

ETFs vs Single Stocks

Comparing alpha extraction in ETFs
vs individual stocks

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About ETFs

- What is an ETF?
- How does it work? What happens when you buy an ETF?
- What can you do with an ETF? What's it designed for?

Growth of ETFs

- Asset growth in ETFs
- Compared to Hedge Funds?
- Compared to Mutual Funds?

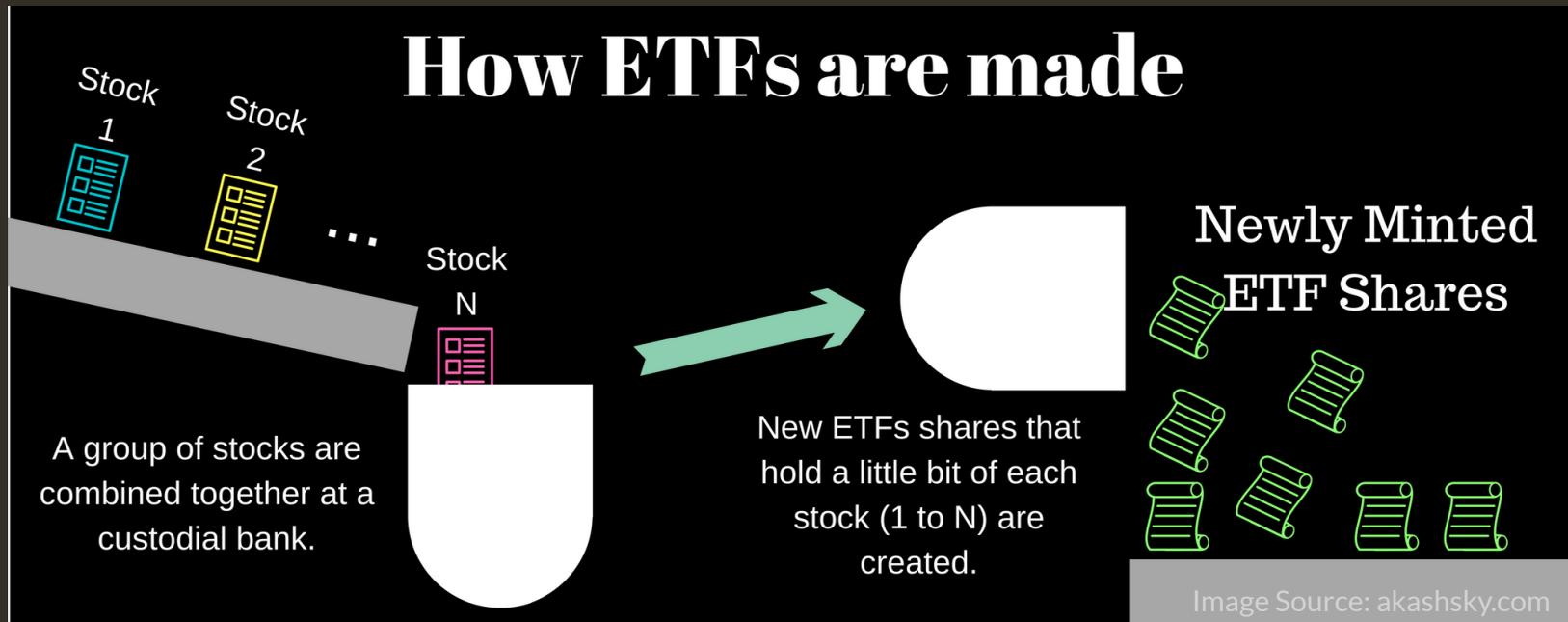
Realizing alpha in ETFs is easier than in stocks

- Over time it's become harder to make money trading stocks
- Reasons for alpha decay

