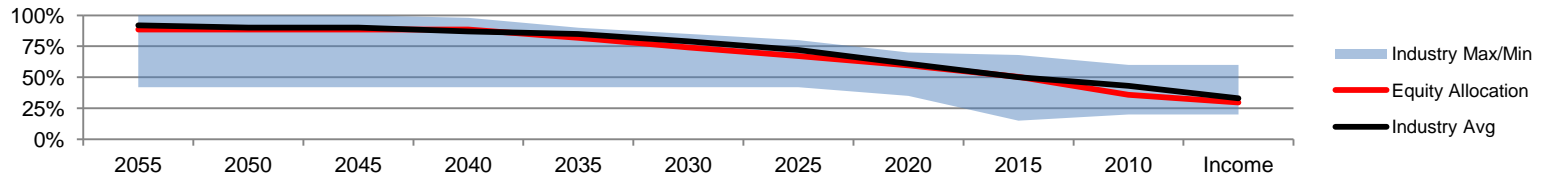
Name	3 Mo	1 Yr	3 Yr	5 Yr	Annual Return (2014)	Annual Return (2013)	Annual Return (2012)	% Short-Term	% US Stocks	% Non US Stocks	% Inv Grade Bond	% High Yield Bond
<b>Vanguard Target Retirement Income Inv</b>	<b>-0.93</b>	<b>1.94</b>	<b>5.35</b>	<b>6.76</b>	<b>5.54</b>	<b>5.87</b>	<b>8.23</b>	<b>8</b>	<b>19</b>	<b>10</b>	<b>64</b>	<b>0</b>
Fidelity Freedom Income	-0.48	1.63	4.21	4.91	3.86	4.56	6.40	6	17	8	49	5
T. Rowe Price Retirement Balanced*	0.00	0.78	6.56	7.41	3.91	9.15	10.05	10	26	12	53	6
Composite Returns*	-1.17	1.53	5.00	5.70	5.06	6.52	6.72	-	-	-	-	-
S&P Target Date Retirement Income TR USD	-0.87	1.61	5.26	6.37	4.86	6.28	7.51	-	-	-	-	-
<b>Vanguard Target Retirement 2015 Inv</b>	<b>-0.64</b>	<b>2.61</b>	<b>8.81</b>	<b>9.68</b>	<b>6.56</b>	<b>13.00</b>	<b>11.37</b>	<b>4</b>	<b>32</b>	<b>16</b>	<b>47</b>	<b>0</b>
Fidelity Freedom 2015	-0.02	3.00	8.20	8.76	5.17	11.88	10.68	7	38	19	32	4
T. Rowe Price Retirement 2015	-0.07	1.86	9.81	10.52	5.37	15.18	13.81	4	36	17	36	7
Composite Returns*	-0.95	1.51	7.32	7.58	4.99	12.23	8.71	-	-	-	-	-
S&P Target Date 2015 TR USD	-0.66	2.12	8.17	8.94	5.49	12.16	10.32	-	-	-	-	-
<b>Vanguard Target Retirement 2025 Inv</b>	<b>-0.41</b>	<b>3.09</b>	<b>11.18</b>	<b>11.52</b>	<b>7.17</b>	<b>18.14</b>	<b>13.29</b>	<b>2</b>	<b>45</b>	<b>21</b>	<b>32</b>	<b>0</b>
Fidelity Freedom 2025	0.27	3.59	10.51	10.74	5.63	16.50	13.15	5	47	24	20	4
T. Rowe Price Retirement 2025	0.12	2.98	12.47	12.61	5.84	20.78	16.00	4	46	23	22	5
Composite Returns*	-0.76	1.60	9.40	9.30	5.09	17.32	10.46	-	-	-	-	-
S&P Target Date 2025 TR USD	-0.41	2.22	10.36	10.87	5.56	17.03	12.51	-	-	-	-	-
<b>Vanguard Target Retirement 2035 Inv</b>	<b>-0.05</b>	<b>3.26</b>	<b>13.21</b>	<b>13.16</b>	<b>7.24</b>	<b>22.82</b>	<b>15.16</b>	<b>1</b>	<b>54</b>	<b>26</b>	<b>18</b>	<b>0</b>
Fidelity Freedom 2035	0.90	4.35	12.46	12.05	5.75	20.68	14.45	3	60	30	1	5
T. Rowe Price Retirement 2035	0.35	3.77	14.32	14.04	6.07	24.86	17.35	4	53	28	12	3
Composite Returns*	-0.57	1.53	11.09	10.64	4.91	21.56	11.89	-	-	-	-	-
S&P Target Date 2035 TR USD	-0.23	2.42	12.08	12.24	5.69	20.84	14.12	-	-	-	-	-
<b>Vanguard Target Retirement 2045 Inv</b>	<b>0.10</b>	<b>3.29</b>	<b>13.80</b>	<b>13.51</b>	<b>7.16</b>	<b>24.37</b>	<b>15.58</b>	<b>1</b>	<b>58</b>	<b>30</b>	<b>11</b>	<b>0</b>
Fidelity Freedom 2045	0.87	4.41	12.86	12.36	5.79	21.60	14.79	3	60	30	1	5
T. Rowe Price Retirement 2045	0.42	4.05	14.81	14.32	6.14	25.93	17.62	4	56	29	9	2
Composite Returns*	-0.48	1.29	11.80	11.14	4.52	23.44	12.58	-	-	-	-	-
S&P Target Date 2045 TR USD	-0.12	2.48	13.09	12.98	5.67	23.14	15.15	-	-	-	-	-
<b>Vanguard Target Retirement 2055 Inv</b>	<b>0.06</b>	<b>3.21</b>	<b>13.79</b>		<b>7.19</b>	<b>24.33</b>	<b>15.58</b>	<b>1</b>	<b>58</b>	<b>30</b>	<b>11</b>	<b>0</b>
Fidelity Freedom 2055 (begun 6/11)	0.83	4.39	13.28		5.75	22.71	15.32	3	60	30	1	5
T. Rowe Price Retirement 2055	0.44	4.05	14.78	14.31	6.18	25.86	17.60	4	56	29	9	2
Composite Returns*	-0.48	1.29	11.80	11.14	4.52	23.44	12.58	-	-	-	-	-
S&P Target Date 2055+ TR USD	-0.04	2.51	13.85	13.40	5.64	24.96	15.81	-	-	-	-	-

\*\*Effective December 29<sup>th</sup>, 2014, The T. Rowe Price Retirement Income Fund changed its name To the T. Rowe Price Retirement Balanced Fund.



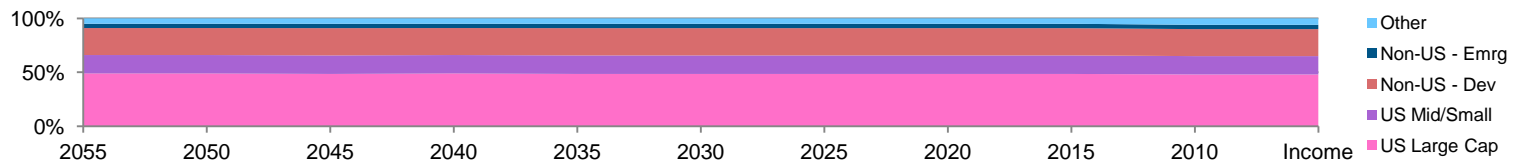
# LIFE CYCLE OPTIONS – 6/30/2015

## Glide Path



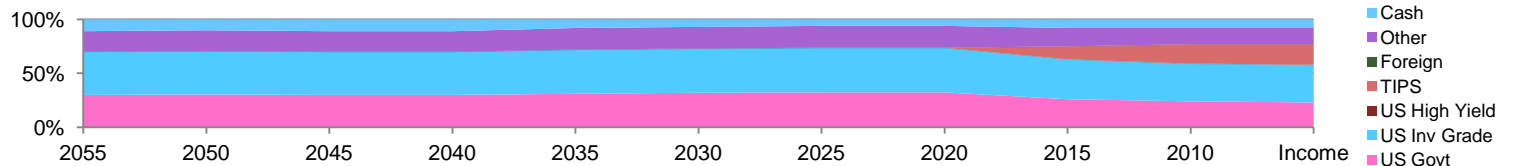
	<u>2055</u>	<u>2050</u>	<u>2045</u>	<u>2040</u>	<u>2035</u>	<u>2030</u>	<u>2025</u>	<u>2020</u>	<u>2015</u>	<u>2010</u>	<u>Income</u>
Equity %	90%	90%	90%	90%	81%	75%	67%	59%	50%	30%	30%
Industry Avg	90%	90%	88%	86%	80%	72%	62%	53%	44%	40%	31%

## Equity Diversification



	<u>2055</u>	<u>2050</u>	<u>2045</u>	<u>2040</u>	<u>2035</u>	<u>2030</u>	<u>2025</u>	<u>2020</u>	<u>2015</u>	<u>2010</u>	<u>Income</u>
US Large Cap	49%	49%	48%	49%	48%	48%	48%	48%	48%	48%	48%
US Mid/Small	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
Non-US - Dev	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Non-US - Emrg	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Other	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%

## Fixed Income Diversification



	<u>2055</u>	<u>2050</u>	<u>2045</u>	<u>2040</u>	<u>2035</u>	<u>2030</u>	<u>2025</u>	<u>2020</u>	<u>2015</u>	<u>2010</u>	<u>Income</u>
US Govt	30%	30%	30%	30%	31%	32%	32%	32%	26%	24%	23%
US Inv Grade	40%	40%	40%	40%	41%	41%	41%	41%	37%	35%	35%
US High Yield	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Foreign	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	19%	19%	19%	19%	20%	20%	20%	20%	17%	15%	15%
Cash	11%	10%	11%	11%	8%	7%	6%	6%	8%	8%	8%
TIPS	0%	0%	0%	0%	0%	0%	0%	0%	12%	18%	19%

# LIFECYCLE OPTIONS OBSERVATIONS – 6/30/2015

- The Vanguard Target Funds outperformed their “Composite” indices for the 2<sup>nd</sup> quarter of 2015. All of the Vanguard Target Retirement Funds continue to outperform their “Composite” indices over the 1, 3, & 5 year time periods as well.
- At the end of the 2<sup>nd</sup> quarter of 2015, the Vanguard Target Retirement Funds were outperforming the Fidelity Freedom Fund across 3 & 5 year time periods. With the exception of the Vanguard Target Retirement Income Fund, however, Vanguard is trailing Fidelity Freedom over the 1 year time period. With the exception of the Income, 2015 & 2025 Funds, Vanguard is also underperforming the T. Rowe Price Target Date Funds over the 1 year time period. With the exception of the Income fund on the 3-year time period, the Vanguard Funds continue to trail all duration T. Rowe Target Date Funds for the 3, & 5 year periods. T. Rowe has a much larger equity exposure which means that they will tend to outperformed in a more “Risk” on environment (like 2012 & 2013) while underperforming in “Defensive” environments (like 2011).
- Vanguard’s target allocations start them with equity exposure that is in-line with their competitors, yet its index-fund focus leads to a slightly higher emphasis on large-company stocks and less exposure to emerging markets than the peer group. At retirement, the glide path reduces the equity exposure to a 50%/50% split between stocks & bonds which is just a slightly heavier equity position than the industry average.
- Vanguard also has a smaller allocation to short term debt than its peers, but a greater allocation to investment grade bonds.

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# Capital Markets Overview

Second Quarter 2015

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## Summary

### U.S. Economy

- GDP posted a small decline in the first quarter (down 0.2%), influenced by a number of temporary factors:
  - Harsh weather through the winter months
  - Stronger dollar
  - Labor dispute at ports on the U.S. west coast
- Headline and core inflation remain low
- Job creation has been strong year-to-date
- Consumer spending is accelerating and consumer confidence is strong
- Housing market activity has stabilized and turned up
- U.S. Federal Reserve is widely expected to begin hiking interest rates before the end of the year

### U.S. Markets

- U.S. equity markets endured another choppy quarter
- Stocks fell sharply lower at the end of the quarter after investors reacted to news from Greece
- Fixed income returns were less positive during the quarter
  - The Barclays Aggregate generated a loss of 1.7% during the quarter
  - High yield returns were flat for the quarter, but remain positive YTD
- US REITs declined significantly during the second quarter

### Global Economy

- The debt crisis in Greece escalated again during the quarter
  - Capital controls were put in place during the quarter to limit deposit withdrawals out of the Greek banking system
  - Greece failed to make a repayment to the International Monetary Fund on June 30
  - The country voted “No” to a referendum held on July 5 over whether or not the terms of additional bailout aid were acceptable

### Global Markets

- The broad equity market indices for international developed and emerging markets ended the quarter slightly positive
  - Slight gains were due to dividend income
  - YTD returns of both indices have been more meaningful
- The returns of individual countries were mixed
- China’s stock market experienced a large drawdown
  - In fewer than 13 months the Shanghai Composite rose more than 150%
  - From mid June to early July the stock market experienced a 32% decline
  - The drawdown primarily impacted Chinese investors, while U.S. investors felt less pain

