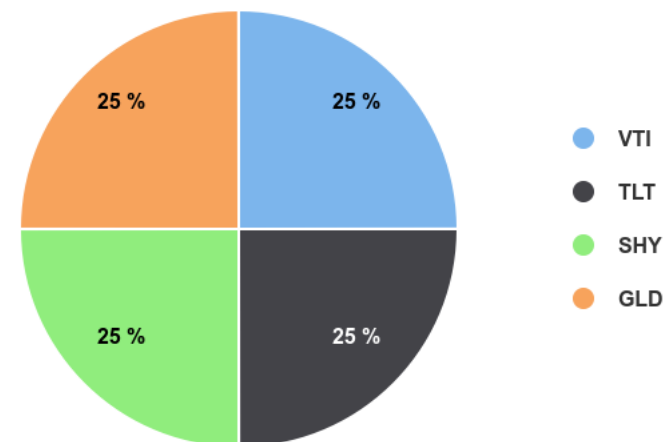


Report Parameters

Start Date	01/01/2005
End Date	10/31/2018
Initial Balance	\$10,000
Periodic Adjustment	None
Rebalancing	Rebalance annually
Reinvest Dividends	Yes

HBPP

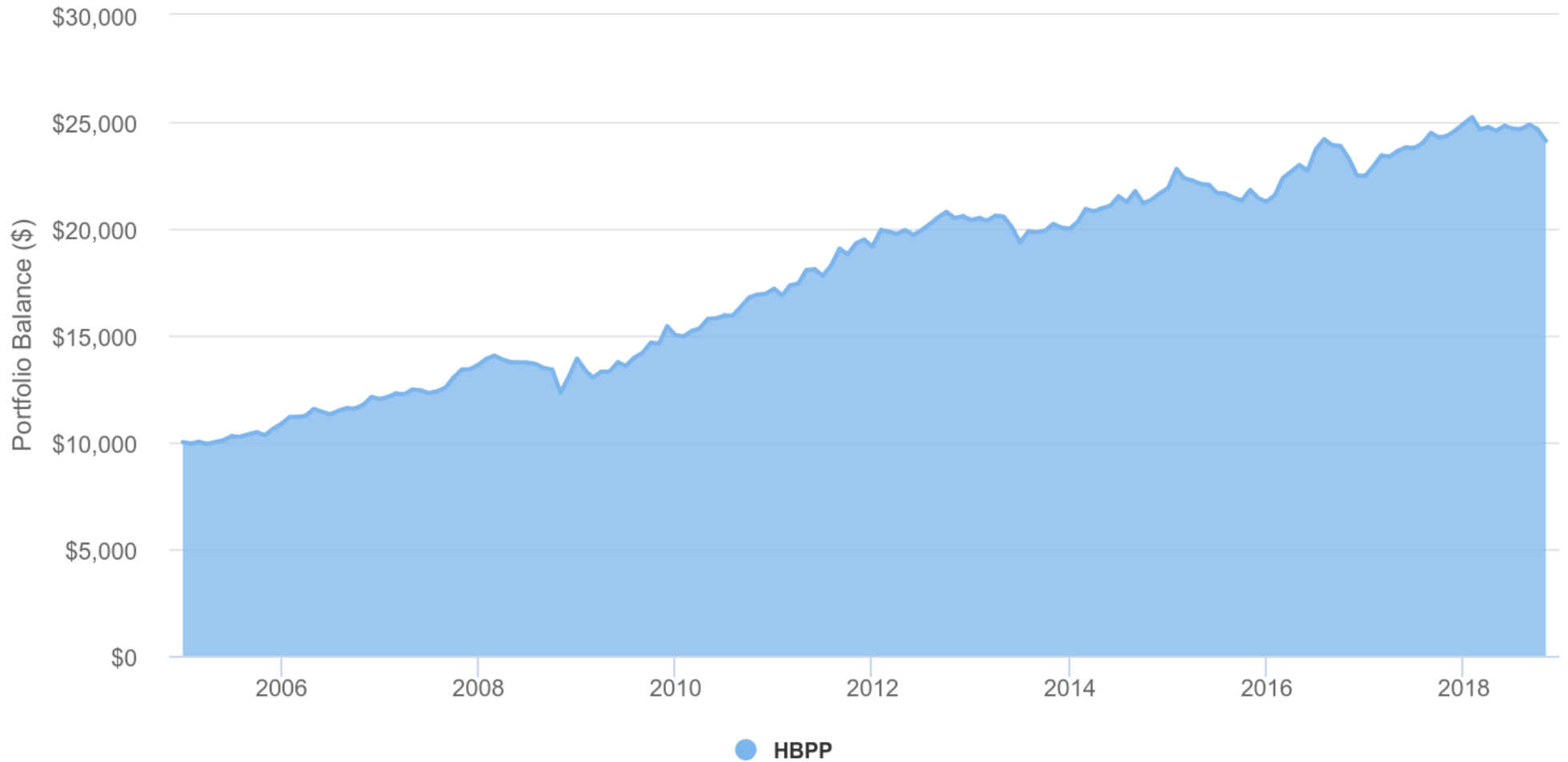
Ticker	Name	Allocation
VTI	Vanguard Total Stock Market ETF	25.00%
TLT	iShares 20+ Year Treasury Bond ETF	25.00%
SHY	iShares 1-3 Year Treasury Bond ETF	25.00%
GLD	SPDR Gold Shares	25.00%



