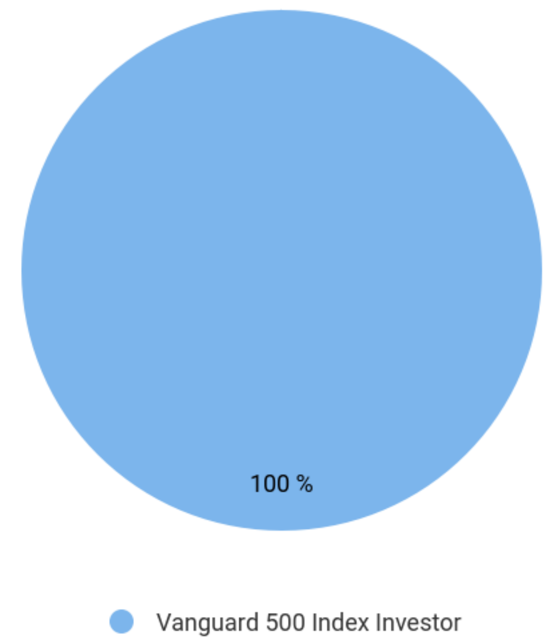
## Report Parameters

| | |
|---|---|
| **Start Date** | 01/01/2000 |
| **End Date** | 12/31/2016 |
| **Initial Balance** | $1,000,000 |
| **External Cashflows** | Withdraw $50,000 annually (inflation adjusted) |
| **Rebalancing** | Rebalance annually |
| **Reinvest Dividends** | Yes |

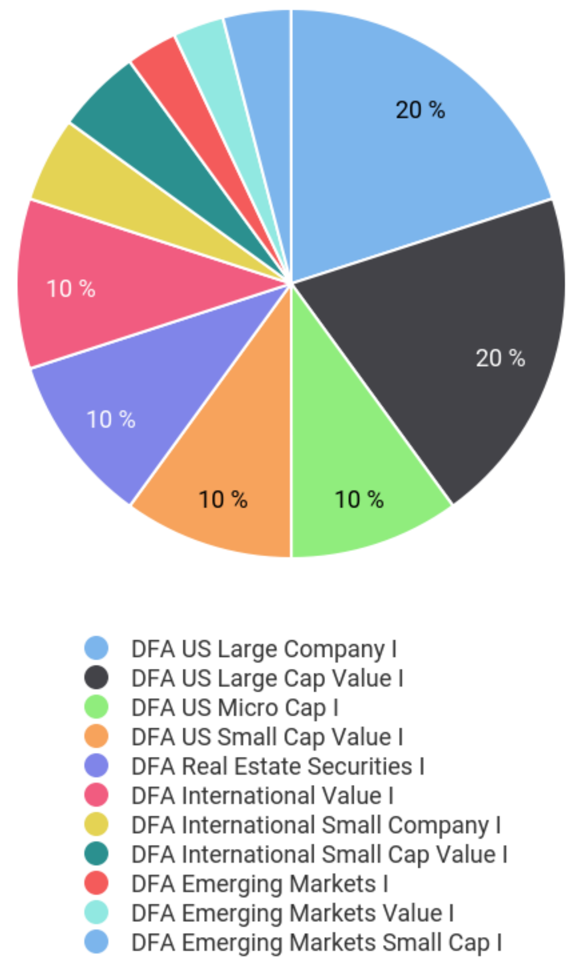
## Portfolio 1

| Ticker | Name | Allocation |
|---|---|---|
| VFINX | Vanguard 500 Index Investor | 100.00% |



## Portfolio 2

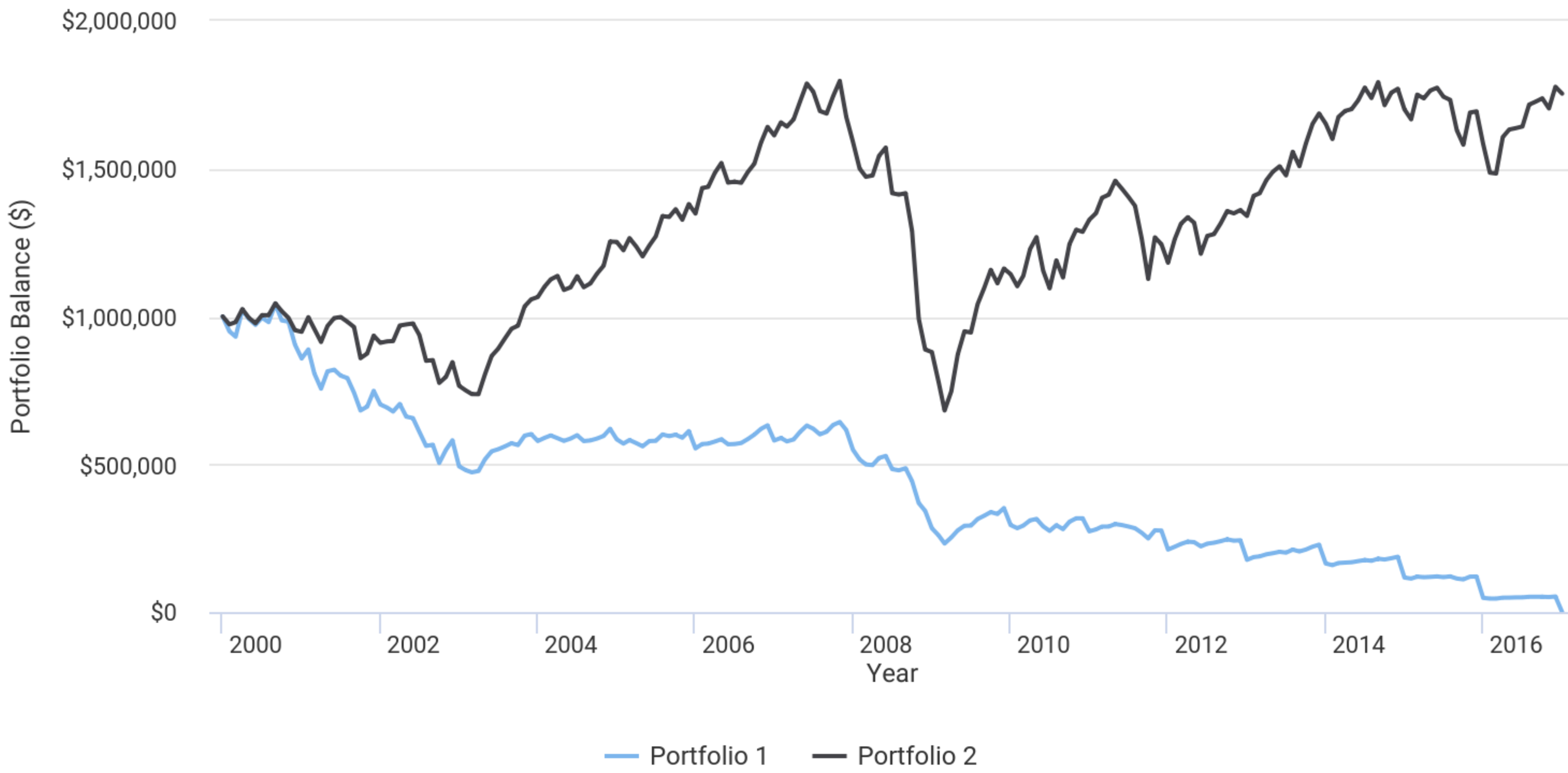
| Ticker | Name | Allocation |
|---|---|---|
| DFUSX | DFA US Large Company I | 20.00% |
| DFLVX | DFA US Large Cap Value I | 20.00% |
| DFSCX | DFA US Micro Cap I | 10.00% |
| DFSVX | DFA US Small Cap Value I | 10.00% |
| DFREX | DFA Real Estate Securities I | 10.00% |
| DFIVX | DFA International Value I | 10.00% |
| DFISX | DFA International Small Company I | 5.00% |
| DISVX | DFA International Small Cap Value I | 5.00% |
| DFEMX | DFA Emerging Markets I | 3.00% |
| DFEVX | DFA Emerging Markets Value I | 3.00% |
| DEMSX | DFA Emerging Markets Small Cap I | 4.00% |



