

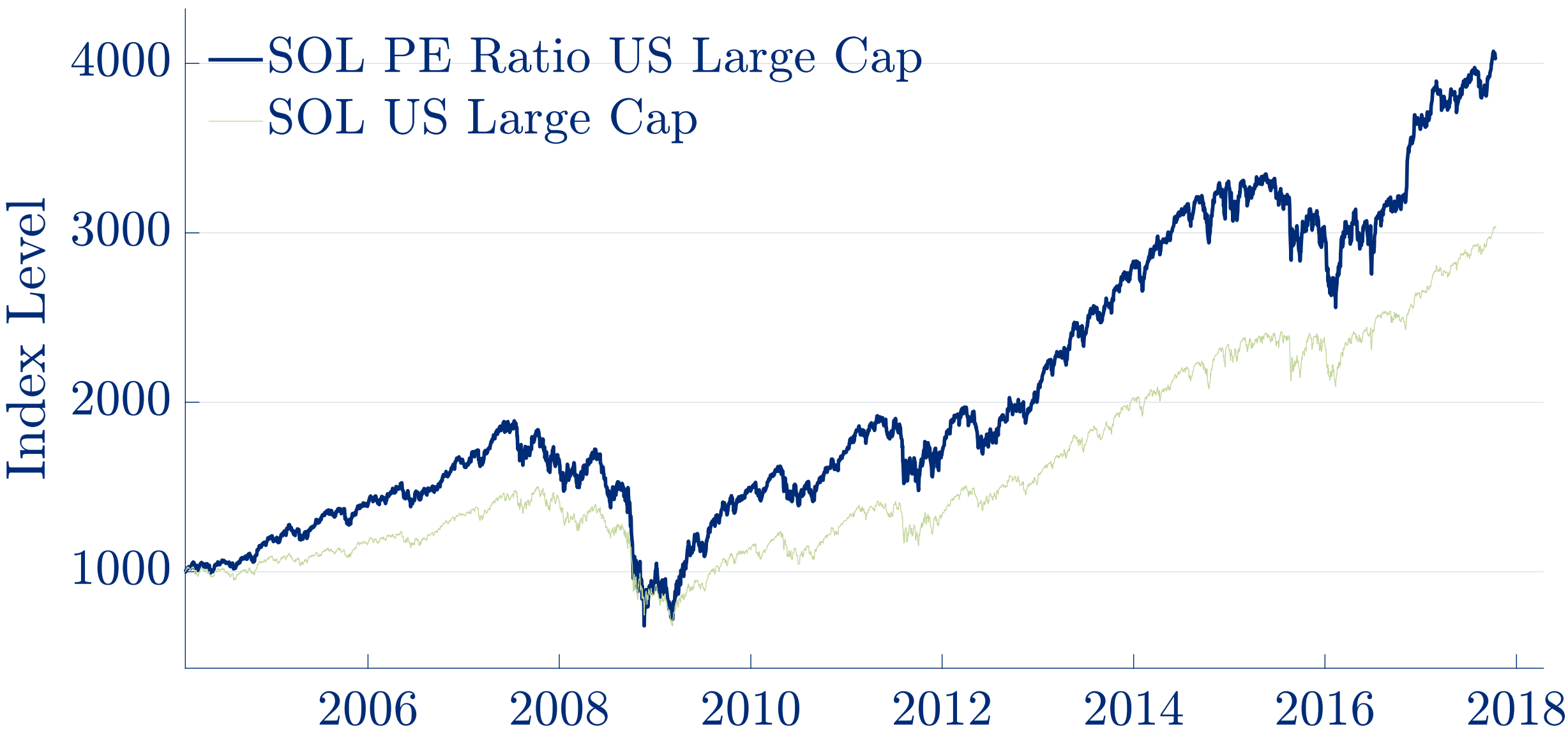


# P/E Ratio US Large Cap Index

## Selection Methodology

- **Starting Universe:** Solactive US Large Cap
- **Number of Index Members:** 100
- **Selection Criteria:** Companies with the lowest P/E ratio
- **Rebalancing Frequency:** Quarterly
- **Index Currency:** USD
- **Index Type:** Gross Total Return
- **Weighting:** Equal