Study to compare alpha in ETFs and Stocks

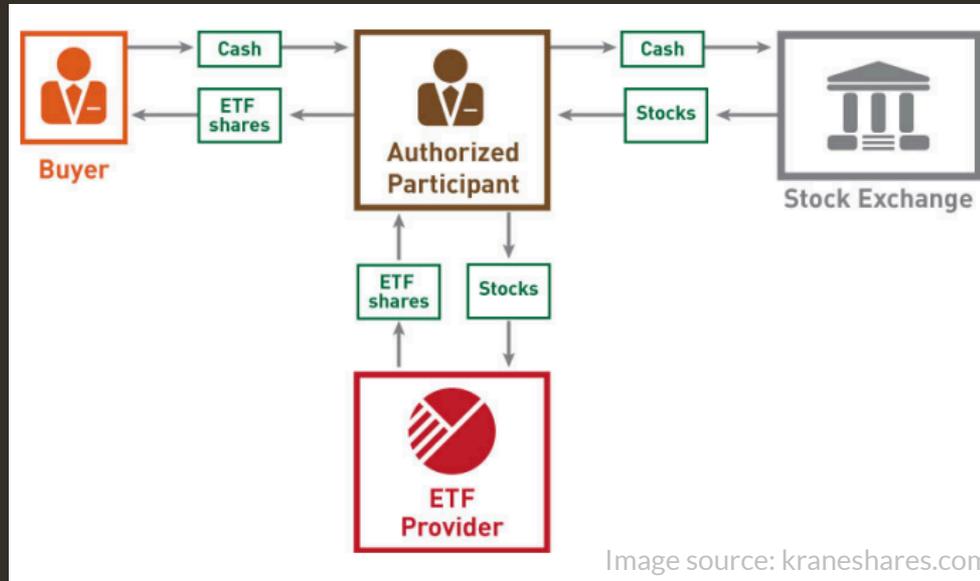
Conclusions

What is an ETF?



- An ETF is a share of a fund.
- The fund has committed to holding a fixed allocation of underlying stocks.
- An ETF can be thought of as a mutual fund that you can buy and sell on the exchange.

How does an ETF work?



- When you buy an ETF, you are usually trading with an ETF market maker.
- The market maker will try to buy the composite stocks in the exact ratio specified by the ETF provider.
- At the end of the day the market maker will ask the ETF provider to net out the short ETF positions and long stock positions (or vice versa).

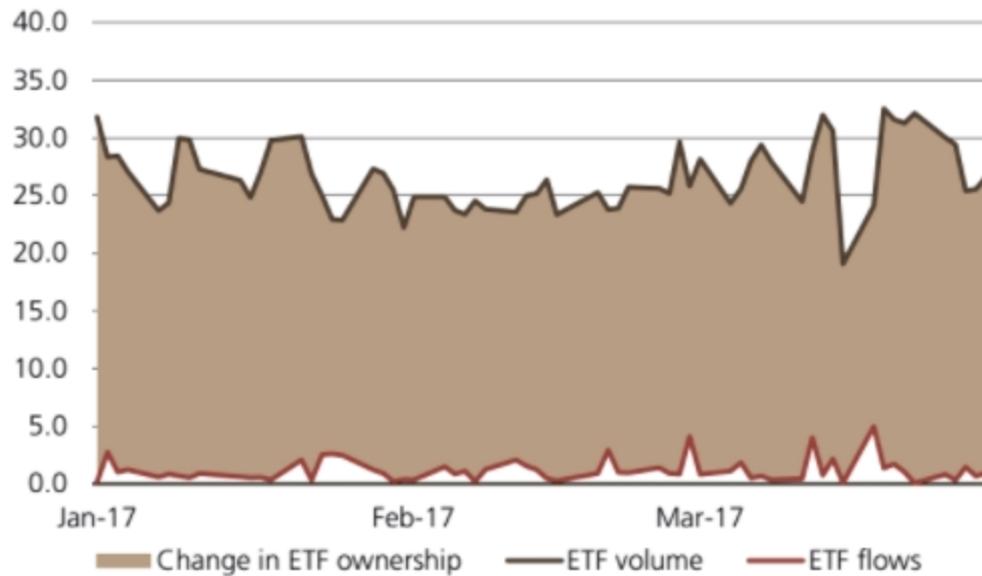
What purposes can an ETF serve?