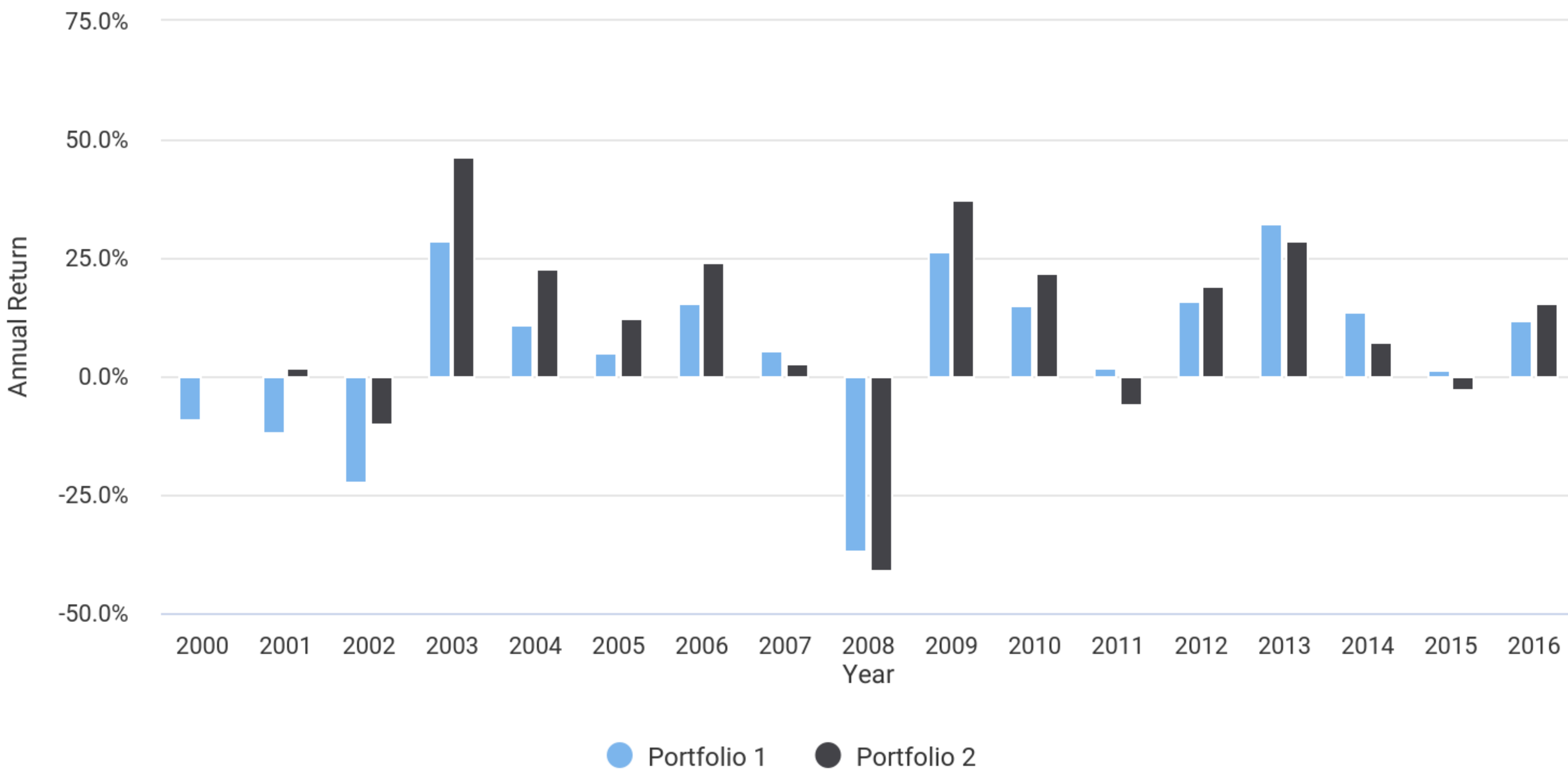
## Portfolio Performance (Jan 2000 - Dec 2016)

| Metric | Portfolio 1 | Portfolio 2 |
|---|---|---|
| Start Balance | $1,000,000 | $1,000,000 |
| End Balance | $0.00 | $1,753,877 |
| End Balance (inflation adjusted) | $0.00 | $1,222,612 |
| Annualized Return (CAGR) | N/A | 3.36% |
| Annualized Return (CAGR, inflation adjusted) | N/A | 1.19% |
| Time-Weighted Rate of Return (TWRR) | 4.40% | 8.53% |
| Money-Weighted Rate of Return (MWRR) | N/A | 8.18% |
| Standard Deviation | 14.87% | 16.73% |
| Best Year | 32.18% | 46.42% |
| Worst Year | -37.02% | -40.79% |
| Maximum Drawdown | -100.00% | -62.04% |
| Max. Drawdown (excluding cashflows) | -50.97% | -57.75% |
| Sharpe Ratio | 0.25 | 0.48 |
| Sortino Ratio | 0.35 | 0.68 |

## Portfolio Growth



## Annual Returns



## Trailing Returns

| Name | Total Return | | | Annualized Return | | | | Annualized Standard Deviation | |
|---|---|---|---|---|---|---|---|---|---|
| | 3 Month | Year To Date | 1 year | 3 year | 5 year | 10 year | Full | 3 year | 5 year |
| Portfolio 1 | 3.80% | 11.82% | 11.82% | 8.72% | 14.49% | 6.82% | 4.40% | 10.74% | 10.36% |
| Portfolio 2 | 5.05% | 15.31% | 15.31% | 6.31% | 12.96% | 5.79% | 8.53% | 11.15% | 11.31% |

*Trailing return and volatility are as of last calendar month ending December 2016*

## Risk and Return Metrics (Jan 2000 - Dec 2016)

| Metric | Portfolio 1 | Portfolio 2 |
|---|---|---|
| Arithmetic Mean (monthly) | 0.45% | 0.80% |
| Arithmetic Mean (annualized) | 5.56% | 10.07% |
| Geometric Mean (monthly) | 0.36% | 0.68% |
| Geometric Mean (annualized) | 4.40% | 8.53% |
| Standard Deviation (monthly) | 4.29% | 4.83% |
| Standard Deviation (annualized) | 14.87% | 16.73% |
| Downside Deviation (monthly) | 3.01% | 3.32% |
| Maximum Drawdown | -50.97% | -57.75% |
| Benchmark Correlation | 0.99 | 0.94 |
| Beta (*) | 0.96 | 1.03 |
| Alpha (annualized) | -0.34% | 3.45% |
| R Squared | 97.77% | 89.17% |
| Sharpe Ratio | 0.25 | 0.48 |
| Sortino Ratio | 0.35 | 0.68 |
| Treynor Ratio (%) | 3.92 | 7.73 |
| Calmar Ratio | 1.04 | 0.50 |
| Modigliani–Modigliani Measure | 5.54% | 8.98% |
| Active Return | -0.52% | 3.61% |
| Tracking Error | 2.30% | 5.53% |
| Information Ratio | -0.23 | 0.65 |
| Skewness | -0.53 | -0.78 |
| Excess Kurtosis | 1.05 | 3.10 |
| Historical Value-at-Risk (5%) | 7.64% | 8.83% |
| Analytical Value-at-Risk (5%) | 6.61% | 7.15% |
| Conditional Value-at-Risk (5%) | 9.54% | 11.38% |
| Upside Capture Ratio (%) | 93.35 | 111.90 |
| Downside Capture Ratio (%) | 95.68 | 95.44 |
| Positive Periods | 125 out of 204 (61.27%) | 130 out of 204 (63.73%) |
| Gain/Loss Ratio | 0.82 | 0.89 |

