

Solactive

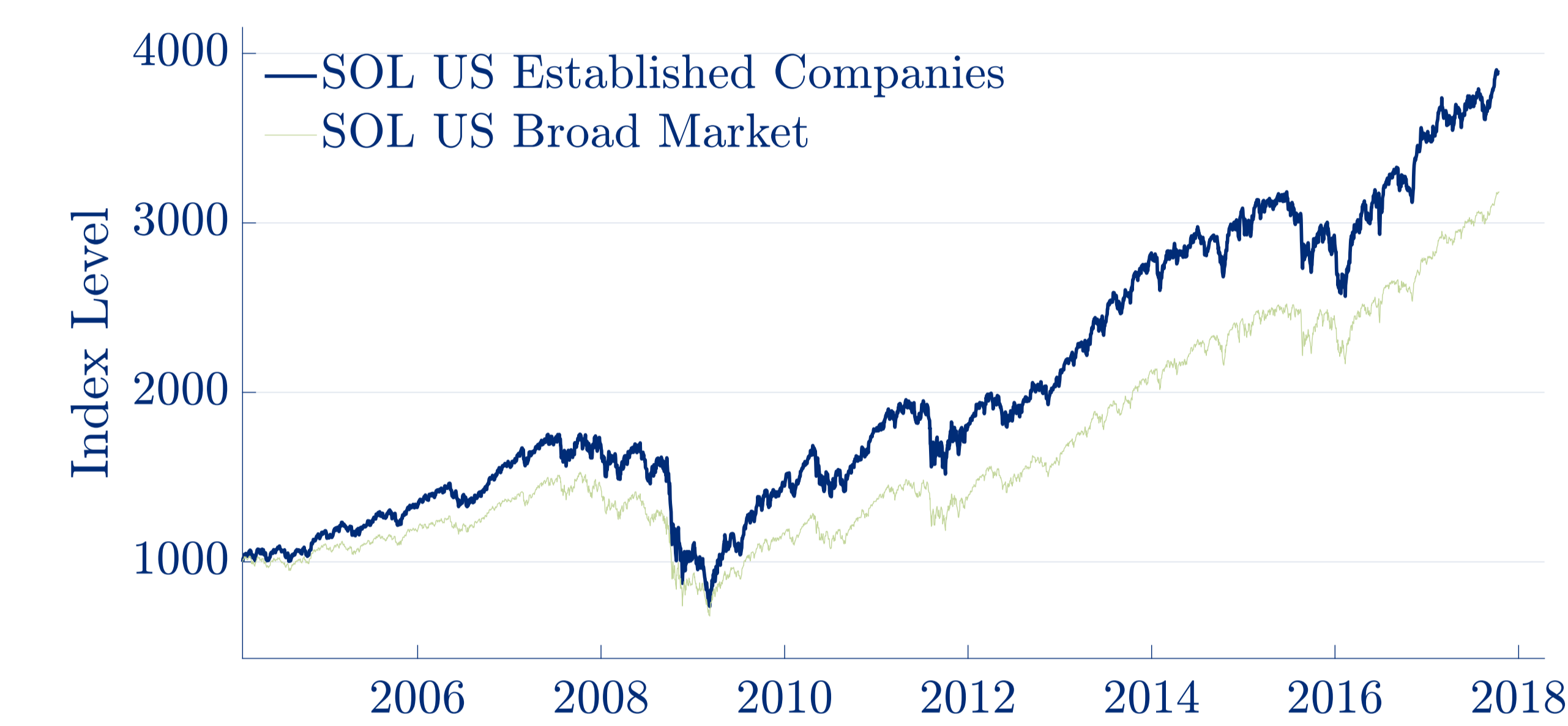


US Established Companies Index

Selection Methodology

- **Starting Universe:** Solactive US Broad Market
- **Number of Index Members:** 100
- **Selection Criteria:** The oldest companies
- **Rebalancing Frequency:** Annually
- **Index Currency:** USD
- **Index Type:** Gross Total Return
- **Weighting:** Equal
- **Minimum 6-month ADV:** USD 1 mn
- **Minimum MCAP:** USD 300 mn