Portfolio Performance

Metric	HBPP
Start Balance	\$10,000
End Balance	\$24,109
End Balance (inflation adjusted)	\$18,142
CAGR	6.57%
CAGR (inflation adjusted)	4.40%
Stdev	6.73%
Best Year	14.50%
Worst Year	-3.24%
Max. Drawdown	-12.29%
Sharpe Ratio	0.80
Sortino Ratio	1.38
US Stock Market Correlation	0.38

Portfolio Growth





Risk and Return Metrics

Metric	HBPP
Arithmetic Mean (monthly)	0.55%
Arithmetic Mean (annualized)	6.81%
Geometric Mean (monthly)	0.53%
Geometric Mean (annualized)	6.57%
Volatility (monthly)	1.94%
Volatility (annualized)	6.73%
Downside Deviation (monthly)	1.09%
Max. Drawdown	-12.29%
US Market Correlation	0.38
Beta (*)	0.18
Alpha (annualized)	4.99%
R Squared	14.08%
Sharpe Ratio	0.80
Sortino Ratio	1.38
Treynor Ratio (%)	30.26
Information Ratio	-0.18
Diversification Ratio	1.72
Skewness	-0.16
Excess Kurtosis	2.19
Historical Value-at-Risk (5%)	-2.46%
Analytical Value-at-Risk (5%)	-2.60%
Conditional Value-at-Risk (5%)	-3.67%
Upside Capture Ratio (%)	27.96
Downside Capture Ratio (%)	4.04
Positive Periods	95 out of 166 (57.23%)
Gain/Loss Ratio	1.59