*(*) U.S. Stock Market is used as the benchmark for calculations. Value-at-risk metrics are monthly values.*

## Portfolio 1 Returns

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Inflation | Cashflow | Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000 | -5.03% | -1.91% | 9.75% | -3.00% | -2.04% | 2.49% | -1.50% | 6.19% | -5.29% | -0.43% | -7.89% | 0.51% | -9.06% | 3.39% | -$51,693 | $857,745 |
| 2001 | 3.55% | -9.14% | -6.36% | 7.77% | 0.65% | -2.45% | -1.00% | -6.27% | -8.09% | 1.90% | 7.65% | 0.87% | -12.02% | 1.55% | -$52,496 | $702,122 |
| 2002 | -1.47% | -1.94% | 3.74% | -6.07% | -0.75% | -7.13% | -7.72% | 0.65% | -10.87% | 8.78% | 5.88% | -5.89% | -22.15% | 2.38% | -$53,743 | $492,893 |
| 2003 | -2.62% | -1.52% | 0.96% | 8.25% | 5.26% | 1.26% | 1.74% | 1.93% | -1.07% | 5.64% | 0.86% | 5.22% | 28.50% | 1.88% | -$54,753 | $578,623 |
| 2004 | 1.82% | 1.38% | -1.51% | -1.58% | 1.36% | 1.93% | -3.31% | 0.38% | 1.07% | 1.51% | 4.05% | 3.39% | 10.74% | 3.26% | -$56,536 | $584,233 |
| 2005 | -2.45% | 2.09% | -1.76% | -1.91% | 3.17% | 0.13% | 3.71% | -0.91% | 0.79% | -1.68% | 3.76% | 0.02% | 4.77% | 3.42% | -$58,467 | $553,659 |
| 2006 | 2.65% | 0.26% | 1.23% | 1.33% | -2.90% | 0.13% | 0.61% | 2.36% | 2.56% | 3.25% | 1.89% | 1.39% | 15.64% | 2.54% | -$59,952 | $580,308 |
| 2007 | 1.49% | -1.97% | 1.11% | 4.42% | 3.48% | -1.68% | -3.08% | 1.50% | 3.72% | 1.58% | -4.19% | -0.70% | 5.39% | 4.08% | -$62,399 | $549,168 |
| 2008 | -6.02% | -3.25% | -0.44% | 4.85% | 1.29% | -8.44% | -0.83% | 1.45% | -8.91% | -16.79% | -7.17% | 1.07% | -37.02% | 0.09% | -$62,456 | $283,406 |
| 2009 | -8.41% | -10.66% | 8.76% | 9.56% | 5.62% | 0.22% | 7.58% | 3.60% | 3.72% | -1.87% | 5.98% | 1.95% | 26.49% | 2.72% | -$64,156 | $294,312 |
| 2010 | -3.60% | 3.09% | 6.01% | 1.58% | -8.01% | -5.24% | 7.00% | -4.53% | 8.92% | 3.79% | 0.00% | 6.67% | 14.91% | 1.50% | -$65,116 | $273,089 |
| 2011 | 2.36% | 3.42% | 0.03% | 2.95% | -1.15% | -1.67% | -2.05% | -5.45% | -7.04% | 10.91% | -0.23% | 1.02% | 1.97% | 2.96% | -$67,045 | $211,414 |
| 2012 | 4.46% | 4.31% | 3.28% | -0.64% | -6.02% | 4.11% | 1.37% | 2.24% | 2.58% | -1.86% | 0.56% | 0.90% | 15.82% | 1.74% | -$68,212 | $176,657 |
| 2013 | 5.18% | 1.34% | 3.74% | 1.91% | 2.33% | -1.35% | 5.07% | -2.91% | 3.12% | 4.59% | 3.03% | 2.51% | 32.18% | 1.50% | -$69,236 | $164,262 |
| 2014 | -3.47% | 4.56% | 0.82% | 0.72% | 2.33% | 2.05% | -1.39% | 3.98% | -1.41% | 2.42% | 2.68% | -0.26% | 13.51% | 0.76% | -$69,760 | $116,691 |
| 2015 | -3.02% | 5.74% | -1.59% | 0.95% | 1.27% | -1.93% | 2.08% | -6.05% | -2.48% | 8.42% | 0.29% | -1.59% | 1.25% | 0.73% | -$70,269 | $47,879 |
| 2016 | -4.98% | -0.15% | 6.78% | 0.37% | 1.78% | 0.25% | 3.68% | 0.13% | 0.01% | -1.83% | 3.70% | 1.96% | 11.82% | 2.07% | $53,537 | $0.00 |

*The cashflow column shows the total annual portfolio contributions (positive) and withdrawals (negative).*

## Portfolio 2 Returns

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Inflation | Cashflow | Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000 | -2.68% | 0.77% | 4.48% | -2.85% | -1.87% | 2.79% | -0.00% | 3.99% | -2.54% | -2.21% | -4.21% | 4.87% | -0.02% | 3.39% | -$51,693 | $948,110 |
| 2001 | 5.19% | -3.98% | -4.58% | 5.91% | 2.77% | 0.34% | -1.59% | -1.82% | -10.92% | 1.83% | 6.90% | 3.03% | 1.60% | 1.55% | -$52,496 | $910,746 |
| 2002 | 0.53% | 0.12% | 5.73% | 0.39% | 0.32% | -4.01% | -9.28% | 0.25% | -9.03% | 2.61% | 6.26% | -3.10% | -10.07% | 2.38% | -$53,743 | $765,245 |
| 2003 | -2.03% | -1.65% | -0.04% | 9.12% | 7.73% | 2.79% | 3.87% | 3.59% | 1.09% | 6.77% | 2.26% | 5.94% | 46.42% | 1.88% | -$54,753 | $1,065,722 |
| 2004 | 3.28% | 2.25% | 1.03% | -4.16% | 0.79% | 3.43% | -3.26% | 1.17% | 2.92% | 2.38% | 6.98% | 4.42% | 22.79% | 3.26% | -$56,536 | $1,252,104 |
| 2005 | -2.25% | 3.34% | -2.21% | -2.71% | 3.05% | 2.50% | 5.39% | -0.22% | 1.95% | -2.60% | 3.98% | 1.93% | 12.34% | 3.42% | -$58,467 | $1,348,175 |
| 2006 | 6.40% | 0.27% | 3.32% | 2.21% | -4.36% | 0.20% | -0.24% | 2.53% | 1.86% | 4.73% | 3.31% | 1.92% | 24.06% | 2.54% | -$59,952 | $1,612,626 |
| 2007 | 2.71% | -0.85% | 1.49% | 3.63% | 3.51% | -1.52% | -3.74% | -0.49% | 3.45% | 2.99% | -6.77% | -1.32% | 2.51% | 4.08% | -$62,399 | $1,590,738 |
| 2008 | -5.69% | -1.86% | 0.30% | 4.51% | 1.81% | -9.82% | -0.33% | 0.33% | -9.00% | -23.03% | -10.52% | 6.07% | -40.79% | 0.09% | -$62,456 | $879,494 |
| 2009 | -11.43% | -12.44% | 9.43% | 16.77% | 8.93% | -0.40% | 10.13% | 5.35% | 5.49% | -3.91% | 4.47% | 3.91% | 37.28% | 2.72% | -$64,156 | $1,143,185 |
| 2010 | -3.57% | 3.19% | 7.90% | 3.32% | -8.96% | -5.15% | 8.61% | -4.84% | 9.97% | 3.88% | -0.52% | 8.25% | 21.80% | 1.50% | -$65,116 | $1,327,302 |
| 2011 | 1.65% | 3.88% | 0.73% | 3.33% | -1.82% | -1.92% | -2.19% | -8.09% | -10.77% | 12.46% | -1.79% | 0.33% | -5.91% | 2.96% | -$67,045 | $1,181,775 |
| 2012 | 6.74% | 4.16% | 1.64% | -1.38% | -7.96% | 4.98% | 0.46% | 2.84% | 3.16% | -0.56% | 0.81% | 3.57% | 19.17% | 1.74% | -$68,212 | $1,340,102 |
| 2013 | 5.08% | 0.61% | 3.15% | 1.93% | 1.22% | -2.02% | 5.38% | -3.11% | 5.08% | 4.20% | 2.12% | 2.07% | 28.45% | 1.50% | -$69,236 | $1,652,184 |
| 2014 | -3.14% | 4.66% | 1.22% | 0.36% | 1.78% | 2.45% | -1.98% | 3.08% | -4.34% | 2.47% | 0.74% | 0.01% | 7.14% | 0.76% | -$69,760 | $1,700,460 |
| 2015 | -1.98% | 5.00% | -0.70% | 1.53% | 0.53% | -1.72% | -0.61% | -5.94% | -2.98% | 6.87% | 0.24% | -2.38% | -2.76% | 0.73% | -$70,269 | $1,583,189 |
| 2016 | -6.12% | -0.19% | 8.32% | 1.58% | 0.29% | 0.33% | 4.51% | 0.60% | 0.64% | -1.96% | 4.28% | 2.75% | 15.31% | 2.07% | -$71,727 | $1,753,877 |