Backtest (04-Feb-2004 – 16-Oct-2017)



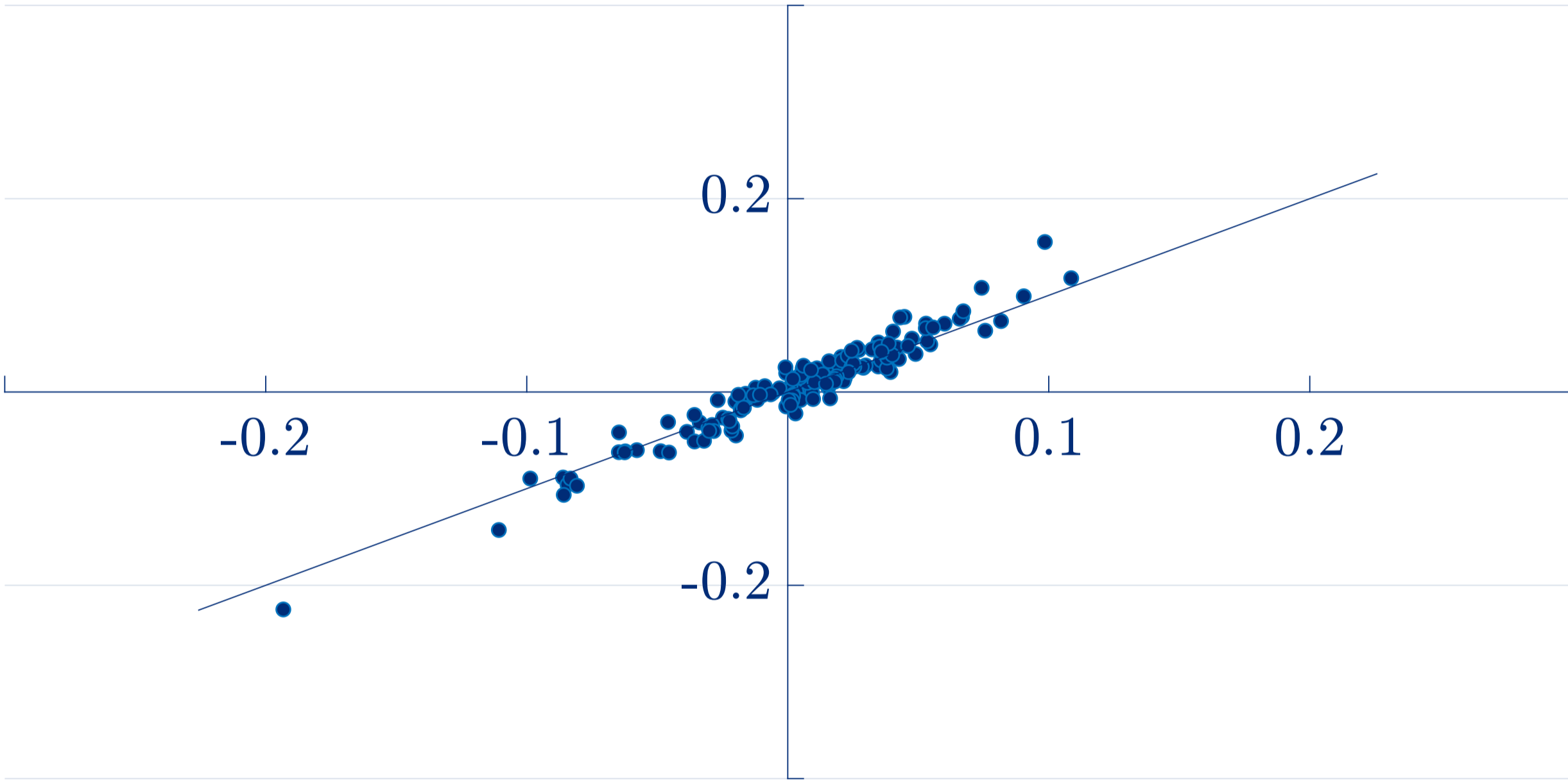
Ratio against SOL US Broad Market



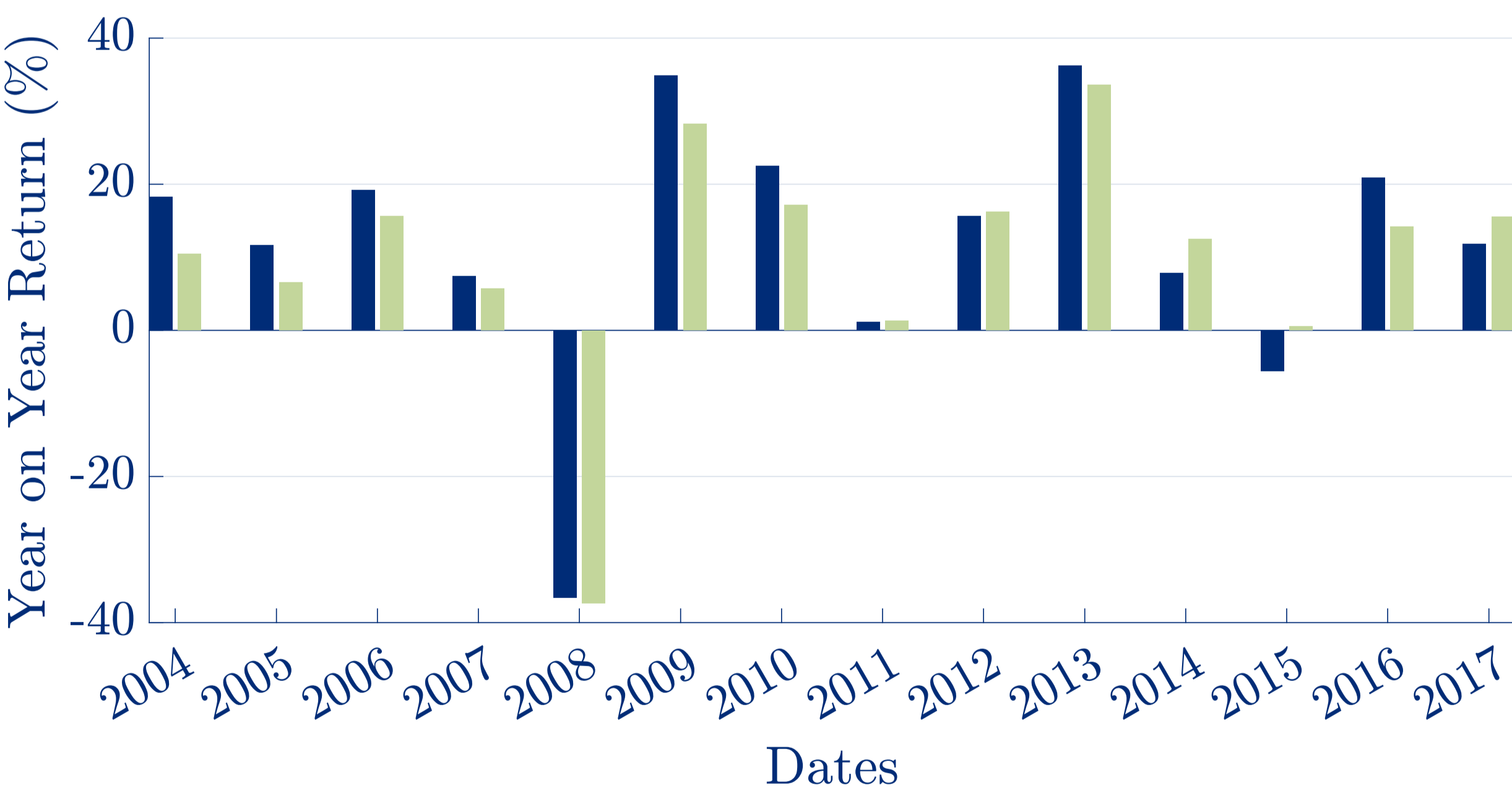
Annualised Performance Figures

	SOL US Estab-lished Companies	SOL US Broad Market
Mean	7.08%	6.01%
Standard Deviation	20.75%	18.87%
Downside Deviation	14.78%	13.45%
Max Drawdown	-57.94%	-55.51%
Sharpe Ratio	0.34	0.32
Sortino Ratio	0.48	0.45