# U.S. Macroeconomic Summary

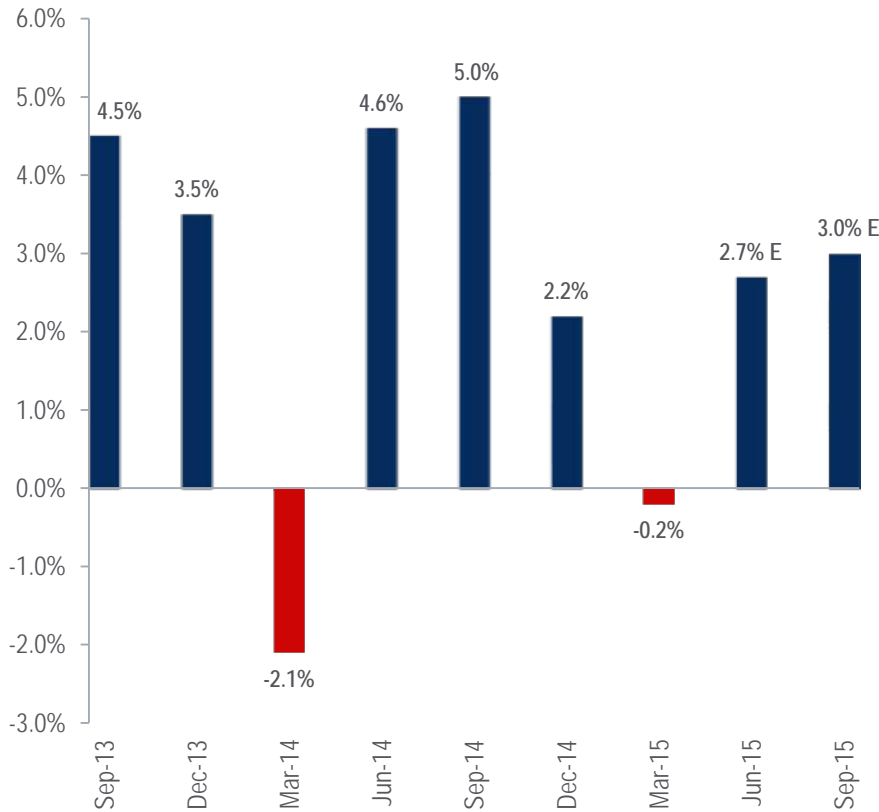
	2013	Q3 2014	Q4 2014	2014	Q1 2015	Q2 2015
Fed Funds (at qtr end)	0 - 0.25%	0 - 0.25%	0 - 0.25%	0 - 0.25%	0 - 0.25%	0 - 0.25%
5 yr U.S. Treasury Yield (at qtr end)	1.74%	1.76%	1.65%	1.65%	1.37%	1.65%
10 yr U.S. Treasury Yield (at qtr end)	3.03%	2.49%	2.17%	2.17%	1.92%	2.35%
Benchmark "A" Intermediate Spread (10yr) (at qtr end)	0.90%	0.90%	1.04%	1.04%	1.03%	1.27%
S&P 500 (at qtr end)	1,848.36	1,972.29	2,058.90	2,058.90	2,067.89	2,063.11
Operating EPS (at qtr end)	\$107.3	\$114.5	\$113.0	\$113.0	\$111.5	\$110.6E
P/E (at qtr end)	17.23	17.22	18.22	18.22	18.55	18.66E
<b>Real GDP (annual)</b>	<b>2.20%</b>			<b>2.40%</b>		
Real GDP (qtr over previous qtr annualized)		5.00%	2.20%		-0.20%	
<b>Real Consumer Spending (yoy)</b>	<b>2.70%</b>			<b>2.90%</b>		
Real Consumer Spending (qtr over previous qtr annualized)		3.20%	4.40%		2.10%	
<b>Payroll Employment (ytd)</b>	<b>2,388,000</b>			<b>3,116,000</b>		
Unemployment Rate (at qtr end)	6.70%	5.90%	5.60%		5.50%	5.30%
<b>Business Fixed Investment (yoy)</b>	<b>3.00%</b>			<b>6.30%</b>		
Business Fixed Investment (qtr over previous qtr annualized)		8.90%	4.70%		-2.00%	
<b>Wage Inflation (ECI yoy)</b>	<b>2.00%</b>			<b>2.20%</b>		
Wage Inflation (ECI qtr over previous qtr annualized)		2.83%	1.61%		2.83%	
<b>CPI (yoy)</b>	<b>1.50%</b>			<b>0.80%</b>		
CPI (qtr over previous qtr annualized)		1.20%	-0.90%		-3.10%	
<b>Core CPI (yoy)</b>	<b>1.70%</b>			<b>1.60%</b>		
Core CPI (qtr over previous qtr annualized)		1.40%	1.50%		1.70%	
<b>Core PCE Deflator (yoy)</b>	<b>1.34%</b>			<b>1.34%</b>		
Core PCE Deflator (qtr over previous qtr annualized)		1.40%	1.10%		0.80%	
EUR/USD (at qtr end)	1.374	1.263	1.210	1.210	1.073	1.115
CAD/USD (at qtr end)	0.941	0.893	0.861	0.861	0.788	0.800
Oil (per barrel) (at qtr end)	\$98.42	\$91.16	\$53.27	\$53.27	\$47.60	\$59.47
Gold (per ounce) (at qtr end)	\$1,205.65	\$1,208.16	\$1,184.86	\$1,184.86	\$1,183.68	\$1,172.42

Source: Bloomberg; Goldman Sachs; UBS; Barclays Live; Standard & Poors; GWCM Analysis

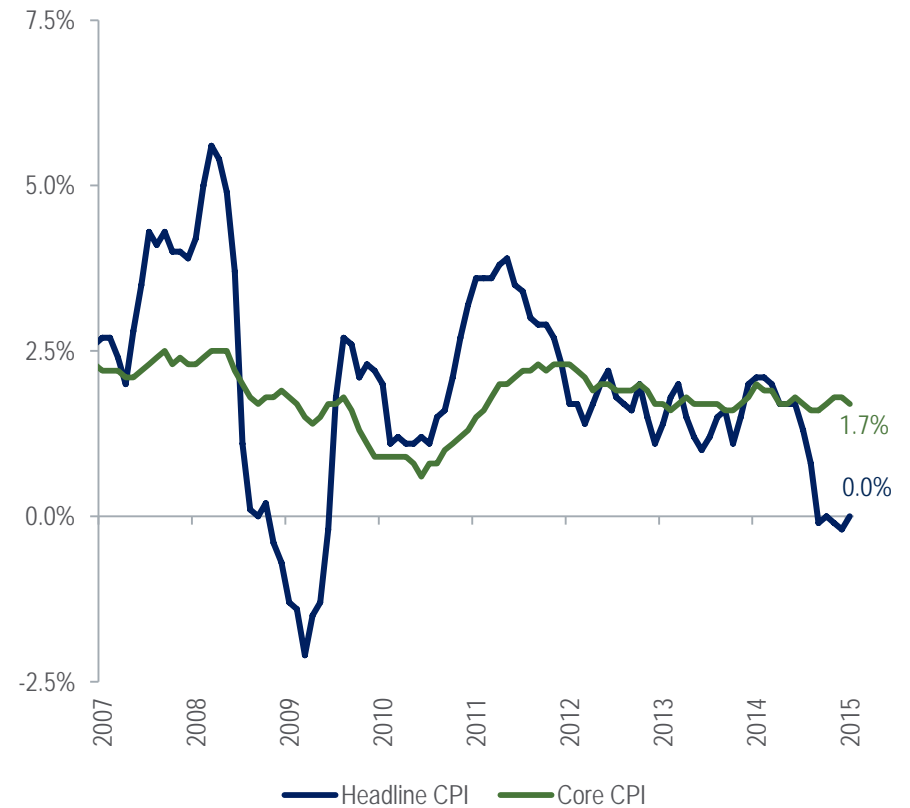


# State of the U.S. Economy

Real GDP Growth  
*quarter over quarter annualized*



U.S. Consumer Price Index  
*annual percent*

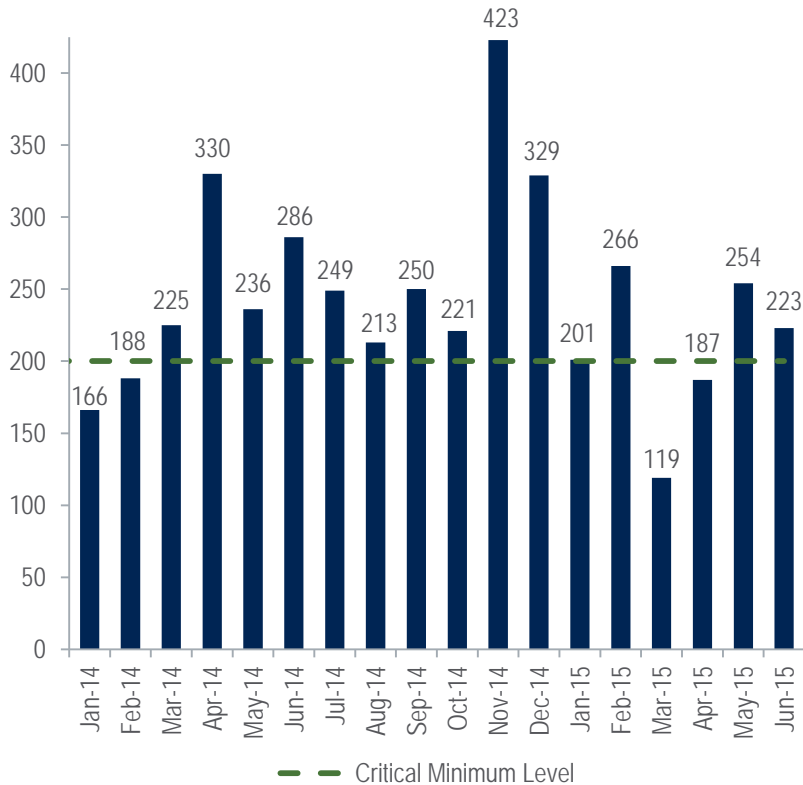


Source: Bloomberg; GWCM Analysis  
The core measure of inflation excludes food and energy prices while the headline measure of inflation does not

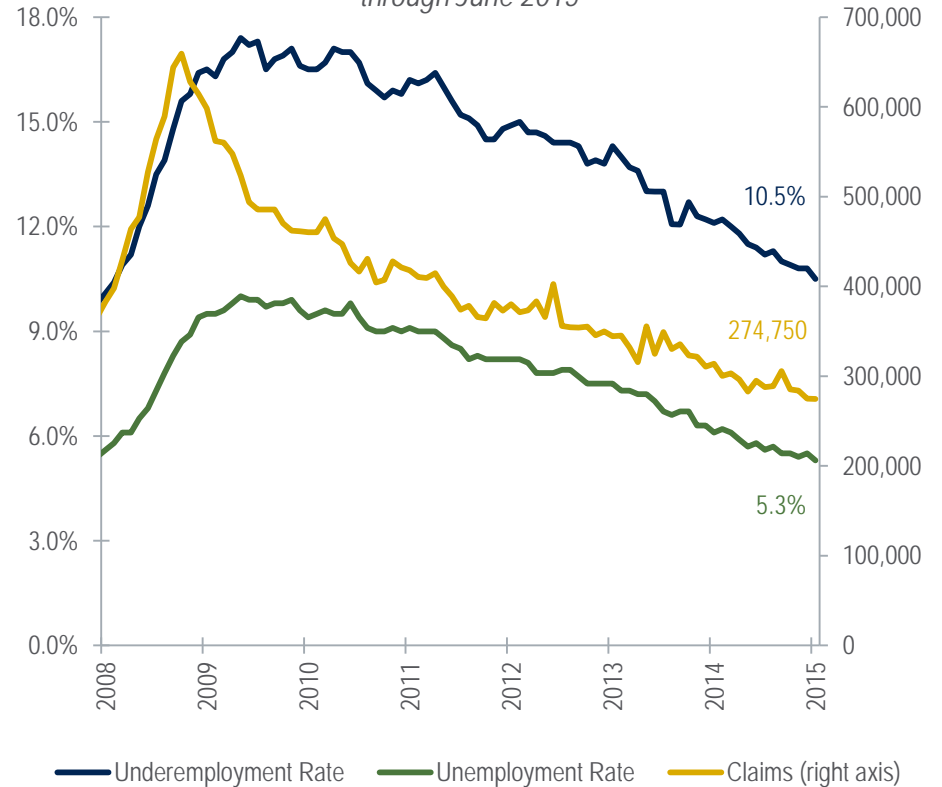


# U.S. Labor Market Trends

## Number of Jobs Created Per Month *thousands*



## Unemployment and Underemployment Rates and Claims *through June 2015*



Source: Bloomberg; Bureau of Labor Statistics; GWCM Analysis

The Unemployment Rate represents total unemployed, as a percent of the civilian labor force

The Underemployment Rate represents total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers

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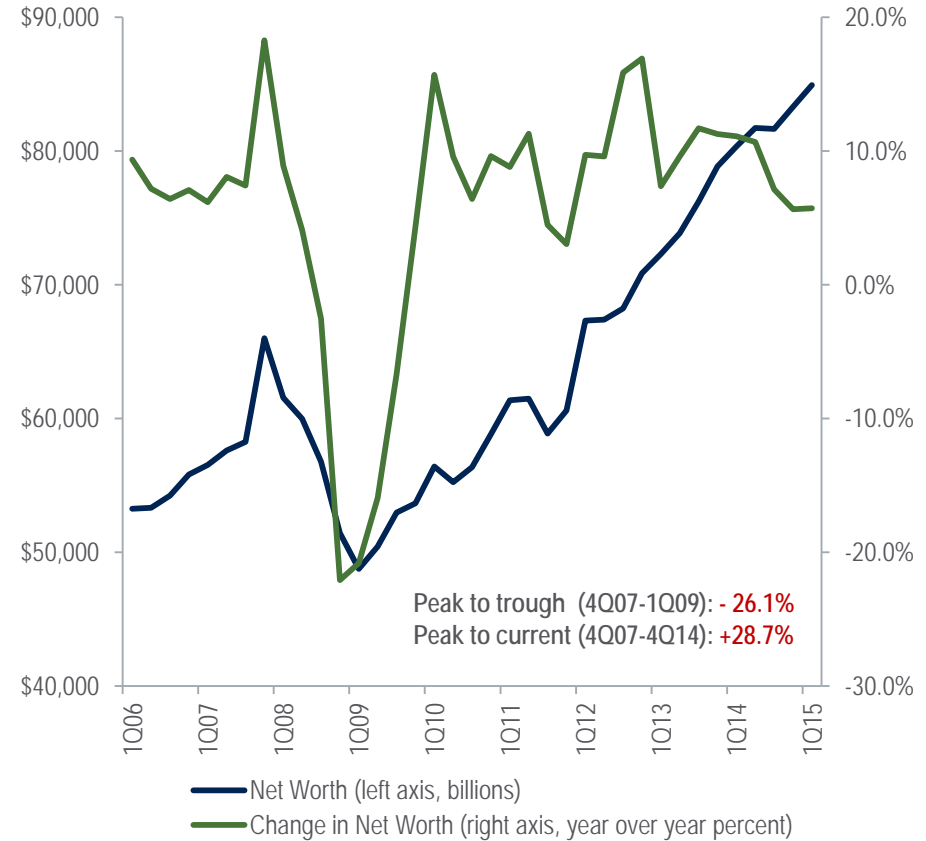
# U.S. Consumer Confidence, Spending and Net Worth