*The cashflow column shows the total annual portfolio contributions (positive) and withdrawals (negative).*

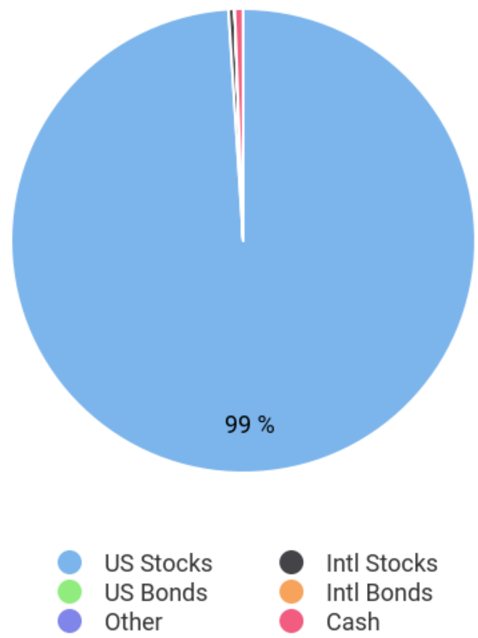
## Holdings Based Style Analysis for Portfolio 1

| Ticker | Name | Category | Weight | SEC Yield | Expense Ratio | | P/E |
|---|---|---|---|---|---|---|---|
| | | | | | Net | Gross | |
| VFINX | Vanguard 500 Index Investor | Large Blend | 100.00% | 1.01% | 0.14% | 0.14% | 28.19 |

## Asset Allocation for Portfolio 1

| Category | Weight |
|---|---|
| US Stocks | 98.99% |
| Intl Stocks | 0.43% |
| US Bonds | 0.00% |
| Intl Bonds | 0.00% |
| Other | 0.00% |
| Cash | 0.58% |

*Holdings-based calculations by Morningstar as of 11/06/2025*




## Equity Market Capitalization for Portfolio 1

| Category | Weight |
|---|---|
| Large Cap | 81.67% |
| Mid Cap | 17.29% |
| Small Cap | 1.04% |

*Market capitaliazation data is based on the rescaled long position of the equity holdings. Holdings-based calculations by Morningstar as of 11/06/2025*

## Stock Sectors for Portfolio 1

| Category | Weight |
|---|---|
| Basic Materials | 1.60% |
| Consumer Discretionary | 10.79% |
| Consumer Staples | 4.89% |
| Energy | 2.92% |
| Financial Services | 13.13% |
| Healthcare | 8.77% |
| Industrials | 7.09% |
| Real Estate | 1.95% |
| Technology | 35.89% |
| Utilities | 2.38% |
| Communication Services | 10.60% |

*Sector data is based on the rescaled long position of the equity holdings. Holdings-based calculations by Morningstar as of 11/06/2025*

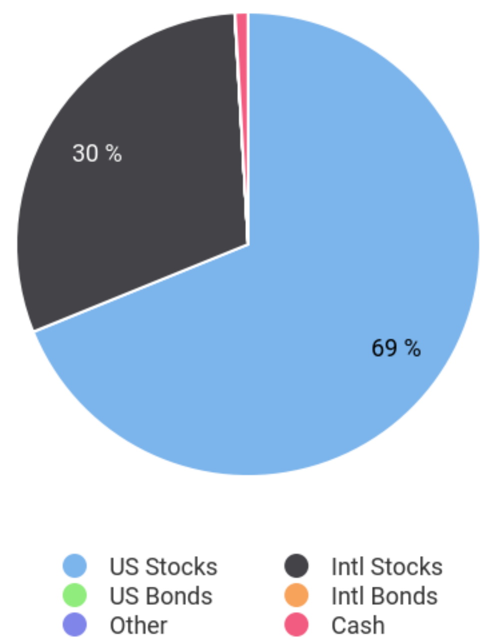
## Holdings Based Style Analysis for Portfolio 2

| Ticker | Name | Category | Weight | Expense Ratio | | P/E |
|---|---|---|---|---|---|---|
| | | | | Net | Gross | |
| DFUSX | DFA US Large Company I | Large Blend | 20.00% | 0.08% | 0.10% | 28.13 |
| DFLVX | DFA US Large Cap Value I | Large Value | 20.00% | 0.23% | 0.33% | 18.12 |
| DFSCX | DFA US Micro Cap I | Small Blend | 10.00% | 0.41% | 0.41% | 17.09 |
| DFSVX | DFA US Small Cap Value I | Small Value | 10.00% | 0.31% | 0.31% | 13.72 |
| DFREX | DFA Real Estate Securities I | Real Estate | 10.00% | 0.18% | 0.20% | 31.42 |
| DFIVX | DFA International Value I | Foreign Large Value | 10.00% | 0.28% | 0.49% | 14.02 |
| DFISX | DFA International Small Company I | Foreign Small/Mid Blend | 5.00% | 0.39% | 0.39% | 14.71 |
| DISVX | DFA International Small Cap Value I | Foreign Small/Mid Value | 5.00% | 0.43% | 0.43% | 11.52 |
| DFEMX | DFA Emerging Markets I | Diversified Emerging Mkts | 3.00% | 0.36% | 0.46% | 13.93 |
| DFEVX | DFA Emerging Markets Value I | Diversified Emerging Mkts | 3.00% | 0.44% | 0.55% | 11.05 |
| DEMSX | DFA Emerging Markets Small Cap I | Diversified Emerging Mkts | 4.00% | 0.61% | 0.81% | 15.55 |
| | | | **100.00%** | **0.27%** | **0.33%** | **19.56** |

## Asset Allocation for Portfolio 2

| Category | Weight |
|---|---|
| US Stocks | 68.85% |
| Intl Stocks | 30.23% |
| US Bonds | 0.00% |
| Intl Bonds | 0.00% |
| Other | 0.02% |
| Cash | 0.90% |