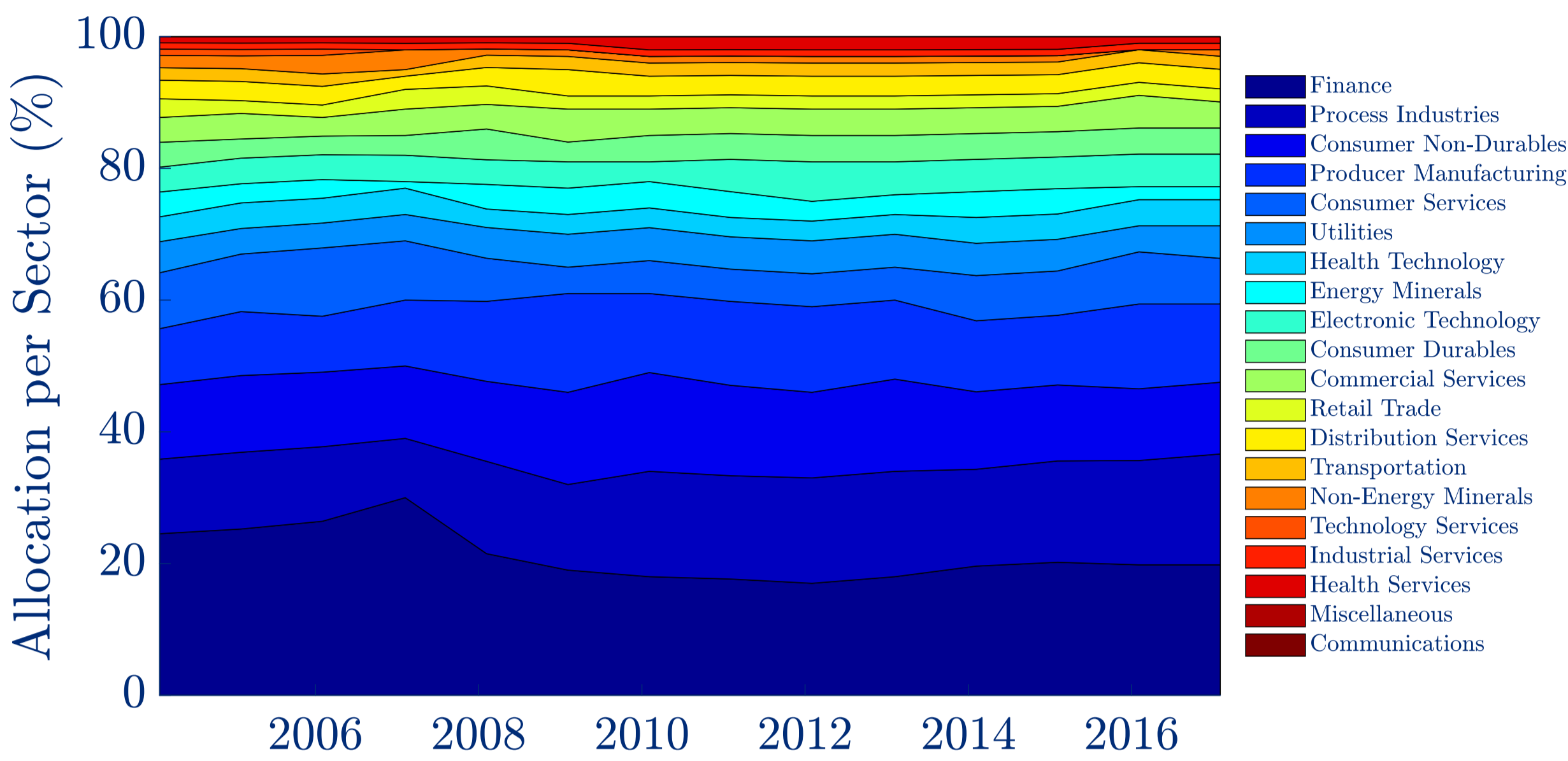
Scatterplot of SOL US Established Companies (Y) against SOL US Broad Market (X), monthly data



