

The background of the slide is a dense, chaotic pattern of thin, overlapping lines in various colors including red, blue, yellow, green, purple, and black. The lines are drawn in a way that creates a sense of depth and complexity, resembling a tangled web or a complex network.

Illusion of Randomness

Illusion of Randomness In Asset Class Returns

The following analysis shows the “Periodic Table of Returns.” The Periodic Table of Returns was originally developed by Callan and Associates to show the randomness of annual returns for a number of asset classes including stocks of various style and size factors and bonds of various quality and maturity horizons. The progression of time horizons of the tables reveals that, although returns are random at 1 year, as the rolling horizons extend, the order in which the asset classes fall is not random.* The subsequent tables show these 18 asset classes:

1. US Large Cap Stocks (Value, Core, Growth)
2. US Mid Cap Stocks (Value, Core, Growth)
3. US Small Cap Stocks (Value, Core, Growth)
4. Standard and Poor’s 500 Index®
5. International Developed Country Stocks
6. Emerging Markets Country Stocks
7. Real Estate Investment Trusts (REITs)
8. Commodities
9. Treasury Bills (t-bills)
10. 5-year Government Bonds
11. Long-Term Government Bonds
12. Long-Term Corporate Bonds

* Asset Dedication’s research suggests that at 15 year rolling horizons and beyond, the order of the asset classes is not random.
See Data Disclosures. Past performance does not guarantee future results.

1-Year Compound Returns

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sm Val 63.9%	REIT 30.4%	Emrg Mkt 34.0%	REIT 34.0%	Emrg Mkt 39.4%	LT Gov 25.9%	Emrg Mkt 78.5%	Mid Grw 31.9%	LT Gov 28.2%	Lrge Val 30.8%	Mid Val 49.0%	REIT 27.2%	Lrge Grw 5.5%	Sm Val 36.6%	Emrg Mkt 37.3%	T-Bills 1.8%	Lrge Val 34.4%	Sm Grw 57.7%	Sm Val 42.3%	Cmdty 22.0%
Emrg Mkt 55.8%	Emrg Mkt 25.6%	Cmdty 24.9%	Emrg Mkt 32.1%	Cmdty 22.1%	5-Yr Gov 13.1%	Mid Grw 42.9%	Sm Grw 29.6%	Corp 17.9%	Sm Val 19.8%	Sm Grw 45.2%	LT Gov 23.9%	REIT 2.1%	Lrge Val 26.9%	Lrge Grw 29.8%	5-Yr Gov 1.2%	Mid Grw 33.6%	Mid Grw 43.1%	REIT 39.9%	T-Bills 1.4%
Sm Grw 54.2%	Mid Core 22.8%	Mid Core 16.0%	Intl Mrkt 25.7%	Lrge Grw 12.9%	Corp 8.8%	Sm Grw 37.0%	Sm Core 29.3%	5-Yr Gov 9.5%	REIT 19.7%	Sm Val 41.6%	Corp 17.3%	5-Yr Gov 1.7%	Sm Core 23.4%	Mid Grw 26.9%	Lrge Grw 0.2%	Lrge Grw 33.3%	Lrge Grw 31.7%	Cmdty 38.5%	Lrge Val 0.8%
Sm Core 48.9%	Sm Core 20.7%	Intl Mrkt 14.5%	Lrge Val 25.4%	Intl Mrkt 12.4%	T-Bills 1.6%	Mid Core 37.0%	REIT 27.6%	REIT 7.3%	Mid Val 19.2%	Sm Core 41.1%	S&P 500 13.7%	S&P 500 1.4%	Mid Val 23.2%	Sm Grw 25.5%	LT Gov -0.6%	S&P 500 31.5%	S&P 500 18.4%	Lrge Val 34.9%	Mid Val -3.5%
Mid Val 47.8%	Intl Mrkt 20.4%	Mid Val 9.8%	Sm Val 24.5%	5-Yr Gov 10.1%	Sm Core -30.8%	Mid Val 34.9%	Sm Val 26.6%	Lrge Core 7.2%	Sm Core 18.5%	Mid Grw 37.9%	Lrge Grw 13.1%	Mid Grw 1.3%	Mid Core 22.3%	Intl Mrkt 24.2%	REIT -4.1%	Sm Grw 29.6%	Emrg Mkt 18.3%	Mid Val 34.2%	Sm Val -5.8%
Mid Core 41.8%	Sm Val 20.2%	Sm Val 8.9%	Lrge Core 21.0%	LT Gov 9.9%	Lrge Grw -32.6%	Intl Mrkt 33.7%	Mid Core 25.7%	Lrge Grw 4.4%	Emrg Mkt 18.2%	Lrge Val 37.4%	Lrge Val 12.1%	T-Bills 0.0%	Lrge Core 13.9%	S&P 500 21.8%	S&P 500 -4.4%	Lrge Core 28.6%	LT Gov 16.7%	Mid Core 29.7%	Lrge Core -8.1%
Intl Mrkt 39.4%	Mid Val 19.9%	Sm Core 8.6%	Sm Core 21.0%	Mid Grw 9.3%	Sm Val -32.9%	Sm Core 33.3%	Mid Val 20.7%	S&P 500 2.1%	Intl Mrkt 16.4%	Mid Core 36.3%	Mid Core 11.3%	LT Gov -0.1%	S&P 500 12.0%	Lrge Val 19.6%	Mid Grw -5.5%	REIT 28.1%	Corp 13.3%	S&P 500 28.7%	5-Yr Gov -9.4%
Mid Grw 39.2%	Cmdty 18.2%	REIT 8.3%	Mid Val 17.6%	Sm Grw 5.5%	Cmdty -35.0%	Lrge Grw 31.2%	Emrg Mkt 18.9%	Mid Grw 0.9%	Mid Grw 16.3%	Lrge Grw 33.8%	Lrge Core 11.1%	Lrge Core -0.4%	Emrg Mkt 11.2%	Mid Core 18.7%	Lrge Core -5.7%	Mid Core 28.1%	Sm Core 11.8%	Lrge Grw 28.0%	Mid Core -10.3%
REIT 38.5%	Sm Grw 15.5%	Lrge Val 8.0%	S&P 500 15.8%	S&P 500 5.5%	Mid Val -35.6%	Sm Val 31.1%	Lrge Core 18.8%	T-Bills 0.0%	S&P 500 16.0%	S&P 500 32.4%	Mid Grw 10.7%	Corp -1.0%	Mid Grw 10.1%	Mid Val 15.8%	Corp -6.8%	Sm Core 26.1%	Mid Core 8.8%	Sm Core 25.8%	Intl Mrkt -14.3%
Lrge Val 30.2%	Lrge Val 15.3%	Mid Grw 7.9%	Mid Grw 12.2%	T-Bills 4.7%	S&P 500 -37.0%	REIT 27.8%	Cmdty 17.6%	Mid Core -0.9%	Mid Core 15.2%	Lrge Core 31.3%	Mid Val 5.7%	Mid Core -1.1%	Cmdty 9.7%	Sm Core 13.2%	Sm Grw -7.6%	Mid Val 25.5%	Intl Mrkt 7.6%	Lrge Core 20.1%	Sm Core -16.7%
S&P 500 28.7%	Mid Grw 13.1%	LT Gov 7.8%	Mid Core 12.0%	Corp 2.6%	REIT -37.8%	S&P 500 26.5%	S&P 500 15.1%	Mid Val -4.7%	Sm Grw 15.0%	Intl Mrkt 21.0%	Sm Grw 5.3%	Sm Grw -3.0%	Lrge Grw 9.6%	Lrge Core 12.7%	Cmdty -10.7%	Corp 23.4%	5-Yr Gov 7.3%	Intl Mrkt 12.6%	S&P 500 -18.1%
Lrge Core 28.1%	Lrge Core 13.0%	Corp 5.9%	Lrge Grw 11.4%	Lrge Val 2.0%	Mid Grw -37.9%	Cmdty 23.7%	Lrge Grw 13.2%	Sm Core -4.9%	Lrge Grw 14.1%	REIT 2.3%	Sm Val 3.9%	Intl Mrkt -3.0%	REIT 9.4%	Corp 12.3%	Sm Core -10.8%	Intl Mrkt 22.5%	Sm Val 4.0%	Mid Grw 7.7%	Emrg Mkt -20.1%
Lrge Grw 28.0%	S&P 500 10.9%	Lrge Grw 5.4%	Sm Grw 8.9%	Mid Core 1.0%	Lrge Val -38.2%	Lrge Core 20.6%	Corp 12.4%	Sm Grw -5.6%	Lrge Core 12.5%	T-Bills 0.0%	Sm Core 3.8%	Sm Core -3.3%	Sm Grw 7.9%	Sm Val 9.5%	Mid Core -11.2%	Emrg Mkt 18.4%	Lrge Core 1.9%	Sm Grw 2.6%	Lrge Grw -22.5%
Cmdty 24.2%	Lrge Grw 9.1%	S&P 500 4.9%	T-Bills 4.8%	Lrge Core -0.6%	Sm Grw -40.2%	Lrge Val 10.6%	LT Gov 10.1%	Cmdty -8.2%	Corp 10.7%	5-Yr Gov -1.1%	5-Yr Gov 3.1%	Lrge Val -7.4%	Corp 6.7%	REIT 9.3%	Sm Val -12.7%	Sm Val 15.0%	T-Bills 0.5%	T-Bills 0.0%	REIT -25.1%
p %	Corp 8.7%	Lrge Core 4.4%	Corp 3.2%	Sm Core -2.5%	Mid Core -41.0%	Corp 3.0%	Intl Mrkt 8.9%	Sm Val -8.5%	LT Gov 3.3%	Emrg Mkt -2.6%	T-Bills 0.0%	Sm Val -9.7%	Intl Mrkt 2.7%	LT Gov 6.2%	Intl Mrkt -14.1%	LT Gov 12.2%	Mid Val -4.2%	Corp -1.2%	Mid Grw -25.1%
5-Yr Gov 2.4%	LT Gov 8.5%	T-Bills 3.0%	5-Yr Gov 3.1%	Mid Val -5.4%	Lrge Core -42.9%	T-Bills 0.1%	5-Yr Gov 7.1%	Intl Mrkt -12.2%	5-Yr Gov 2.1%	Cmdty -5.0%	Emrg Mkt -2.2%	Mid Val -9.8%	5-Yr Gov 1.9%	Cmdty 1.7%	Emrg Mkt -14.6%	Cmdty 11.8%	Lrge Val -5.3%	Emrg Mkt -2.5%	Corp -25.3%
LT Gov 1.4%	5-Yr Gov 2.3%	5-Yr Gov 1.4%	LT Gov 1.2%	Sm Val -11.1%	Intl Mrkt -43.6%	5-Yr Gov -2.4%	Lrge Val 1.6%	Lrge Val -15.1%	T-Bills 0.1%	Corp -7.1%	Intl Mrkt -4.3%	Emrg Mkt -14.9%	LT Gov 1.8%	5-Yr Gov 1.6%	Lrge Val -16.6%	5-Yr Gov 6.7%	REIT -5.9%	5-Yr Gov -3.4%	LT Gov -26.1%
T-Bills 1.0%	T-Bills 1.2%	Sm Grw 0.0%	Cmdty -2.9%	REIT -17.8%	Emrg Mkt -53.3%	LT Gov -14.9%	T-Bills 0.1%	Emrg Mkt -18.4%	Cmdty -3.3%	LT Gov -11.4%	Cmdty -17.9%	Cmdty -23.4%	T-Bills 0.2%	T-Bills 0.8%	Mid Val -17.7%	T-Bills 2.2%	Cmdty -9.3%	LT Gov -5.4%	Sm Grw -27.7%

