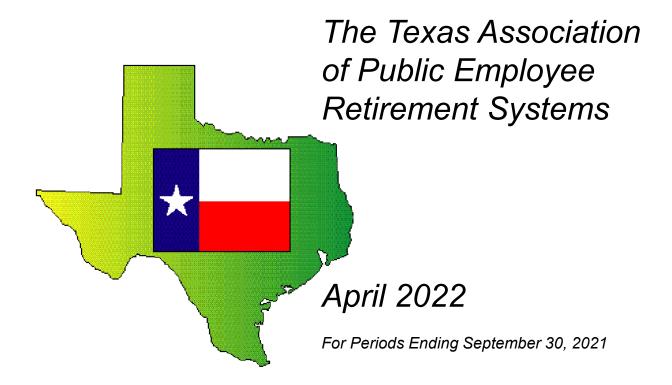




Austin, TX:

1504 San Antonio St., Austin, TX 78701 713-622-8018 Houston, TX:

13111 Northwest Freeway, Suite 100, Houston, TX 77040 713-622-8018



Key Findings



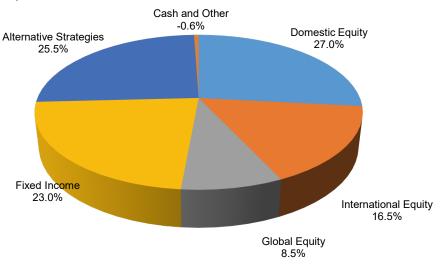
Forty participating members contributed data for the fiscal year 2021 Asset Allocation and Investment Performance of Texas Public Employee Retirement Systems, and represented approximately \$26.69 billion in total assets.

- Participating TEXPERS members' FY 2020 dollar-weighted asset allocation (for the fiscal year ending September 30, 2021) was: equities (domestic, international, and global), 52.02%; alternative strategies, 25.54%; fixed income, 23.00%; and short-term securities/cash/other, -0.56%.
- In terms of relative performance, TEXPERS members have on a weighted average basis outperformed the current average actuarial target of 7.3% over the 1, 3, 5, 10, and 20 year time horizons. The group's weighted average performance has also outperformed a global 60/40 benchmark over all time horizons (1, 3, 5, 10, 15, and 20 years).



Weighted Average TEXPERS Asset Allocation

Figure 1
Market Value \$26.69 Billion
As of September 30, 2021



The asset allocation demonstrates that, in aggregate, the respondents have a level of diversification within the norm for public pension systems.

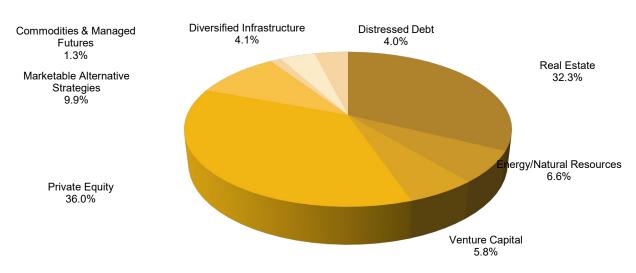
3

^{*} Dollar-weighted means that individual responses are weighted according to size of the asset base when calculating the average results – meaning that responses from large participants have a greater impact on average results than those of smaller participants.



Weighted Average TEXPERS Allocation to Alternatives

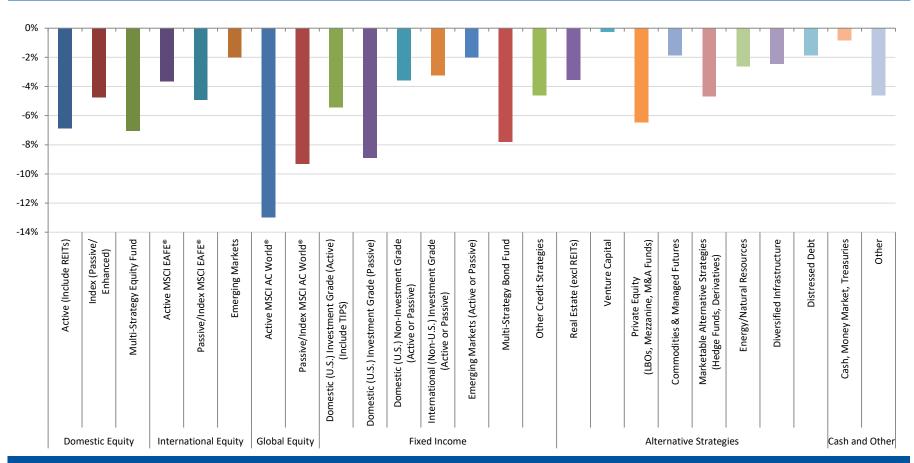
Figure 2
Alternative Strategies Breakout