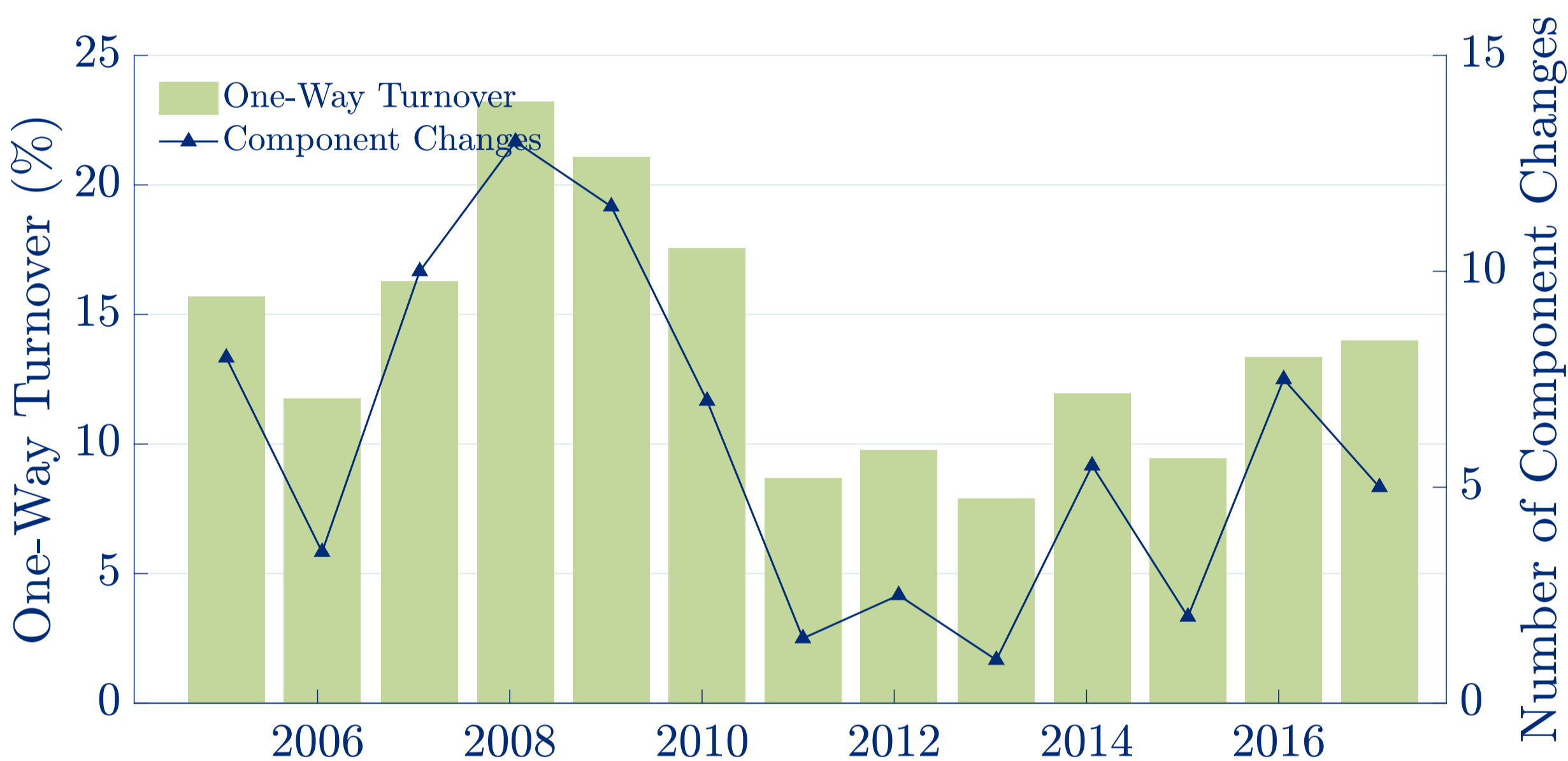
Year on Year Returns



Historic Sector Allocation



Historic Turnover



Disclaimer

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# Solactive US Established Companies Index