5-Year Compound Returns

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sm Val 20.0%	REIT 22.5%	Sm Val 19.3%	Emrg Mkt 26.6%	Emrg Mkt 37.0%	LT Gov 10.4%	Emrg Mkt 15.5%	Emrg Mkt 12.8%	LT Gov 10.7%	Corp 10.5%	Mid Grw 25.0%	Mid Grw 18.7%	Lrge Grw 13.7%	Lrge Val 18.8%	Lrge Grw 17.8%	Lrge Grw 11.2%	Lrge Grw 14.9%	Sm Grw 20.7%	Lrge Grw 23.9%	Lrge Grw 11.8%
Cmdty 17.7%	Sm Val 22.5%	Emrg Mkt 19.1%	REIT 22.5%	Intl Mkt 22.1%	Emrg Mkt 7.7%	LT Gov 5.1%	Mid Grw 7.5%	Corp 8.8%	LT Gov 9.3%	Sm Grw 22.9%	Mid Core 16.8%	Mid Grw 12.6%	Sm Val 16.8%	Mid Core 16.8%	S&P 500 8.5%	Mid Grw 12.3%	Mid Grw 20.4%	Mid Grw 19.8%	S&P 500 9.4%
Sm Core 17.0%	Sm Core 16.6%	REIT 18.9%	Sm Val 19.4%	Sm Val 18.9%	5-Yr Gov 5.9%	5-Yr Gov 4.9%	Sm Core 7.1%	5-Yr Gov 7.3%	Mid Grw 6.5%	Mid Val 22.5%	Mid Val 16.6%	S&P 500 12.6%	Mid Core 16.1%	Lrge Val 16.7%	REIT 8.3%	S&P 500 11.7%	Lrge Grw 20.2%	Sm Grw 19.4%	Cmdty 8.9%
REIT 14.7%	Mid Core 15.8%	Sm Core 14.7%	Cmdty 18.9%	Sm Core 18.2%	Corp 5.8%	Corp 4.7%	5-Yr Gov 6.1%	Mid Grw 5.2%	Sm Core 6.1%	Sm Core 22.3%	Sm Grw 16.6%	Lrge Core 11.9%	Mid Val 15.8%	Mid Grw 16.7%	Mid Grw 8.2%	Mid Core 10.3%	S&P 500 15.2%	S&P 500 18.5%	Mid Grw 7.8%
Mid Val 12.0%	Cmdty 15.1%	Cmdty 13.9%	Sm Core 15.7%	Mid Core 18.0%	T-Bills 3.0%	Intl Mkt 4.1%	Corp 5.9%	Lrge Grw 3.4%	5-Yr Gov 5.7%	Mid Core 21.8%	Sm Core 16.4%	Mid Core 11.4%	Sm Core 15.7%	S&P 500 15.8%	Mid Core 7.3%	Lrge Val 9.5%	Emrg Mkt 12.8%	Mid Core 13.8%	Lrge Val 7.6%
Mid Core 11.5%	Mid Val 13.9%	Mid Core 13.2%	Intl Mkt 15.3%	Cmdty 16.8%	Cmdty 2.6%	Cmdty 3.5%	LT Gov 5.6%	Emrg Mkt 2.4%	REIT 5.4%	Sm Val 20.8%	REIT 16.4%	REIT 11.3%	Lrge Grw 14.8%	Mid Val 15.2%	Lrge Core 6.0%	Sm Grw 9.5%	Mid Core 12.4%	Sm Core 12.4%	Mid Core 7.6%
Emrg Mkt 10.4%	Corp 10.7%	Mid Val 10.8%	Mid Core 14.6%	Mid Val 16.7%	Intl Mkt 1.9%	Sm Core 3.4%	Lrge Grw 4.7%	Sm Core 2.0%	Sm Val 4.1%	Lrge Grw 18.8%	Lrge Core 15.9%	Mid Val 10.0%	S&P 500 14.7%	Sm Grw 15.0%	LT Gov 5.9%	Lrge Core 9.2%	Sm Core 11.9%	REIT 12.1%	Sm Grw 7.0%
Mid Grw 8.7%	LT Gov 10.3%	Corp 9.3%	Mid Val 13.2%	REIT 16.6%	Sm Core 1.4%	Mid Grw 3.3%	Sm Val 4.3%	T-Bills 1.3%	Lrge Grw 3.6%	S&P 500 17.9%	S&P 500 15.5%	Sm Grw 10.0%	Mid Grw 14.6%	Sm Val 14.7%	Lrge Val 5.6%	Sm Core 8.7%	Lrge Val 10.0%	Lrge Val 11.4%	Sm Val 7.0%
Corp 1.2%	5-Yr Gov 7.5%	LT Gov 7.7%	Lrge Core 9.5%	Mid Grw 15.8%	Lrge Val -0.3%	Lrge Grw 3.2%	Sm Grw 4.1%	Cmdty 1.2%	Mid Val 3.5%	Lrge Core 17.8%	Sm Val 15.4%	Sm Core 9.8%	Lrge Core 13.2%	Sm Core 14.6%	Corp 5.3%	REIT 8.4%	Lrge Core 9.7%	Lrge Core 10.8%	Lrge Core 6.4%
5-Yr Gov 6.6%	Lrge Core 6.2%	5-Yr Gov 5.2%	Mid Grw 8.4%	Lrge Val 15.7%	Lrge Grw -0.5%	T-Bills 2.8%	Mid Val 3.1%	Sm Grw 1.1%	Mid Core 3.0%	REIT 16.5%	Lrge Grw 15.3%	Lrge Val 9.6%	Sm Grw 13.0%	Lrge Core 13.3%	Sm Grw 5.0%	Corp 6.4%	Sm Val 9.3%	Sm Val 10.2%	Sm Core 5.7%
LT Gov 6.5%	Lrge Val 5.1%	Mid Grw 5.0%	Corp 7.8%	Sm Grw 15.4%	Sm Val -0.5%	Mid Val 1.2%	Intl Mkt 3.0%	Mid Core 0.3%	Sm Grw 2.9%	Emrg Mkt 14.8%	Lrge Val 11.7%	Sm Val 7.8%	REIT 11.7%	REIT 9.7%	Sm Core 4.6%	Sm Val 6.3%	Corp 9.3%	Emrg Mkt 9.9%	Mid Val 5.1%
Lrge Core 4.5%	Emrg Mkt 4.3%	Intl Mkt 4.9%	LT Gov 7.2%	Lrge Grw 13.1%	REIT -0.7%	Mid Core 1.2%	Mid Core 2.8%	S&P 500 -0.2%	S&P 500 1.7%	Intl Mkt 12.5%	LT Gov 9.9%	LT Gov 7.8%	Intl Mkt 6.1%	Intl Mkt 7.5%	Sm Val 4.1%	Mid Val 5.8%	Intl Mkt 7.6%	Intl Mkt 9.6%	REIT 3.9%
T-Bills 3.4%	Mid Grw 3.1%	Lrge Core 4.8%	S&P 500 6.2%	S&P 500 12.8%	Mid Core -1.0%	Sm Val 1.2%	Cmdty 2.3%	Mid Val -1.1%	T-Bills 0.4%	Lrge Val 11.4%	Corp 9.9%	Corp 7.1%	Corp 5.0%	Corp 5.3%	Mid Val 2.3%	Emrg Mkt 5.6%	Mid Val 7.1%	Mid Val 9.0%	Intl Mkt 1.8%
Sm Grw 3.2%	T-Bills 2.7%	Sm Grw 4.1%	Sm Grw 5.7%	Lrge Core 12.7%	Mid Val -1.1%	S&P 500 0.4%	S&P 500 2.3%	Sm Val -1.9%	Lrge Core -0.3%	Corp 7.0%	Intl Mkt 5.2%	5-Yr Gov 3.0%	LT Gov 2.9%	Emrg Mkt 4.3%	5-Yr Gov 1.9%	Intl Mkt 5.4%	LT Gov 7.1%	Corp 7.7%	T-Bills 1.2%
Lrge Val 0.9%	Intl Mkt -0.8%	Lrge Val 2.4%	Lrge Val 5.5%	LT Gov 5.7%	Mid Grw -1.5%	REIT -1.1%	T-Bills 2.2%	REIT -2.2%	Emrg Mkt -0.9%	Cmdty 4.2%	5-Yr Gov 4.1%	Intl Mkt 2.8%	5-Yr Gov 1.5%	LT Gov 3.5%	Emrg Mkt 1.6%	LT Gov 3.8%	REIT 6.7%	LT Gov 5.5%	5-Yr Gov 0.3%
Intl Mkt 0.4%	Sm Grw -1.7%	T-Bills 2.1%	Lrge Grw 5.0%	Corp 5.1%	S&P 500 -2.2%	Lrge Val -1.2%	REIT 2.2%	Lrge Core -2.7%	Intl Mkt -3.4%	5-Yr Gov 2.9%	Emrg Mkt 1.8%	T-Bills 0.0%	Emrg Mkt 1.3%	5-Yr Gov 1.4%	T-Bills 0.6%	5-Yr Gov 2.6%	5-Yr Gov 3.7%	Cmdty 5.0%	Corp -0.8%
Lrge Grw 0.2%	Lrge Grw -2.2%	S&P 500 0.5%	5-Yr Gov 4.3%	5-Yr Gov 3.8%	Lrge Core -4.1%	Sm Grw -1.2%	Lrge Core -0.3%	Intl Mkt -4.1%	Cmdty -3.5%	LT Gov 1.9%	T-Bills 0.1%	Emrg Mkt -4.8%	T-Bills 0.1%	T-Bills 0.2%	Intl Mkt 0.3%	T-Bills 1.0%	T-Bills 1.1%	5-Yr Gov 2.6%	Emrg Mkt -1.4%
S&P 500 -0.6%	S&P 500 -2.3%	Lrge Grw 0.4%	T-Bills 2.3%	T-Bills 2.9%	Sm Grw -4.5%	Lrge Core -2.9%	Lrge Val -2.4%	Lrge Val -9.7%	Lrge Val -5.1%	T-Bills 0.1%	Cmdty -4.0%	Cmdty -11.9%	Cmdty -8.7%	Cmdty -7.8%	Cmdty -8.9%	Cmdty -3.1%	Cmdty 0.2%	T-Bills 1.1%	LT Gov -1.9%