## Consumer Confidence and Spending through June 2015



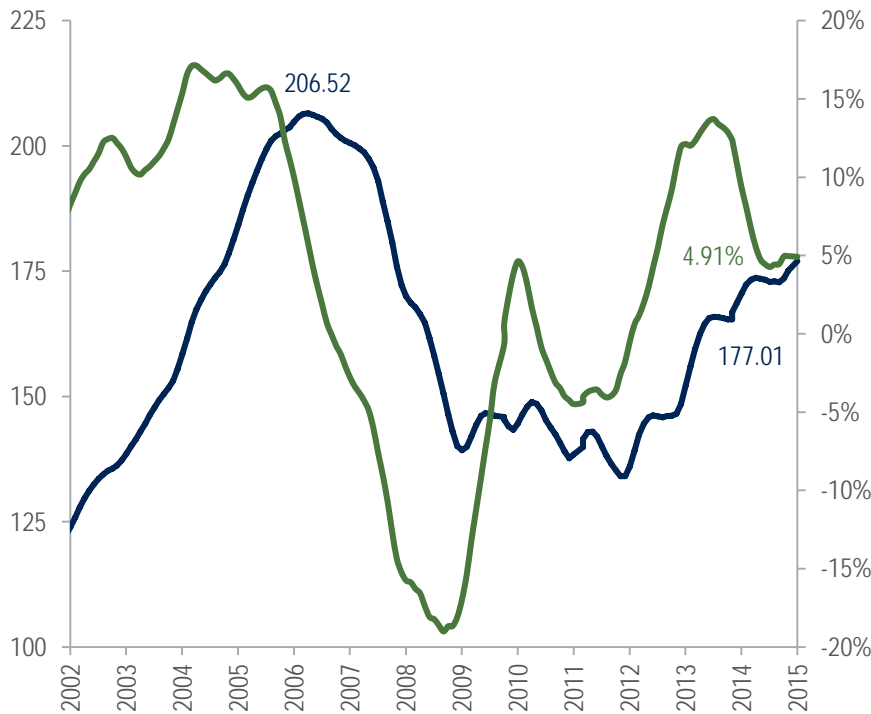
Source: Bloomberg; Federal Reserve; GWCM Analysis

## Consumer Net Worth



# U.S Housing Market Trends

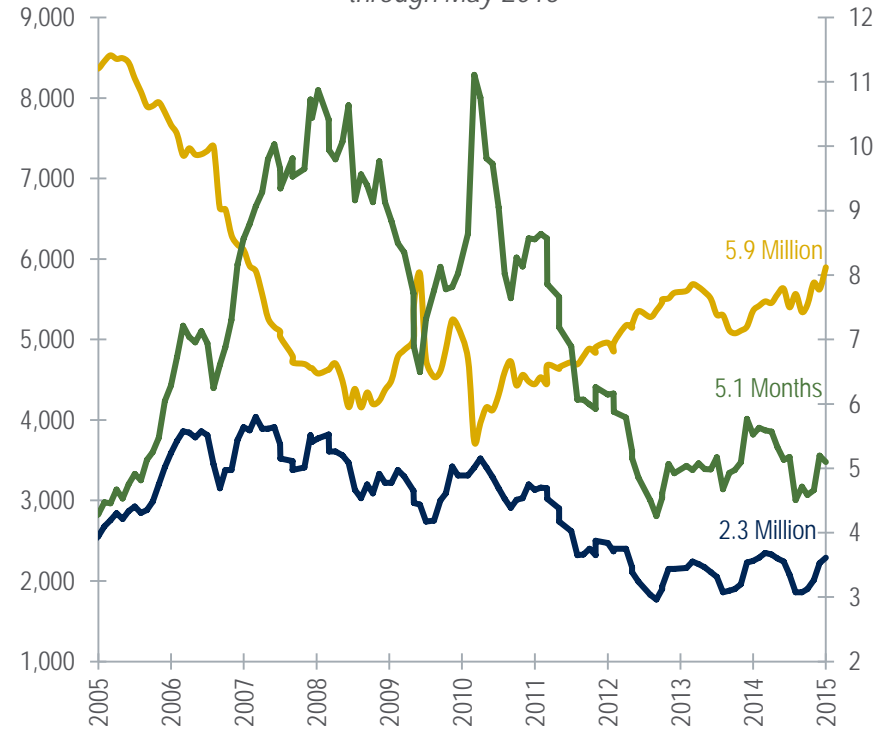
## Case Shiller 20 City Home Price Index through April 2015



— Index Level (left axis)  
— Year Over Year Percent Change (right axis)

Source: Bloomberg; GWCM Analysis

## Housing Supply and Demand through May 2015



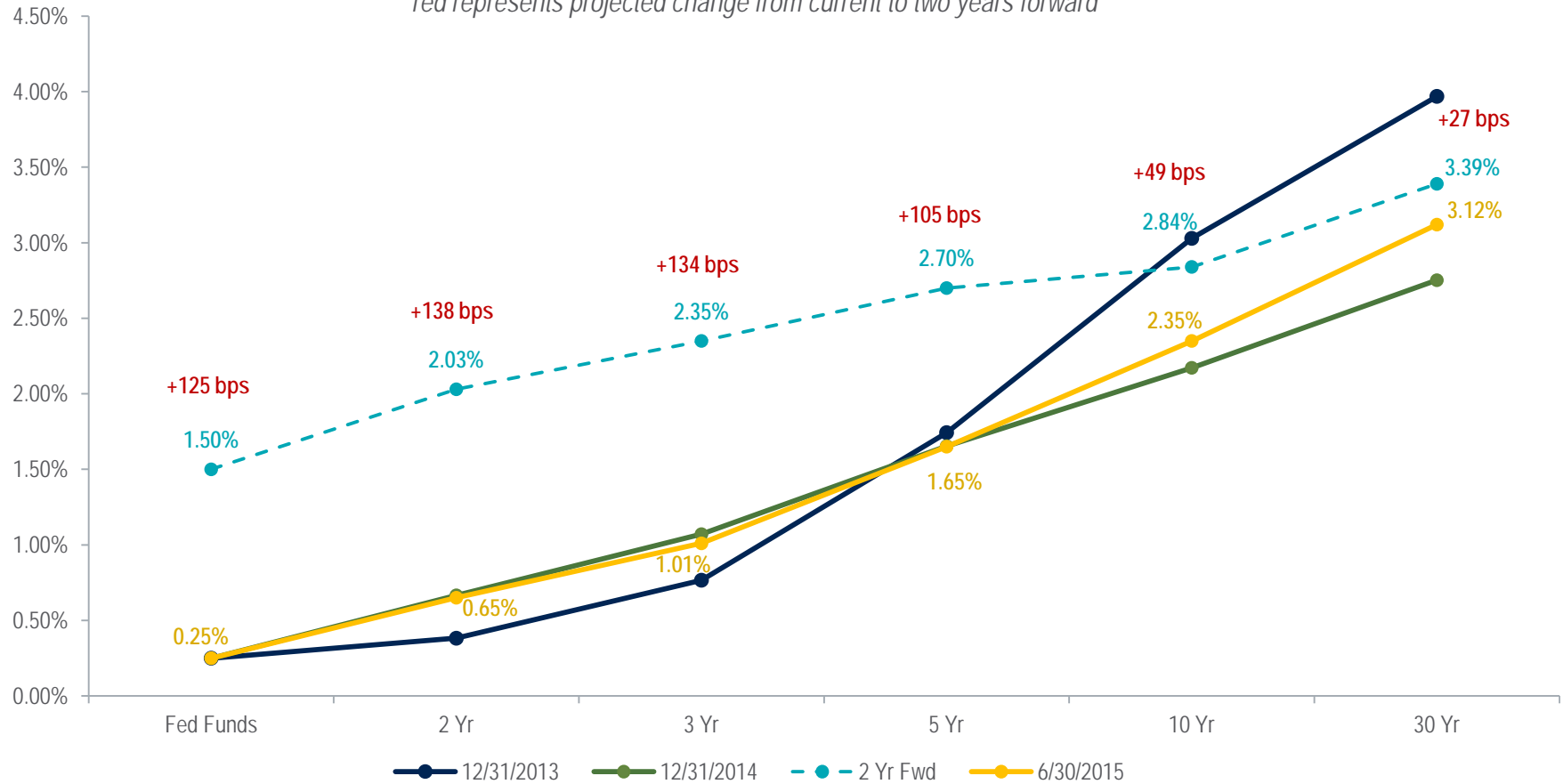
— Sales (left axis, thousands) — Inventories (left axis, thousands)  
— # of Months Supply (right axis)



# Historical, Current and Forward Rates

## U.S. Yield Curve

red represents projected change from current to two years forward

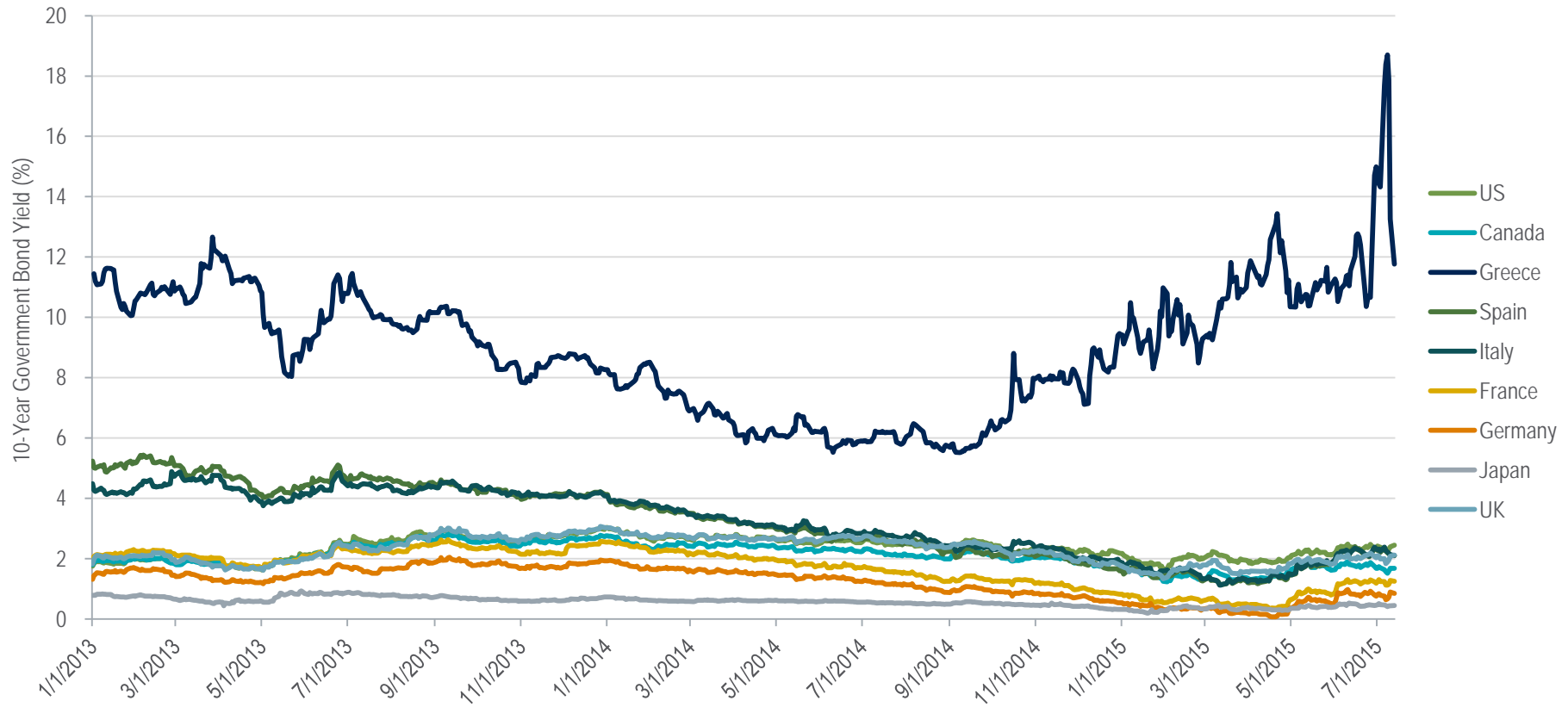


Source: Bloomberg; GWCM Analysis



# The Situation in Greece Riled Financial Markets Over the Past Several Months

Greek Bond Yields Spiked Dramatically with the Turmoil and Remain Well Above the Rest of the Developed World