Invest in companies that passed the test of time

COMPANIES’ lifespans keep declining: While in 1958 the average tenure of a firm has been 61-years, this has trimmed to 18 years in the recent past.<sup>[1]</sup> In his best-selling book ‘Innovation: The attackers advantage’ Richard Forster describes why companies struggle to achieve eternal success.<sup>[2]</sup> Forster argues that technological and economic innovation leads to disruption to how business is conducted. Newly founded companies then have an advantage as they are more able to use technological innovation to attack their older competitors.

Yet, there are companies who have managed to contradict this trend and prevail for a very long time. Some exist since the early 19th century and have survived a series industry shakeouts due to political, economic and technological crises and innovations. Among others two world wars, the great depression, oil and inflation crises. They have managed to stay profitable by defending themselves against rising competitors, using change of fundamental economic forces, such as increasing efficiency and higher labor productivity, to their advantage.

The Solactive US Established Companies Index gives investors the opportunity to invest in these high tenure companies. The index is made fully tradeable by applying liquidity and market capitalisation criteria. All constituents are equal weighted and belong to the 100 oldest companies in the Solactive US Broad Market Benchmark.

## Evidence

In order to analyse the relationship between company tenure and performance we construct five portfolios ranked according to their tenure. These portfolios are equally weighted. The quintiles are sorted from the youngest 20% (1) to the oldest 20% (5). Our sample period covers 3,470 observations ranging from 04/02/2004 to 23/05/2017. Figure 1 illustrates the corresponding performance.