- Diversify away from business risks of a single company.
- Greater liquidity
- Tax efficiency compared to mutual funds (minor)

Greater liquidity

Fig. 4: Most ETF trades don't result in trades of the underlying securities...

% of total consolidated US equities market volume



Source: BATS Global Markets, Morningstar Direct, UBS. Data from 1Q17.

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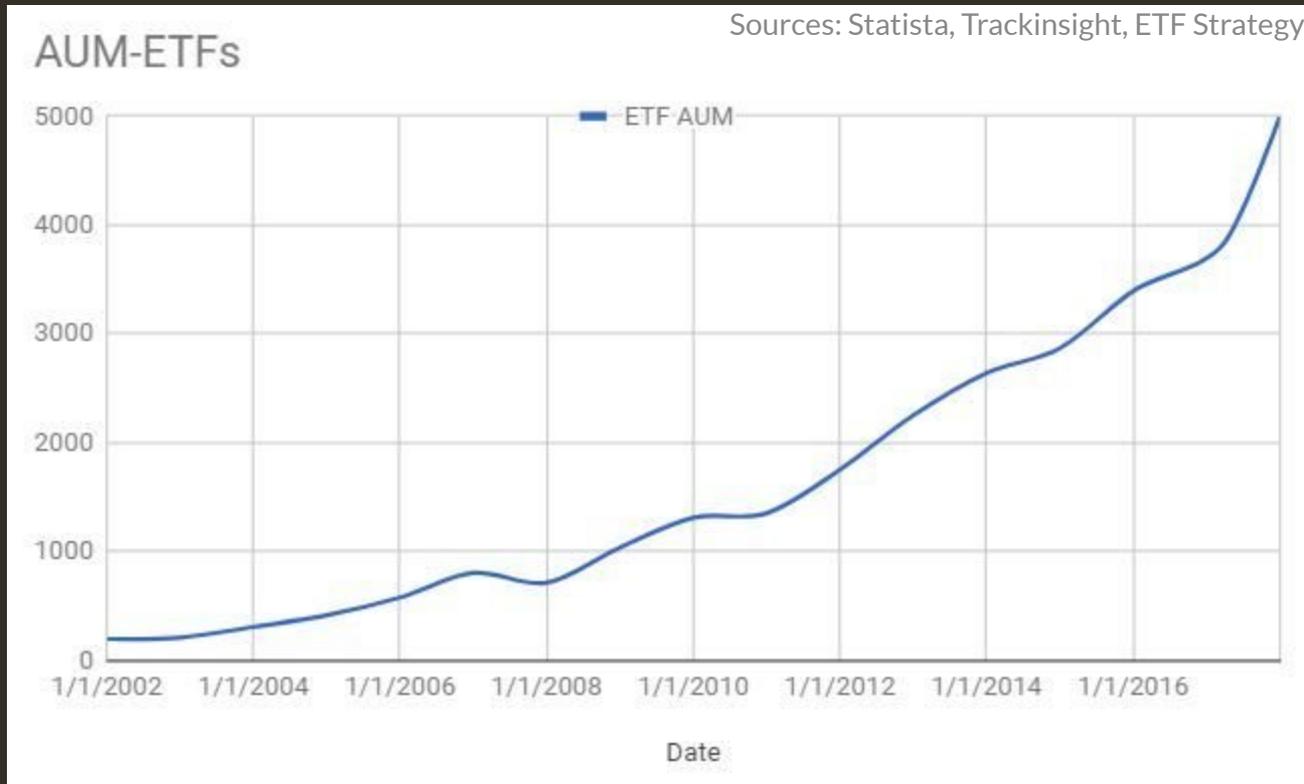
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Growth of assets managed by ETFs