*Holdings-based calculations by Morningstar as of 11/06/2025*



## Equity Market Capitalization for Portfolio 2

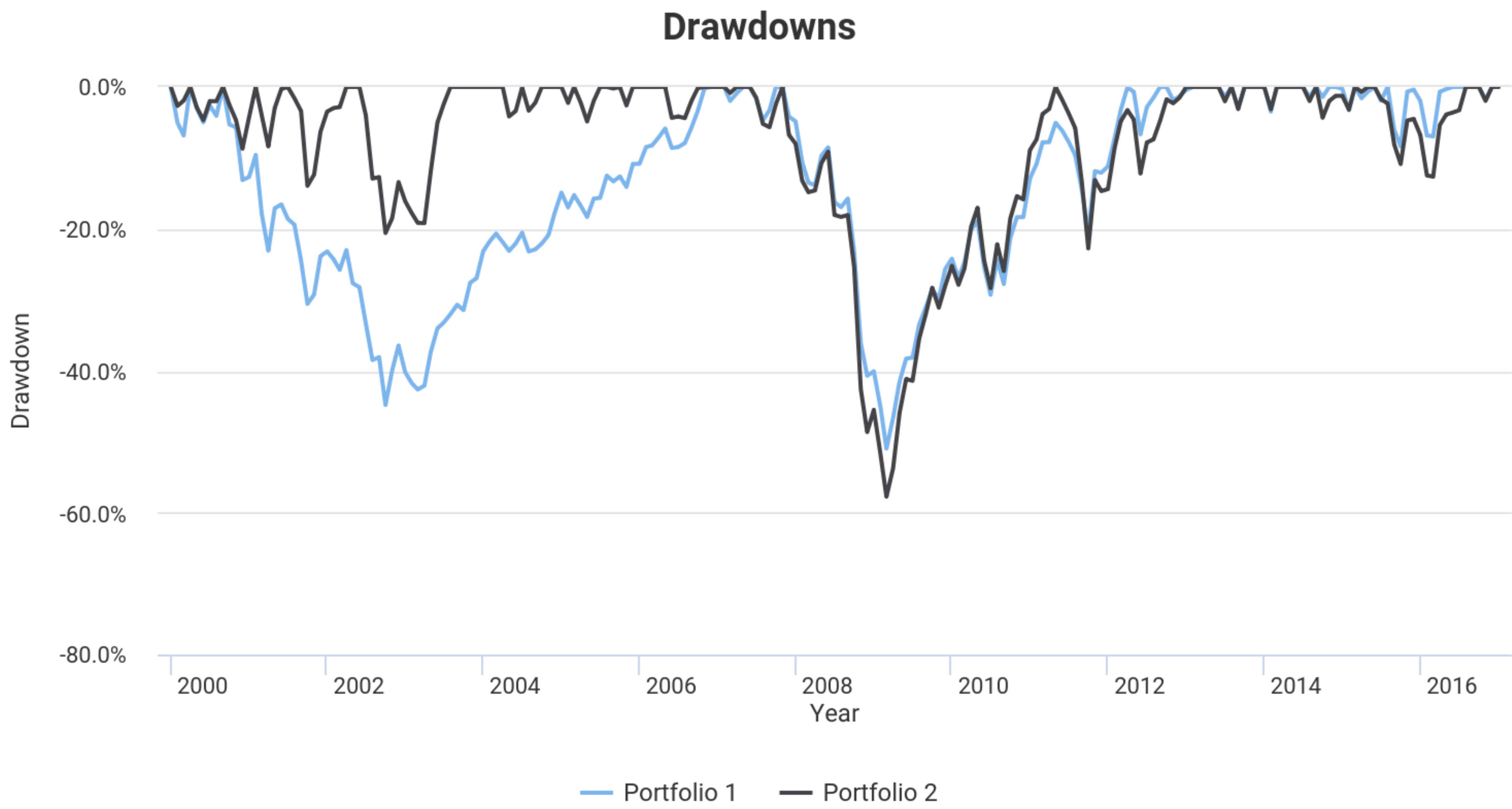
| Category | Weight |
|---|---|
| Large Cap | 42.76% |
| Mid Cap | 28.69% |
| Small Cap | 28.55% |

*Market capitaliazation data is based on the rescaled long position of the equity holdings. Holdings-based calculations by Morningstar as of 11/06/2025*

## Stock Sectors for Portfolio 2

| Category | Weight |
|---|---|
| Basic Materials | 6.45% |
| Consumer Discretionary | 9.61% |
| Consumer Staples | 4.15% |
| Energy | 6.94% |
| Financial Services | 20.21% |
| Healthcare | 8.23% |
| Industrials | 11.93% |
| Real Estate | 11.11% |
| Technology | 14.60% |
| Utilities | 1.48% |
| Communication Services | 5.29% |

*Sector data is based on the rescaled long position of the equity holdings. Holdings-based calculations by Morningstar as of 11/06/2025*




## Drawdowns for Historical Market Stress Periods

| Stress Period | Start | End | Portfolio 1 | Portfolio 2 |
|---|---|---|---|---|
| Dotcom Crash | Mar 2000 | Oct 2002 | -44.82% | -20.58% |
| Subprime Crisis | Nov 2007 | Mar 2009 | -50.97% | -57.75% |

## Drawdowns for Portfolio 1 (worst 10)

| Rank | Start | End | Length | Recovery By | Recovery Time | Underwater Period | Drawdown |
|---|---|---|---|---|---|---|---|
| 1 | Nov 2007 | Feb 2009 | 1 year 4 months | Aug 2012 | 3 years 6 months | 4 years 10 months | -50.97% |
| 2 | Sep 2000 | Sep 2002 | 2 years 1 month | Nov 2006 | 4 years 2 months | 6 years 3 months | -44.82% |
| 3 | Aug 2015 | Sep 2015 | 2 months | May 2016 | 8 months | 10 months | -8.38% |
| 4 | Jan 2000 | Feb 2000 | 2 months | Mar 2000 | 1 month | 3 months | -6.84% |
| 5 | Apr 2000 | May 2000 | 2 months | Aug 2000 | 3 months | 5 months | -4.98% |
| 6 | Jun 2007 | Jul 2007 | 2 months | Sep 2007 | 2 months | 4 months | -4.71% |
| 7 | Jan 2014 | Jan 2014 | 1 month | Feb 2014 | 1 month | 2 months | -3.47% |
| 8 | Dec 2014 | Jan 2015 | 2 months | Feb 2015 | 1 month | 3 months | -3.27% |
| 9 | Aug 2013 | Aug 2013 | 1 month | Sep 2013 | 1 month | 2 months | -2.91% |
| 10 | Feb 2007 | Feb 2007 | 1 month | Apr 2007 | 2 months | 3 months | -1.97% |

## Drawdowns for Portfolio 2 (worst 10)

| Rank | Start | End | Length | Recovery By | Recovery Time | Underwater Period | Drawdown |
|---|---|---|---|---|---|---|---|
| 1 | Nov 2007 | Feb 2009 | 1 year 4 months | Apr 2011 | 2 years 2 months | 3 years 6 months | -57.75% |
| 2 | May 2011 | Sep 2011 | 5 months | Dec 2012 | 1 year 3 months | 1 year 8 months | -22.75% |
| 3 | Jun 2002 | Sep 2002 | 4 months | Jul 2003 | 10 months | 1 year 2 months | -20.58% |
| 4 | Jul 2001 | Sep 2001 | 3 months | Mar 2002 | 6 months | 9 months | -13.93% |
| 5 | Jun 2015 | Feb 2016 | 9 months | Jul 2016 | 5 months | 1 year 2 months | -12.65% |
| 6 | Sep 2000 | Nov 2000 | 3 months | Jan 2001 | 2 months | 5 months | -8.70% |
| 7 | Feb 2001 | Mar 2001 | 2 months | Jun 2001 | 3 months | 5 months | -8.38% |
| 8 | Jun 2007 | Aug 2007 | 3 months | Oct 2007 | 2 months | 5 months | -5.67% |
| 9 | Mar 2005 | Apr 2005 | 2 months | Jun 2005 | 2 months | 4 months | -4.86% |
| 10 | Apr 2000 | May 2000 | 2 months | Aug 2000 | 3 months | 5 months | -4.67% |