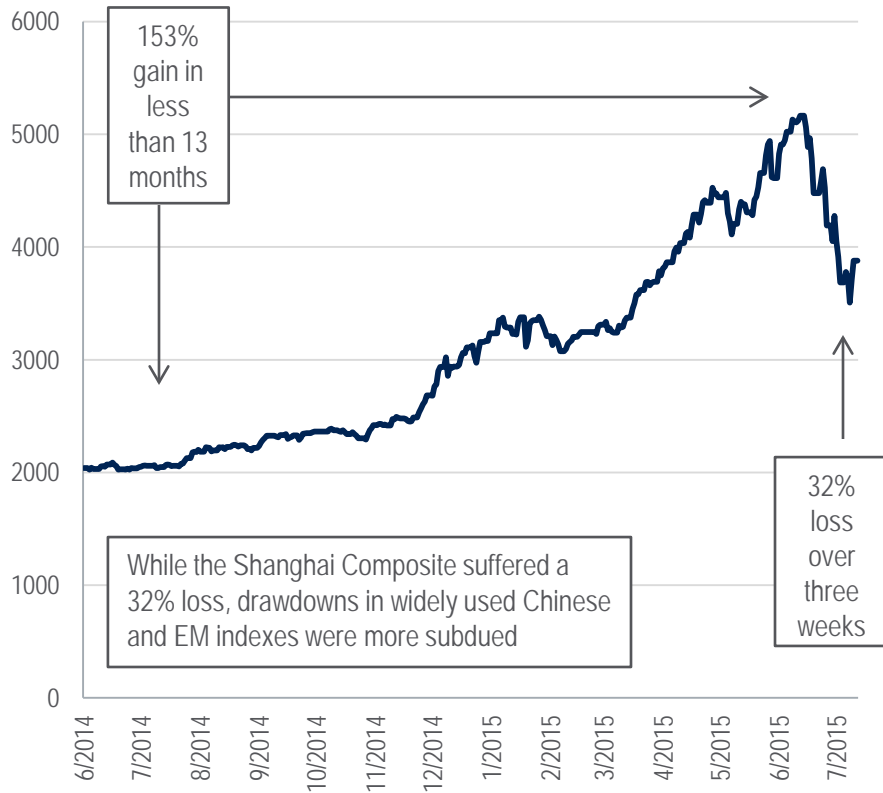


Source: Bloomberg; GWCM Analysis

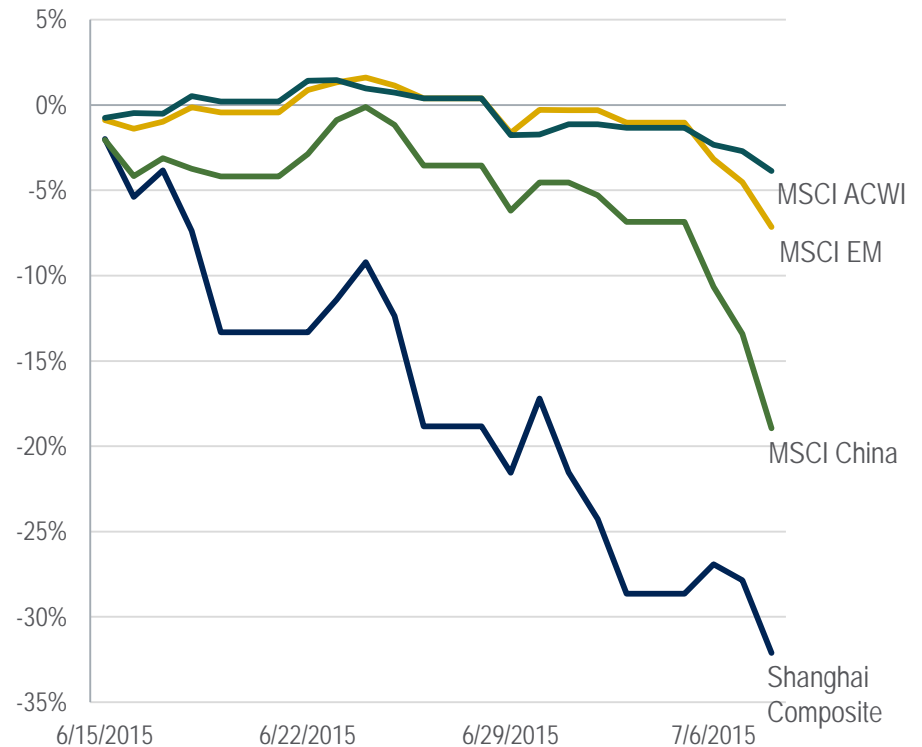


# The Drawdown in Chinese Markets has Been Largely a Chinese Investor's Problem

## The Dramatic 13-month Rise and Fall of the Shanghai Composite



## The Chinese Drawdown has Impacted Some Equity Indices More than Others

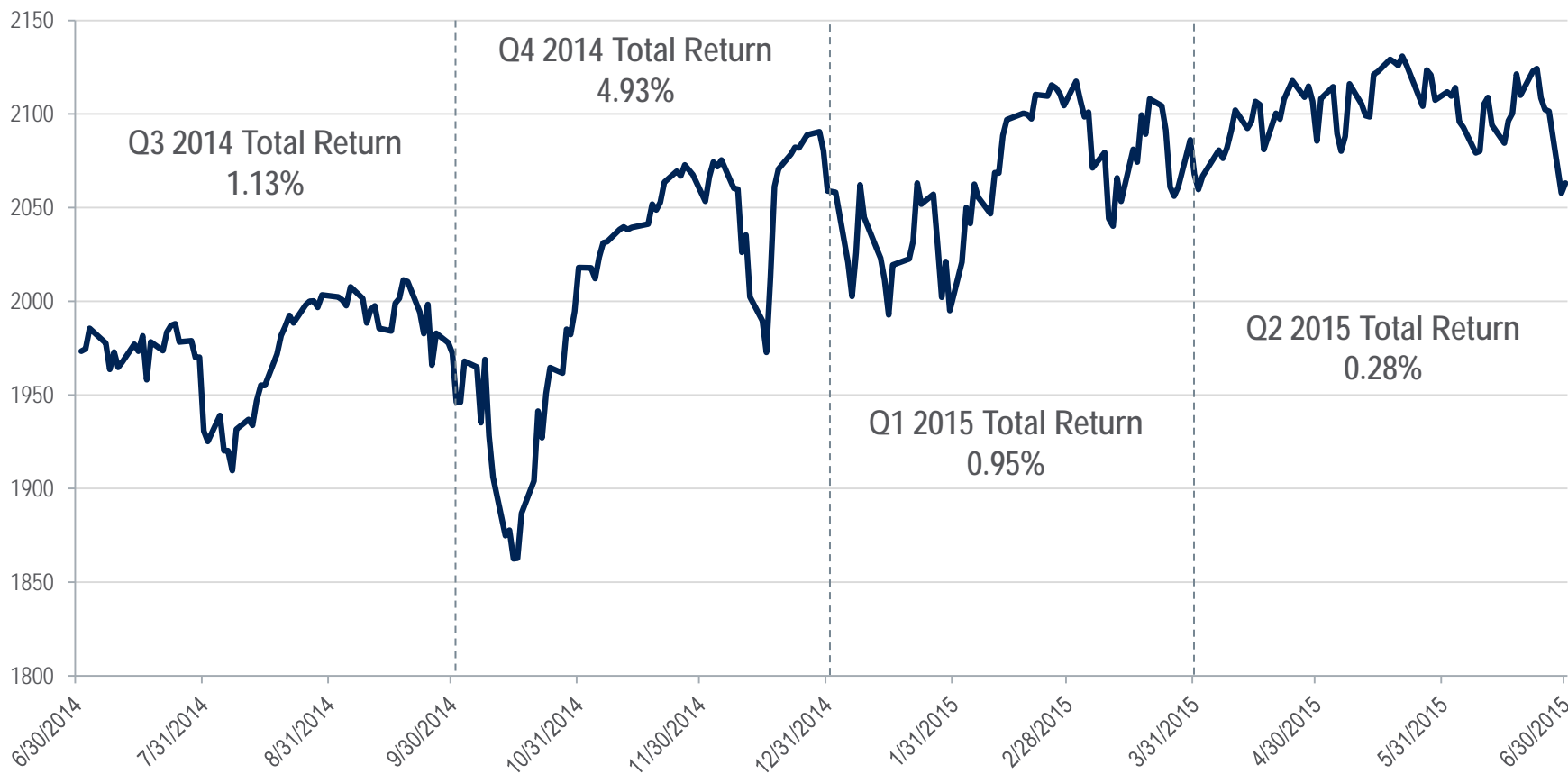


Source: Morningstar Direct; GWCM Analysis



## U.S. Equity Markets Endured Another Choppy Quarter During the Second Quarter

S&P 500 Index



Source: Morningstar; Federal Reserve; GWCM Analysis



# Equity Market Returns

(as of June 30, 2015)

		QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2014	2013	2012	2011	2010
<b>Domestic Equity</b>												
Large Cap	S&P 500	0.3%	1.2%	7.4%	17.3%	17.3%	7.9%	13.7%	32.4%	16.0%	2.1%	15.1%
	Russell 1000 Value	0.1%	-0.6%	4.1%	17.3%	16.5%	7.0%	13.5%	32.5%	17.5%	0.4%	15.5%
	Russell 1000 Growth	0.1%	4.0%	10.6%	18.0%	18.6%	9.1%	13.0%	33.5%	15.3%	2.6%	16.7%
Mid Cap	Russell Mid Cap	-1.5%	2.4%	6.6%	19.3%	18.2%	9.4%	13.2%	34.8%	17.3%	-1.5%	25.5%
	Russell Mid Cap Value	-2.0%	0.4%	3.7%	19.1%	17.7%	8.9%	14.7%	33.5%	18.5%	-1.4%	24.8%
	Russell Mid Cap Growth	-1.1%	4.2%	9.5%	19.2%	18.7%	9.7%	11.9%	35.7%	15.8%	-1.7%	26.4%
Small Cap	Russell 2000	0.4%	4.8%	6.5%	17.8%	17.1%	8.4%	4.9%	38.8%	16.3%	-4.2%	26.9%
	Russell 2000 Value	-1.2%	0.8%	0.8%	15.5%	14.8%	6.9%	4.2%	34.5%	18.1%	-5.5%	24.5%
	Russell 2000 Growth	2.0%	8.7%	12.3%	20.1%	19.3%	9.9%	5.6%	43.3%	14.6%	-2.9%	29.1%
<b>International Equity</b>												
Developed Markets	MSCI EAFE	0.6%	5.5%	-4.2%	12.0%	9.5%	5.1%	-4.9%	22.8%	17.3%	-12.1%	7.8%
	Australia	-6.2%	-3.3%	-14.2%	4.7%	7.5%	6.9%	-3.4%	4.2%	22.1%	-11.0%	14.5%
	Canada*	-0.9%	-6.9%	-15.3%	3.5%	3.8%	6.0%	1.5%	5.6%	9.1%	-12.7%	20.5%
	France	0.3%	5.0%	-9.6%	12.4%	8.2%	3.7%	-9.9%	26.3%	21.3%	-16.9%	-4.1%
	Germany	-5.6%	2.2%	-9.5%	14.2%	10.5%	7.2%	-10.4%	31.4%	30.9%	-18.1%	8.4%
	Japan	3.1%	13.6%	8.3%	13.3%	8.8%	4.2%	-4.0%	27.2%	8.2%	-14.3%	15.4%
	Switzerland	1.0%	5.8%	-1.1%	15.9%	12.8%	8.7%	-0.1%	26.6%	20.4%	-6.8%	11.8%
	UK	3.0%	2.0%	-8.2%	9.1%	10.7%	4.7%	-5.4%	20.7%	15.3%	-2.6%	8.8%
Emerging Markets	MSCI Emerging Markets	0.7%	2.9%	-5.1%	3.7%	3.7%	8.1%	-2.2%	-2.6%	18.2%	-18.4%	18.9%
	Brazil	7.0%	-8.7%	-29.0%	-10.6%	-8.3%	7.1%	-14.0%	-16.0%	0.0%	-21.8%	6.5%
	China	6.0%	14.6%	24.6%	14.9%	7.4%	14.0%	8.0%	3.6%	22.7%	-18.4%	4.6%
	India	-3.6%	1.6%	3.3%	12.0%	2.5%	10.6%	23.9%	-3.8%	26.0%	-37.2%	20.9%
	Indonesia	-14.1%	-12.0%	-8.5%	-2.6%	2.0%	13.3%	26.6%	-23.5%	4.6%	6.0%	33.9%
	Korea	-3.7%	0.4%	-14.2%	2.2%	5.5%	7.2%	-11.1%	3.9%	21.2%	-12.0%	26.7%
	Mexico	0.3%	-1.6%	-11.9%	0.3%	5.7%	9.5%	-9.3%	0.2%	29.1%	-12.1%	27.6%
	Russia	7.6%	27.6%	-27.6%	-8.2%	-3.6%	1.9%	-46.3%	0.8%	13.7%	-19.6%	19.1%