^{*} Marketable Alternative Strategies include Hedge Funds, Absolute Return, Market Neutral, Long/Short, 130/30 Strategy, Event Driven and Derivatives

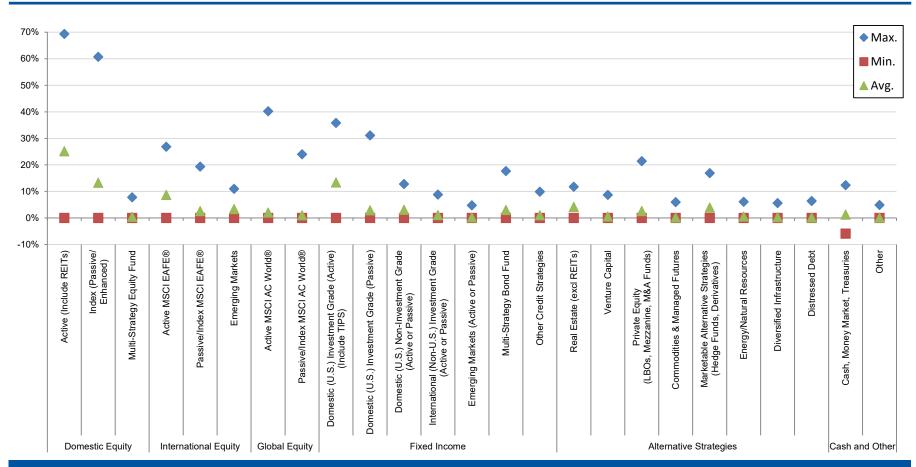
Variance of Average Asset Allocation: 2022 vs 2021





Allocation Dispersion



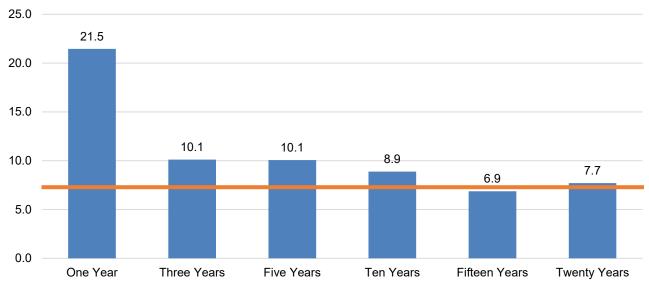




Investment Performance

Trailing Period Returns - Chart *Figure 3*

Returns vs. Average Actuarial Assumption* For periods ending September 30, 2021

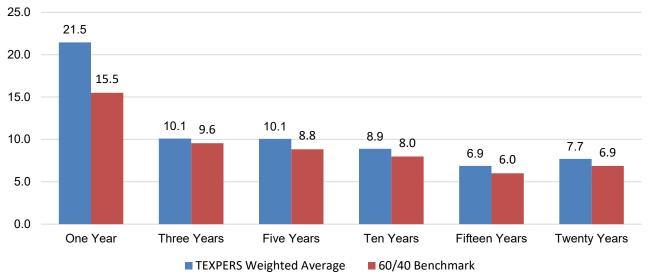


^{*} This year's actuarial assumption of 7.3% is the average of what was reported among participating TEXPERS members.