## Portfolio Components (Jan 2000 - Dec 2016)

| Ticker | Name | CAGR | Stdev | Best Year | Worst Year | Max Drawdown | Sharpe Ratio | Sortino Ratio |
|---|---|---|---|---|---|---|---|---|
| VFINX | Vanguard 500 Index Investor | 4.40% | 14.87% | 32.18% | -37.02% | -50.97% | 0.25 | 0.35 |
| DFUSX | DFA US Large Company I | 4.47% | 14.86% | 32.33% | -36.76% | -50.68% | 0.26 | 0.36 |
| DFLVX | DFA US Large Cap Value I | 8.29% | 17.99% | 40.32% | -40.80% | -60.60% | 0.44 | 0.64 |
| DFSCX | DFA US Micro Cap I | 9.93% | 21.37% | 60.72% | -36.72% | -56.88% | 0.47 | 0.72 |
| DFSVX | DFA US Small Cap Value I | 11.27% | 20.77% | 59.40% | -36.79% | -61.18% | 0.54 | 0.81 |
| DFREX | DFA Real Estate Securities I | 11.78% | 21.72% | 35.59% | -37.36% | -69.53% | 0.55 | 0.79 |
| DFIVX | DFA International Value I | 5.23% | 19.22% | 49.93% | -46.33% | -62.70% | 0.28 | 0.39 |
| DFISX | DFA International Small Company I | 8.23% | 17.26% | 58.78% | -43.87% | -57.90% | 0.45 | 0.65 |
| DISVX | DFA International Small Cap Value I | 9.80% | 18.07% | 66.48% | -41.68% | -57.69% | 0.52 | 0.77 |
| DFEMX | DFA Emerging Markets I | 5.94% | 21.36% | 71.77% | -49.20% | -59.19% | 0.30 | 0.44 |
| DFEVX | DFA Emerging Markets Value I | 7.75% | 24.23% | 92.28% | -53.94% | -64.51% | 0.36 | 0.54 |
| DEMSX | DFA Emerging Markets Small Cap I | 8.68% | 22.64% | 99.74% | -54.53% | -63.34% | 0.41 | 0.60 |

## Portfolio Asset Performance

| | Total Return | | | Annualized Return | | | Expense Ratio | |
|---|---|---|---|---|---|---|---|---|
| Name | 3 Month | Year To Date | 1 year | 3 year | 5 year | 10 year | Net | Gross |
| Vanguard 500 Index Investor | 3.80% | 11.82% | 11.82% | 8.72% | 14.49% | 6.82% | 0.14% | 0.14% |
| DFA US Large Company I | 3.78% | 11.90% | 11.90% | 8.80% | 14.57% | 6.95% | 0.08% | 0.10% |
| DFA US Large Cap Value I | 8.63% | 18.89% | 18.89% | 8.09% | 16.68% | 6.55% | 0.23% | 0.33% |
| DFA US Micro Cap I | 13.62% | 25.63% | 25.63% | 7.61% | 16.41% | 7.63% | 0.41% | 0.41% |
| DFA US Small Cap Value I | 15.06% | 28.26% | 28.26% | 6.96% | 16.22% | 6.82% | 0.31% | 0.31% |
| DFA Real Estate Securities I | -3.22% | 8.38% | 8.38% | 13.63% | 11.81% | 4.81% | 0.18% | 0.20% |
| DFA International Value I | 5.09% | 8.41% | 8.41% | -1.88% | 6.28% | 0.28% | 0.28% | 0.49% |
| DFA International Small Company I | -2.05% | 5.80% | 5.80% | 1.64% | 9.72% | 3.46% | 0.39% | 0.39% |
| DFA International Small Cap Value I | 1.71% | 8.00% | 8.00% | 2.19% | 11.55% | 3.50% | 0.43% | 0.43% |
| DFA Emerging Markets I | -5.02% | 12.09% | 12.09% | -2.48% | 1.38% | 2.49% | 0.36% | 0.46% |
| DFA Emerging Markets Value I | -0.97% | 19.84% | 19.84% | -2.37% | 1.33% | 2.27% | 0.44% | 0.55% |
| DFA Emerging Markets Small Cap I | -5.92% | 10.92% | 10.92% | 1.42% | 5.06% | 4.92% | 0.61% | 0.81% |

*Trailing returns as of last calendar month ending December 2016*

## Portfolio Return Decomposition (Jan 2000 - Dec 2016)

| Ticker | Name | Portfolio 1 | Portfolio 2 |
|---|---|---|---|
| VFINX | Vanguard 500 Index Investor | $39,826 | |
| DFUSX | DFA US Large Company I | | $238,469 |
| DFLVX | DFA US Large Cap Value I | | $365,779 |
| DFSCX | DFA US Micro Cap I | | $211,361 |
| DFSVX | DFA US Small Cap Value I | | $232,087 |
| DFREX | DFA Real Estate Securities I | | $242,689 |
| DFIVX | DFA International Value I | | $120,540 |
| DFISX | DFA International Small Company I | | $88,205 |
| DISVX | DFA International Small Cap Value I | | $102,398 |
| DFEMX | DFA Emerging Markets I | | $48,935 |
| DFEVX | DFA Emerging Markets Value I | | $67,104 |
| DEMSX | DFA Emerging Markets Small Cap I | | $94,325 |

*Return attribution decomposes portfolio gains into its constituent parts and identifies the contribution to returns by each of the assets.*

## Portfolio Risk Decomposition (Jan 2000 - Dec 2016)

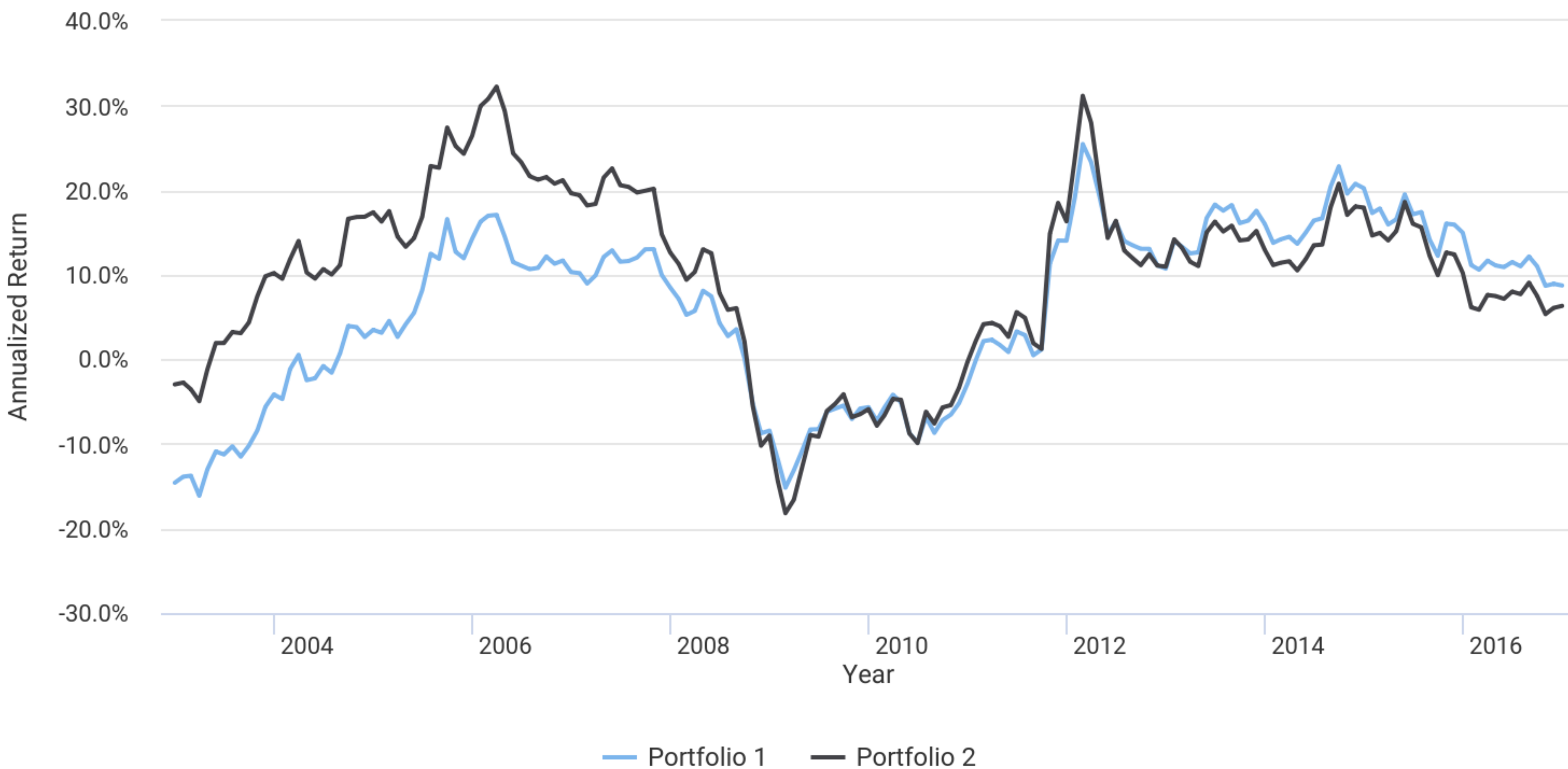
| Ticker | Name | Portfolio 1 | Portfolio 2 |
|---|---|---|---|
| VFINX | Vanguard 500 Index Investor | 100.00% | |
| DFUSX | DFA US Large Company I | | 16.43% |
| DFLVX | DFA US Large Cap Value I | | 20.01% |
| DFSCX | DFA US Micro Cap I | | 10.91% |
| DFSVX | DFA US Small Cap Value I | | 11.50% |
| DFREX | DFA Real Estate Securities I | | 9.56% |
| DFIVX | DFA International Value I | | 10.66% |
| DFISX | DFA International Small Company I | | 4.52% |
| DISVX | DFA International Small Cap Value I | | 4.76% |
| DFEMX | DFA Emerging Markets I | | 3.33% |
| DFEVX | DFA Emerging Markets Value I | | 3.72% |
| DEMSX | DFA Emerging Markets Small Cap I | | 4.58% |