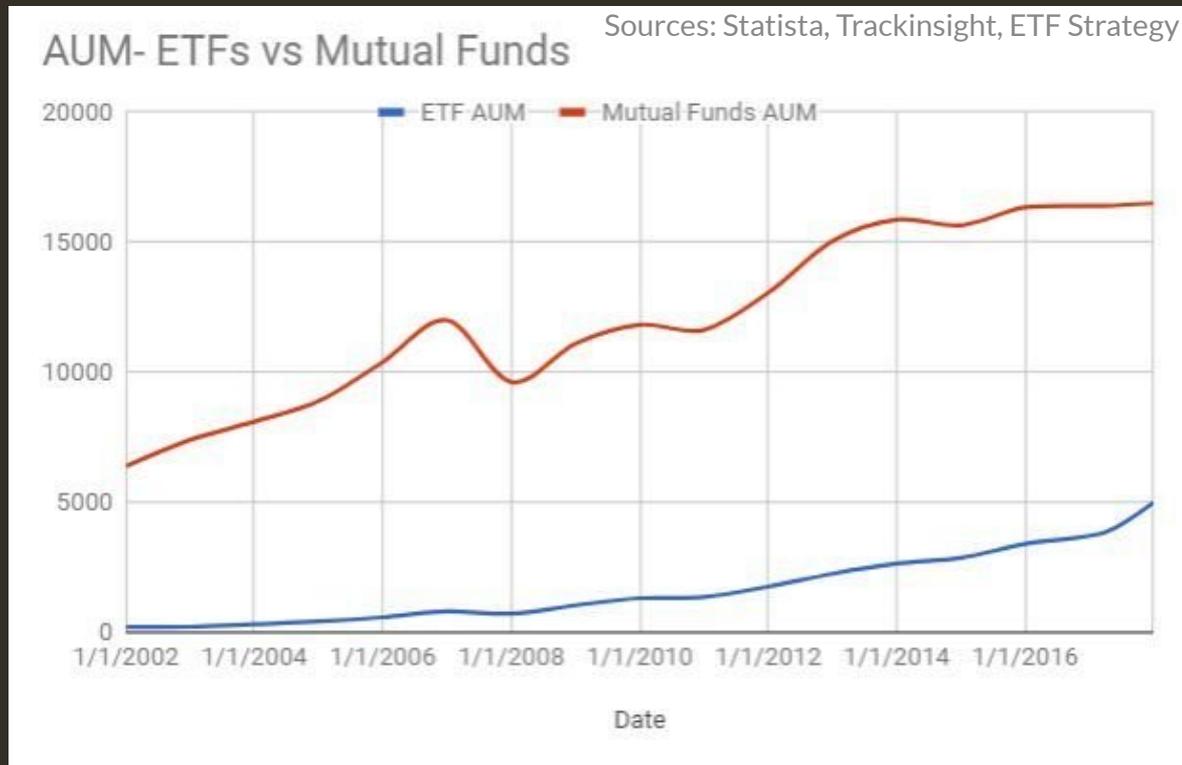
- ETFs have grown to 5 trillion dollars in assets.

ETFs vs Hedge Funds



- ETFs growth has dwarfed hedge fund asset growth in recent years

ETFs vs Mutual Funds



- While mutual funds have a lot more assets, accounting for market appreciation, they have been losing assets.
- ETF inflows seems to be continuing their strong pace.
- Assets are moving from mutual funds to ETFs

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Harder to derive alpha from stocks