Investment Performance

Annualized Returns for the Periods Ending 9/30/2021	One Year	Three Years	Five Years	Ten Years	Fifteen Years	Twenty Years
TEXPERS Weighted Average	21.5	10.1	10.1	8.9	6.9	7.7
60/40 Benchmark	15.5	9.6	8.8	8.0	6.0	6.9

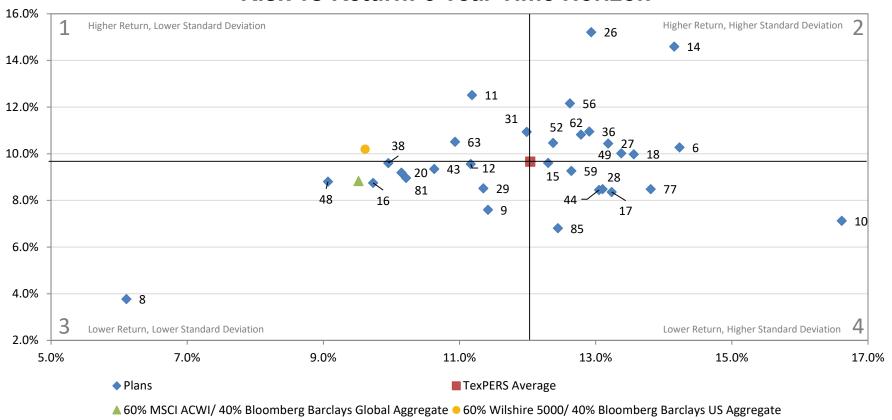


^{* 60%} MSCI ACWI / 40% Bloomberg Barclays Global Aggregate

Quadrants by TEXPERS Average

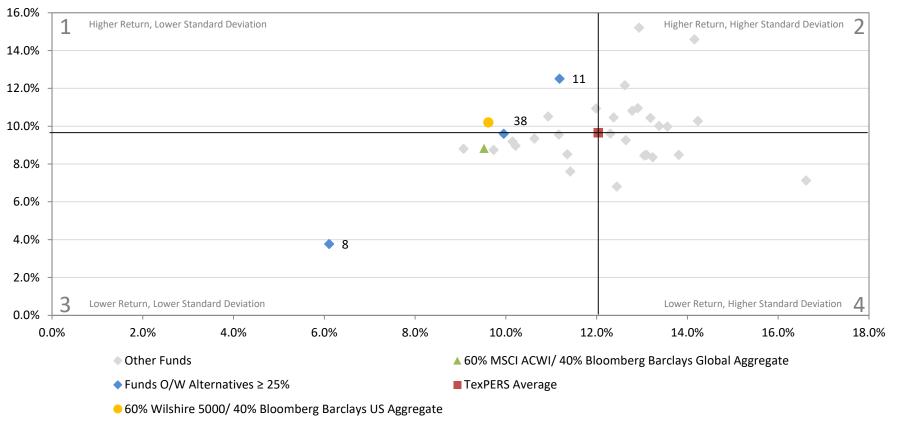


Risk vs Return: 5 Year Time Horizon



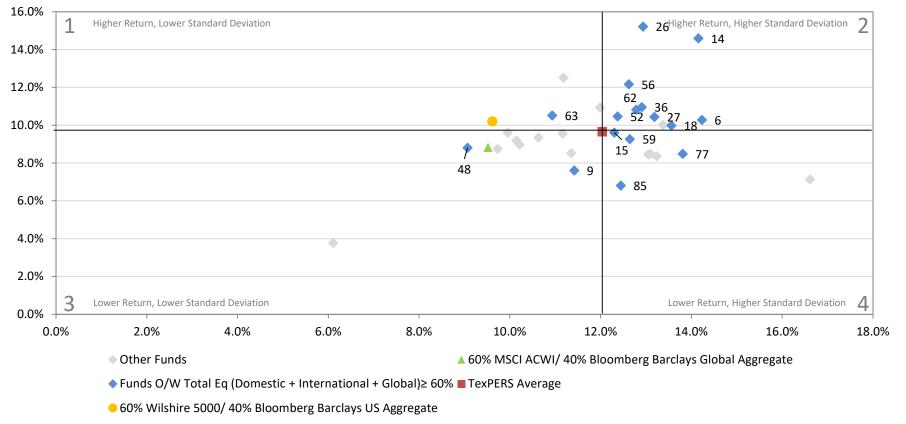


Risk vs Return: 5 Year Time Horizon



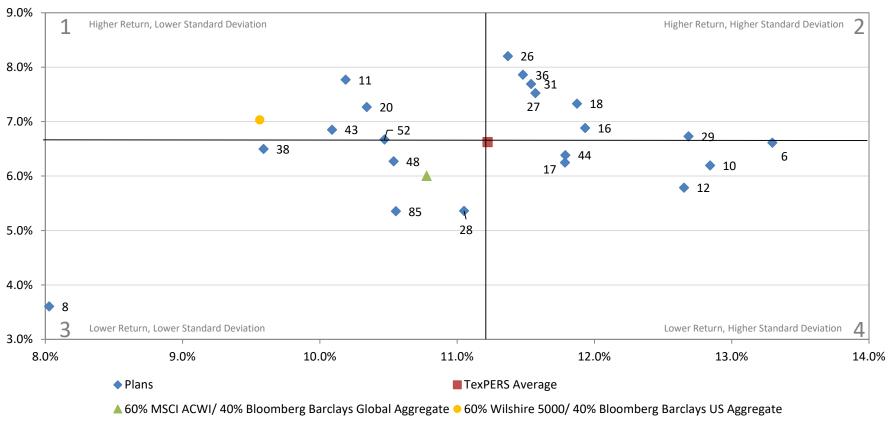