Source: Morningstar Direct; GWCM Analysis

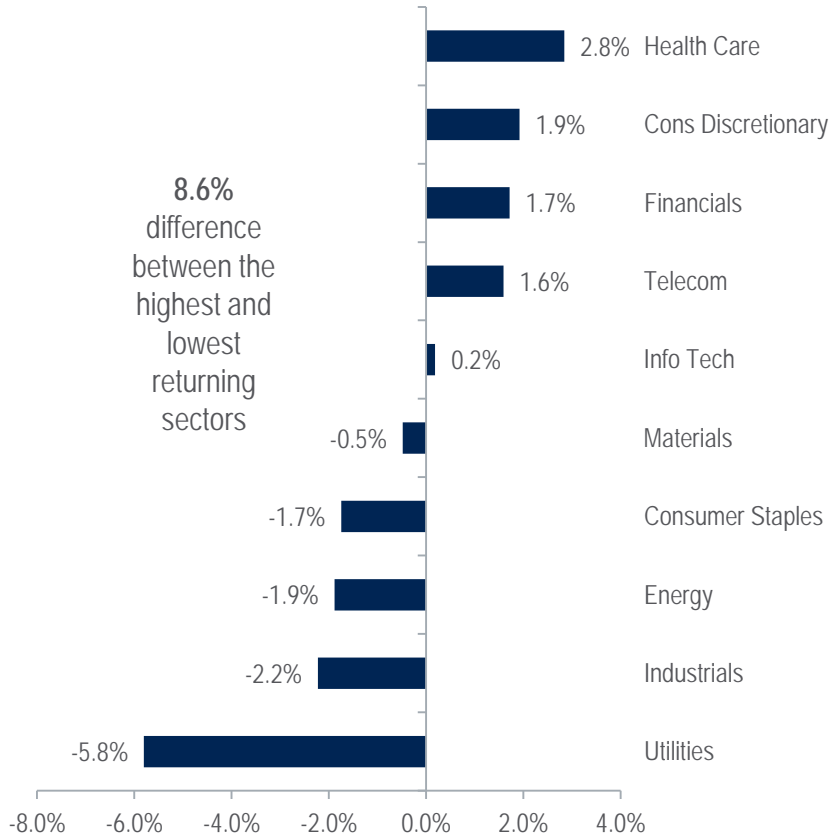
Individual country returns are represented by MSCI indices and shown as USD returns

\*Canada is not part of the EAFE Index

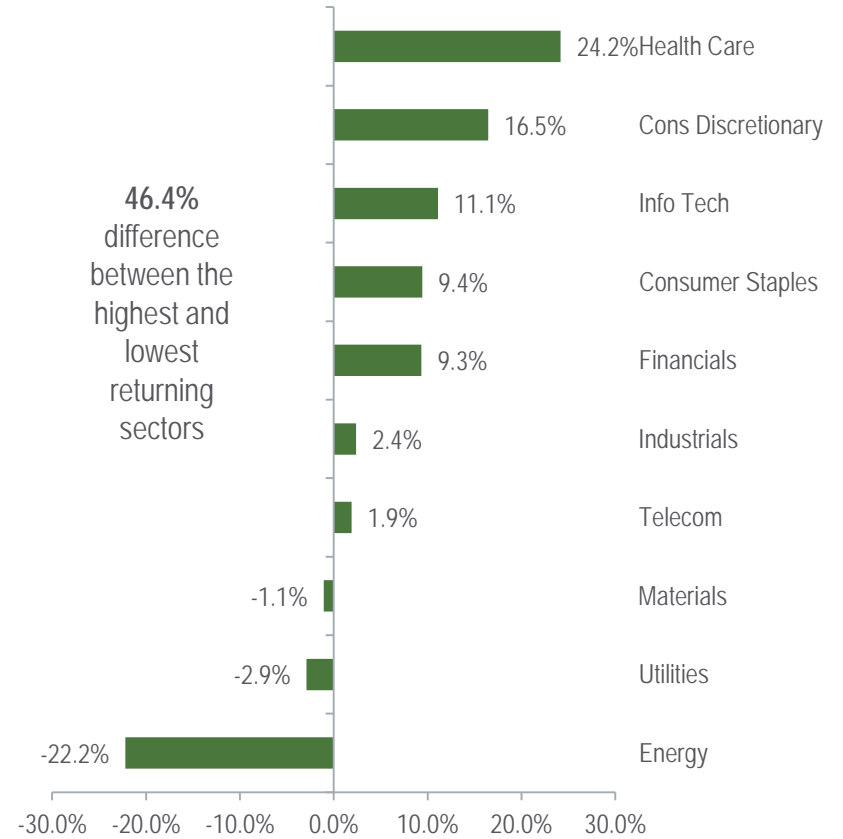


# S&P 500 Sector Returns

QTD Returns  
as of June 30, 2015



1 Year Trailing Returns  
as of June 30, 2015



Source: Morningstar Direct; GWCM Analysis





## Returns by Style

		3 Months			1 Year			Since Market Peak (October, 2007)		
		Value	Blend	Growth	Value	Blend	Growth	Value	Blend	Growth
Size	Large	0.1%	0.3%	0.1%	4.1%	7.4%	10.6%	41.3%	55.9%	76.8%
	Mid	-2.0%	-1.5%	-1.1%	3.7%	6.6%	9.5%	69.2%	74.0%	76.6%
	Small	-1.2%	0.4%	2.0%	0.8%	6.5%	12.3%	49.2%	65.1%	81.2%
		3 Year			5 Year			Since Market Low (March, 2009)		
		Value	Blend	Growth	Value	Blend	Growth	Value	Blend	Growth
Size	Large	17.3%	17.3%	18.0%	16.5%	17.3%	18.6%	252.2%	248.5%	260.6%
	Mid	19.1%	19.3%	19.2%	17.7%	18.2%	18.7%	331.9%	320.0%	308.4%
	Small	15.5%	17.8%	20.1%	14.8%	17.1%	19.3%	269.0%	298.0%	327.7%

performance as of 6/30/2015

Source: Morningstar Direct; GWCM Analysis; Large Blend – S&P 500 Index, Large Value – Russell 1000 Value Index, Large Growth – Russell 1000 Growth Index, Mid Blend – Russell Mid Cap Index, Mid Value – Russell Mid Cap Value Index, Mid Growth – Russell Mid Cap Growth Index, Small Blend – Russell 2000 Index, Small Value – Russell 2000 Value Index, Small Growth – Russell 2000 Growth Index



## Fixed Income and Specialty Returns

(as of June 30, 2015)

	QTD	YTD	1 Year Trailing	3 Year Trailing	5 Year Trailing	10 Year Trailing	2014	2013	2012	2011	2010
<b>Fixed Income</b>											
Barclays US Aggregate	-1.7%	-0.1%	1.9%	1.8%	3.3%	4.4%	6.0%	-2.0%	4.2%	7.8%	6.5%
Barclays US Treasury	-1.6%	0.0%	2.3%	0.9%	2.7%	4.1%	5.1%	-2.7%	2.0%	9.8%	5.9%
Barclays US Govt/Credit Intermediate	-0.6%	0.8%	1.7%	1.6%	2.8%	4.0%	3.1%	-0.9%	3.9%	5.8%	5.9%
Barclays US TIPS	-1.1%	0.3%	-1.7%	-0.8%	3.3%	4.1%	3.6%	-8.6%	7.0%	13.6%	6.3%
Barclays US Corporate High Yield	0.0%	2.5%	-0.4%	6.8%	8.6%	7.9%	2.5%	7.4%	15.8%	5.0%	15.1%
Citi WGBI	-1.5%	-4.0%	-9.0%	-2.4%	1.0%	3.1%	-0.5%	-4.0%	1.6%	6.4%	5.2%
JPM EMBI Global Diversified	-0.3%	1.7%	0.5%	4.3%	6.8%	7.4%	7.4%	-5.3%	17.4%	7.3%	12.2%
Citi Treasury Bill 3 Month	0.0%	0.0%	0.0%	0.0%	0.1%	1.3%	0.0%	0.1%	0.1%	0.1%	0.1%
<b>Specialty</b>											
Bloomberg Commodity	4.7%	-1.6%	-23.7%	-8.8%	-3.9%	-2.6%	-17.0%	-9.5%	-1.1%	-13.3%	16.8%
DJ US Select REIT	-10.0%	-5.8%	5.2%	8.7%	14.4%	6.8%	32.0%	1.2%	17.1%	9.4%	28.1%
FTSE EPRA/NAREIT Developed Ex US	-2.4%	1.1%	-2.9%	9.9%	10.7%	5.9%	3.2%	6.1%	38.6%	-15.3%	16.0%

Source: Morningstar Direct; GWCM Analysis



## Calendar Year Returns by Asset Class

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emrg Mkt 34.0	Emrg Mkt 32.1	Emrg Mkt 39.4	Agg Bond 5.2	Emrg Mkt 78.5	Sm Growth 29.1	Agg Bond 7.8	Mid Value 18.5	Sm Growth 43.3	Mid Value 14.7
International 13.5	International 26.3	Lg Growth 11.8	Sm Value -28.9	Mid Growth 46.3	Mid Growth 26.4	Lg Growth 2.6	Emrg Mkt 18.2	Mid Growth 35.7	Lg Value 13.5
Mid Value 12.6	Sm Value 23.5	Mid Growth 11.4	Lg Value -36.8	Lg Growth 37.2	Mid Value 24.8	Lg Value 0.4	Sm Value 18.1	Sm Value 34.5	Lg Growth 13.0
Mid Growth 12.1	Lg Value 22.2	International 11.2	Lg Growth -38.4	Sm Growth 34.5	Sm Value 24.5	Mid Value -1.4	Lg Value 17.5	Lg Growth 33.5	Mid Growth 11.9
Lg Value 7.1	Mid Value 20.2	Sm Growth 7.0	Mid Value -38.4	Mid Value 34.2	Emrg Mkt 18.9	Mid Growth -1.7	International 17.3	Mid Value 33.5	Agg Bond 6.0
Lg Growth 5.3	Sm Growth 13.3	Agg Bond 7.0	Sm Growth -38.5	International 31.8	Lg Growth 16.7	Sm Growth -2.9	Mid Growth 15.8	Lg Value 32.5	Sm Growth 5.6
Sm Value 4.7	Mid Growth 10.7	Lg Value -0.2	International -43.4	Sm Value 20.6	Lg Value 15.5	Sm Value -5.5	Lg Growth 15.3	International 22.8	Sm Value 4.2
Sm Growth 4.2	Lg Growth 9.1	Mid Value -1.4	Mid Growth -44.3	Lg Value 19.7	International 7.8	International -12.1	Sm Growth 14.6	Agg Bond -2.0	Emrg Mkt -2.2
Agg Bond 2.4	Agg Bond 4.3	Sm Value -9.8	Emrg Mkt -53.3	Agg Bond 5.9	Agg Bond 6.5	Emrg Mkt -18.4	Agg Bond 4.2	Emrg Mkt -2.6	International -4.9

Source: Morningstar Direct; GWCM Analysis; Lg Growth – Russell 1000 Growth Index, Lg Value – Russell 1000 Value Index, Mid Growth – Russell Mid Cap Growth Index, Mid Value – Russell Mid Cap Value Index, Sm Growth – Russell 2000 Growth Index, Sm Value – Russell 2000 Value Index, International – MSCI EAFE NR Index, Emrg Mkt – MSCI EM NR Index, Agg Bond – Barclays US Aggregate Bond Index



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The MSCI Emerging Markets Index represents the performance of stocks in 26 emerging market countries in Europe, Latin America and the Pacific Basin.

The Barclays Capital US Aggregate Bond Index includes fixed rate debt issues rated investment grade or higher by Moody's Investors Service, Standard and Poor's, or Fitch Investor's Service, in that order. All issues must have at least 1 year left to maturity and have an outstanding par value of at least \$100 million. The Aggregate Index is comprised of the Government/Corporate, the Mortgage-Backed Securities, and the Asset-Backed Securities indices.

The Standard & Poor's 500 is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid-1989, this composition has been more flexible and the number of issues in each sector has varied. The returns presented for the S&P 500 are total returns, including the reinvestment of dividends each month.

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ADVISED ASSETS  
GROUP

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# INVESTMENT POLICY STATEMENT & FUND BENCHMARKS

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*2Q2015*

**Wisconsin Deferred Compensation Program**  
**Deferred Compensation Board**  
**Investment Policy Statement**  
*Approved by the Deferred Compensation Board November 1998*  
Revised February 2005

**Objective**

The Wisconsin Deferred Compensation Program (WDC) will provide participants with the ability to invest pre-tax income in a broad range of investment alternatives with diverse risk and return characteristics. The Deferred Compensation Board's goal is to ensure the WDC offers sufficient investment choices to meet participants' needs when establishing their personal retirement savings portfolio.

**Investment Spectrum**

The Board will maintain a core investment spectrum, normally between eight and twenty options, to ensure sufficient choices are available and are reasonable in number to allow the average participant to decide which options best meet their personal needs. The spectrum will be comprised of fixed options and publicly traded mutual fund options from the following categories:

1. *Fixed income/cash investments - FDIC insured bank account option, stable value fund, or money market mutual fund.*
2. *Bond mutual funds - government or corporate bond funds, domestic or international, active or passive management.*
3. *Balanced mutual fund – combining equity and bond investments in one option.*
4. *Domestic large cap equity mutual funds – including both active and passive (index) investments; funds with investment objectives that may include: growth and income, growth, aggressive growth, value, and blend of growth and value.*
5. *Domestic small and mid cap equity mutual funds – growth, value or blend.*
6. *International or foreign equity mutual funds – growth, value or blend.*
7. *Lifecycle funds – age-based portfolios for multiple time horizons.*

**Selection Process**

The Board may from time to time provide additional investment alternatives and may change the categories of funds offered to maintain a broad spectrum to address participants' changing needs or changes to the investment industry. The Board has established minimum criteria for selecting and evaluating the options offered by the WDC.

Mutual fund options are selected from the universe of publicly traded funds through a comprehensive search process. For an option to be considered for the WDC, it must meet the established minimum requirements in regard to: asset size, years in operation, costs (expense

ratio and sales fees), and historical performance. Once the initial screening has occurred, options are further analyzed based on criteria that includes, but is not limited to: short and long term performance as compared to peer group average and benchmarks, risk/return measurements, manager tenure, and industry ratings (such as *Morningstar*). Fixed income investments must also meet minimum criteria established by the Board (see attachment 1) and are selected from a competitive request for proposal process.