Sharpe Ratio of HFRX Equity Market Neutral



Source: Hedge Fund Research

Reasons for alpha decay in stocks

Hard to execute good ideas

- Reg-NMS
- Decimalization
- High Frequency Trading

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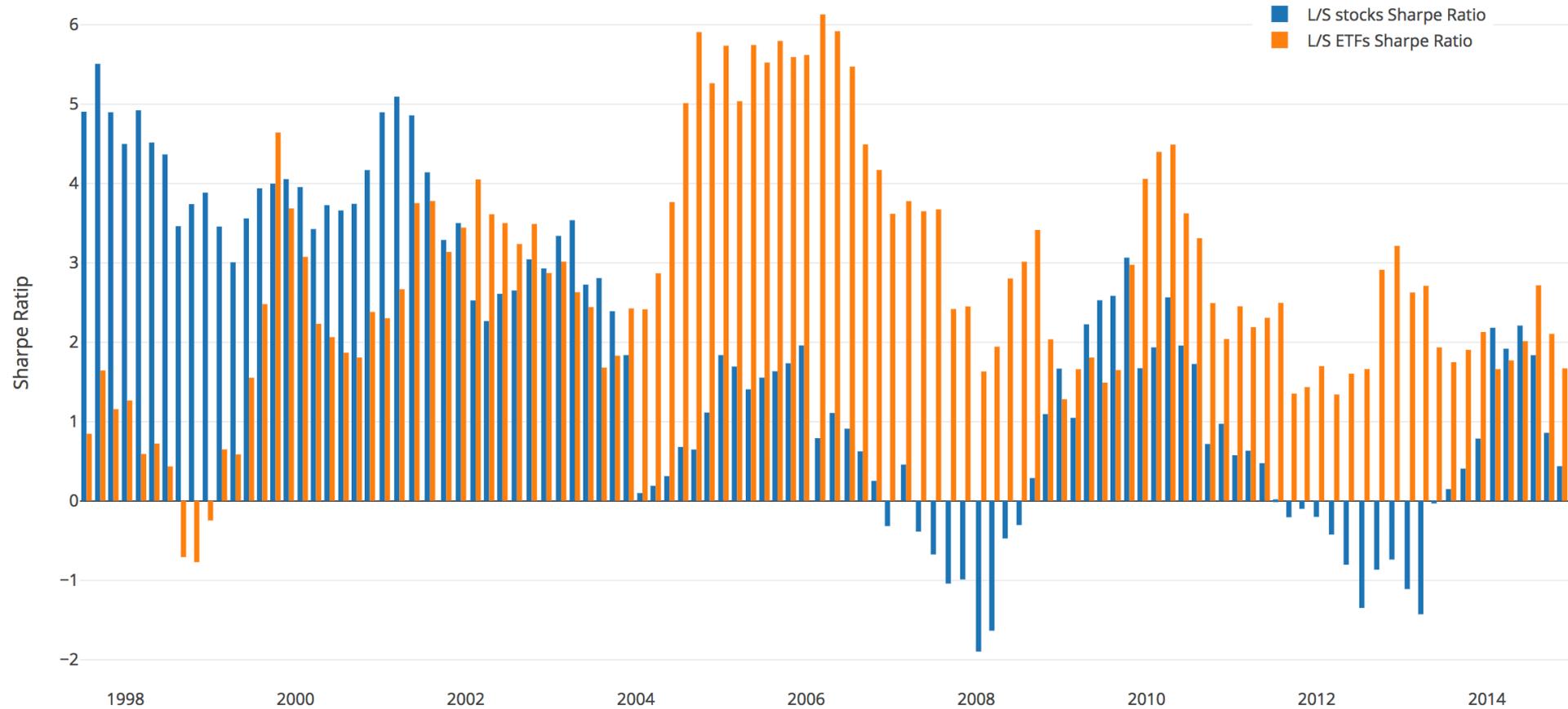
Results of an internal study of representative long-short strategies on ETFs and single stocks

Disclosure *This is for educational purposes only. All investments carry risk. Back-tested performance is not indicative of future results. Any return values and/or projections are based on the back-tested results from Jan 1st, 1995 till date. Average case return is the back-tested return. The actual performance for investments in this portfolio could be different. [Read our full disclosure here](#) about back-tested performance and projections. qplum is not a tax advisor. Please consult with your tax advisor before making any decisions about your tax liabilities.*

Long-short ETFs vs stocks

Source: Proprietary study on representative relative-value L/S strategies on ETFs and Stocks