Risk vs Return: 5 Year Time Horizon



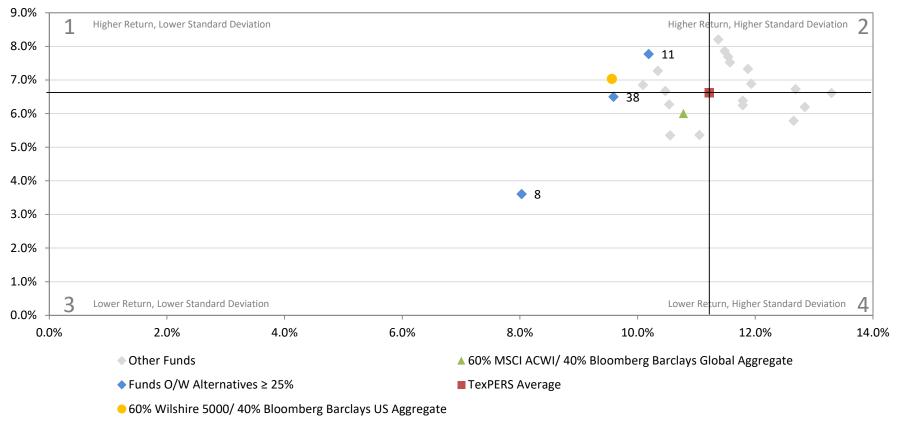


Risk vs Return: 15 Year Time Horizon



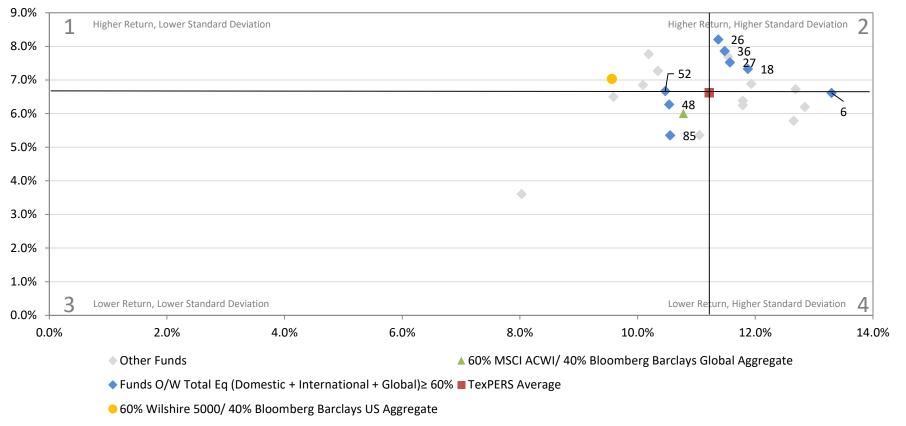


Risk vs Return: 15 Year Time Horizon





Risk vs Return: 15 Year Time Horizon





Average Asset Allocation Comparison

Asset	5 Year Quadrant							
	1	2	3	4				
Domestic Equity	32.31%	49.04%	35.27%	43.02%				
International Equity	11.45%	17.54%	13.97%	16.15%				
Global Equity	13.40%	0.00%	6.37%	0.35%				
Fixed Income	22.56%	24.73%	30.00%	26.98%				
Alternative Strategies	21.90%	7.63%	12.65%	10.58%				
Cash and Other	-1.62%	1.06%	1.73%	2.92%				