10-Year Compound Returns																				
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Sm Val 18.9%	Sm Val 21.1%	Sm Val 18.6%	Sm Val 18.6%	Emrg Mkt 14.3%	Cmdty 9.9%	Sm Val 11.3%	Emrg Mkt 15.9%	Emrg Mkt 13.9%	Emrg Mkt 16.5%	Sm Core 11.4%	Mid Grw 10.7%	Mid Grw 10.0%	Mid Grw 9.8%	Mid Grw 11.5%	Mid Grw 16.3%	Mid Grw 15.5%	Lrge Grw 16.9%	Lrge Grw 19.3%	Lrge Grw 14.8%	
Sm Core 15.5%	Sm Core 17.6%	Sm Core 15.8%	Sm Core 15.8%	Sm Val 13.4%	Sm Val 9.3%	REIT 10.1%	Sm Val 11.5%	Cmdty 9.7%	Sm Core 12.0%	Emrg Mkt 11.2%	Sm Core 9.7%	Lrge Grw 9.1%	Lrge Grw 9.0%	Lrge Grw 10.5%	Lrge Grw 15.0%	Lrge Grw 15.1%	Mid Grw 16.4%	Mid Grw 17.2%	S&P 500 12.6%	
Mid Val 13.9%	Mid Val 16.7%	Mid Core 14.7%	Mid Val 14.1%	Sm Core 12.5%	Emrg Mkt 9.0%	Emrg Mkt 9.8%	Sm Core 10.8%	REIT 9.4%	Sm Val 11.2%	Mid Grw 11.0%	Lrge Grw 9.1%	Sm Core 8.4%	Sm Core 8.6%	Sm Core 10.3%	Mid Core 14.3%	S&P 500 13.6%	Sm Grw 15.2%	S&P 500 16.6%	Mid Grw 12.2%	
Mid Core 13.5%	Mid Core 16.0%	Mid Val 14.2%	Mid Core 13.8%	Cmdty 11.1%	Sm Core 8.9%	Sm Core 9.8%	REIT 10.2%	LT Gov 8.9%	Mid Grw 11.1%	Mid Val 10.0%	Mid Core 8.7%	S&P 500 7.3%	Mid Core 8.0%	Mid Core 9.7%	Sm Grw 13.6%	Mid Core 13.5%	S&P 500 13.9%	Sm Grw 16.2%	Mid Core 12.1%	
Lrge Grw 12.7%	REIT 14.9%	REIT 13.9%	REIT 13.7%	Mid Core 10.8%	LT Gov 8.4%	Cmdty 9.2%	Cmdty 7.9%	Sm Core 8.7%	REIT 10.9%	Mid Core 9.8%	Mid Val 8.6%	Mid Core 7.0%	Sm Val 7.0%	Sm Val 9.3%	S&P 500 13.1%	Sm Grw 13.0%	Mid Core 11.9%	Lrge Val 15.0%	Lrge Val 12.1%	
Lrge Core 12.5%	Lrge Val 14.6%	Cmdty 12.5%	Lrge Val 11.3%	Mid Val 10.5%	REIT 6.7%	Mid Core 8.2%	Mid Core 7.9%	Corp 8.3%	Mid Core 10.2%	Sm Val 9.6%	Emrg Mkt 8.4%	Sm Grw 7.0%	Mid Val 7.0%	Mid Val 9.2%	Sm Core 13.1%	Sm Core 12.5%	Sm Core 10.9%	Mid Core 14.9%	Sm Grw 10.9%	
Lrge Val 12.1%	Lrge Core 13.5%	Lrge Val 11.0%	Mid Grw 10.2%	REIT 9.6%	Corp 6.5%	LT Gov 7.7%	Corp 7.6%	Sm Val 8.2%	Mid Val 9.9%	Lrge Grw 8.7%	Sm Val 8.0%	LT Gov 6.7%	S&P 500 6.9%	Sm Grw 8.8%	REIT 12.3%	Lrge Core 12.5%	Lrge Core 10.8%	Sm Core 14.0%	Sm Val 10.8%	
REIT 12.0%	Lrge Grw 13.4%	Lrge Grw 10.5%	Lrge Core 10.0%	Mid Grw 9.5%	5-Yr Gov 6.2%	Corp 7.6%	Mid Val 6.9%	Mid Core 7.2%	Sm Grw 9.0%	Sm Grw 8.3%	S&P 500 7.7%	REIT 6.7%	Sm Grw 6.9%	S&P 500 8.5%	Sm Val 12.2%	REIT 12.3%	Lrge Val 9.8%	Sm Val 13.5%	Sm Core 10.1%	
Mid Grw 11.2%	Mid Grw 12.7%	Mid Grw 10.5%	Lrge Grw 9.4%	Intl Mkt 9.0%	Mid Val 5.2%	Mid Val 7.4%	LT Gov 6.6%	Mid Grw 6.8%	Intl Mkt 8.6%	REIT 7.6%	LT Gov 7.5%	Mid Val 6.5%	Corp 6.9%	Corp 7.8%	Mid Val 11.9%	Mid Val 11.1%	REIT 9.0%	Mid Val 12.4%	Mid Val 10.0%	
S&P 500 11.1%	S&P 500 12.1%	Lrge Core 10.4%	Emrg Mkt 9.2%	Lrge Val 8.3%	Mid Core 5.0%	5-Yr Gov 6.2%	Mid Grw 6.2%	5-Yr Gov 5.8%	Lrge Grw 8.2%	S&P 500 7.4%	Sm Grw 7.3%	Corp 6.5%	LT Gov 6.7%	REIT 7.5%	Lrge Core 11.8%	Sm Val 10.7%	Mid Val 8.6%	Lrge Core 12.0%	Lrge Core 9.8%	
Cmdty 10.6%	Cmdty 11.9%	S&P 500 9.1%	Cmdty 8.7%	Lrge Grw 7.5%	Mid Grw 3.5%	Mid Grw 3.2%	5-Yr Gov 5.6%	Mid Val 5.8%	Corp 7.8%	Intl Mkt 7.1%	REIT 7.3%	Sm Val 6.0%	Lrge Core 4.9%	LT Gov 6.4%	Lrge Val 8.5%	Lrge Val 10.6%	Sm Val 8.6%	REIT 11.9%	REIT 6.8%	
LT Gov 8.0%	LT Gov 9.8%	LT Gov 7.6%	S&P 500 8.4%	LT Gov 7.3%	T-Bills 3.2%	T-Bills 2.8%	Sm Grw 4.1%	Intl Mkt 5.1%	LT Gov 7.5%	Corp 6.4%	Corp 7.2%	Lrge Core 5.6%	REIT 4.5%	Lrge Core 6.3%	Emrg Mkt 8.0%	Corp 8.1%	Corp 8.2%	Intl Mkt 7.8%	Intl Mkt 4.6%	
Corp 8.0%	Corp 9.5%	Corp 7.5%	Intl Mkt 8.0%	Lrge Core 6.9%	Intl Mkt 1.2%	Lrge Val 1.9%	Intl Mkt 4.0%	Lrge Grw 4.2%	S&P 500 7.1%	Lrge Core 6.3%	Lrge Core 6.1%	5-Yr Gov 4.5%	5-Yr Gov 4.4%	Lrge Val 5.2%	Intl Mkt 6.2%	LT Gov 6.8%	LT Gov 7.4%	Corp 6.3%	Corp 2.2%	
5-Yr Gov 6.4%	Sm Grw 7.4%	Emrg Mkt 6.8%	LT Gov 7.8%	Corp 6.7%	Lrge Val 0.3%	Intl Mkt 1.6%	Lrge Grw 2.6%	Sm Grw 3.4%	Cmdty 6.2%	LT Gov 6.1%	Lrge Val 5.1%	Emrg Mkt 3.6%	Lrge Val 3.6%	5-Yr Gov 3.6%	Corp 6.2%	Intl Mkt 5.3%	Intl Mkt 5.2%	Emrg Mkt 5.5%	Emrg Mkt 1.4%	
Sm Grw 5.1%	5-Yr Gov 7.2%	Intl Mkt 6.2%	Corp 7.7%	5-Yr Gov 6.0%	Lrge Core 0.1%	Lrge Core 1.6%	Lrge Core 2.2%	Lrge Core 3.2%	Lrge Core 6.0%	Lrge Val 5.4%	Intl Mkt 4.6%	Lrge Val 3.5%	Emrg Mkt 1.8%	Intl Mkt 1.9%	LT Gov 3.9%	Emrg Mkt 3.7%	Emrg Mkt 3.6%	LT Gov 4.2%	5-Yr Gov 0.9%	
Intl Mkt 4.7%	Intl Mkt 5.9%	5-Yr Gov 5.7%	5-Yr Gov 5.8%	S&P 500 5.9%	Lrge Grw -0.1%	Lrge Grw 0.5%	T-Bills 2.2%	S&P 500 2.9%	Lrge Val 4.8%	5-Yr Gov 4.4%	5-Yr Gov 4.5%	Intl Mkt 2.9%	Intl Mkt 0.9%	Emrg Mkt 1.7%	5-Yr Gov 2.4%	5-Yr Gov 3.3%	5-Yr Gov 3.3%	5-Yr Gov 2.1%	LT Gov 0.8%	
T-Bills 4.2%	T-Bills 3.9%	Sm Grw 4.6%	Sm Grw 4.5%	Sm Grw 4.2%	Sm Grw -0.8%	S&P 500 -0.9%	S&P 500 1.4%	T-Bills 1.8%	5-Yr Gov 4.8%	Cmdty 3.4%	T-Bills 1.4%	T-Bills 1.1%	T-Bills 0.7%	T-Bills 0.3%	T-Bills 0.3%	T-Bills 0.5%	T-Bills 0.6%	T-Bills 0.6%	T-Bills 0.7%	
Emrg Mkt 0.1%	Emrg Mkt 3.2%	T-Bills 3.6%	T-Bills 3.6%	T-Bills 3.5%	S&P 500 -1.4%	Sm Grw -1.4%	Lrge Val 0.0%	Lrge Val -2.4%	T-Bills 1.6%	T-Bills 1.5%	Cmdty -0.3%	Cmdty -5.1%	Cmdty -3.9%	Cmdty -5.7%	Cmdty -2.6%	Cmdty -3.6%	Cmdty -6.1%	Cmdty -2.1%	Cmdty 0.2%	