## Backtest (04-Feb-2004 – 16-Oct-2017)



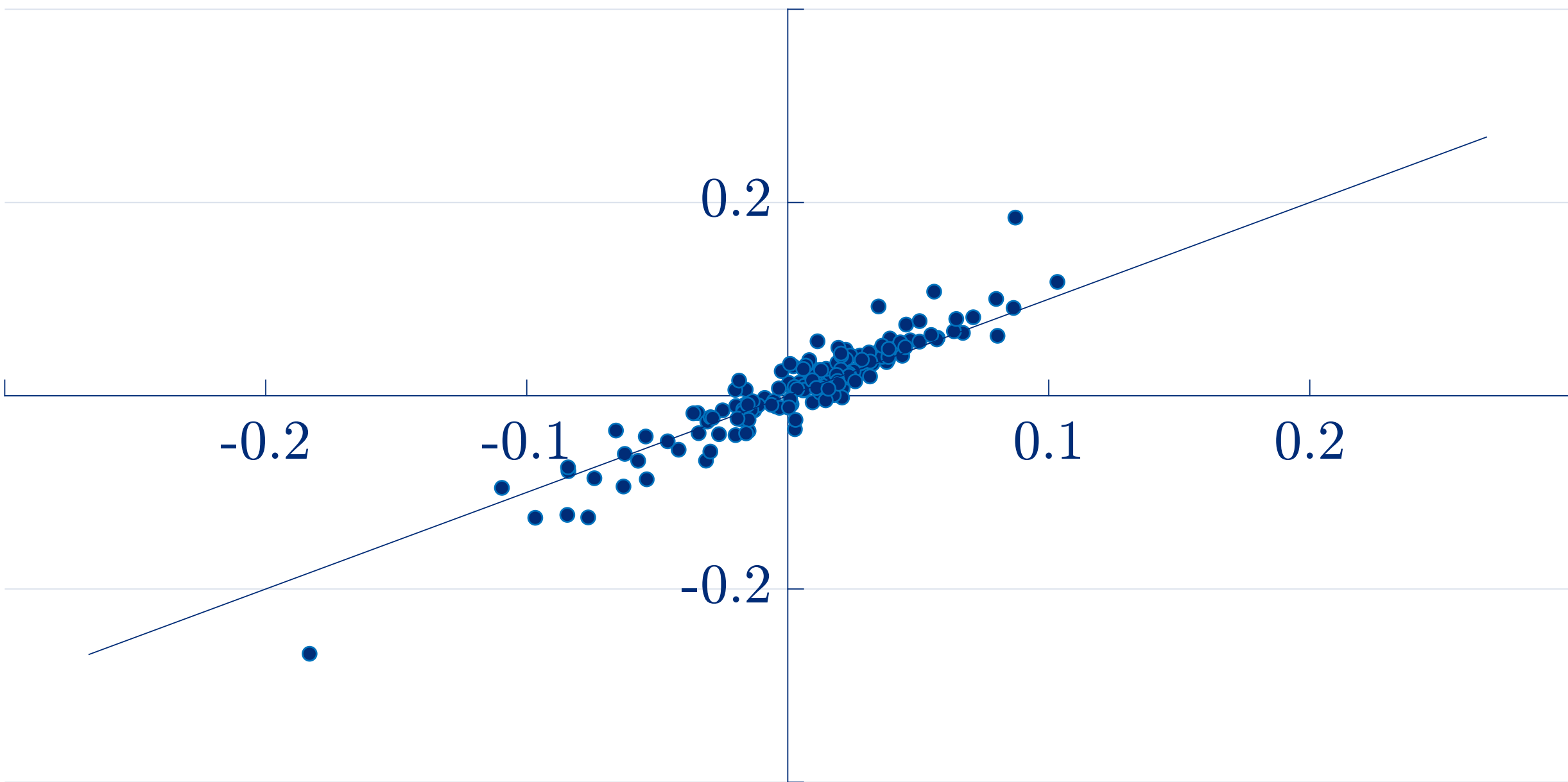
## Ratio against SOL US Large Cap



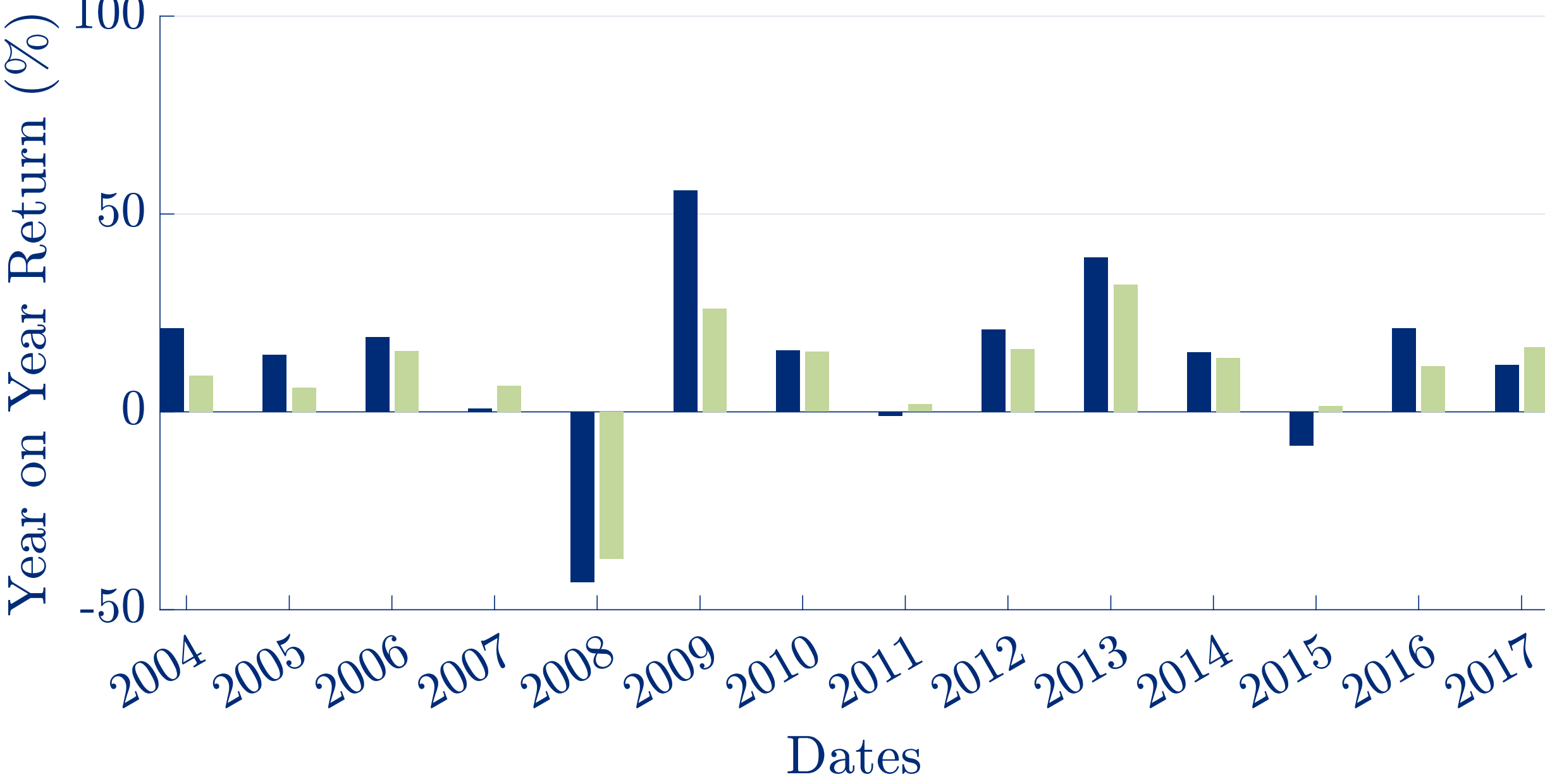
## Annualised Performance Figures

	SOL P/E Ra- tio US Large Cap	SOL US Large Cap
Mean	7.29%	5.76%
Standard Deviation	22.51%	18.42%
Downside Deviation	16.11%	13.11%
Max Drawdown	-64.00%	-54.73%
Sharpe Ratio	0.32	0.31
Sortino Ratio	0.45	0.44