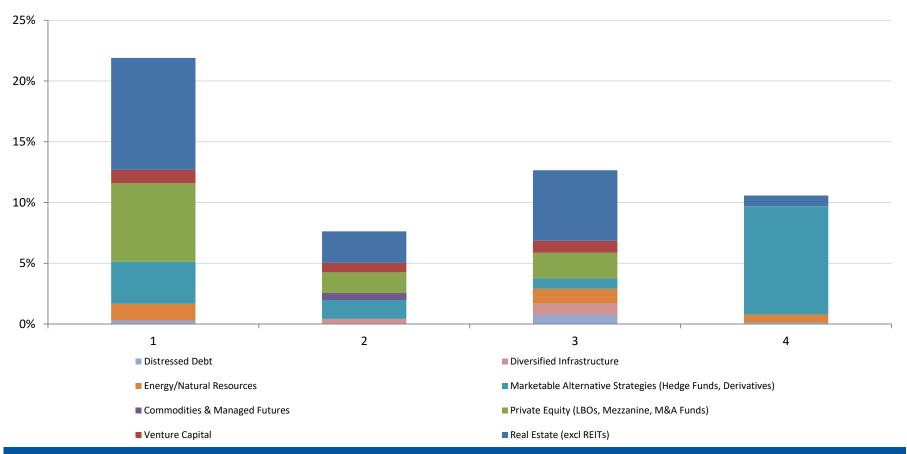


Detailed Average Asset Allocation Comparison

Asset		5 Year			
	1	2	3	4	
Domestic Equity	32.31%	49.04%	35.27%	43.02%	
International Equity	11.45%	17.54%	13.97%	16.15%	
Global Equity	13.40%	0.00%	6.37%	0.35%	
Fixed Income	22.56%	24.73%	30.00%	26.98%	
Alternative Strategies	21.90%	7.63%	12.65%	10.58%	
Real Estate (excl REITs)	9.21%	2.60%	5.80%	0.88%	
Venture Capital	1.10%	0.77%	0.97%	0.00%	
Private Equity (LBOs, Mezzanine, M&A Funds)	6.46%	1.71%	2.11%	0.01%	
Commodities & Managed Futures	0.00%	0.55%	0.00%	0.00%	
Marketable Alternative Strategies (Hedge Funds, Derivatives)	3.45%	1.57%	0.87%	8.90%	
Energy/Natural Resources	1.38%	0.00%	1.23%	0.66%	
Diversified Infrastructure	0.00%	0.43%	0.94%	0.00%	
Distressed Debt	0.30%	0.00%	0.74%	0.13%	
Cash and Other	<u>-1.62</u> %	1.06%	1.73%	2.92%	