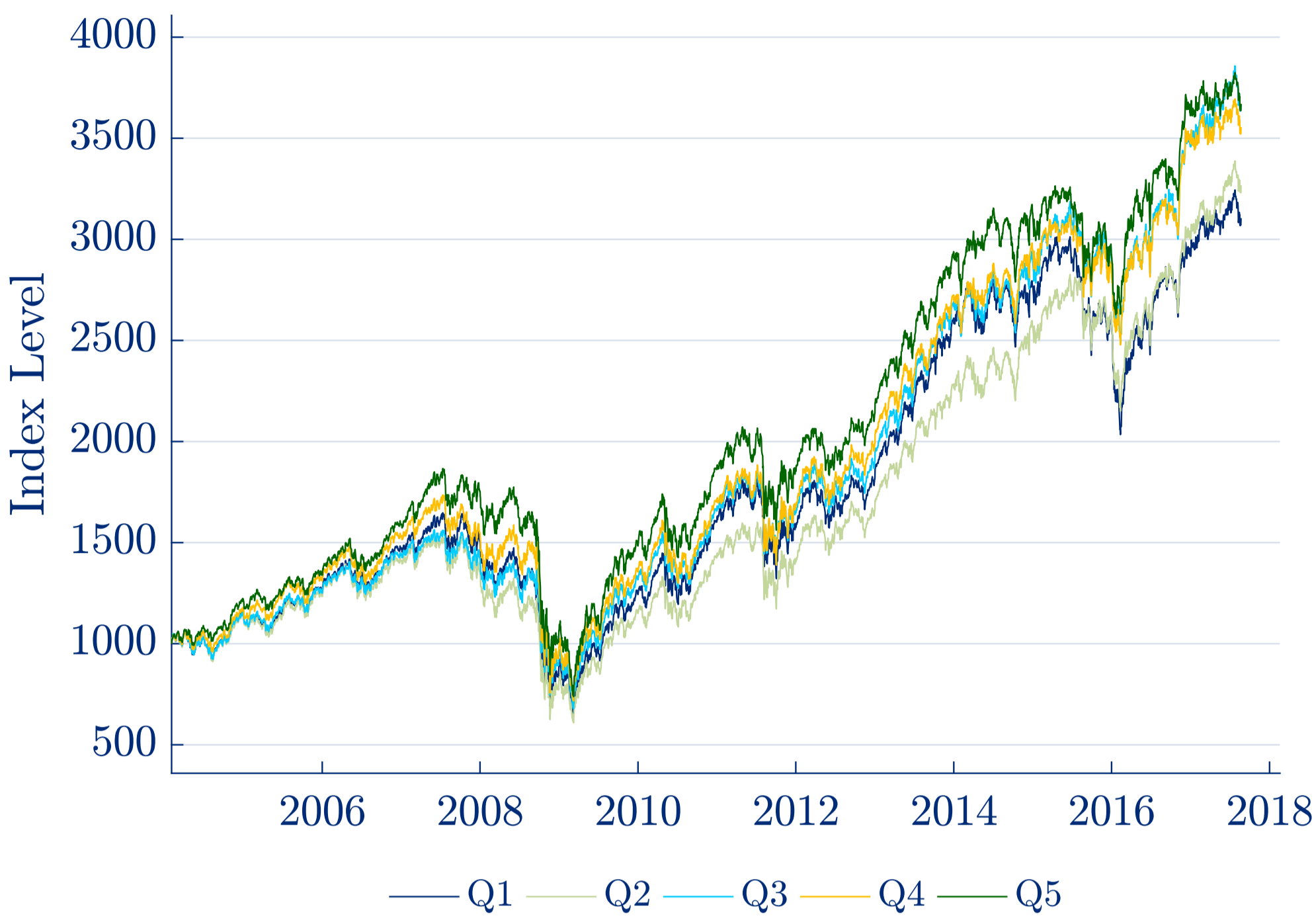


Figure 1: Backtest quintile portfolios

We can observe that the portfolios consisting of companies exhibiting higher tenure consistently outperform their younger counterparts. Table 1 draws the same picture.

	Q1	Q2	Q3	Q4	Q5
Mean	8.6%	9.0%	9.9%	9.7%	9.9%
STD	22.2%	23.0%	21.9%	22.1%	21.4%
Max DD	-60.2%	-60.4%	-56.7%	-58.7%	-60.4%
Sharpe	0.39	0.39	0.45	0.44	0.46

Table 1: Descriptive statistics quintile portfolios

High tenure companies not only outperform low tenure firms, they further show an lower standard deviation, lower maximum drawdowns and a higher Sharpe ratio in our backtest period.

## Conclusions

Our empirical findings show that equally weighted high company tenure portfolios have:

- Higher annual mean return
- Lower annual standard deviation

## Intuition

Our findings raise the question why high tenure companies achieve this performance. There are various reasons why these companies perform well and achieve unusual long lifespans:

First, high tenure companies have build long term relationships with retailers and suppliers. At the same time, they have proved themself trustworthy for maintaining these long term contracts. They have fully developed their logistics and processes and thus have implemented an efficient **Supply Chain Management**.

Second, they have survived numerous industry shakeouts and thus are members of mature industries. They face stable competition and a stable demand for their goods. This gives them a **Competitive Advantage**.

Finally, their long lifespan, stable competition and established networks with clients, the government etc. offers a potential for high job security which can attract skilled workers. Additionally, they potentially employ staff who are working in the companies / the industry for a very long time. They have thus developed a potent **Corporate Governance**.

## Index Construction

The theme is implemented in the Solactive US Established Companies Index by selecting the 100 oldest companies in the Solactive US Broad Market Universe. The selection criteria are as follows:

### Selection Criteria

- **Starting Universe:** Solactive US Broad Market
- **Number of Index Members:** 100
- **Minimum 6-month ADV:** USD 1 mn