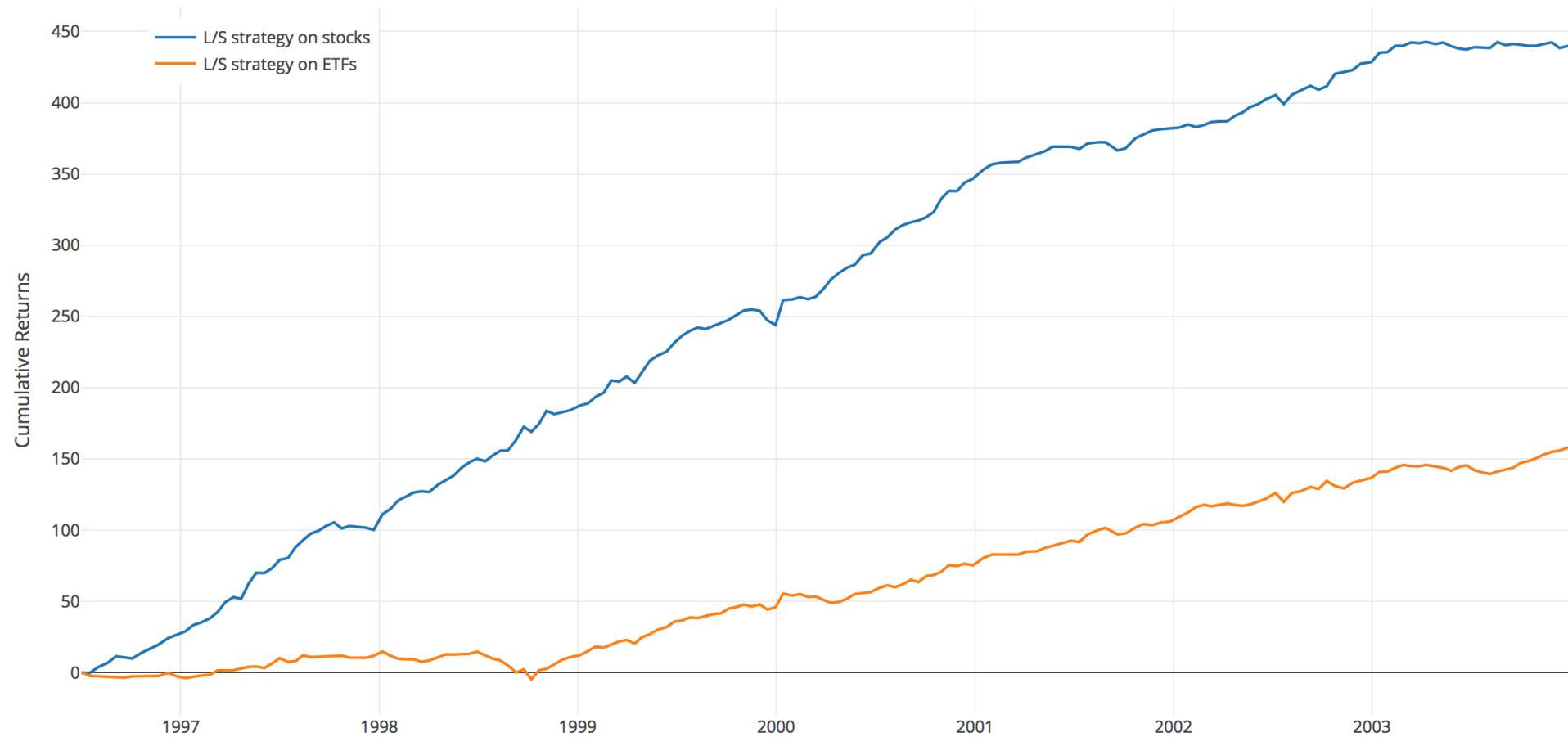
Sharpe Ratios of Market Neutral strategies on ETFs and stocks



Pre 2004 there was more alpha in stocks

Source: Proprietary study on representative relative-value L/S strategies on ETFs and Stocks