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

HBPP Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Inflation	Balance
2005	-0.64%	0.82%	-0.98%	0.88%	0.88%	1.84%	-0.28%	1.12%	0.97%	-1.34%	2.90%	2.16%	8.55%	3.42%	\$10,855
2006	3.00%	0.03%	0.41%	2.94%	-1.20%	-1.04%	1.52%	1.03%	-0.18%	1.54%	3.11%	-0.81%	10.71%	2.54%	\$12,018
2007	0.90%	1.25%	-0.33%	1.82%	-0.23%	-1.08%	0.68%	1.35%	3.81%	2.86%	0.10%	1.57%	13.37%	4.08%	\$13,624
2008	2.11%	0.99%	-1.30%	-0.88%	-0.05%	-0.06%	-0.52%	-1.40%	-0.48%	-8.06%	5.92%	6.60%	2.12%	0.09%	\$13,914
2009	-4.00%	-2.51%	2.15%	-0.01%	3.33%	-1.24%	2.87%	1.61%	3.29%	-0.25%	5.59%	-2.75%	7.87%	2.72%	\$15,008
2010	-0.33%	1.60%	0.88%	2.92%	0.11%	0.84%	-0.01%	2.64%	2.64%	0.77%	0.22%	1.41%	14.50%	1.50%	\$17,185
2011	-1.82%	2.77%	0.48%	3.68%	0.16%	-1.66%	2.71%	4.31%	-1.41%	2.72%	0.93%	-1.67%	11.48%	2.96%	\$19,159
2012	4.05%	-0.38%	-0.55%	0.93%	-1.17%	1.15%	1.45%	1.57%	1.21%	-1.38%	0.43%	-0.88%	6.49%	1.74%	\$20,402
2013	0.43%	-0.61%	1.18%	-0.19%	-2.42%	-3.56%	2.66%	-0.22%	0.36%	1.60%	-0.83%	-0.28%	-2.01%	1.50%	\$19,992
2014	1.69%	2.90%	-0.54%	0.71%	0.55%	2.12%	-1.27%	2.43%	-2.63%	0.81%	1.38%	1.14%	9.53%	0.76%	\$21,897
2015	4.10%	-1.89%	-0.49%	-0.76%	-0.11%	-1.79%	-0.12%	-0.92%	-0.60%	2.33%	-1.76%	-0.78%	-2.92%	0.73%	\$21,258
2016	1.48%	3.67%	1.37%	1.37%	-1.15%	4.37%	2.02%	-1.18%	-0.13%	-2.48%	-3.39%	-0.07%	5.72%	2.07%	\$22,473
2017	2.05%	2.15%	-0.24%	1.15%	0.71%	-0.14%	0.95%	2.01%	-0.89%	0.35%	1.04%	1.29%	10.87%	2.11%	\$24,915
2018	1.23%	-2.26%	0.40%	-0.70%	0.95%	-0.56%	-0.05%	0.82%	-0.83%	-2.24%			-3.24%	2.58%	\$24,109

Portfolio Returns Based Style Analysis

Style Category	HBPP
Large-cap Value	0.00%
Large-cap Growth	2.95%
Mid-cap Value	6.20%
Mid-cap Growth	3.00%
Small-cap Value	0.00%
Small-cap Growth	0.00%
Global ex-US Developed Markets	0.00%
Emerging Markets	13.29%
Corporate Bonds	0.00%
Long-Term Treasuries	13.63%
Intermediate-Term Treasuries	45.42%
Short-Term Treasuries	15.50%
R Squared	69.19%

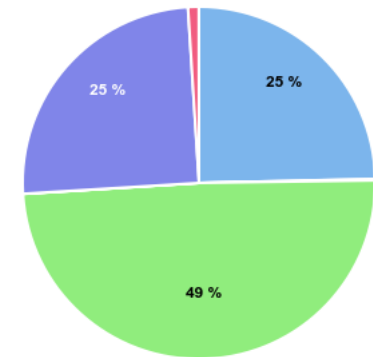
Style analysis is based on monthly returns from Apr 2005 to Oct 2018 and uses total portfolio return with monthly rebalancing.

Exposures for HBPP

Ticker	Name	Category	Duration	ER	Weight
VTI	Vanguard Total Stock Market ETF	Large Blend		0.04%	25.00%
TLT	iShares 20+ Year Treasury Bond ETF	Long Government	17.42	0.15%	25.00%
SHY	iShares 1-3 Year Treasury Bond ETF	Short Government	1.90	0.15%	25.00%
GLD	SPDR Gold Shares	Commodities Precious Metals		0.40%	25.00%

Asset Allocation for HBPP

Category	Weight
US Stocks	24.65%
Intl Stocks	0.13%
US Bonds	49.23%
Intl Bonds	0.00%
Other	25.00%
Cash	0.99%



● US Stocks
 ● Intl Stocks
 ● US Bonds
 ● Intl Bonds
 ● Other
 ● Cash

Equity Market Capitalization for HBPP

Category	Weight
Large Cap	75.85%
Mid Cap	17.60%
Small Cap	6.55%

Stock Sectors for HBPP

Category	Weight
Basic Materials	2.78%
Consumer Cyclical	12.33%
Financial Services	15.60%
Real Estate	3.50%
Consumer Defensive	6.53%
Healthcare	14.46%
Utilities	2.79%
Communication Services	2.96%
Energy	5.75%
Industrials	11.03%
Technology	22.26%

Fixed Income Credit Quality for HBPP

Category	Weight
AAA	100.00%
AA	0.00%
A	0.00%
BBB	0.00%
Non-Investment Grade	0.00%