### **Evaluation Process**

To ensure options continue to be suitable for offering to WDC participants and are consistent with the established investment policy, the Board completes a comprehensive evaluation each year.

Performance benchmarks are specifically established for each investment option and include a comparison to their peer group average, an appropriate index measurement, and an internal benchmark identified by the fund manager. Volatility is also measured by an analysis of risk versus return.

If the Board determines an option is no longer acceptable for continued offering, the Board may close the investment to new participant elections or initiate the process to phase the option out of the WDC and require participants to move account balances to an alternate choice. The steps in the review process are as follows:

- 1. A determination is made that a fund is unacceptable for offering. The Board can either close the fund to new elections and proceed with step 2, or initiate the phase out process to remove the fund from the WDC and skip step 2 and 3 and go directly to step 4.*
- 2. As a result of the next year's annual review, if it is determined to once again be acceptable, the fund is re-opened to participant elections.*
- 3. If improvements have occurred but it is not completely meeting all established criteria and/or there are remaining questions about its performance in can be continued in it's current closed status for an additional year.*
- 4. If the review demonstrates that the fund continues to be unacceptable for offering, the Board can initiate the process to phase it out of the WDC over a minimum of a one-year period (as required in Wisconsin Administrative Code ETF 70.08(3)).*
- 5. Participants are instructed to re-direct deferrals to an alternate choice within a period of not less than six-months from the original notification. If this action is not taken, deferrals being directed into the option being removed will automatically be redirected to an alternate option as designated by the Board.*
- 6. Participants are instructed to transfer existing balances to an alternate choice within a period of not less than one year from the original notification. If this action is not taken, account balances not exchanged out of the option being removed will automatically be redirected to an alternate option as designated by the Board.*

***Responsibilities***

Deferred Compensation Board – The Board is responsible for selecting appropriate investment options for offering by the WDC and monitoring the selections to ensure they continue to be acceptable for long-term retirement savings.

Investment Providers – The companies contracted to provide an investment option to the WDC are responsible for following the investment objectives that were either, identified during the competitive bid process (for fixed income options) or stated in their fund prospectus (for mutual funds).

Department of Employee Trust Funds and Administrative Services Provider Staff – Staff is responsible for completing the annual evaluation to monitor the WDC investment choices and providing sufficient analysis and information on which the Board can base decisions regarding maintaining, removing or adding investment options to the WDC. Staff is also responsible for providing sufficient information about the available investment choices and how to structure a retirement savings portfolio to enable participants to make informed decisions.

Participants – Investment decisions are the full responsibility of participants and their beneficiaries. Although the Board monitors the options that are being made available, participants are responsible for deciding which, if any, of the available choices are the most appropriate for their supplemental retirement savings needs.



<b>Minimum Criteria for Selecting and Evaluating Fixed Income Options</b>	
Bank Option	<ul style="list-style-type: none"> <li>• FDIC insured</li> <li>• Capital ratio as required by US government to maintain FDIC coverage</li> <li>• Minimum size - \$1 billion in assets</li> </ul>
Insurance Option	<ul style="list-style-type: none"> <li>• Top rating received by at least <b>2 rating agencies</b></li> <li>• No rating below a Double A or equivalent</li> <li>• Total capital (equivalent to total assets minus total liabilities) equal to at least 5% of invested assets</li> <li>• High risk assets (non-investment grade bonds and non-performing real estate loans and investments) under 200% of total capital</li> <li>• Performance returns compared to blended 5-year Treasury rates, or other index as appropriate</li> </ul>
Stable Value Fund Manager	<ul style="list-style-type: none"> <li>• Minimum five years experience managing stable value assets</li> <li>• Minimum \$2 billion in discretionary assets under management</li> <li>• Investment guidelines and performance benchmark as approved by Board</li> </ul>
<b>Minimum Criteria for Selecting and Evaluating Mutual Fund Options</b>	
<b>Selection Criteria:</b> <i>Requirements apply to all mutual funds unless specifically waived</i>	<ul style="list-style-type: none"> <li>• Minimum 5 year operating history – may be waived for index funds</li> <li>• Expense ratio [internal expense charge plus any 12(b)1 fee] not greater than the mean for the appropriate peer group</li> <li>• 5-year rolling average performance must equal or exceed appropriate benchmark or index</li> <li>• Minimum total asset size of \$400 million – may be waived for certain categories of funds</li> <li>• Anticipated WDC assets not greater than 5% of total fund (determined by comparing current WDC asset levels in a comparable fund)</li> <li>• No loads or sales charges unless they are waived for the WDC</li> <li>• Not a sector fund</li> </ul>
<b>Monitoring Criteria:</b> <i>Requirements apply to all mutual funds unless specifically waived</i>	<ul style="list-style-type: none"> <li>• Performance must meet or exceed one or more of established benchmarks – benchmarks used include, but are not limited to 1) peer group average, 2) appropriate index as determined by Board, and 3) internal benchmark assigned by fund manager.</li> <li>• For specialty funds selected for reasons other than performance (e.g., socially responsive funds or lifecycle funds), performance will only be evaluated based on a comparison to the funds peer group of funds with same specialty objective. [Participants will be fully advised that fund is selected for reasons other than investment returns.]</li> <li>• WDC assets in fund no greater than 10% of the total mutual fund assets</li> <li>• After 5 years in WDC, minimum of 3% of participants or 3% of assets.</li> </ul>

# INVESTMENT BENCHMARKS

<u>Investment Product</u>	<u>Current Benchmarks</u>
<u>Core Funds</u>	
American Funds EuroPacific Growth R6	Morningstar Foreign Large Blend Avg MSCI EAFE Index MSCI ACWI ex U.S.
DFA U.S. Microcap Portfolio	Morningstar Small Cap Growth Avg Russell 2000 Index*
T. Rowe Price MidCap Growth Fund	Morningstar Mid Cap Growth Avg Russell Mid Cap Growth Index S&P Midcap 400 Index
Fidelity Contrafund	Morningstar Large Cap Growth Avg Russell 1000 Growth Index S&P 500 Index
Vanguard Wellington Fund (Admiral Shares)	Morningstar Moderate Allocation Avg Composite 65% S&P 500 / 35% Barclay's Aggregate Composite 65% S&P 500 / 35% Barclay's U.S. Credit A or Better Idx
Vanguard Long-Term Investment Grade-Fund Adm	Morningstar Corporate Bond Avg Barclay's LT Corporate A*
Federated U.S. Government Securities Fund 2-5 Years Instl	Morningstar Short Government Avg Barclay's US Treas/Agency 3-5 Yr BofA Merrill Lynch US Treas 3-5 Yr
Vanguard Admiral Treasury Money Market Fund	Morningstar Taxable Money Market Avg U.S. Treasury 90-Day T-Bill iMoneyNet Money Fund Report Avg 100% Treas Fund
Stable Value Fund (Galliard) FDIC Option- M&I Bank of Southern Wisconsin	Five Year Constant Maturity Treas Rate 50% 3-Month LIBOR / 50% 12-Month LIBOR

# INVESTMENT BENCHMARKS

## Index Funds

Blackrock EAFE Equity Index Fund	MSCI EAFE
Blackrock Small Cap Equity Index Fund	Russell 2000 Index
Blackrock MidCap Equity Index Fund	S&P MidCap 400 Index
Vanguard Institutional Index Fund (Plus Shares)	S&P 500 Index
Blackrock U.S. Debt Index Fund	BarCap Aggregate Index

## Specialty Funds

Calvert Social Investment Equity Fund- Institutional Class	Morningstar Socially Responsible Large Cap Avg** Morningstar Large Cap Growth Avg S&P 500 Index
Vanguard Lifecycle Funds	S&P Target Date Indexes** Composite benchmarks based on asset allocation of funds

\* Benchmarks that are used by both the Wisconsin ETF Deferred Compensation Board as well as the mutual fund advisor.

\*\* Per the Deferred Compensation Plan's Investment Policy Statement, Specialty Funds (funds chosen for reasons other than performance) are measured only against their peer group. Other benchmarks are included to provide additional monitoring criteria.

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ADVISED ASSETS  
GROUP

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# GLOSSARY

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*2Q2015*

## Glossary

**12b-1 Fee** The maximum annual charge deducted from fund assets to pay for distribution and marketing costs. Although usually set on a percentage basis, this amount will occasionally be a flat figure.

**Actively managed fund** A fund manager buys and sells securities attempting to outperform the market as a whole.

**Adjustable Bonds** A bond whose coupon is reset periodically—usually every six months to three years. At the reset date, the coupon is set equal to some base index, such as the one-year constant Treasury rate, plus a spread (or margin). When interest rates are falling, these bonds do better than an in-year Treasury, but when interest rates rise, they can lag Treasury yields.

**Aggressive Growth** (Objective) Funds that seek rapid growth of capital and that may invest in emerging market growth companies without specifying a market capitalization range. They often invest in small or emerging growth companies and are more likely than other funds to invest in IPO's or in companies with high price/earnings and price/book ratios. They may use such investment techniques as heavy sector concentrations, leveraging, and short-selling.

**Alpha** A measure of the difference between a fund's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha figure indicates the fund has performed better than its beta would predict. In contrast, a negative alpha indicates the fund's underperformance, given the expectations established by the fund's beta.

**Annual Returns** Total returns calculated on a calendar-year basis. The annual return for a fund will be the same as its trailing 12-month total return only at year-end.

**Annualized Returns** Returns for periods longer than one year are expressed as "annualized returns." This is equivalent to the compound rate of return which, over a certain period of time, would produce a fund's total return over that same period.

**Asset Allocation** (Objective) Income and capital appreciation are dual goals for funds in this objective. Managers often use a flexible combination of stocks, bonds, and cash. Managers may shift assets based on analysis of business-cycle trends.

**Average Credit Quality** Gives a snapshot of the portfolio's overall credit quality. It is an average of each bond's credit rating, adjusted for its relative weighting in the portfolio.

**Average Effective Duration** A measure of a fund's interest-rate sensitivity—the longer a fund's duration, the more sensitive the fund is to shifts in interest rates. Duration is determined by a formula that includes coupon rates and bond maturities. Small coupons tend to increase duration, while shorter maturities and higher coupons shorten duration. The relationship between funds with different durations is straightforward: A fund with a duration of 10 years is twice as volatile as a fund with a five-year duration.

**Average Effective Maturity** Used for taxable fixed-income funds only, this figure takes into consideration all mortgage prepayments, puts, and adjustable coupons; it does not, however, account for call provisions. The number listed is a weighted average of all the maturities of the bonds in the portfolio, computed by weighing each maturity date (the date the security comes due) by the market value of the security.

**Balanced** (Objective) Funds that seek both income and capital appreciation by investing in a generally fixed combination of stocks and bonds. These funds generally hold a minimum of 25% of their assets in fixed-income securities at all times.

**Basis Point** One-hundredth of a percentage point. For example, 50 basis points equals .50%.

**Beta** A measure of a fund's sensitivity to market movements. The beta of the market is 1.00 by definition. Beta is calculated by comparing a fund's excess return over Treasury bills to the market's excess return over Treasury bills, so a beta of 1.10 shows that the fund has performed 10% better than its benchmark index in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the fund's excess return is expected to perform 15% worse than the market's excess return during up markets and 15% better during down markets.

**Bonds** Interest-bearing certificates of indebtedness or IOUs. While bonds' rates of return remain fixed, bond prices change in relation to interest rates — when interest rates go up, bond prices go down, and vice versa. However, bond funds are variable funds and fluctuate with market conditions.

**Bond funds** Contrary to individual bonds, which offer a guaranteed rate of return, bond funds are variable funds and their returns may rise or fall depending on market conditions. Funds with 70% or more of their assets invested in bonds are classified as Bond Funds. Bond funds are divided into two main groups: Taxable Bond and Municipal Bond. Taxable Bond Fund categories include the following: Long-Term Government, Intermediate-Term Government, Short-Term Government, Long-Term Bond, Intermediate-Term Bond, Short-Term Bond, Ultrashort-Bond, International-Bond, High-Yield Bond, Emerging-Markets Bond and Multisector Bond.

**Breakpoint** The investment amount at which investors in a load fund qualify for a discount on the fund's sales charges.

## Glossary

**Broker** A firm or individual that acts as an intermediary between a buyer and a seller of securities, thereby earning a commission on the transaction. Unlike a broker-dealer, a broker does not own the securities that he or she sells.

**Callable Bond** A bond that can be repaid early, at the issuer's discretion. A callable bond allows an issuer to refinance debt at a lower rate, should interest rates drop below the coupon rate on the bond. If interest rates have dropped significantly since the date of issue, a callable bond will trade as though its maturity were shortened to the call date, which is the earliest time at which the bond can be redeemed.

**Capital Appreciation** The taxable income generated when a security is sold. The amount of appreciation is measured by subtracting the purchase price from the sale price.

**Capital Gains** Taxable income generated only when a security is sold. This figure is calculated by subtracting the purchase price from the sale price. Under IRS regulations, funds must distribute 98% of their capital gains each year to avoid paying taxes on them. Shareholders pay taxes on these distributions, even if the gains are reinvested. Further capital gains can be generated by selling shares in a fund for more than the original purchase price.

**Capitalization** The total dollar value of all stock issued by a company. Small-cap stocks are issued by companies with market cap less than \$1 billion. Mid-cap stocks are issued by medium-sized companies with market cap anywhere from \$1 billion to \$5 billion. Large-cap stocks include companies with market cap greater than \$5 billion.

**CMOs** Collateralized mortgage obligations are derivative securities, created by chopping up mortgage pass-throughs or whole loans into various slices in order to redistribute the cash flows (both principal and interest payments) from the underlying bonds. The CMO group, except for adjustable-rate mortgage funds, includes PACs (planned amortization class bonds), floating- and inverse-floating-rate CMOs, and accrual or Z-tranche bonds, among other varieties.