*Risk attribution decomposes portfolio risk into its constituent parts and identifies the contribution to overall volatility by each of the assets.*

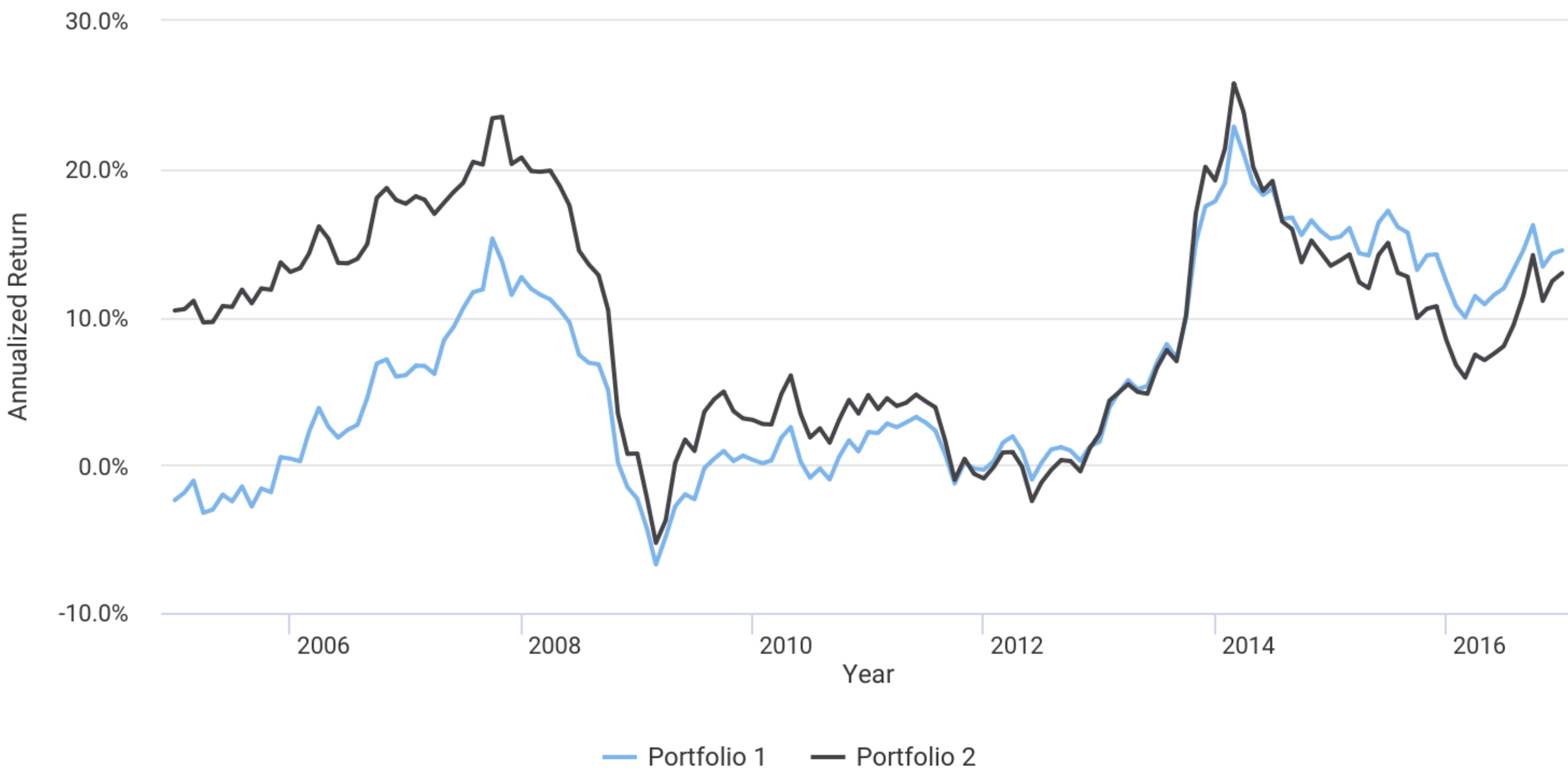
## Rolling Returns (Jan 2000 - Dec 2016)

| Roll Period | Portfolio 1 | | | Portfolio 2 | | |
|---|---|---|---|---|---|---|
| | Average | High | Low | Average | High | Low |
| 1 year | 5.93% | 53.61% | -43.32% | 10.47% | 76.14% | -50.39% |
| 3 years | 6.28% | 25.43% | -16.14% | 10.02% | 32.22% | -18.20% |
| 5 years | 6.17% | 22.85% | -6.73% | 9.65% | 25.78% | -5.27% |
| 7 years | 5.34% | 17.12% | -3.94% | 8.55% | 17.17% | 0.75% |
| 10 years | 5.26% | 8.42% | -1.91% | 8.45% | 12.44% | 5.20% |
| 15 years | 5.10% | 7.03% | 3.64% | 8.96% | 10.08% | 7.86% |