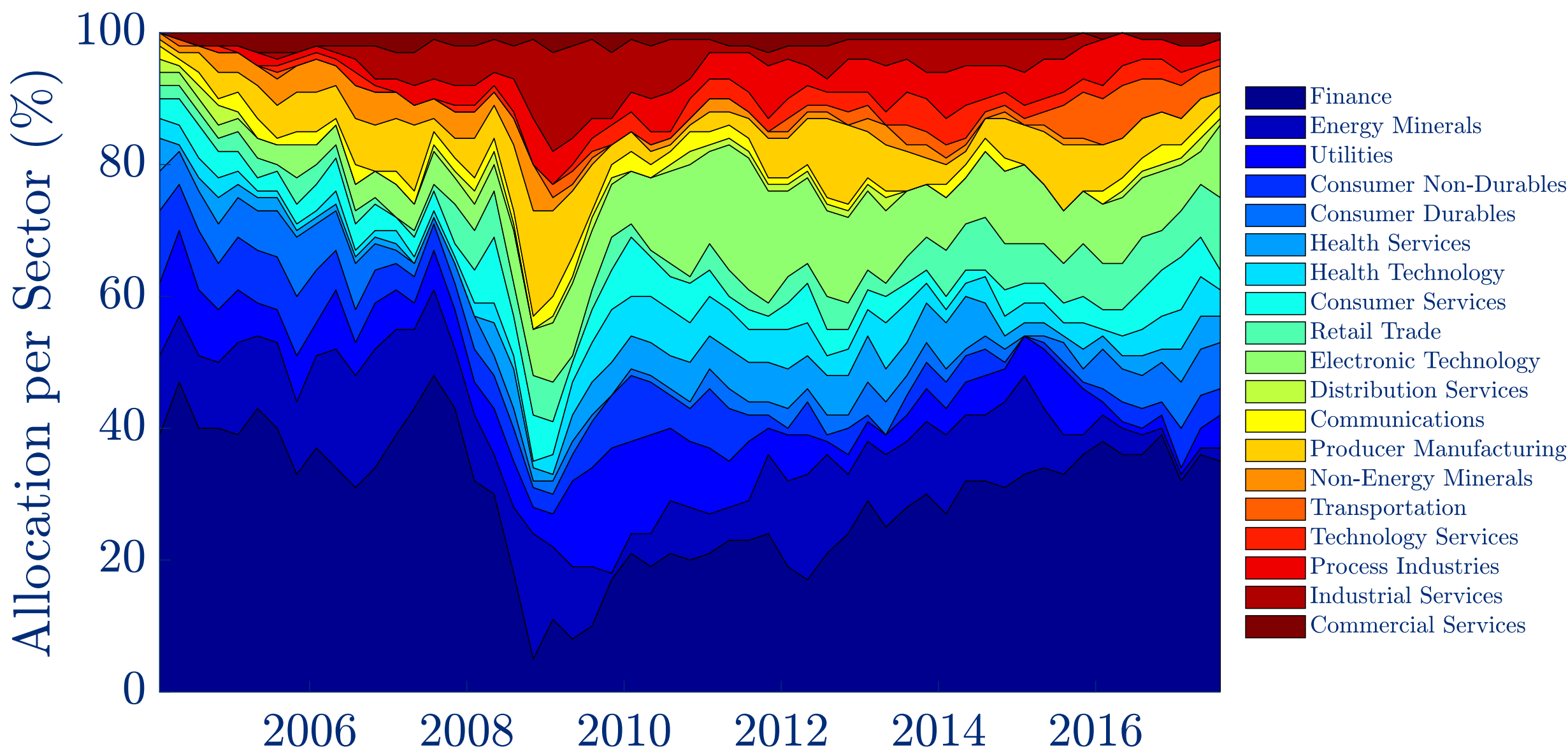
## Scatterplot of SOL P/E Ratio US Large Cap (Y) against SOL US Large Cap (X), monthly data