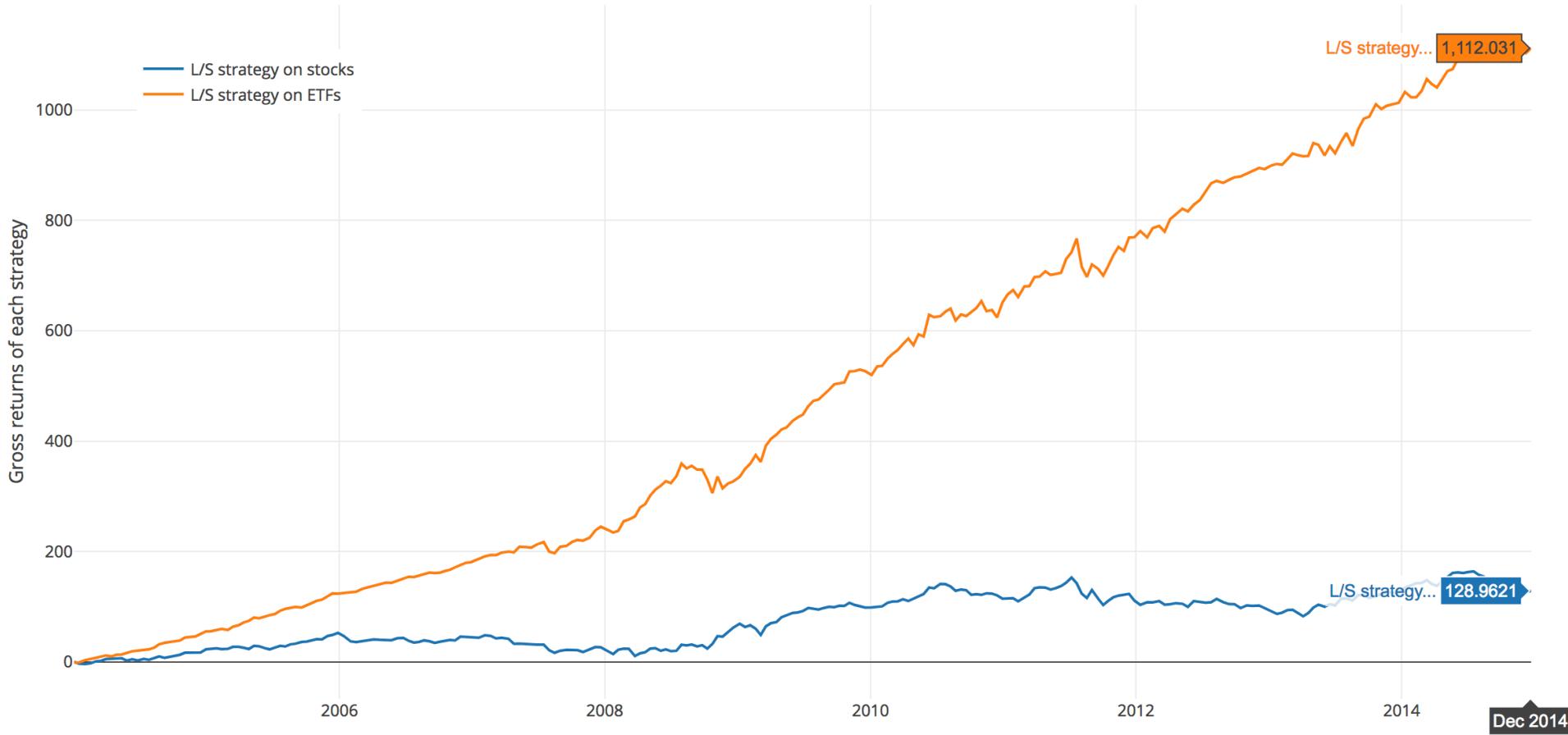
Prior to 2004 market neutral strategies in stocks were doing better than ETFs



Post 2004, ETFs seem easier than stocks

Source: Proprietary study on representative relative-value L/S strategies on ETFs and Stocks

Comparing returns of market neutral trading on ETFs and stocks



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- ETFs cover a large universe of stocks and bonds.
- ETFs allows us to source returns from other asset classes and not just equities.
- Less operational work needed in trading ETFs than stocks.
- Trading ETFs is less dependent on execution.
- ETFs are new and not many quant strategies have been developed for ETFs.



Questions?

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