Fixed Income Maturity for HBPP

Category	Weight
Under 1 Year	33.60%
1 - 3 Years	32.87%
3 - 5 Years	0.19%
5 - 7 Years	0.00%
7 - 10 Years	0.00%
10 - 15 Years	0.00%
15 - 20 Years	0.30%
20 - 30 Years	33.04%
Over 30 Years	0.00%

Drawdowns for Historical Market Stress Periods

Stress Period	Start	End	HBPP
Subprime Crisis	Nov 2007	Mar 2009	-12.29%

Drawdowns for HBPP (worst 10)

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Mar 2008	Oct 2008	8 months	Aug 2009	10 months	1 year 6 months	-12.29%
2	Aug 2016	Dec 2016	5 months	Aug 2017	8 months	1 year 1 month	-7.08%
3	Oct 2012	Jun 2013	9 months	Feb 2014	8 months	1 year 5 months	-6.86%
4	Feb 2015	Dec 2015	11 months	Apr 2016	4 months	1 year 3 months	-6.74%
5	Feb 2018	Oct 2018	9 months				-4.41%
6	Dec 2009	Jan 2010	2 months	Apr 2010	3 months	5 months	-3.07%
7	Sep 2014	Sep 2014	1 month	Dec 2014	3 months	4 months	-2.63%
8	May 2006	Jun 2006	2 months	Aug 2006	2 months	4 months	-2.22%
9	Jan 2011	Jan 2011	1 month	Feb 2011	1 month	2 months	-1.82%
10	Dec 2011	Dec 2011	1 month	Jan 2012	1 month	2 months	-1.67%

Portfolio Components

Ticker	Name	CAGR	Stdev	Best Year	Worst Year	Max DD	Sharpe Ratio	Sortino Ratio	US Mkt Correlation
VTI	Vanguard Total Stock Market ETF	8.43%	14.15%	33.45%	-36.98%	-50.84%	0.56	0.81	1.00
TLT	iShares 20+ Year Treasury Bond ETF	5.40%	13.02%	33.96%	-21.80%	-21.80%	0.38	0.63	-0.30
SHY	iShares 1-3 Year Treasury Bond ETF	1.87%	1.26%	7.35%	0.21%	-1.18%	0.57	1.04	-0.33
GLD	SPDR Gold Shares	7.24%	17.80%	30.45%	-28.33%	-42.91%	0.42	0.66	0.05

Monthly Correlations

Ticker	Name	VTI	TLT	SHY	GLD	HBPP
VTI	Vanguard Total Stock Market ETF	-	-0.30	-0.33	0.05	0.37
TLT	iShares 20+ Year Treasury Bond ETF	-0.30	-	0.51	0.18	0.49
SHY	iShares 1-3 Year Treasury Bond ETF	-0.33	0.51	-	0.27	0.32
GLD	SPDR Gold Shares	0.05	0.18	0.27	-	0.81