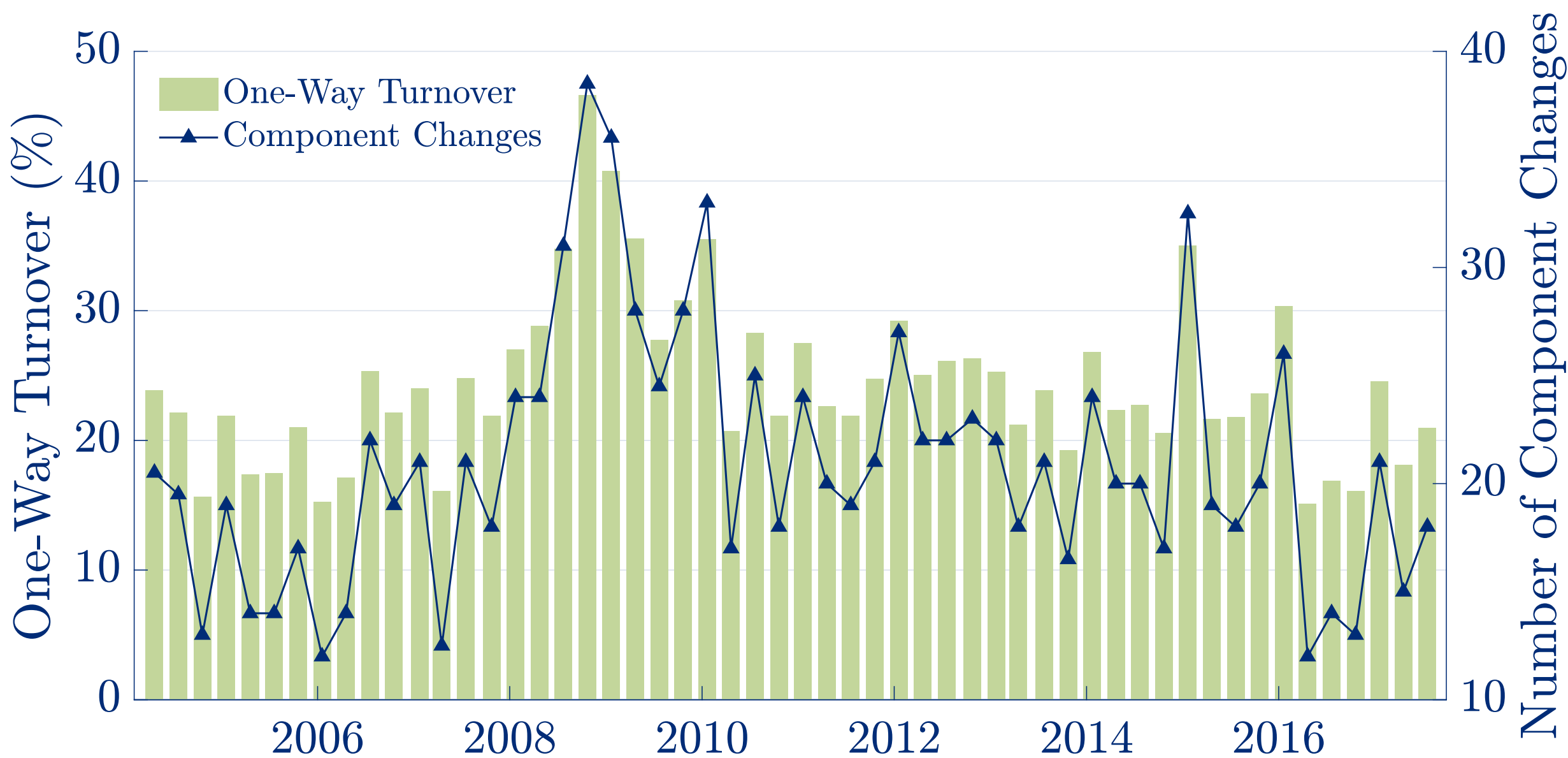
## Year on Year Returns



## Historic Sector Allocation



## Historic Turnover



## Disclaimer

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# Solactive P/E Ratio US Large Cap Index

Invest in undervalued companies



HOW to recognise undervalued companies? For the majority of investors, a quick way to tell if a stock is cheap or expensive is the Price/Earnings ratio. Fundamentally, the price of a stock is the present value of future earnings discounted to today. Historically, stocks having low P/E value tend to significantly outperform stocks with high P/E value. At a glance, the P/E ratio indicates the dollar amount an investor can expect to invest in a company in order to receive one dollar of that company’s earnings.

**Solactive P/E Ratio US Large Cap Index** provides targeted exposure to 100 companies from US with large market capitalization with the lowest positive Price/Earnings ratio. All constituents are equally weighted. The index is focused on US companies with large capitalization.

## Intuition

The companies with lowest Price/Earnings ratio tend to outperform the benchmark.

**Low price & high earnings - superior return potential.** Companies that have low prices but high earnings can be viewed as a bargain, since such stocks have an undervalued potential for appreciation. Because for each \$1 of earnings per share you pay less than for the company with a higher P/E ratio.

## Index Construction

The first step is to calculate the trailing Price/Earnings ratio.

$$P/E\ ratio = \frac{\text{Price per Share}}{\text{Earnings per Share}}$$

Earnings per Share are 1-year looking back. The second step is to rank the companies in accordance with their P/E ratio. The company with the lowest P/E ratio gets the highest rank. At each selection day, the top 100 ranking companies form the index.