**Consumer Price Index (CPI)** This index measures the changes in prices of goods and services purchased by urban households. Many pension and employment contracts are tied to changes in consumer prices, as protection against inflation and reduced purchasing power.

**Corporate Bond--General** (Objective) Funds that seek income by investing in fixed-income securities. Funds with this objective may hold a variety of issues, including but not limited to government bonds, high-quality corporates, mortgages, asset-backed, bank loans and junk bonds.

**Corporate Bond--High Quality** (Objective) Offerings that seek income by investing at least 65% of their assets in corporate debt securities rated A or higher. They generally maintain average ratings of AA or better.

**Corporate Bond--High Yield** (Objective) Funds that seek income by generally investing 65% or more of their assets in bonds rated below BBB. The price of these issues is generally affected more by the condition of the issuing company (similar to a stock) than by the interest-rate fluctuation that usually causes bond prices to move up and down.

**Current income** Results when a stock pays a dividend or a bond makes an interest payment. This is the value of your investment increased. With current income, you get a fairly stable pattern of income — which generally means reduced volatility. (Stock dividends must be declared, and are not predictable.)

**Diversification** Spreading your money over many different types of investments. Contrary to putting all your eggs in one basket, diversification can help protect your savings because when one investment is doing poorly, another may be doing well. This does not guarantee against loss of value in your investments.

**Dividends** The distribution of earnings to stockholders by a company. Dividends are usually paid out from current earnings.

**Domestic equity funds** are placed in a category based on the style and size of the stocks they typically own. The style and size parameters are based on the divisions used in the investment style box: Value, Blend, or Growth style and Small, Medium, or Large median market capitalization.

**Domestic Hybrid Category** Used for funds with stock holdings of greater than 20% but less than 70% of the portfolio.

**Dow Jones Industrial Average** Computed by summing the prices of the stocks of 30 companies and then dividing that total by an adjusted value--one which has been adjusted over the years to account for the effects of stock splits on the prices of the 30 companies. Dividends are reinvested to reflect the actual performance of the underlying securities.

**Duration** A time measure of a bond's interest-rate sensitivity, based on the weighted average of the time periods over which a bond's cash flows accrue to the bondholder. Time periods are weighted by multiplying by the present value of its cash flow divided by the bond's price. (A bond's cash flows consist of coupon payments and repayment of capital). A bond's duration will almost always be shorter than its maturity, with the exception of zero-coupon bonds, for which maturity and duration are equal.

**Equity-Income** (Objective) Funds that are expected to pursue current income by investing at least 65% of their assets in dividend-paying equity securities.

## Glossary

**Equity style box** is a matrix that shows a fund's investment style. Nine boxes represent two variables: the size of the companies invested in (small-cap, mid-cap, large-cap), and whether a fund is growth, value, or blend oriented. Morningstar recalculates the style of each fund on a monthly basis. The equity style box is shown below (areas are shaded according to risk — the darker the area, the higher the risk associated with the investment).

Value	Blend	Growth	
1	2	3	Large
4	5	6	Medium
7	8	9	Small

**Excess Returns** A component found in Morningstar Return, Morningstar Risk, and the Morningstar Rating. This figure is calculated by subtracting the monthly returns of the three-month Treasury-bill from the monthly returns of the fund during the same time period.

**Exchange-Traded Funds (ETFs)** are not mutual funds in the traditional sense; rather, they are hybrid instruments combining aspects of common stocks and mutual funds and offering many the benefits of both. ETFs are products that trade like stocks. They mimic stock indexes and are passively managed just like an index fund. Because ETFs trade throughout the day just like a stock, investors have the ability to choose the timing and know the price of the transaction.

**Expense Ratio** The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

**FHLMC mortgages** The Federal Home Loan Mortgage Commission, a federally-sponsored corporation that packages huge pools of individual mortgages and carves these pools up as mortgage-backed securities. This provides diversification, and consequently lower risk for mortgage investors. Although FHLMC securities are not directly backed by the federal government, it is implicitly recognized that the government would step in were there a likelihood that they would default.

**Fixed-income style box** is similar to the equity style box. Fixed income style boxes represent a bond fund's investment style. A fixed-income style would be the intersection of its duration (short, intermediate, and long) and the quality of the bonds selected for the portfolio (high, medium, low). Listed below is the matrix using the fixed-income style groupings (again, the darker the shading, the higher the risk).

Short	Int.	Long	
1	2	3	High
4	5	6	Medium
7	8	9	Low

**Flagship Fund** Not to be confused with the Flagship Family of funds, a flagship fund is typically the oldest of a management company's funds, or one that boasts the largest number of assets. Such funds often bear the management company's name.

**Foreign Stock Category** An international fund having no more than 10% of stocks invested in the United States.

**Fund of Funds** A fund that specializes in buying shares in other mutual funds rather than individual securities. Quite often this type of fund is not discernible from its name alone, but rather through prospectus wording (i.e.: the fund's charter).

**Geometric Mean Return** A compounded and annualized rate of return.

**GNMA mortgages** These are mortgage pass-through securities issued by the Government National Mortgage Association. These bonds are backed by the full faith and credit of the U.S. government.

**Government Bond--General (Objective)** Offerings that pursue income by investing in a combination of mortgage-backed securities, Treasuries, and agency securities.



## Glossary

**Government Bond--Mortgage** (Objective) Funds that seek income by generally investing at least 65% of their assets in securities backed by mortgages, such as securities issued by the Government National Mortgage Association (GNMA), the Federal National Mortgage Association (FNMA), and the Federal Home Loan Mortgage Corporation (FHLMC).

**Government Bond--Treasury** (Objective) Treasury funds that seek income by generally investing at least 80% of their assets in U.S. Treasury securities.

**Growth** (Objective) Funds that pursue capital appreciation by investing primarily in equity securities. Current income, if considered at all, is a secondary concern.

**Growth and Income** (Objective) Growth of capital and current income are near-equal objectives for these funds. Investments are typically selected for both appreciation potential and dividend-paying ability.

**Guaranteed Certificate Fund** All money deposited into a certificate during a "deposit period" earns a guaranteed rate of return, credited daily until maturity. Backed by the general assets of the certificate issuer.

**High-Yield Bond Category** A fund with at least 65% or more of bond assets in bonds rated below BBB.

**Index Fund** A fund that tracks a particular index and attempts to match returns. While an index typically has a much larger portfolio than a mutual fund, the fund's management may study the index's movements to develop a representative sampling, and match sectors proportionately.

**Individual Retirement Account (IRA)** A personal retirement plan. Taxes on earnings are deferred until money from the account is withdrawn.

**Industrial Cyclical Sector** Includes aerospace and aerospace industries, building supplies, industrial-building products, business equipment, chemicals, machinery (both light and industrial), metals fabrication (iron, steel, coal, and rare metals), paper and packaging, and photo equipment. Some examples of companies in this sector include Boeing, Canon, Caterpillar, Eastman Kodak, Georgia Pacific, Potash, and Sherwin-Williams.

**Information Ratio** The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.

**Institutional Fund** Any fund that meets one of the following qualifications:

a) has the word "institutional" in its name.

b) has a minimum initial purchase of \$100,000 or more.

c) states in its prospectus that it is designed for institutional investors or those purchasing on a fiduciary basis.

**International Equity Funds** with 40% or more of their equity holdings in foreign stocks (on average over three years) are placed in the international equity class. These categories include Europe, Japan, International Hybrid, Latin America, Diversified Pacific, Pacific ex. Japan, Specialty Precious Metals, Diversified Emerging Markets, World Stock, and Foreign Stock. Foreign investments involve special risks, including currency fluctuations and political developments.

**Lehman Brothers 1-3 Year Government Bond** Comprised of both the Treasury Bond index (all public obligations of the U.S. Treasury, excluding flower bonds and foreign-targeted issues) and the Agency Bond Index (all publicly issued debt of U.S. Government agencies and quasi-federal corporations and corporate-debt guaranteed by the U.S. Government). These bonds also must have maturities of one to three years. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Aggregate Index** Composed of the Lehman Brothers Govt/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Credit** Listed for corporate bond-general and high-quality funds. This index tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC-registered, investment-grade corporate debt. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Government Bond Index** Listed for government-bond general and Treasury funds. Because it tracks the returns of U.S. Treasuries, agency bonds, and one- to three-year U.S. government obligations, this index is effective for tracking portfolios holding non-mortgage government securities. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Govt/Credit** Represents a combination of the Government and Corporate Bond indices. The returns published for the index are total returns, which include reinvestment of dividends. For more information, view the Lehman Brothers Web site or call 212-526-1000.

## Glossary

**Lehman Brothers Intermediate Government Index** Includes those indexes found in the LB Government Index which have a maturity of one to three years. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Intermediate Government/Corporate Index** Includes both corporate (publicly-issued, fixed-rate, nonconvertible, investment grade, dollar-denominated, SEC-registered, corporate dept.) and government (Treasury Bond index, Agency Bond index, 1-3 Year Government index, and the 20+-Year treasury) indexes, including bonds with maturities up to ten years. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Intermediate Treasury** This index includes treasury bonds with maturates of at least one year and up to 10 years with an outstanding par value of at least 100 million. They include fixed-rate debt issues, rated investment grade or higher by Moody's Investor Services, Standard & Poor's Corporation, or Fitch Investor's Service (in that order). Treasuries include all public obligations of the U.S. Treasury, excluding flower bonds and foreign-targeted issues. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Long Credit** Serves as a measure of all public-issued nonconvertible investment-grade corporate debts that have a maturity of 10 years or more. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Long Term Government Index** Includes those indexes found in the LB Government index which have a maturity of 10 years or more. The returns published for the index are total returns, which include reinvestment of dividends.

**Lehman Brothers Mortgage-Backed Securities** Includes 15- and 30-year fixed-rate securities backed by mortgage pools of the Government National Mortgage Association (GNMA). The returns published for the index are total returns, which include reinvestment of dividends.

**Life Cycle** These funds are geared toward investors of a certain age or with a specific time horizon for investing. Typically they are grouped together in sets (i.e. conservative, moderate, and aggressive portfolios).

**Linear Scale** Linear graphs are scaled so that equal vertical distances represent the same absolute dollar value change. A drop from \$10,000 to \$9,000, for example, is represented in the same way as a drop from \$100,000 to \$99,000.

**Logarithmic Scale** Used for graphs, a scale that reveals percentage changes. A given percentage move takes up the same amount of space as another move of equal percentage. A change from 100 to 200, for example, is presented in the same way as a change from 1000 to 2000.

**Maturity** Short-term bonds mature (or come due) in less than four years. Intermediate-term bonds mature in four to ten years. Long-term bonds mature more than ten years from the date of purchase. The longer the term, the higher the risk and the rate of potential return.

**Management Fees** The management fee is the percentage deducted from fund assets to pay an advisor or subadvisor. Often, as the fund's net assets grow, the percentage deducted for management fees decreases. For example, a particular fund may report a management fee of 0.40% on the first \$500 million in assets, 0.35% on all assets between \$500 million and \$1 billion, and 0.30% on assets in excess of \$1 billion. Thus, if the fund contains \$1.5 billion in total net assets, the advisor scales back its management fees accordingly. Alternatively, the fund may compute the fee as a flat percentage of average net assets. The management fee might also come in the form of a group fee (G), a performance fee (P), or a gross income fee (I). Note: The management fee is just one (albeit a major) component of a fund's costs. The overall expense ratio is the most useful number for investors. Actual fees are also noted in this section.

**Market-Neutral Funds** These are funds that attempt to eliminate the risks of the market by holding 50% of assets in long positions in stocks and 50% of assets in short positions. Funds in this group match the characteristics of their long and short portfolios, keeping factors such as price-to-earnings and industry exposure similar. Stock picking, rather than broad market moves, should drive a market-neutral fund's performance.

**Median Market Capitalization** The median market capitalization of a fund's equity portfolio gives you a measure of the size of the companies in which the fund invests. It is the trimmed mean of the market capitalizations of the stocks in the fund's portfolio.

**Modern Portfolio Theory (MPT) Statistics** Alpha, beta, and R-squared are modern-portfolio-theory measures of a fund's relative risk, based on least-squares regression of a fund's excess returns on the excess returns of a market index. Standard deviation is not considered an MPT statistic because it is not generated through the same formula or mathematical analysis as the other three statistics.

**Money market funds** Best described as short-term versions of bonds. These relatively low-risk variable funds hold very short-term securities such as U.S. government securities, certificates of deposit, cash and cash equivalents. Investments in Money Market funds are neither insured nor guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although they seek to preserve the value of your investment at \$1 per share, it is possible to lose money in Money Market funds.

## Glossary

**Morley Stable Value Index** A hypothetical portfolio comprised of a weighted blend of 50% five-year stable value contracts, 30% three-year stable value contracts and 20% 30-day prime commercial paper. The five-year component consists of 60 hypothetical five-year stable value contracts, one purchased at the prior month end's illustrative rate at the beginning of each month for the prior 60 months. The three-year component consists of 36 hypothetical three-year stable value contracts, one purchased at the prior month end's illustrative rate at the beginning of each month for the prior 36 months.

**Morningstar** was founded in 1984 to provide investors with useful information for making intelligent, informed investment decisions. The company's first product, originally named the Mutual Fund Sourcebook, proved to be innovative in its ability to tap into an underserved market. Soon a demand grew for an even more in-depth and analytical publication, leading to the launch of Morningstar Mutual Funds in late 1986.

**Morningstar Category** identifies funds based on their actual investment styles as measured by their underlying portfolio holdings (portfolio statistics and compositions over the past three years). If the fund is new and has no portfolio, we estimate where it will fall before assigning a more permanent category. When necessary, we may change a category assignment based on current information.