Comparison of Quadrants using Allocation to Alternatives

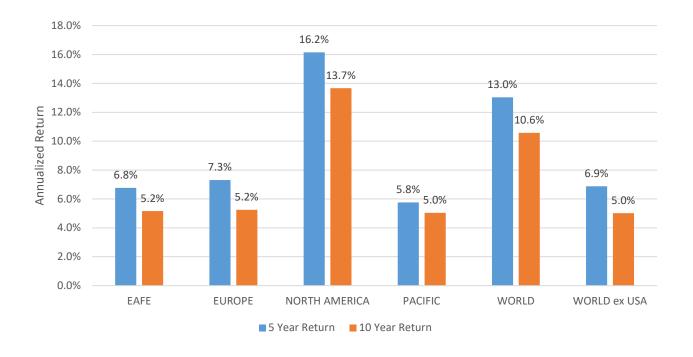




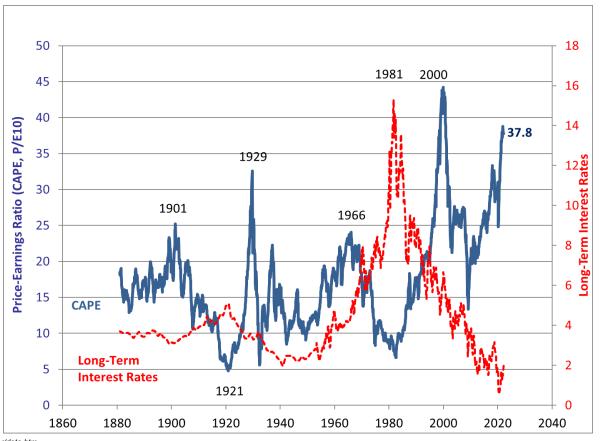
Comparison of Historical Regional Equity Performance



The below chart shows the relative performance of the various broad MSCI regional indices for the past 5 and 10 years, as of 12/31/2021. US centric strategies will have benefitted significantly from this regional overperformance.





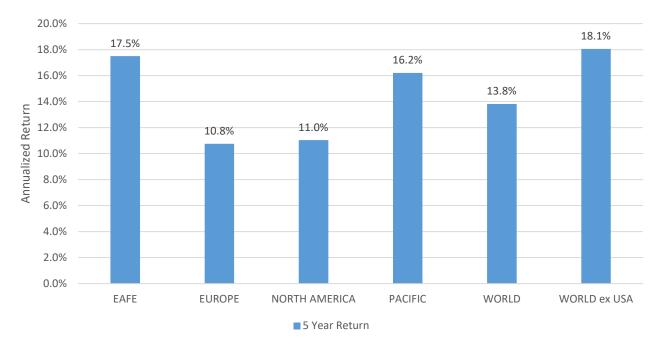


Source: http://www.econ.yale.edu/~shiller/data.htm

US Outperformance Has Historically Been Cyclical



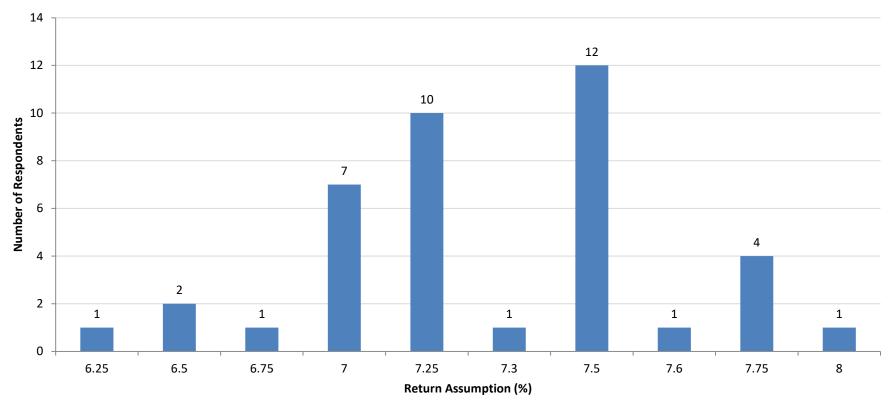
The below chart shows the relative performance of the various broad MSCI regional indices for the 5 year period ending 01/31/2008. US centric outperformance has historically been cyclical, and when it does underperform it can be significant.