15-Year Compound Returns																			
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sm Val 18.1%	Sm Val 18.3%	Sm Val 21.2%	Sm Val 20.2%	Sm Val 16.9%	Sm Val 12.1%	Sm Val 14.0%	Sm Val 13.6%	Sm Val 11.3%	Sm Core 10.3%	Sm Core 13.2%	Sm Val 12.6%	REIT 10.6%	Sm Val 11.0%	Mid Grw 12.9%	Mid Grw 10.0%	Mid Grw 11.3%	Mid Grw 13.4%	Lrge Grw 13.7%	Lrge Grw 10.9%
Sm Core 15.6%	Sm Core 15.8%	Sm Core 18.0%	Lrge Val 16.5%	Sm Core 14.7%	Sm Core 10.6%	Sm Core 12.7%	Sm Core 12.8%	Sm Core 11.0%	Sm Val 10.2%	Sm Val 13.0%	REIT 12.1%	Sm Core 10.5%	Sm Core 11.0%	Sm Core 12.8%	Lrge Grw 9.6%	Lrge Grw 11.0%	Lrge Grw 12.7%	Mid Grw 13.1%	Mid Grw 10.3%
Mid Val 15.4%	Mid Val 14.7%	Mid Val 16.8%	Sm Core 16.5%	Mid Core 13.7%	LT Gov 8.8%	Mid Val 11.3%	Mid Core 10.6%	Mid Core 9.1%	Emrg Mkt 9.0%	Emrg Mkt 10.9%	Sm Core 11.9%	Sm Val 10.3%	REIT 10.2%	Mid Core 12.4%	Sm Core 9.1%	Sm Core 9.4%	Sm Grw 11.4%	Sm Grw 10.9%	Mid Core 9.0%
Lrge Val 14.0%	Mid Core 14.0%	Mid Core 16.5%	Mid Val 15.6%	Lrge Val 13.1%	Mid Val 8.6%	Mid Core 10.8%	Mid Val 10.4%	LT Gov 8.8%	Mid Grw 8.5%	Mid Val 10.7%	Mid Core 11.0%	Mid Core 9.0%	Mid Core 10.1%	Sm Val 12.4%	Mid Core 8.9%	Mid Core 9.3%	S&P 500 9.9%	S&P 500 10.7%	S&P 500 8.8%
Lrge Grw 14.0%	Lrge Val 13.3%	Lrge Val 15.1%	Mid Core 14.8%	Mid Val 13.1%	Mid Core 8.5%	Lrge Grw 9.9%	REIT 9.8%	Mid Val 8.8%	REIT 8.2%	Mid Core 10.3%	Mid Val 10.4%	Emrg Mkt 8.5%	Emrg Mkt 9.5%	Emrg Mkt 12.3%	Emrg Mkt 7.9%	S&P 500 9.0%	Sm Core 9.6%	Sm Core 9.9%	Sm Core 8.7%
Mid Core 13.9%	REIT 12.7%	REIT 14.8%	REIT 14.7%	REIT 12.3%	Lrge Grw 8.1%	Mid Grw 9.5%	Mid Grw 9.5%	Mid Grw 8.5%	Mid Val 8.1%	Mid Grw 10.2%	LT Gov 8.4%	Mid Grw 8.3%	Mid Grw 9.4%	Mid Val 11.7%	REIT 7.8%	Sm Grw 8.0%	Mid Core 8.8%	Mid Core 9.9%	Sm Val 8.5%
Mid Grw 13.1%	Mid Grw 12.2%	Mid Grw 13.1%	Lrge Core 12.4%	Emrg Mkt 12.0%	Cmdty 7.9%	REIT 9.3%	Cmdty 9.0%	REIT 8.1%	Mid Core 8.1%	REIT 9.9%	Corp 8.4%	Mid Val 7.9%	Mid Val 9.1%	Lrge Grw 11.4%	Sm Val 7.8%	Mid Val 7.7%	Corp 7.4%	Sm Val 8.1%	Sm Grw 8.2%
Lrge Core 12.8%	Lrge Grw 12.2%	Lrge Core 12.6%	Mid Grw 11.2%	Lrge Core 11.8%	Lrge Val 7.8%	Lrge Val 9.1%	Emrg Mkt 8.8%	Corp 8.1%	LT Gov 8.0%	Cmdty 7.9%	Mid Grw 8.1%	Corp 7.4%	Lrge Grw 7.6%	Sm Grw 10.9%	S&P 500 7.8%	REIT 7.7%	Sm Val 7.1%	Mid Val 7.7%	Mid Val 7.8%
S&P 500 12.2%	Lrge Core 11.8%	Lrge Grw 12.5%	Lrge Grw 11.0%	Cmdty 11.8%	REIT 7.6%	Cmdty 9.1%	Lrge Grw 8.5%	Lrge Grw 7.3%	Corp 7.9%	Corp 6.7%	Emrg Mkt 7.0%	LT Gov 7.0%	Corp 7.2%	REIT 10.5%	Mid Val 7.4%	Emrg Mkt 7.5%	Lrge Core 6.9%	Corp 7.1%	Lrge Core 6.3%
Emrg Mkt 10.8%	S&P 500 10.9%	Emrg Mkt 11.7%	S&P 500 10.6%	Lrge Grw 11.2%	Corp 7.2%	LT Gov 8.2%	Corp 7.0%	Emrg Mkt 6.9%	Lrge Grw 6.2%	Sm Grw 6.6%	Lrge Core 6.1%	Lrge Grw 6.1%	LT Gov 6.9%	S&P 500 9.9%	Sm Grw 7.2%	Sm Val 7.5%	LT Gov 6.8%	REIT 7.0%	REIT 6.3%
REIT 10.6%	LT Gov 9.3%	S&P 500 11.5%	Emrg Mkt 10.3%	Mid Grw 11.0%	Mid Grw 6.8%	S&P 500 8.0%	LT Gov 6.9%	5-Yr Gov 6.3%	Cmdty 6.0%	LT Gov 6.2%	5-Yr Gov 5.5%	Sm Grw 6.0%	S&P 500 6.7%	Lrge Val 8.6%	Lrge Core 6.2%	Lrge Core 7.1%	Mid Val 6.7%	Lrge Core 6.9%	Lrge Val 6.0%
LT Gov 9.9%	Corp 9.1%	Cmdty 9.9%	Cmdty 10.1%	S&P 500 10.5%	Lrge Core 6.6%	Corp 7.9%	S&P 500 6.8%	Cmdty 6.1%	5-Yr Gov 5.9%	Lrge Grw 5.8%	Lrge Grw 5.2%	Lrge Core 5.3%	Sm Grw 6.5%	Lrge Core 8.4%	Corp 6.1%	Corp 7.0%	REIT 6.7%	LT Gov 6.3%	Corp 4.9%
Corp 9.6%	Emrg Mkt 8.8%	LT Gov 9.4%	LT Gov 8.2%	Intl Mkt 9.8%	S&P 500 6.5%	Lrge Core 7.8%	Lrge Core 6.7%	Lrge Core 5.6%	Intl Mkt 4.7%	Lrge Core 5.7%	Lrge Val 5.1%	S&P 500 5.0%	Lrge Core 6.4%	Intl Mkt 8.2%	LT Gov 6.0%	Lrge Val 6.5%	Emrg Mkt 6.6%	Lrge Val 6.1%	LT Gov 3.5%
5-Yr Gov 8.0%	Cmdty 8.0%	Corp 9.1%	Intl Mkt 8.0%	LT Gov 8.3%	5-Yr Gov 6.2%	Emrg Mkt 7.1%	Lrge Val 6.4%	S&P 500 5.5%	S&P 500 4.5%	5-Yr Gov 5.1%	Cmdty 4.6%	5-Yr Gov 4.8%	Intl Mkt 5.4%	Corp 6.9%	Lrge Val 5.4%	LT Gov 6.2%	Lrge Val 5.6%	Emrg Mkt 4.5%	5-Yr Gov 2.5%
Sm Grw 7.2%	5-Yr Gov 7.3%	Sm Grw 8.4%	Corp 8.0%	Corp 7.5%	T-Bills 3.8%	5-Yr Gov 6.4%	5-Yr Gov 5.8%	Lrge Val 3.8%	Lrge Core 4.4%	Intl Mkt 4.8%	S&P 500 4.2%	Intl Mkt 3.6%	5-Yr Gov 4.4%	LT Gov 6.1%	Intl Mkt 4.8%	Intl Mkt 4.9%	Intl Mkt 4.5%	5-Yr Gov 3.8%	Intl Mkt 1.8%
Cmdty 6.2%	Sm Grw 6.9%	Intl Mkt 7.2%	Sm Grw 5.9%	5-Yr Gov 6.1%	Intl Mkt 3.8%	Intl Mkt 5.3%	Intl Mkt 5.2%	Intl Mkt 3.8%	Sm Grw 3.8%	S&P 500 4.7%	Sm Grw 4.2%	Lrge Val 3.1%	Lrge Val 4.2%	5-Yr Gov 3.6%	5-Yr Gov 3.6%	5-Yr Gov 3.8%	5-Yr Gov 4.2%	Intl Mkt 3.7%	Emrg Mkt 0.6%
T-Bills 4.7%	Intl Mkt 4.4%	5-Yr Gov 6.7%	5-Yr Gov 5.9%	Sm Grw 6.0%	Emrg Mkt 2.5%	Sm Grw 4.4%	Sm Grw 4.4%	Sm Grw 3.4%	Lrge Val 3.7%	Lrge Val 3.9%	Intl Mkt 2.8%	T-Bills 1.5%	Cmdty 3.2%	Cmdty 1.3%	T-Bills 1.2%	T-Bills 1.3%	T-Bills 1.1%	T-Bills 0.8%	T-Bills 0.6%
Intl Mkt 3.9%	T-Bills 4.2%	T-Bills 3.9%	T-Bills 3.8%	T-Bills 3.9%	Sm Grw 1.8%	T-Bills 3.5%	T-Bills 3.2%	T-Bills 2.8%	T-Bills 2.5%	T-Bills 2.2%	T-Bills 1.8%	Cmdty 0.9%	T-Bills 1.2%	T-Bills 1.2%	Cmdty -0.9%	Cmdty -1.3%	Cmdty -3.3%	Cmdty -1.0%	Cmdty -1.0%