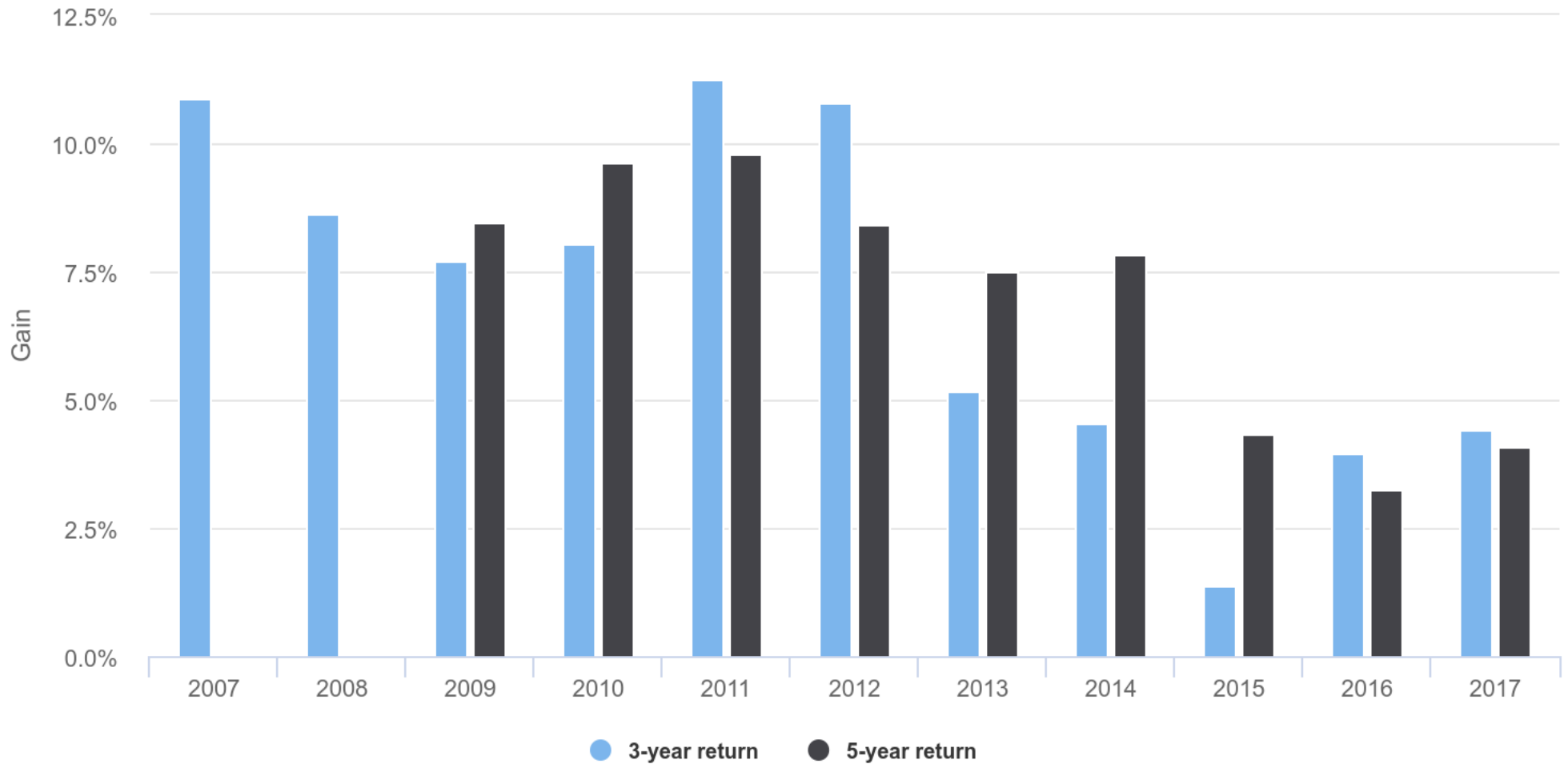
Portfolio Return Decomposition

Ticker	Name	HBPP
VTI	Vanguard Total Stock Market ETF	\$6,343
TLT	iShares 20+ Year Treasury Bond ETF	\$3,488
SHY	iShares 1-3 Year Treasury Bond ETF	\$898
GLD	SPDR Gold Shares	\$3,380

Portfolio Risk Decomposition

Ticker	Name	HBPP
VTI	Vanguard Total Stock Market ETF	20.07%
TLT	iShares 20+ Year Treasury Bond ETF	24.04%
SHY	iShares 1-3 Year Treasury Bond ETF	1.52%
GLD	SPDR Gold Shares	54.38%

HBPP Rolling Returns



Notes:

- Past performance is not a guarantee of future returns and data and other errors may exist. See Disclaimer and Terms of Use
- The entered time period is automatically adjusted based on the available return data for the specified assets
- The annual results for 2018 are based on full calendar months from January to October
- CAGR = Compound Annual Growth Rate
- Stdev = Annualized standard deviation of monthly returns
- Sharpe and Sortino ratios are calculated and annualized from monthly excess returns over risk free rate (1-month treasury bill)
- Stock market correlation is based on the correlation of monthly returns
- Drawdowns are calculated based on monthly returns
- The backtested results include annual rebalancing of portfolio assets to match the specified allocation
- The results use total return and assume that all received dividends and distributions are reinvested. Taxes and transaction fees are not included
- Portfolio cashflows and rebalancing for quarterly and annual periods are aligned with calendar periods.
- Fund fundamentals data as of 11/05/2018. (c) 2018 Morningstar. All Rights Reserved. The fund fundamentals information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.