- **Minimum MCAP:** USD 500 mn

## Backtest Results

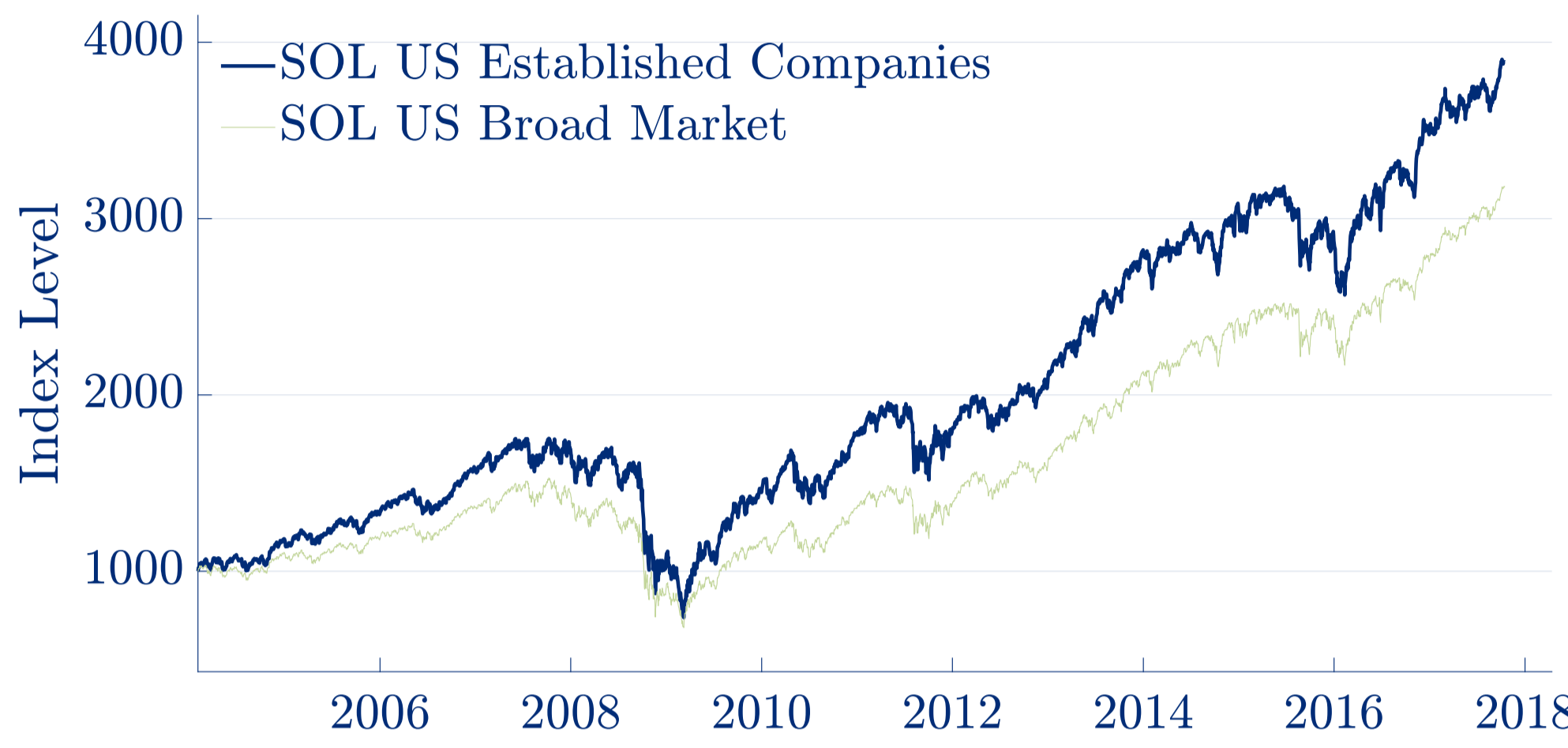


Figure 2: Backtest index

The backtest performance shows that the investment theme of investing in high tenure companies can be build in a tradable index that outperforms its Benchmark.

	SOL US Es- tablished Companies	SOL US Broad Market
Mean	7.08%	6.01%
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Max Drawdown	-57.94%	-55.51%
Sharpe Ratio	0.34	0.32
Sortino Ratio	0.48	0.45

Table 2: Descriptive statistics index

## References

- [1] Innosight, (2012). *Creative destruction whips through corporate America*. Executive Briefing
- [2] Richard N. Foster, (1986). *Innovation: The attacker’s advantage*.

## Disclaimer

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