20-Year Compound Returns

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sm Val 17.3%	Sm Val 17.9%	Sm Val 16.8%	Sm Val 17.3%	Sm Val 17.0%	Sm Val 13.1%	Sm Val 13.8%	Sm Val 16.7%	Sm Val 14.3%	Sm Val 13.6%	Sm Val 14.2%	Sm Val 14.4%	Sm Val 12.1%	Sm Val 12.7%	Sm Core 11.4%	Sm Core 11.0%	REIT 11.2%	Mid Grw 11.2%	Mid Grw 11.9%	Mid Grw 11.6%
Mid Val 15.7%	Mid Val 16.3%	Mid Val 15.2%	Emrg Mkt 15.4%	Emrg Mkt 16.2%	Sm Core 11.9%	Sm Core 12.5%	Sm Core 15.1%	Sm Core 12.7%	Sm Core 12.5%	Sm Core 13.4%	Sm Core 13.6%	Sm Core 12.1%	Sm Core 12.2%	Sm Val 11.3%	Sm Val 10.7%	Sm Core 11.1%	Sm Core 10.8%	Lrge Grw 11.5%	Lrge Grw 11.5%
Sm Core 15.1%	Sm Core 16.0%	Sm Core 14.7%	Sm Core 15.3%	Sm Core 15.4%	Mid Val 11.0%	Mid Val 11.1%	Mid Val 13.2%	Mid Val 11.2%	Mid Core 10.9%	Mid Val 11.9%	Mid Val 12.6%	Mid Core 10.8%	Mid Core 10.8%	Mid Grw 10.5%	Mid Grw 9.7%	Sm Val 11.0%	Sm Val 10.0%	Sm Core 11.3%	Mid Core 11.2%
Lrge Val 15.0%	Mid Core 14.9%	Emrg Mkt 14.5%	Mid Val 15.1%	Mid Val 15.0%	Lrge Val 10.2%	Mid Core 10.7%	Mid Core 12.9%	Mid Core 11.0%	Mid Val 10.6%	Mid Core 11.7%	Mid Core 12.3%	Mid Val 10.3%	Mid Val 10.5%	Mid Core 10.2%	Mid Core 9.6%	Mid Core 10.8%	Mid Core 9.9%	Mid Core 11.0%	Sm Core 11.0%
Lrge Grw 14.0%	Lrge Val 14.8%	Mid Core 14.2%	Lrge Val 14.0%	Lrge Val 14.2%	Lrge Grw 10.2%	Emrg Mkt 10.4%	Emrg Mkt 12.0%	REIT 10.2%	REIT 10.5%	Mid Grw 11.1%	Mid Grw 11.7%	Mid Grw 10.3%	Mid Grw 10.0%	Mid Val 9.8%	REIT 9.5%	Mid Val 9.2%	REIT 9.6%	Sm Val 10.8%	Sm Val 11.0%
Mid Core 13.8%	Lrge Grw 14.3%	Lrge Val 13.8%	Mid Core 13.9%	Mid Core 14.0%	LT Gov 10.0%	Mid Grw 9.9%	Mid Grw 11.6%	Mid Grw 9.7%	Mid Grw 9.9%	Lrge Grw 10.7%	Lrge Grw 11.3%	REIT 10.2%	Lrge Grw 9.2%	Lrge Grw 9.0%	Mid Val 8.5%	Mid Grw 9.2%	Emrg Mkt 9.6%	REIT 10.7%	Mid Val 10.0%
Lrge Core 13.7%	Emrg Mkt 14.1%	Lrge Grw 13.0%	Lrge Grw 12.8%	Lrge Grw 13.1%	Emrg Mkt 10.0%	Lrge Grw 9.9%	REIT 11.5%	Lrge Val 9.3%	Lrge Grw 9.2%	REIT 9.7%	REIT 11.0%	Lrge Grw 9.8%	REIT 9.0%	REIT 8.6%	Emrg Mkt 8.5%	Corp 7.9%	Sm Grw 9.5%	Sm Grw 9.6%	Sm Grw 9.9%
Emrg Mkt 13.5%	Lrge Core 14.0%	Lrge Core 12.5%	Lrge Core 12.5%	Mid Grw 12.7%	Mid Core 10.0%	Lrge Val 9.5%	Lrge Grw 10.5%	Lrge Grw 9.0%	Lrge Core 8.7%	Lrge Core 9.3%	S&P 500 9.9%	S&P 500 8.2%	S&P 500 7.7%	Emrg Mkt 7.8%	Lrge Grw 7.1%	Lrge Grw 7.6%	Lrge Grw 9.5%	Emrg Mkt 9.6%	S&P 500 9.8%
S&P 500 13.0%	Mid Grw 13.6%	Mid Grw 12.4%	Mid Grw 12.3%	Lrge Core 12.2%	Mid Grw 9.3%	REIT 9.1%	Lrge Val 10.4%	LT Gov 8.8%	Emrg Mkt 8.6%	S&P 500 9.2%	Lrge Val 9.7%	Lrge Core 7.9%	Lrge Core 7.5%	Corp 7.3%	Corp 6.3%	LT Gov 7.2%	Corp 7.9%	S&P 500 9.5%	REIT 8.8%
Mid Grw 12.6%	S&P 500 13.2%	S&P 500 11.9%	S&P 500 11.8%	S&P 500 11.8%	Corp 8.7%	LT Gov 8.2%	Lrge Core 9.2%	Lrge Core 8.4%	LT Gov 8.6%	Lrge Val 8.7%	Lrge Core 9.7%	Lrge Val 7.2%	Lrge Val 7.4%	S&P 500 7.2%	Sm Grw 6.2%	Lrge Core 6.9%	Mid Val 7.7%	Mid Val 9.0%	Emrg Mkt 8.7%
LT Gov 11.2%	Intl Mkt 11.2%	REIT 10.7%	REIT 11.3%	REIT 10.9%	S&P 500 8.4%	S&P 500 8.2%	S&P 500 9.1%	Emrg Mkt 8.3%	Lrge Val 8.3%	Corp 7.2%	LT Gov 8.6%	LT Gov 7.1%	Corp 7.3%	LT Gov 6.8%	LT Gov 6.1%	Emrg Mkt 6.7%	S&P 500 7.5%	Lrge Core 7.5%	Lrge Val 8.4%
Corp 10.9%	LT Gov 10.8%	LT Gov 9.7%	LT Gov 8.6%	LT Gov 9.3%	Lrge Core 8.3%	Corp 8.0%	LT Gov 8.4%	Corp 8.2%	Corp 8.3%	LT Gov 7.0%	Corp 8.4%	Corp 7.0%	LT Gov 7.3%	Lrge Val 6.8%	Lrge Core 5.7%	Lrge Val 6.2%	LT Gov 7.0%	Corp 7.3%	Lrge Core 7.9%
Intl Mkt 10.3%	Corp 10.5%	Intl Mkt 9.7%	Corp 8.6%	Corp 8.7%	REIT 7.7%	Lrge Core 7.9%	Corp 8.3%	Cmdty 7.8%	S&P 500 8.2%	Cmdty 6.9%	Sm Grw 7.3%	Sm Grw 5.8%	Sm Grw 5.7%	Lrge Core 6.6%	S&P 500 5.6%	S&P 500 6.1%	Lrge Core 6.4%	LT Gov 6.5%	Intl Mkt 6.6%
REIT 9.8%	REIT 10.5%	Corp 9.4%	Intl Mkt 8.2%	Cmdty 8.0%	5-Yr Gov 7.5%	Cmdty 6.9%	Cmdty 7.9%	S&P 500 7.8%	Cmdty 7.8%	Sm Grw 6.7%	5-Yr Gov 5.8%	Emrg Mkt 5.2%	Emrg Mkt 5.4%	Sm Grw 6.5%	5-Yr Gov 4.3%	Sm Grw 5.5%	Lrge Val 4.8%	Intl Mkt 6.5%	Corp 4.9%
5-Yr Gov 8.9%	5-Yr Gov 8.3%	5-Yr Gov 7.4%	Cmdty 7.5%	Intl Mkt 7.7%	Cmdty 5.3%	5-Yr Gov 6.7%	Sm Grw 7.3%	5-Yr Gov 6.3%	Intl Mkt 6.4%	Intl Mkt 5.9%	Emrg Mkt 5.8%	5-Yr Gov 5.1%	5-Yr Gov 5.1%	Intl Mkt 5.4%	Lrge Val 4.3%	5-Yr Gov 4.7%	Intl Mkt 4.6%	Lrge Val 6.0%	LT Gov 4.1%
Sm Grw 6.0%	Sm Grw 7.5%	Cmdty 7.1%	5-Yr Gov 6.8%	Sm Grw 7.5%	T-Bills 4.2%	Sm Grw 4.8%	5-Yr Gov 6.6%	Intl Mkt 4.9%	5-Yr Gov 6.0%	Emrg Mkt 5.5%	Cmdty 5.6%	Intl Mkt 4.6%	Intl Mkt 4.4%	5-Yr Gov 4.8%	Intl Mkt 3.7%	Intl Mkt 3.5%	5-Yr Gov 4.5%	5-Yr Gov 3.9%	Cmdty 3.1%
T-Bills 5.3%	Cmdty 5.6%	Sm Grw 6.2%	Sm Grw 6.5%	5-Yr Gov 7.1%	Sm Grw 4.1%	Intl Mkt 4.3%	Intl Mkt 6.2%	Sm Grw 4.7%	Sm Grw 5.2%	5-Yr Gov 5.4%	Intl Mkt 5.3%	Cmdty 3.3%	Cmdty 2.2%	Cmdty 2.4%	Cmdty 3.5%	Cmdty 2.6%	T-Bills 1.4%	Cmdty 3.6%	5-Yr Gov 2.8%
Cmdty 4.1%	T-Bills 4.8%	T-Bills 4.6%	T-Bills 4.5%	T-Bills 4.5%	Intl Mkt 3.4%	T-Bills 3.8%	T-Bills 3.5%	T-Bills 3.2%	T-Bills 3.0%	T-Bills 2.9%	T-Bills 2.7%	T-Bills 2.4%	T-Bills 2.1%	T-Bills 1.9%	T-Bills 1.8%	T-Bills 1.6%	Cmdty 0.7%	T-Bills 1.2%	T-Bills 1.2%