**MSCI EAFE Ndrtr\_D** Listed for foreign stock funds (EAFE refers to Europe, Australasia, and Far East). Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world. Ndrtr\_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndrtr\_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty. The returns published for the index are total returns, which include reinvestment of dividends.

**MSCI Europe Ndrtr\_D** Listed for Europe stock funds. This index measures the performance of stock markets in Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, Ireland, Portugal, and the United Kingdom. Total returns date back to December 1981. Ndrtr\_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndrtr\_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty.

**MSCI Pacific Ndrtr\_D** Formerly known as MS Pacific, this index is listed for Pacific stock funds and measures the performance of stock markets in Australia, Hong Kong, Japan, New Zealand, and Singapore, and Malaysia. Ndrtr\_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndrtr\_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty. The returns we publish for the index are total returns, which include reinvestment of dividends.

**MSCI World Ndrtr\_D** Includes all 23 MSCI developed market countries. Ndrtr\_D indexes are calculated daily and take into account actual dividends reinvested daily before withholding taxes, but exclude special tax credits declared by companies. In addition, Ndrtr\_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty.

**Mutual fund** An investment option that pools money from many shareholders and invests it in a group of stocks, bonds, or other securities. Also known as an open-end investment management company, mutual funds are securities required to be registered with the SEC.

**NASD** (National Association of Securities Dealers) A self-regulatory organization for the securities industry with jurisdiction over certain broker-dealers. The NASD enforces broker-dealers' compliance with securities regulations, including the requirement that they maintain sufficient levels of net operating capital. It also conducts market surveillance of the over-the-counter (OTC) securities market.

**NAV** Stands for net asset value, which is the fund's share price. Funds compute this value by dividing the total net assets by the total number of shares.

**NASDAQ Composite Index** Measures the performance of all issues listed in the NASDAQ Stock Market, except for rights, warrants, units, and convertible debentures.

**Net Assets** The month-end net assets of the mutual fund, recorded in millions of dollars. Net-asset figures are useful in gauging a fund's size, agility, and popularity. They help determine whether a small company fund, for example, can remain in its investment-objective category if its asset base reaches an ungainly size.

**Ndrtr\_D:** Noted for various Morgan Stanley indexes, Ndrtr\_D indicates that the index is listed in US dollars, with net dividends reinvested. Ndrtr\_D indexes take into account actual dividends before withholding taxes, but excludes special tax credits declared by companies. In addition, Ndrtr\_D indexes subtract withholding taxes retained at the source, for foreigners who do not benefit from a double taxation treaty.

**NYSE** (New York Stock Exchange Composite) Serves as a comprehensive measure of the market trend for the benefit of investors who are concerned with general stock market price movements. The index is a composite of all common stocks listed on the NYSE and four sub-groups--Industrial, Transportation, Utility, and Finance.

**Options/Futures/Warrants** Options and futures may be used speculatively, to leverage a portfolio, or cautiously, as a hedge against risk.

## Glossary

**OTC** (over the counter) A name for a security that is not listed on an exchange. The OTC is the major trading market for all US bonds, as well as many small- and large-capitalization stocks. Whereas non-OTC stocks trade on the floor of actual stock exchanges, OTC issues are traded via telephone and computer networks connecting dealers in stocks and bonds. The dealer may or may not be a member of a securities exchange, but he or she must be a member of the NASD.

**Price/Book Ratio** The weighted average of the price/book ratios of all the stocks in a fund's portfolio. The P/B ratio of a company is calculated by dividing the market price of its stock by the company's per-share book value. Stocks with negative book values are excluded from this calculation. In theory, a high P/B ratio indicates that the price of the stock exceeds the actual worth of the company's assets, while a low P/B ratio indicates that the stock is a bargain.

**Price/Earnings Ratio** The weighted average of the price/earnings ratios of the stocks in a fund's portfolio. The P/E ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. In computing the average, Morningstar weights each portfolio holding by the percentage of equity assets it represents, so that larger positions have proportionately greater influence on the fund's final P/E.

**Price/Cash Flow** This represents the weighted average of the price/cash-flow ratios of the stocks in a fund's portfolio. Price/cash-flow represents the amount an investor is willing to pay for a dollar generated from a particular company's operations. Price/cash-flow shows the ability of a business to generate cash and acts as a gauge of liquidity and solvency. Because accounting conventions differ among nations, reported earnings (and P/E ratios) may not be comparable across national boundaries. Price/cash-flow attempts to provide an internationally-standard measure of a firm's stock price relative to its financial performance.

**Prospectus** A fund's formal written statement, generally issued on an annual basis. In this statement the fund sets forth its proposed purposes and goals, and other facts (e.g.: history and investment objective) that an investor should know in order to make an informed decision.

**Prospectus Objective** Indicates a particular fund's investment goals, based on the wording in a fund's prospectus.

**R-Squared** Reflects the percentage of a fund's movements that can be explained by movements in its benchmark index. An R-squared of 100 indicates that all movements of a fund can be explained by movements in the index. Thus, index funds that invest only in S&P 500 stocks will have an R-squared very close to 100. Conversely, a low R-squared indicates that very few of the fund's movements can be explained by movements in its benchmark index. An R-squared measure of 35, for example, means that only 35% of the fund's movements can be explained by movements in the benchmark index.

**Regression** A mathematical tool used to study the way that two sets of numbers interact with each other. Regression measures how much of one number's changes might be caused by or linked to how much another number changes.

**Returns Based Style Analysis** In 1988, William F. Sharpe, Nobel Laureate and Professor of Finance at Stanford University, wrote an article for the Investment Analyst Review entitled "Determining a Fund's Effective Asset Mix". In this article, he demonstrated that a manager's style could be determined by analyzing portfolio returns, as opposed to holdings. This was done mathematically by comparing the manager's returns to the returns of a number of style indexes. This discovery revolutionized style and performance analysis and provided the basis for the StyleADVISOR suite of software.

Since its debut in 1993, StyleADVISOR has been the style analysis package of choice for the large institutional marketplace. Our client list has grown to include over 250 plan sponsors, consultants, and money managers. They use StyleADVISOR to determine, for themselves, using only monthly or quarterly returns, the style and consistency of managers and funds. They create custom style benchmarks, do performance, risk-return, upside downside market capture analyses, manager to peer universe comparisons, asset allocation, and much more. StyleADVISOR also enables them to perform manager searches, create custom universes, evaluate competitors, and monitor aggregate portfolios.

**Risk** Basically there are four types of risk: 1) inflation risk means your money may not earn enough in the long run because as prices go up the value of your money goes down; 2) market risk means you could lose money because the price of a stock may go down; 3) credit risk means a company or organization that borrowed your money may not be able to pay it back; and 4) interest rate risk means you could lose money because as interest rates go up the value of bond investments goes down.

**Risk-Free Rate of Return** Three-month T-bills are government-backed short-term investments considered to be risk-free and as good as cash because the maturity is only three months.

**Risk/Return Graph** The Manager Risk/Return Graph displays the risk/return characteristics of a manager and compares them to a benchmark, universe or other managers. It plots Return on the vertical axis and a Risk Statistic on the horizontal axis.

The chart has crosshairs that provide a basis for comparison by dividing the graph into four quadrants. The crosshairs are centered at either the Market Benchmark, the Style Benchmark or the median of the Universe, depending on the options you select. A relatively aggressive manager, for example, is likely to fall in the Northeast corner relative to the crosshairs centered at the universe median, with both more risk and more return.

## Glossary

**Russell 1000** Consists of the 1000 largest companies within the Russell 3000 index. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The returns published for the index are total returns, which include reinvestment of dividends.

**Russell 1000 Growth** Market-capitalization weighted index of those firms in the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable US equity market.

**Russell 1000 Value** Market-capitalization weighted index of those firms in the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The Russell 1000 includes the largest 1000 firms in the Russell 3000, which represents approximately 98% of the investable US equity market.

**Russell 2000** Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization. The returns published for the index are total returns, which include reinvestment of dividends.

**Russell 2000 Growth** Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having higher price-to-book ratios and higher forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations. The Russell 3000 Index represents 98% of the of the investable US equity market.

**Russell 2000 Value** Market-weighted total return index that measures the performance of companies within the Russell 2000 Index having lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Index includes the 2000 firms from the Russell 3000 Index with the smallest market capitalizations. The Russell 3000 Index represents 98% of the of the investable US equity market.

**Russell 3000** Composed of the 3000 largest U.S. companies by market capitalization, representing approximately 98% of the U.S. equity market. The returns published for the index are total returns, which include reinvestment of dividends.

**S&P 500/BARRA Growth Index** A subset of the Standard & Poor's 500 Index®. Each year, all the stocks in the S&P 500® are classified as either growth or value. The stocks classified as growth make up the S&P 500/BARRA Growth Index. In general, growth companies tend to have high price-to-earnings (P/E) ratios, low dividend yields, and above-average earnings growth rates.

**S&P 500/BARRA Value Index** A subset of the Standard & Poor's 500 Index®. Each year, all the stocks in the S&P 500® are classified as either growth or value. The stocks classified as value make up the S&P 500/BARRA Value Index. In general, value companies tend to have low P/E ratios, high dividend yields, and below-average earnings growth rates.

**S&P 400 MidCap Index** The S&P 400 MidCap Index consists of 400 U.S. companies that have market capitalization from \$1 billion to \$5 billion. The index includes approximately 312 industrial companies, 10 transportation companies, 41 utilities, and 37 financial companies.

**S&P 500 Index®** Standard & Poor's 500 Index® is a benchmark for the United States stock market. It's a list of the 500 largest publicly traded companies, which include 400 industrial companies, 20 transportation companies, 40 utilities, and 40 financial companies.

**S&P Small Cap 600 Index** The Standard & Poor's SmallCap 600 Index consists of 600 U.S. companies that have market capitalization less than \$1 billion. The index includes approximately 499 industrial companies, 18 transportation companies, 27 utilities, and 56 financial companies. Equity securities of companies with small market capitalization may be more volatile than securities of larger, more established companies.

**SEC Yield** A calculation based on a 30-day period ending on the last of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period.

**Share Classes** Shares of the same fund that offer different shareholder rights and obligations, such as different fee and load charges. Common share classes are A (front-end load), B (deferred fees), C (no sales charge and a relatively high annual 12b-1 fee, such as 1.00%). Multi-class funds hold the same investment portfolio for all classes, and differ only in their surrounding fee structure.

**Sharpe Ratio** A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated for the past 36-month period by dividing a fund's annualized excess returns by its annualized standard deviation.

## Glossary

**Socially Conscious** Any fund that invests according to non-economic guidelines. Such funds may make investments based on such issues as environmental responsibility, human rights, or religious views. A socially conscious fund may take a pro-active stance by selectively investing in, for example, environmentally-friendly companies, or firms with good employee relations. This group also includes funds that avoid investing in companies involved in promoting alcohol, tobacco, or gambling, or in the defense industry.

**Standard Deviation** A statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given fund. When a fund has a high standard deviation, the predicted range of performance is wide, implying greater volatility.

**Stocks** Ownership in a company. Stocks are sold by the company and then bought/sold among investors. Risks involved include the company not performing up to expectations or that the price of your stock will fall.

**Style Benchmark** The concept of the style benchmark was first introduced by Nobel Laureate William F. Sharpe in 1988 and referred to as the "Effective Asset Mix". A quadratic optimizer is used to find a combination of the selected indices that would best track (have the highest correlation to) a given return series. For example, if a domestic equity manager optimization found that a weighted composite of 20% Russell Large Value, 10% Russell Large Growth, 60% Russell Small Value, 5% Russell Small Growth, and 5% T-bills had a 92% R-squared to that manager's returns, it could be said that 92% of this manager's performance may be attributed to his "style". The remaining 8% is unexplained variance due to stock selection, etc.

**Tax-deferred earnings** You don't have to pay taxes on any earnings in your 401(k) until you withdraw your money. The money in a 401(k) can grow faster than with other types of savings plans, because the earnings you accumulate, if any, are also tax-deferred.

**Treynor Ratio** The Treynor Ratio is a measure of performance per unit of market risk. It is the portfolio's excess return over the risk-free rate divided by the portfolio's beta to the selected benchmark. Also known as the Reward to Volatility Ratio.

**Turnover Ratio** The turnover rate of a fund is a decent proxy for how frequently a manager trades his or her portfolio. The inverse of a fund's turnover ratio is the average holding period for a security in that fund. If a fund consistently showed a 20% turnover ratio, for example, it would suggest that--on average--that fund holds a security for five years before selling it. A fund with a 200% turnover ratio pretty much changes its portfolio wholesale every six months.

**Upside / Downside Market Capture Graph** StyleADVISOR's Upside / Downside Market Capture graph displays the percentage of benchmark movement captured by a manager in both up and down markets. The graph plots the manager's upside capture ratio (vertical axis) against the downside capture ratio (horizontal axis). The capture ratio is the manager's return divided by the benchmark's return, or the percentage of the benchmark's return that was "captured" by the manager. The Upside capture ratio is computed for periods when the market has a positive return. The Downside capture ratio is computed for periods when the market has a negative return.

**Variable funds** Investments that fluctuate with market conditions. Unlike guaranteed investments, such as bonds or CDs, variable funds don't guarantee a specific rate of return. They do offer potential for higher earnings in return for higher degree of market risk.

**Wilshire 4500** Listed for small-company funds, measures the performance of all U.S. common equity securities excluding the stocks in the S&P 500. The returns published for the index are total returns, which include reinvestment of dividends.

**Wilshire 5000** Measures the performance of all U.S. common equity securities, and so serves as an index of all stock trades in the United States. The returns published for the index are total returns, which include reinvestment of dividends.

**World Stock Category** An international fund having more than 10% of stocks invested in the US. Also known as global funds. Foreign Investments involve special risks, including currency fluctuations and political developments.

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