Appendix – Dispersion of Actuarial Investment Return Assumptions

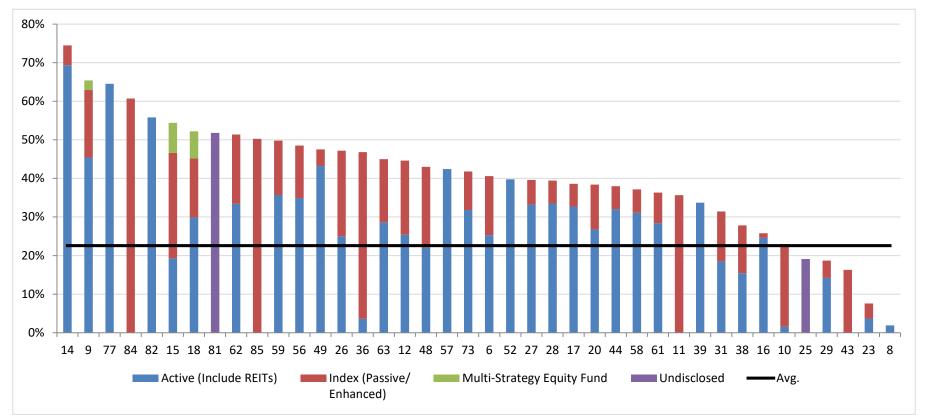






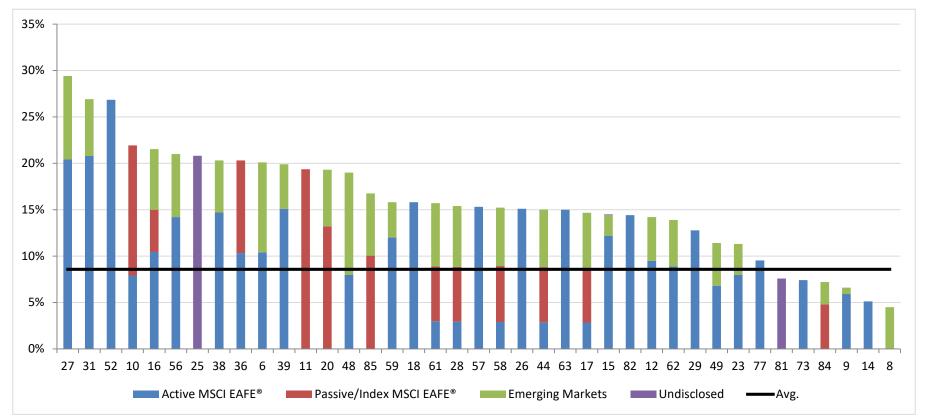


Domestic Equity



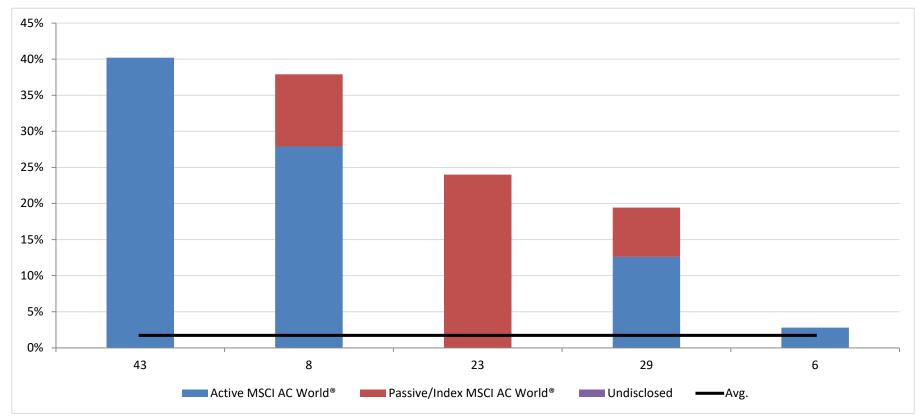


International Equity



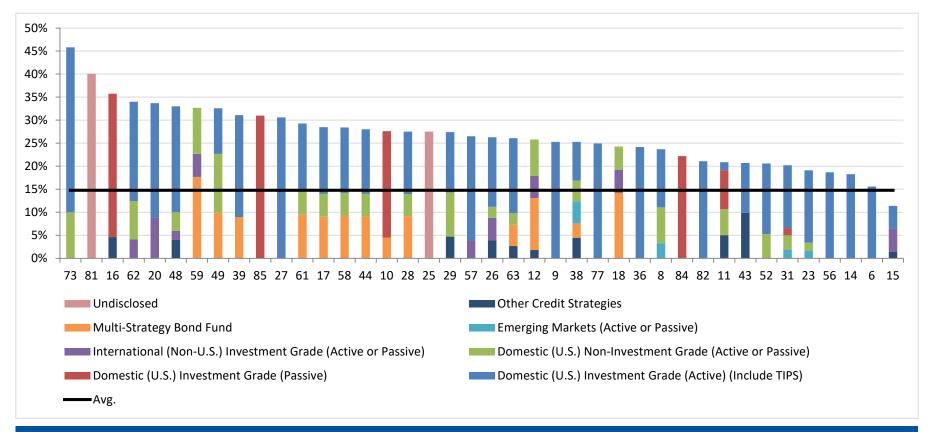