30-Year Compound Returns

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sm Val 21.2%	Sm Val 22.8%	Sm Val 21.3%	Sm Val 20.2%	Sm Val 18.9%	Sm Val 16.6%	Sm Val 16.3%	Sm Val 16.5%	Sm Val 15.5%	Sm Val 14.9%	Sm Val 14.7%	Sm Val 14.5%	Sm Val 13.1%	Sm Val 13.7%	Sm Val 14.4%	Sm Val 12.8%	Sm Val 12.8%	Sm Val 13.9%	Sm Val 14.0%	Sm Val 12.6%
Sm Core 18.3%	Sm Core 20.3%	Sm Core 18.8%	Sm Core 18.0%	Sm Core 17.3%	Sm Core 15.1%	Sm Core 15.0%	Sm Core 14.9%	Sm Core 14.3%	Sm Core 13.8%	Sm Core 13.8%	Sm Core 13.9%	Sm Core 12.6%	Sm Core 13.0%	Sm Core 13.7%	Sm Core 12.3%	Sm Core 12.5%	Sm Core 13.7%	Sm Core 13.1%	Sm Core 11.7%
Mid Val 17.5%	Mid Val 19.2%	Mid Val 17.6%	Mid Val 16.6%	Mid Val 16.1%	Mid Val 14.0%	Mid Val 14.2%	Mid Val 14.5%	Mid Val 13.9%	Emrg Mkt 13.5%	Mid Val 13.8%	Mid Val 13.7%	Mid Val 12.2%	Mid Val 12.4%	Mid Val 13.0%	Lrge Grw 11.7%	Mid Grw 11.7%	Mid Grw 13.2%	Lrge Grw 12.3%	Mid Core 11.3%
Mid Core 15.4%	Mid Core 17.2%	Mid Core 16.1%	Lrge Val 15.1%	Emrg Mkt 15.4%	Lrge Val 13.2%	Lrge Val 13.2%	Mid Core 12.9%	Mid Core 12.5%	Mid Val 13.4%	Emrg Mkt 12.7%	Mid Core 12.8%	Mid Core 11.7%	Mid Core 11.9%	Mid Core 12.5%	Mid Grw 11.6%	Mid Core 11.6%	Lrge Grw 12.6%	Mid Core 12.3%	Lrge Grw 11.0%
Lrge Val 14.6%	Lrge Val 16.8%	Lrge Val 15.6%	Mid Core 15.1%	Lrge Val 15.1%	Mid Core 12.6%	Emrg Mkt 12.9%	Lrge Val 12.5%	Emrg Mkt 11.9%	Mid Core 12.2%	Mid Core 12.4%	Mid Grw 12.6%	Lrge Grw 11.7%	Lrge Grw 11.5%	Mid Grw 12.3%	Mid Core 11.4%	Lrge Grw 11.6%	Mid Core 12.6%	Mid Grw 12.1%	Mid Grw 10.6%
Lrge Core 13.7%	Mid Grw 15.2%	Emrg Mkt 14.5%	Emrg Mkt 15.0%	Mid Core 14.9%	Emrg Mkt 11.9%	Mid Core 12.9%	Emrg Mkt 12.4%	Lrge Grw 11.8%	Lrge Grw 11.6%	Lrge Grw 12.2%	Lrge Grw 12.6%	Mid Grw 11.6%	Mid Grw 11.5%	Lrge Grw 12.2%	Mid Val 11.3%	Mid Val 11.1%	Mid Val 11.7%	Mid Val 11.6%	Mid Val 10.4%
Mid Grw 13.1%	Lrge Core 15.2%	Mid Grw 14.2%	Mid Grw 13.7%	Mid Grw 14.0%	Mid Grw 11.9%	Mid Grw 11.9%	Mid Grw 11.5%	Mid Grw 11.6%	Mid Grw 11.5%	Mid Grw 12.0%	Emrg Mkt 12.2%	Emrg Mkt 10.7%	Emrg Mkt 10.7%	Lrge Val 11.2%	S&P 500 10.0%	REIT 10.2%	S&P 500 10.7%	Lrge Val 11.2%	S&P 500 9.6%
Emrg Mkt 12.5%	REIT 14.7%	Lrge Core 13.9%	Lrge Core 13.5%	Lrge Core 13.6%	Lrge Grw 11.4%	Lrge Grw 11.9%	Lrge Grw 11.3%	Lrge Val 11.5%	Lrge Val 11.5%	Lrge Val 11.7%	Lrge Val 11.5%	S&P 500 10.4%	Lrge Val 10.4%	Emrg Mkt 11.1%	Lrge Val 9.6%	S&P 500 10.0%	REIT 10.6%	REIT 10.8%	Lrge Val 9.5%
S&P 500 12.2%	Emrg Mkt 13.8%	REIT 13.8%	REIT 13.4%	Lrge Grw 13.1%	Lrge Core 11.3%	S&P 500 11.2%	S&P 500 10.7%	Lrge Core 11.1%	Lrge Core 11.0%	Lrge Core 11.2%	S&P 500 11.3%	Lrge Val 10.2%	S&P 500 10.2%	S&P 500 10.7%	Lrge Core 9.4%	Lrge Val 9.8%	Lrge Val 10.2%	S&P 500 10.6%	REIT 9.3%
Lrge Grw 12.1%	S&P 500 13.7%	S&P 500 12.7%	S&P 500 12.5%	S&P 500 13.0%	S&P 500 11.0%	Lrge Core 11.1%	Lrge Core 10.5%	LT Gov 11.0%	S&P 500 10.8%	S&P 500 11.1%	Lrge Core 11.3%	Lrge Core 10.1%	Lrge Core 9.9%	Lrge Core 10.2%	Emrg Mkt 9.3%	Lrge Core 9.4%	Sm Grw 9.9%	Lrge Core 9.6%	Lrge Core 9.0%
REIT 11.6%	Lrge Grw 13.4%	Lrge Grw 12.5%	Lrge Grw 12.2%	REIT 12.0%	REIT 10.3%	REIT 10.2%	REIT 10.2%	S&P 500 11.0%	Corp 9.9%	LT Gov 9.4%	LT Gov 9.7%	REIT 9.3%	REIT 9.0%	REIT 9.7%	REIT 9.2%	Emrg Mkt 8.1%	Lrge Core 9.7%	Sm Grw 8.4%	Sm Grw 7.1%
Sm Grw 10.4%	Sm Grw 12.4%	Intl Mkt 11.2%	Intl Mkt 12.0%	Intl Mkt 11.9%	LT Gov 10.2%	LT Gov 9.7%	Corp 10.2%	Corp 10.8%	LT Gov 9.9%	Corp 9.4%	REIT 9.4%	LT Gov 8.7%	Corp 8.0%	Corp 8.4%	LT Gov 7.9%	Corp 8.0%	Emrg Mkt 9.1%	Corp 7.6%	Corp 6.2%
Intl Mkt 10.3%	Intl Mkt 11.8%	Sm Grw 10.6%	Sm Grw 9.8%	LT Gov 9.3%	Corp 9.4%	Corp 9.6%	LT Gov 10.2%	REIT 10.2%	REIT 9.8%	Intl Mkt 9.2%	Corp 9.4%	Corp 8.4%	LT Gov 8.0%	LT Gov 8.3%	Corp 7.8%	LT Gov 7.8%	Corp 8.3%	Emrg Mkt 7.3%	Emrg Mkt 6.2%
Corp 9.4%	Corp 9.8%	Corp 9.6%	Corp 9.0%	Sm Grw 9.3%	Intl Mkt 8.8%	Intl Mkt 9.5%	Intl Mkt 9.1%	Intl Mkt 8.7%	Intl Mkt 9.3%	REIT 9.1%	Intl Mkt 9.0%	Intl Mkt 7.4%	Sm Grw 6.6%	Sm Grw 7.9%	Sm Grw 7.2%	Sm Grw 7.5%	LT Gov 8.1%	LT Gov 7.3%	LT Gov 5.9%
LT Gov 9.4%	LT Gov 9.5%	LT Gov 9.5%	LT Gov 9.0%	Corp 9.1%	5-Yr Gov 8.6%	5-Yr Gov 8.4%	5-Yr Gov 8.5%	5-Yr Gov 8.5%	5-Yr Gov 7.7%	5-Yr Gov 7.4%	Sm Grw 7.5%	Sm Grw 6.4%	5-Yr Gov 6.0%	5-Yr Gov 5.9%	5-Yr Gov 5.8%	5-Yr Gov 5.6%	Intl Mkt 5.8%	Intl Mkt 5.8%	Intl Mkt 5.8%
5-Yr Gov 8.7%	5-Yr Gov 8.6%	5-Yr Gov 8.3%	5-Yr Gov 8.0%	5-Yr Gov 8.3%	Sm Grw 6.9%	Sm Grw 6.6%	Sm Grw 6.0%	Sm Grw 6.2%	Sm Grw 6.0%	Sm Grw 6.7%	5-Yr Gov 7.0%	5-Yr Gov 6.4%	Intl Mkt 5.7%	Intl Mkt 5.7%	Intl Mkt 4.3%	Intl Mkt 4.7%	5-Yr Gov 5.5%	5-Yr Gov 4.9%	Cmdty 5.2%
T-Bills 6.4%	T-Bills 6.1%	T-Bills 6.1%	T-Bills 6.0%	T-Bills 6.0%	T-Bills 5.8%	T-Bills 5.5%	T-Bills 5.1%	T-Bills 4.6%	Cmdty 4.6%	T-Bills 4.0%	T-Bills 3.7%	T-Bills 3.4%	Cmdty 3.5%	Cmdty 3.2%	T-Bills 2.9%	Cmdty 3.3%	Cmdty 3.0%	Cmdty 4.4%	5-Yr Gov 4.3%
Cmdty 3.8%	Cmdty 4.3%	Cmdty 5.4%	Cmdty 5.0%	Cmdty 5.8%	Cmdty 3.8%	Cmdty 3.8%	Cmdty 4.1%	Cmdty 4.4%	T-Bills 4.3%	Cmdty 3.9%	Cmdty 3.6%	Cmdty 2.9%	T-Bills 3.2%	T-Bills 3.1%	Cmdty 2.6%	T-Bills 2.7%	T-Bills 2.5%	T-Bills 2.3%	T-Bills 2.2%