### Selection Criteria

- **Starting Universe:** Solactive US Large Cap
- **Number of Index Members:** 100
- **Rebalancing Frequency:** Quarterly
- **Index Currency:** USD
- **Index Type:** Gross Total Return
- **Weighting:** Equal

### Backtest Results

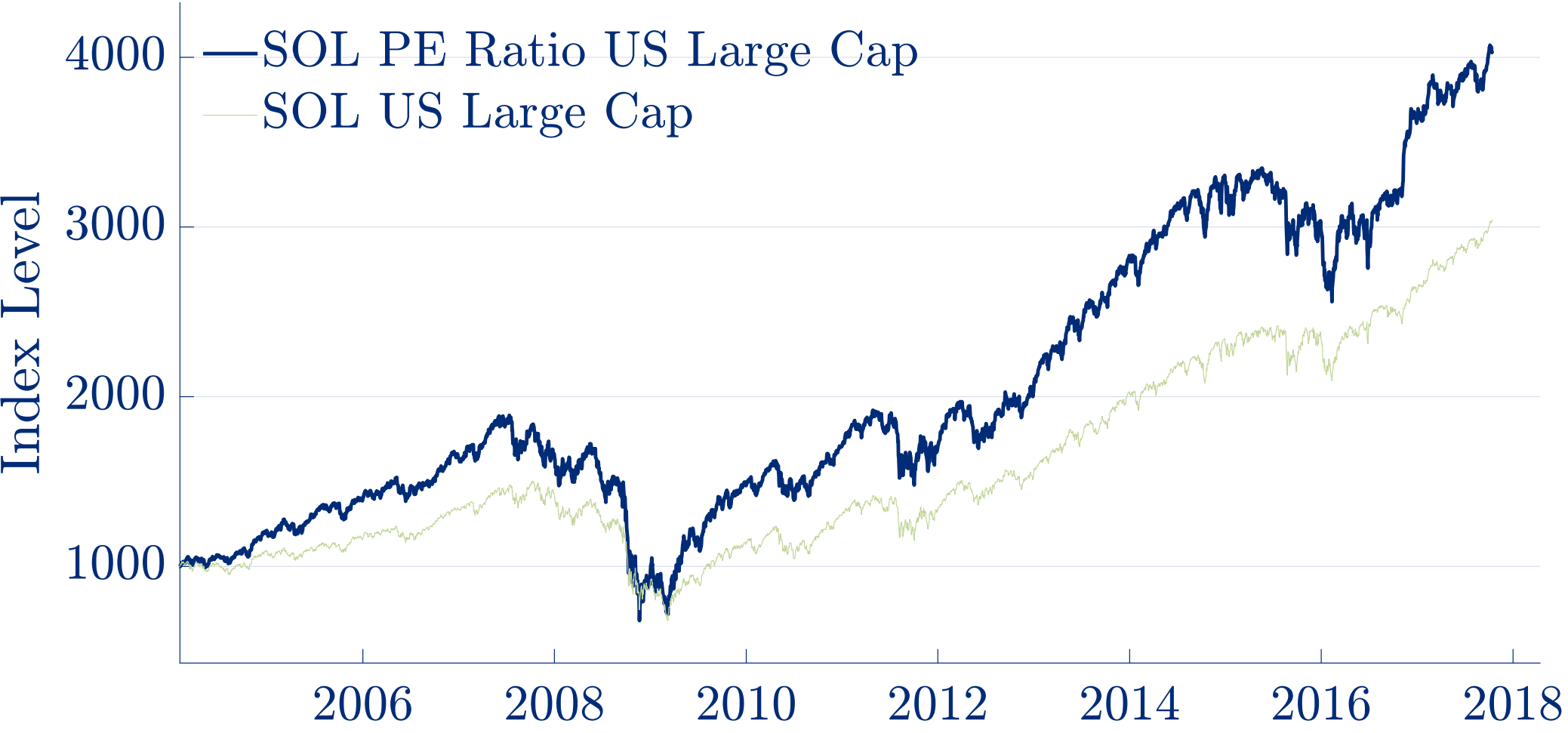


Figure 1: Backtest index

The backtest performance shows that the intuitive investment theme of investing in underpriced US companies with large market capitalization can be built into a tradable index that **outperforms its benchmark over time.**



Figure 2: Ratio against the benchmark

From Figure 2 it is clear how the index outperforms its benchmark consistently.