Global Equity



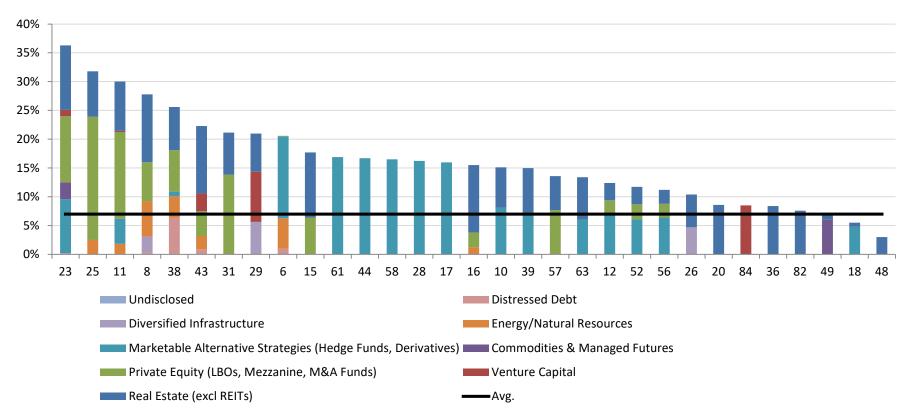


Fixed Income

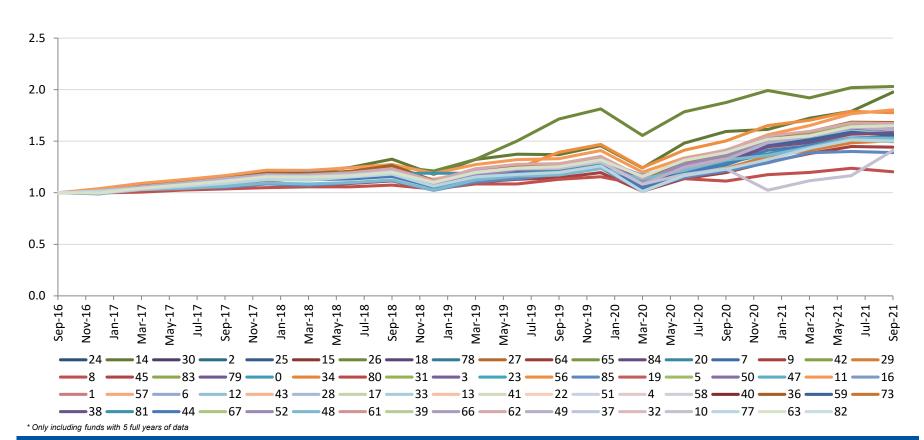




Alternative Strategies

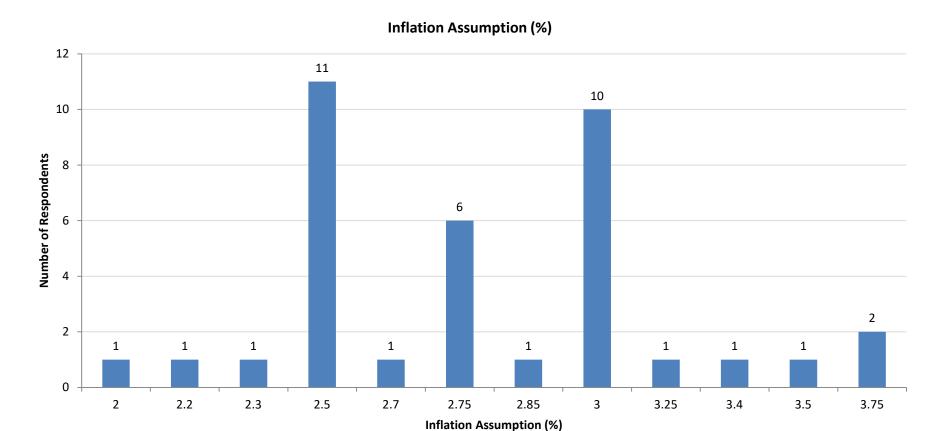






Appendix – Dispersion of Inflation Assumptions







Number of survey participants by AUM