30-Year Compound Returns Starting 1954

1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sm Val 19.3%	Sm Val 17.6%	Sm Val 17.9%	Sm Val 18.2%	Sm Val 18.6%	Sm Val 17.6%	Sm Val 17.5%	Sm Val 16.7%	Sm Val 17.0%	Sm Val 18.5%	Sm Val 18.5%	Emrg Mkt 17.7%	Sm Val 17.4%	Sm Val 18.6%	Sm Val 17.8%	Sm Val 16.2%	Sm Val 17.7%	Sm Val 18.3%	Sm Val 18.6%	Sm Val 18.0%
Sm Core 16.2%	Sm Core 14.4%	Mid Val 15.0%	Mid Val 15.5%	Mid Val 16.4%	Mid Val 15.2%	Mid Val 15.7%	Mid Val 15.5%	Emrg Mkt 16.3%	Mid Val 17.1%	Emrg Mkt 17.8%	Sm Val 17.6%	Emrg Mkt 17.1%	Emrg Mkt 17.3%	Emrg Mkt 16.4%	Mid Val 15.2%	Mid Val 16.6%	Mid Val 17.3%	Mid Val 16.8%	Mid Val 15.5%
Mid Val 16.2%	Mid Val 14.4%	Sm Core 14.9%	Sm Core 15.0%	Sm Core 15.4%	Sm Core 14.7%	Emrg Mkt 14.9%	Emrg Mkt 13.9%	Mid Val 15.8%	Emrg Mkt 16.0%	Mid Val 16.6%	Mid Val 15.4%	Mid Val 15.6%	Mid Val 16.7%	Mid Val 16.2%	Lrge Val 15.1%	Emrg Mkt 15.7%	Sm Core 16.2%	Sm Core 16.0%	Sm Core 15.2%
Mid Core 14.4%	Mid Core 12.5%	Mid Core 12.8%	Mid Core 13.1%	Mid Core 13.5%	Emrg Mkt 13.6%	Sm Core 14.6%	Sm Core 13.9%	Sm Core 14.3%	Sm Core 15.8%	Sm Core 15.9%	Sm Core 15.2%	Sm Core 15.1%	Sm Core 16.0%	Sm Core 14.9%	Emrg Mkt 14.4%	Lrge Val 15.6%	Lrge Val 16.0%	Lrge Val 15.8%	Lrge Val 13.6%
Lrge Val 12.8%	Lrge Val 11.4%	Emrg Mkt 11.7%	Lrge Val 12.1%	Lrge Val 13.2%	Mid Core 12.6%	Mid Core 12.7%	Lrge Val 12.2%	Mid Core 12.3%	Mid Core 13.3%	Mid Core 13.4%	Mid Core 12.7%	Lrge Val 13.1%	Lrge Val 14.4%	Lrge Val 14.8%	Sm Core 13.5%	Sm Core 15.2%	Mid Core 14.4%	Mid Core 14.0%	Mid Core 13.2%
Sm Grw 11.6%	Emrg Mkt 11.3%	Lrge Val 11.3%	Emrg Mkt 11.7%	Emrg Mkt 12.4%	Lrge Val 12.3%	Lrge Val 12.4%	Mid Core 12.0%	Lrge Val 11.4%	Lrge Val 13.1%	Lrge Val 13.1%	Lrge Val 12.2%	Mid Core 12.7%	Mid Core 13.6%	Mid Core 13.5%	Mid Core 12.8%	S&P 500 13.7%	Lrge Core 13.9%	Lrge Core 13.7%	Lrge Core 12.6%
Emrg Mkt 10.9%	REIT 9.9%	Sm Grw 10.2%	Intl Mkt 11.2%	Intl Mkt 12.0%	Intl Mkt 12.1%	Intl Mkt 11.1%	Lrge Core 10.4%	Lrge Core 10.4%	Lrge Core 10.9%	Lrge Core 10.8%	Intl Mkt 10.9%	Intl Mkt 11.6%	Intl Mkt 12.3%	Lrge Core 12.9%	Lrge Core 12.8%	Lrge Core 13.7%	Emrg Mkt 13.8%	Emrg Mkt 12.5%	Emrg Mkt 11.3%
REIT 10.8%	Sm Grw 9.7%	Lrge Core 9.8%	REIT 10.2%	Lrge Core 10.6%	Lrge Core 10.0%	Lrge Core 10.9%	S&P 500 10.2%	S&P 500 10.3%	S&P 500 10.9%	Mid Grw 10.6%	Lrge Core 10.2%	Lrge Core 11.2%	Lrge Core 12.3%	S&P 500 12.1%	S&P 500 12.7%	Mid Core 13.6%	S&P 500 13.2%	S&P 500 12.2%	S&P 500 10.7%
S&P 500 10.8%	Lrge Core 9.5%	REIT 9.6%	Sm Grw 10.0%	S&P 500 10.5%	S&P 500 9.7%	S&P 500 10.3%	Intl Mkt 9.7%	Intl Mkt 9.9%	Mid Grw 10.6%	Intl Mkt 10.6%	Mid Grw 10.1%	S&P 500 10.7%	S&P 500 11.9%	Intl Mkt 11.6%	Lrge Grw 12.6%	Lrge Grw 13.3%	Lrge Grw 13.1%	Lrge Grw 11.9%	Lrge Grw 10.3%
Lrge Core 10.7%	S&P 500 9.4%	S&P 500 9.5%	Lrge Core 10.0%	REIT 10.4%	REIT 9.3%	Mid Grw 9.4%	Lrge Grw 9.2%	Lrge Grw 9.5%	Lrge Grw 10.2%	S&P 500 10.5%	S&P 500 10.0%	Mid Grw 10.3%	Lrge Grw 11.2%	Lrge Grw 11.5%	Intl Mkt 11.5%	Intl Mkt 12.3%	Mid Grw 12.5%	Mid Grw 11.4%	Mid Grw 10.2%
Mid Grw 10.5%	Mid Grw 9.0%	Mid Grw 9.3%	S&P 500 9.8%	Sm Grw 10.2%	Mid Grw 9.0%	Lrge Grw 9.1%	Mid Grw 9.0%	Mid Grw 9.5%	Sm Grw 9.8%	Sm Grw 9.9%	Sm Grw 9.3%	Lrge Grw 9.9%	Mid Grw 11.0%	Mid Grw 10.4%	Mid Grw 10.3%	Mid Grw 12.1%	Intl Mkt 12.4%	Intl Mkt 10.4%	LT Gov 9.3%
Lrge Grw 9.4%	Lrge Grw 8.1%	Intl Mkt 9.2%	Mid Grw 9.5%	Mid Grw 10.0%	Sm Grw 8.6%	REIT 8.8%	REIT 8.5%	REIT 8.9%	Intl Mkt 9.8%	REIT 9.7%	REIT 9.2%	Sm Grw 9.2%	REIT 10.3%	REIT 9.5%	Corp 9.1%	Corp 9.2%	LT Gov 9.2%	REIT 9.4%	Corp 9.3%
Intl Mkt 8.8%	Intl Mkt 7.9%	Lrge Grw 8.3%	Lrge Grw 8.5%	Lrge Grw 9.1%	Lrge Grw 8.3%	Sm Grw 8.6%	Sm Grw 7.9%	Sm Grw 8.8%	REIT 9.7%	Lrge Grw 9.5%	Lrge Grw 9.1%	REIT 8.9%	Sm Grw 9.7%	Corp 8.9%	LT Gov 9.1%	Sm Grw 9.0%	REIT 9.2%	Corp 9.0%	REIT 9.2%
5-Yr Gov 5.3%	5-Yr Gov 5.7%	5-Yr Gov 6.3%	5-Yr Gov 6.9%	5-Yr Gov 6.7%	5-Yr Gov 6.9%	5-Yr Gov 7.4%	5-Yr Gov 7.3%	5-Yr Gov 7.8%	5-Yr Gov 7.8%	5-Yr Gov 8.2%	5-Yr Gov 7.8%	5-Yr Gov 8.4%	5-Yr Gov 8.3%	LT Gov 8.6%	5-Yr Gov 8.7%	LT Gov 8.9%	Corp 9.0%	LT Gov 8.9%	5-Yr Gov 8.8%
T-Bills 5.3%	T-Bills 5.6%	T-Bills 5.8%	Corp 6.2%	T-Bills 6.0%	Corp 6.3%	Corp 6.9%	Corp 6.8%	Corp 7.3%	Corp 7.3%	Corp 7.7%	Corp 7.3%	Corp 8.2%	Corp 8.2%	5-Yr Gov 8.5%	REIT 7.7%	5-Yr Gov 8.7%	Sm Grw 8.9%	5-Yr Gov 8.5%	Intl Mkt 8.6%
Corp 4.0%	Corp 4.4%	Corp 5.3%	T-Bills 5.9%	Corp 5.9%	T-Bills 6.2%	LT Gov 6.4%	T-Bills 6.5%	LT Gov 6.8%	LT Gov 6.8%	LT Gov 7.4%	LT Gov 7.0%	LT Gov 7.9%	LT Gov 7.8%	Sm Grw 7.7%	T-Bills 6.8%	REIT 8.4%	5-Yr Gov 8.5%	Sm Grw 8.1%	Sm Grw 6.7%
LT Gov 3.4%	LT Gov 3.6%	LT Gov 4.6%	LT Gov 5.6%	LT Gov 5.2%	LT Gov 5.8%	T-Bills 6.3%	LT Gov 6.2%	T-Bills 6.6%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.8%	Sm Grw 6.6%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.7%	T-Bills 6.6%
Cmdty 3.3%	Cmdty 2.8%	Cmdty 2.6%	Cmdty 2.1%	Cmdty 2.8%	Cmdty 3.1%	Cmdty 2.8%	Cmdty 2.8%	Cmdty 2.4%	Cmdty 2.3%	Cmdty 2.4%	Cmdty 2.8%	Cmdty 3.3%	Cmdty 4.5%	Cmdty 4.5%	Cmdty 3.4%	Cmdty 4.2%	Cmdty 5.3%	Cmdty 4.4%	Cmdty 4.4%