## Annualized Rolling Return (36 months)



## Annualized Rolling Return (60 months)



**Notes:**

• IMPORTANT: The projections or other information generated by Portfolio Visualizer regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results may vary with each use and over time.
• The results do not constitute investment advice or recommendation, are provided solely for informational purposes, and are not an offer to buy or sell any securities. All use is subject to terms of service.
• Investing involves risk, including possible loss of principal. Past performance is not a guarantee of future results.
• Asset allocation and diversification strategies do not guarantee a profit or protect against a loss.
• Hypothetical returns do not reflect trading costs, transaction fees, commissions, or actual taxes due on investment returns.
• The results are based on information from a variety of sources we consider reliable, but we do not represent that the information is accurate or complete.
• Refer to the related documentation sections for more details on terms and definitions , methodology , and data sources.
• Portfolio model information represents a blended portfolio consisting of the model's underlying positions and assigned weights provided by the user and rebalanced at the specified schedule. The results were constructed using net of fee mutual fund performance. Portfolio Visualizer does not provide preferential treatment to any specific security or investment.
• The results are based on the total return of assets and assume that all received dividends and distributions are reinvested.
• Market capitalization refers to the total value of all a company's shares of stock. It is calculated by multiplying the price of a stock by its total number of outstanding shares. Large cap refers to a company with a market capitalization value of more than $10 billion, mid cap refers to a company with a market capitalization value between $2 and $10 billion, and small cap refers to a company with a market capitalization value below $2 billion. For funds and portfolios the equity market capitalization is calculated based on the long position of the equity holdings.
• Credit quality measures the ability of a bond issuer to repay a bond's interest and principal in a timely manner. Ratings agencies research the financial health of each bond issuer and assign ratings to the bonds being offered. Lower-rated bonds generally offer higher yields to compensate investors for the additional risk. AAA is the highest possible rating that may be assigned to an issuer's bonds by any of the major credit rating agencies. Bonds rated AAA to AA are known as high-grade bonds, bonds rated A to BBB are known as medium-grade bonds, and bonds rated BB to C are known as non-investment grade bonds. An issuer will receive a rating of D if it is already in default on some of its debt. For funds and portfolios the fixed income credit quality break-down is calculated based on the long position of the fixed income holdings.
• A fixed income maturity date refers to the specific date on which the investor's principal will be repaid. Duration measures a bond's or fixed income portfolio's price sensitivity to interest rate changes. If a bond has a duration of 5 years, and interest rates increase by 1%, the bond's price will decline by approximately 5%. Conversely, if a bond has a duration of 5 years and interest rates fall by 1%, the bond's price will increase by approximately 5%. A fixed income portfolio's duration is computed as the weighted average of individual bond durations held in the portfolio.
• Compound annualized growth rate (CAGR) is the annualized geometric mean return of the portfolio. It is calculated from the portfolio start and end balance and is thus impacted by any cashflows.
• The time-weighted rate of return (TWRR) is a measure of the compound rate of growth in a portfolio. This is calculated from the holding period returns (e.g. monthly returns), and TWRR will thus not be impacted by cashflows. If there are no external cashflows, TWRR will equal CAGR.
• The money-weighted rate of return (MWRR) is the internal rate of return (IRR) taking into account cashflows. This is the discount rate at which the present value of cash inflows equals the present value of cash outflows.
• Total return is the combined return in income and capital appreciation from investment in an asset. Yield measures the current cash income received from investment in an asset. Bonds provide yield in the form of interest payments and stocks through dividends.
• Standard deviation (Stdev) is used to measure the dispersion of returns around the mean and is often used as a measure of risk. A higher standard deviation implies greater the dispersion of data points around the mean.
• Sharpe Ratio is a measure of risk-adjusted performance of the portfolio, and it is calculated by dividing the mean monthly excess return of the portfolio over the risk-free rate by the standard deviation of excess return, and the displayed value is annualized.
• Sortino Ratio is a measure of risk-adjusted return which is a modification of the Sharpe Ratio. While the latter is the ratio of average returns in excess of a risk-free rate divided by the standard deviation of those excess returns, the Sortino Ratio has the same denominator divided by the standard deviation of returns below the risk-free rate.
• Treynor Ratio is a measure of risk-adjusted performance of the portfolio. It is similar to the Sharpe Ratio, but it uses portfolio beta (systematic risk) as the risk metric in the denominator.
• Calmar Ratio is a measure of risk-adjusted performance of the portfolio. It is calculated as the annualized return over the past 36 months divided by the maximum drawdown over the past 36 months based on monthly returns.
• Downside deviation measures the downside volatility of the portfolio returns unlike standard deviation, which includes both upside and downside deviations. Downside deviation is calculated based on negative returns that hurt the portfolio performance.
• Risk-free returns are calculated based on U.S. 3-Month Treasury Bill Rate.
• Inflation is calculated based on U.S. Consumer Price Index.
• Correlation measures to what degree the returns of the two assets move in relation to each other. Correlation coefficient is a numerical value between -1 and +1. If one variable goes up by a certain amount, the correlation coefficient indicates which way the other variable moves and by how much. Asset correlations are calculated based on monthly returns.
• Skewness is a measure of the asymmetry of the probability distribution or returns from a normal Gaussian distribution shape about its mean. Negative skewness is associated with the left (typically negative returns) tail of the distribution extending further than the right tail; and positive skewness is associated with the right (typically positive returns) tail of the distribution extending further than the left tail.
• Excess kurtosis is a measure of whether a data distribution is peaked or flat relative to a normal distribution. Distributions with high kurtosis tend to have a distinct peak near the mean, decline rather rapidly, and have heavy or fat tails.
• A drawdown refers to the decline in value of a single investment or an investment portfolio from a relative peak value to a relative trough. A maximum drawdown (Max Drawdown) is the maximum observed loss from a peak to a trough of a portfolio before a new peak is attained. Drawdown values are calculated based on monthly returns.
• Value at Risk (VaR) measures the scale of loss at a given confidence level. For example, if the 95% confidence one-month VaR is 3%, there is 95% confidence that over the next month the portfolio will not lose more than 3%. Value at Risk can be calculated directly based on historical returns based on a given percentile or analytically based on the mean and standard deviation of the returns.
• Conditional Value at Risk (CVaR) measures the scale of the expected loss once the specific Value at Risk (VaR) breakpoint has been breached, i.e., it calculates the average tail loss by taking a weighted average between the value at risk and losses exceeding the value at risk.
• Beta is a measure of systematic risk and measures the volatility of a particular investment relative to the market or its benchmark. Alpha measures the active return of the investment compared to the market benchmark return. R-squared is the percentage of a portfolio's movements that can be explained by movements in the selected benchmark index.

- Active return is the investment return minus the return of its benchmark. For periods longer than 12 months this is displayed as annualized value, i.e., annualized investment return minus annualized benchmark return.
- Tracking error, also known as active risk, is the standard deviation of active return. This is displayed as annualized value based on the standard deviation of monthly active returns.
- Information ratio is the active return divided by the tracking error. It measures whether the investment outperformed its benchmark consistently.
- Gain/Loss ratio is a measure of downside risk, and it is calculated as the average positive return in up periods divided by the average negative return in down periods.
- Upside Capture Ratio measures how well the fund performed relative to the benchmark when the market was up, and Downside Capture Ratio measures how well the fund performed relative to the benchmark when the market was down. An upside capture ratio greater than 100 would indicate that the fund outperformed its benchmark when the market was up, and a downside capture ratio below 100 would indicate that the fund lost less than its benchmark when the market was down. To calculate upside capture ratio a new series from the portfolio returns is constructed by dropping all time periods where the benchmark return is less than equal to zero. The up capture is then the quotient of the annualized return of the resulting manager series, divided by the annualized return of the resulting benchmark series. The downside capture ratio is calculated analogously.
- All risk measures for the portfolio and portfolio assets are calculated based on monthly returns.
- Gross expense ratio reflects the total annual operating expenses paid by each fund. Net expense ratio reflects what investors were charged after waivers, reductions, and reimbursements.
- Price to earnings (P/E) ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months' earnings per share. For funds the price to earnings ratio is computed as the weighted average of fund holdings.
- Drawdown analysis is calculated based on monthly returns excluding cashflows.
- The results assume annual rebalancing of portfolio assets to match the specified allocation.
- Inflation adjusted annual withdrawal of $50,000 was applied at the end of each period. This is reflected in the CAGR and maximum drawdown shown above.
- Fund fundamentals data as of 11/06/2025. 