	SOL P/E Ratio US Large Cap	SOL US Large Cap
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Standard Deviation	22.51%	18.42%
Downside Deviation	16.11%	13.11%
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Table 1: Descriptive statistics index

The risk-adjusted return of the index is superior to that of the benchmark. Based on the Sharpe Ratio, the conclusion is that

the portfolio tends to deliver a **higher return** for the risk taken.

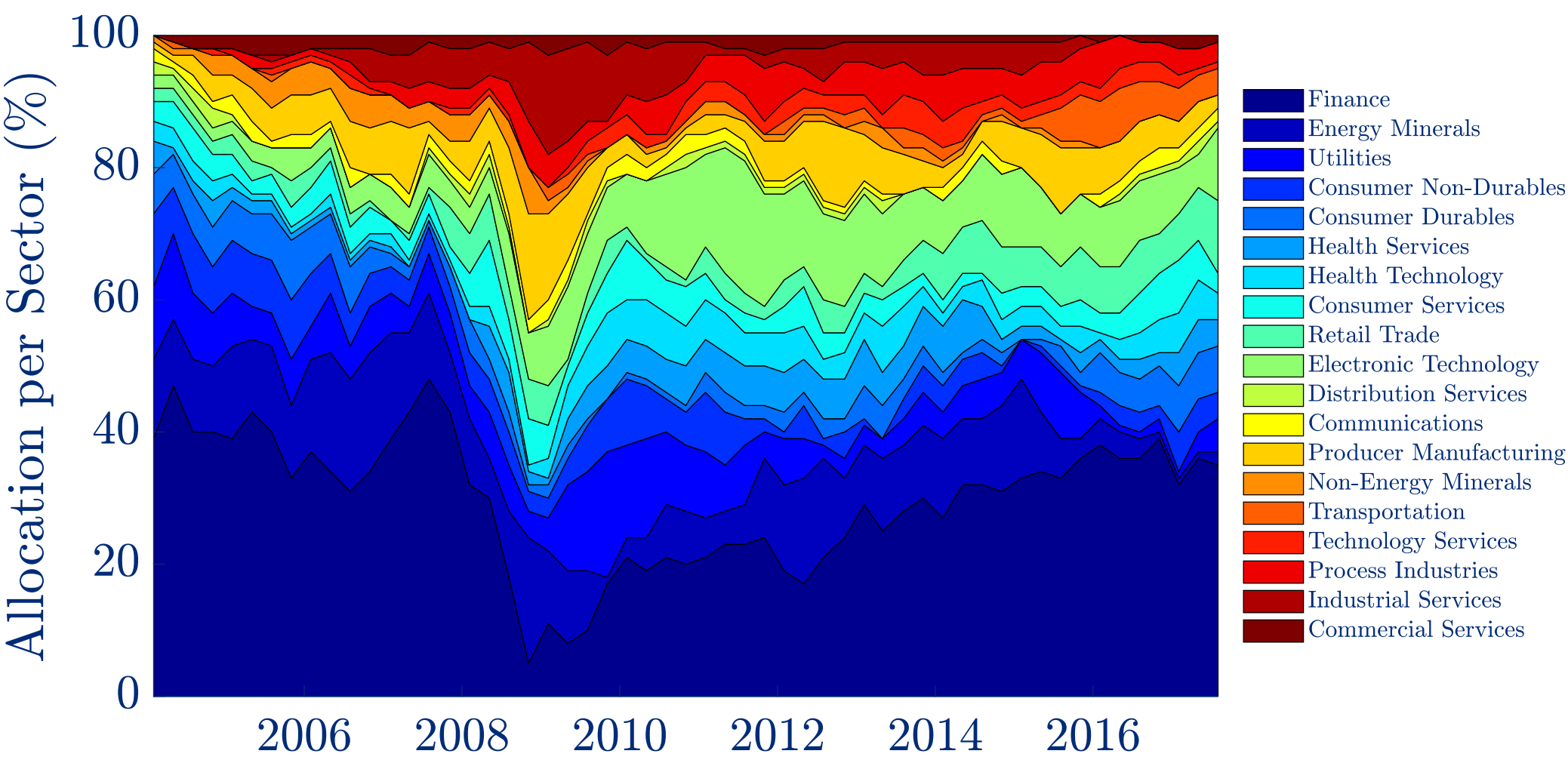


Figure 3: Historic sector allocation index

The sector allocation is intuitively distributed through industries which tend to have low P/E ratios. The largest part of the companies in index comes from Finance. Industries such as Communications and Technology Services, which are tend to have overpriced companies, are almost entirely excluded by the selection algorithm from the start.