30-Year Compound Returns Starting 1934

1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Sm Val 17.1%	Sm Val 17.5%	Sm Val 17.2%	Sm Val 14.6%	Sm Val 19.3%	Sm Val 19.9%	Sm Val 19.0%	Sm Val 19.7%	Sm Val 20.4%	Sm Val 19.4%	Mid Val 15.8%	Mid Val 13.3%	Mid Val 13.1%	Mid Val 15.2%	Sm Val 15.6%	Sm Val 16.5%	Sm Val 17.1%	Sm Val 16.2%	Sm Val 16.4%	Sm Val 17.4%
Mid Core 14.8%	Lrge Val 15.7%	Mid Val 15.6%	Mid Val 13.3%	Mid Val 17.5%	Mid Val 17.8%	Mid Val 17.6%	Mid Val 17.9%	Mid Val 18.5%	Mid Val 17.9%	Sm Val 15.5%	Sm Val 13.2%	Sm Val 12.9%	Sm Val 15.1%	Mid Val 15.4%	Mid Val 15.7%	Mid Val 16.0%	Mid Val 14.4%	Mid Val 14.4%	Mid Val 14.9%
Sm Core 14.6%	Mid Val 15.5%	Lrge Val 14.9%	Lrge Val 12.8%	Sm Core 16.6%	Sm Core 16.5%	Sm Core 15.4%	Sm Core 15.1%	Sm Core 16.5%	Sm Core 15.9%	Lrge Val 13.8%	Mid Core 11.4%	Mid Core 11.3%	Mid Core 12.8%	Mid Core 13.0%	Sm Core 13.7%	Sm Core 14.1%	Sm Core 14.1%	Sm Core 14.1%	Sm Core 14.8%
Lrge Val 14.6%	Mid Core 14.8%	Mid Core 14.4%	Mid Core 12.7%	Mid Core 16.0%	Mid Core 15.4%	Mid Core 14.7%	Mid Core 15.1%	Mid Core 15.9%	Mid Core 15.5%	Mid Core 13.4%	Lrge Val 10.8%	Lrge Val 10.9%	Lrge Val 12.4%	Sm Core 12.7%	Mid Core 13.3%	Mid Core 13.4%	Mid Core 13.3%	Mid Core 12.9%	Mid Core 13.4%
Mid Val 13.5%	Sm Core 14.7%	Sm Core 13.6%	Sm Core 11.9%	Lrge Val 15.3%	Lrge Val 15.0%	Lrge Val 14.6%	Lrge Val 15.0%	Lrge Val 15.7%	Lrge Val 15.0%	Sm Core 12.8%	Sm Core 10.3%	S&P 500 10.2%	Sm Core 12.0%	Lrge Val 12.3%	Lrge Val 12.2%	Lrge Val 12.1%	Emrg Mkt 12.2%	Emrg Mkt 11.6%	Lrge Val 11.5%
S&P 500 12.4%	Lrge Core 13.1%	S&P 500 12.0%	S&P 500 10.5%	Sm Grw 14.8%	Sm Grw 14.5%	Sm Grw 13.0%	S&P 500 12.5%	Sm Grw 13.8%	S&P 500 13.5%	S&P 500 12.0%	S&P 500 10.2%	Sm Core 10.2%	S&P 500 11.3%	S&P 500 10.8%	S&P 500 10.9%	Emrg Mkt 11.4%	Sm Grw 11.6%	Lrge Val 11.3%	Sm Grw 11.0%
Sm Grw 12.0%	S&P 500 13.0%	Lrge Core 11.8%	Lrge Core 10.3%	S&P 500 12.9%	REIT 12.6%	S&P 500 12.0%	REIT 12.4%	S&P 500 13.5%	Sm Grw 13.2%	Lrge Core 10.8%	Lrge Core 9.2%	Lrge Core 9.4%	Lrge Core 10.6%	Lrge Core 10.3%	Lrge Core 10.6%	Sm Grw 11.0%	Lrge Val 11.3%	Sm Grw 10.6%	Emrg Mkt 10.4%
Lrge Core 11.9%	Mid Grw 11.4%	Sm Grw 11.2%	Mid Grw 9.9%	Mid Grw 12.9%	S&P 500 12.3%	REIT 11.9%	Sm Grw 12.2%	REIT 13.0%	REIT 12.6%	Lrge Grw 10.4%	Lrge Grw 8.9%	Lrge Grw 9.1%	Lrge Grw 10.1%	Lrge Grw 9.6%	Sm Grw 10.3%	S&P 500 10.9%	Lrge Core 11.0%	S&P 500 9.9%	S&P 500 10.0%
Mid Grw 11.7%	Lrge Grw 11.3%	Mid Grw 10.9%	Sm Grw 9.9%	REIT 12.1%	Mid Grw 12.0%	Mid Grw 11.5%	Lrge Core 11.5%	Mid Grw 12.8%	Mid Grw 12.4%	Mid Grw 9.9%	Mid Grw 7.5%	Mid Grw 7.5%	Mid Grw 8.7%	Sm Grw 9.4%	Emrg Mkt 10.1%	Lrge Core 10.8%	S&P 500 10.9%	Lrge Core 9.8%	Mid Grw 9.9%
Lrge Grw 11.1%	Sm Grw 11.1%	REIT 10.5%	Lrge Grw 9.1%	Lrge Core 12.1%	Lrge Core 12.0%	Lrge Core 11.2%	Mid Grw 11.3%	Lrge Grw 11.9%	Lrge Grw 12.1%	Sm Grw 9.6%	Emrg Mkt 7.2%	Emrg Mkt 7.0%	Sm Grw 8.5%	Emrg Mkt 8.9%	Lrge Grw 9.6%	Mid Grw 9.5%	Mid Grw 10.3%	Mid Grw 9.6%	Lrge Core 9.8%
REIT 10.3%	REIT 10.8%	Lrge Grw 10.4%	REIT 8.5%	Lrge Grw 11.4%	Lrge Grw 10.5%	Lrge Grw 10.2%	Lrge Grw 10.6%	Lrge Core 11.9%	Lrge Core 11.9%	REIT 9.4%	Sm Grw 6.9%	Sm Grw 6.9%	Emrg Mkt 8.0%	Mid Grw 8.8%	Mid Grw 9.1%	Lrge Grw 9.4%	Lrge Grw 9.7%	REIT 8.8%	REIT 9.6%
Emrg Mkt 5.8%	Emrg Mkt 5.0%	Emrg Mkt 5.0%	Emrg Mkt 4.4%	Emrg Mkt 4.9%	Emrg Mkt 5.9%	Emrg Mkt 7.1%	Emrg Mkt 7.7%	Emrg Mkt 8.2%	Emrg Mkt 8.5%	Emrg Mkt 8.2%	REIT 6.3%	REIT 5.9%	REIT 7.7%	REIT 8.3%	REIT 8.4%	REIT 8.9%	Intl Mkt 9.0%	Lrge Grw 8.7%	Lrge Grw 9.0%
Cmdty 3.9%	Corp 3.1%	Corp 2.8%	Corp 2.6%	Cmdty 3.0%	Intl Mkt 3.7%	Intl Mkt 4.3%	Intl Mkt 3.5%	Intl Mkt 3.6%	Intl Mkt 4.8%	Intl Mkt 4.0%	Intl Mkt 3.7%	Intl Mkt 4.6%	Intl Mkt 5.7%	Intl Mkt 6.5%	Intl Mkt 7.8%	Intl Mkt 8.4%	REIT 8.7%	Intl Mkt 8.5%	Intl Mkt 8.5%
Corp 3.4%	Cmdty 2.9%	Cmdty 2.7%	5-Yr Gov 2.5%	Intl Mkt 2.7%	Cmdty 3.2%	Cmdty 2.2%	Cmdty 2.6%	5-Yr Gov 2.9%	5-Yr Gov 3.0%	Cmdty 3.4%	Cmdty 3.5%	5-Yr Gov 3.4%	5-Yr Gov 3.8%	5-Yr Gov 3.8%	5-Yr Gov 3.8%	T-Bills 4.0%	T-Bills 4.3%	T-Bills 4.8%	5-Yr Gov 5.2%
Intl Mkt 3.1%	Intl Mkt 2.8%	LT Gov 2.6%	LT Gov 2.4%	5-Yr Gov 2.4%	5-Yr Gov 2.4%	5-Yr Gov 2.2%	5-Yr Gov 2.6%	Corp 2.5%	Corp 2.7%	5-Yr Gov 3.1%	5-Yr Gov 3.2%	Cmdty 3.2%	T-Bills 3.3%	T-Bills 3.5%	T-Bills 3.7%	5-Yr Gov 3.9%	5-Yr Gov 4.0%	5-Yr Gov 4.3%	T-Bills 5.1%
LT Gov 2.9%	LT Gov 2.7%	5-Yr Gov 2.4%	Cmdty 2.1%	Corp 2.3%	Corp 2.2%	T-Bills 2.0%	T-Bills 2.3%	T-Bills 2.4%	T-Bills 2.5%	T-Bills 2.7%	T-Bills 3.0%	T-Bills 3.2%	Corp 3.2%	Corp 3.3%	Corp 3.2%	Cmdty 3.7%	Corp 2.8%	Corp 2.8%	Corp 3.9%
5-Yr Gov 2.8%	5-Yr Gov 2.6%	Intl Mkt 2.4%	Intl Mkt 1.6%	LT Gov 2.1%	LT Gov 1.9%	Corp 1.8%	Corp 2.3%	LT Gov 2.1%	LT Gov 2.2%	Corp 2.6%	Corp 2.3%	Corp 2.7%	LT Gov 2.6%	LT Gov 2.7%	LT Gov 2.5%	Corp 2.9%	Cmdty 2.6%	Cmdty 2.4%	LT Gov 3.5%
T-Bills 1.1%	T-Bills 1.2%	T-Bills 1.4%	T-Bills 1.5%	T-Bills 1.7%	T-Bills 1.8%	LT Gov 1.5%	LT Gov 1.7%	Cmdty 1.4%	Cmdty 2.2%	LT Gov 2.1%	LT Gov 2.1%	LT Gov 2.1%	Cmdty 1.9%	Cmdty 1.3%	Cmdty 2.3%	LT Gov 2.3%	LT Gov 2.1%	LT Gov 2.3%	Cmdty 2.7%

Data Disclosure

The Asset Dedication Periodic Table Analysis uses historical index data from a number of providers to create an historical audit of an investor's specific scenario. The dataset range is 1927 to present. The primary sources are: Center for Research in Securities Prices (CRSP), Fama/French Research Database, Dimensional Fund Advisors, MSCI, Ibbotson Associates and Global Financial Data. Some datasets have been extended using multiple regression analysis.

An historical audit is a method for back-testing performance with the benefit of hindsight. Back-tested performance is provided for informational purposes only and does not represent actual performance. It is strictly hypothetical. Actual performance may have been materially lower and future performance may be materially lower. Results also do not reflect actual trading and market factors that could have impacted a client's or Asset Dedication's decision-making process. Trading costs, management fees, and taxes are not considered in the analysis.

No matter how positive historical audits have been over any time period, the potential for loss is always present due to factors which may not be accounted for in the historical audit. The nature of a back-tested audit creates the potential for a financial professional to select superior performance results in order to get the desired audit results.

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