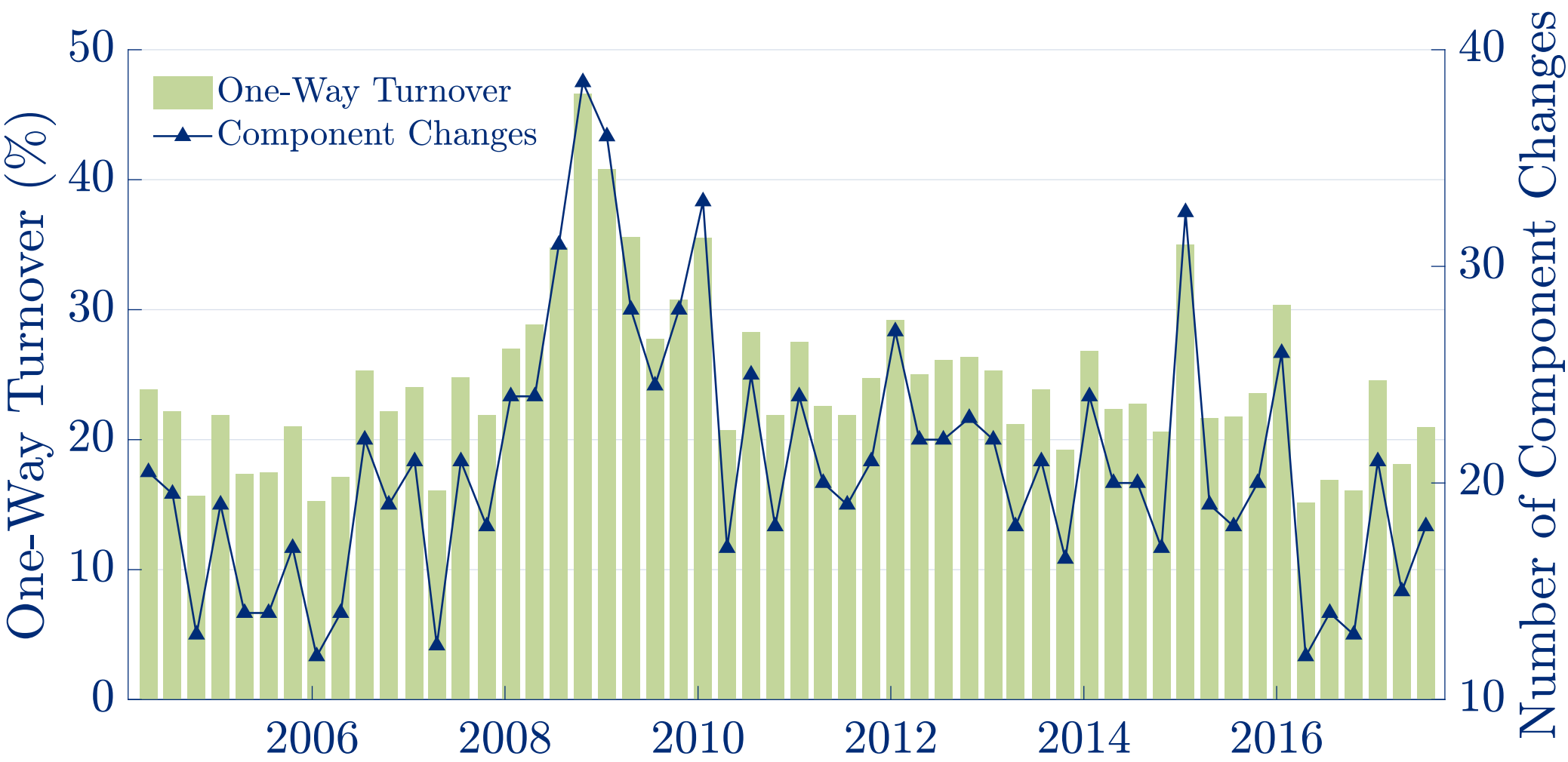


Figure 4: Historic Turnover

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