

Trailblazing Momentum Strategies in Mutual Funds

Assessing AQR's Position and Exposure in 2009 and 2019

GEORGETOWN
UNIVERSITY

McDonough
SCHOOL of BUSINESS

MASTER OF SCIENCE
IN FINANCE



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Demonstrating the Business Need for a Momentum-Based Mutual Fund

AQR wanted to use momentum strategy to pioneer the retail mutual fund market.

This would in effect increase AQR's revenue.

**Backtesting shows favorable
results for investors and AQR.**



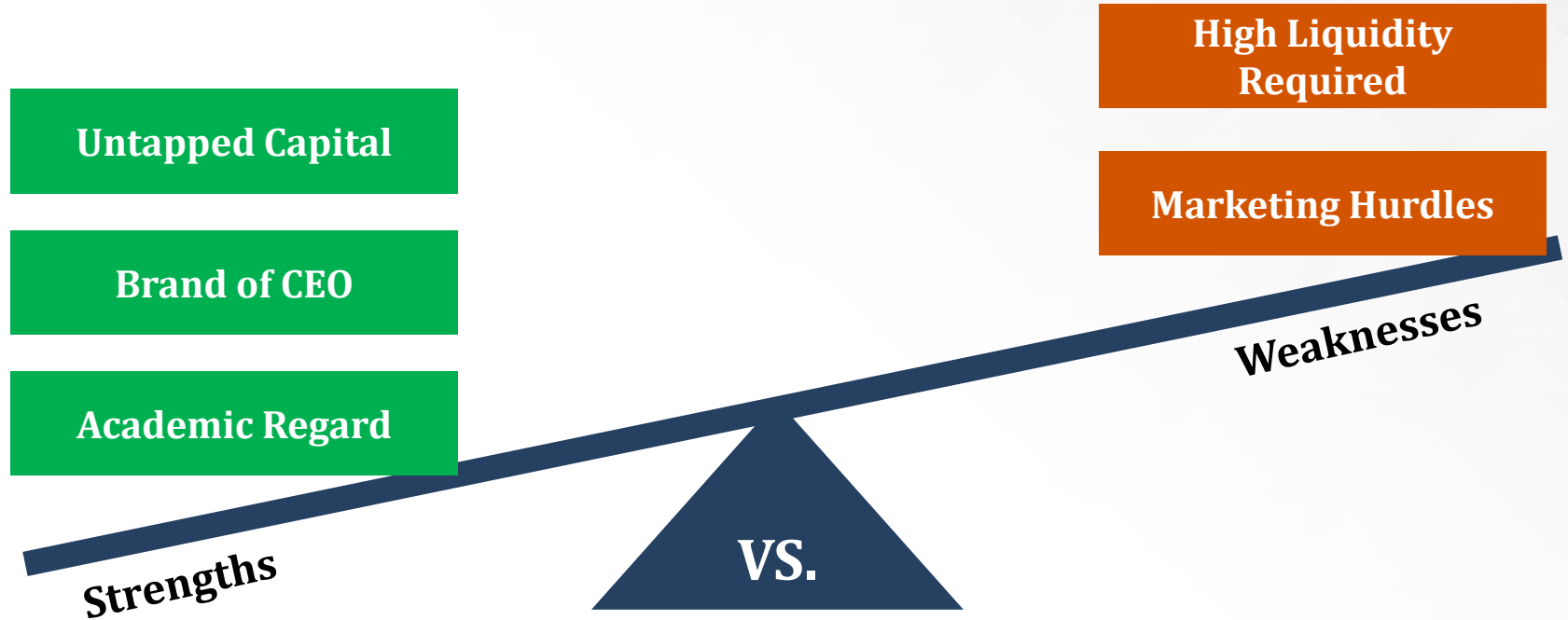
**We support the 2009 strategy.
BUT!**

There is a but...

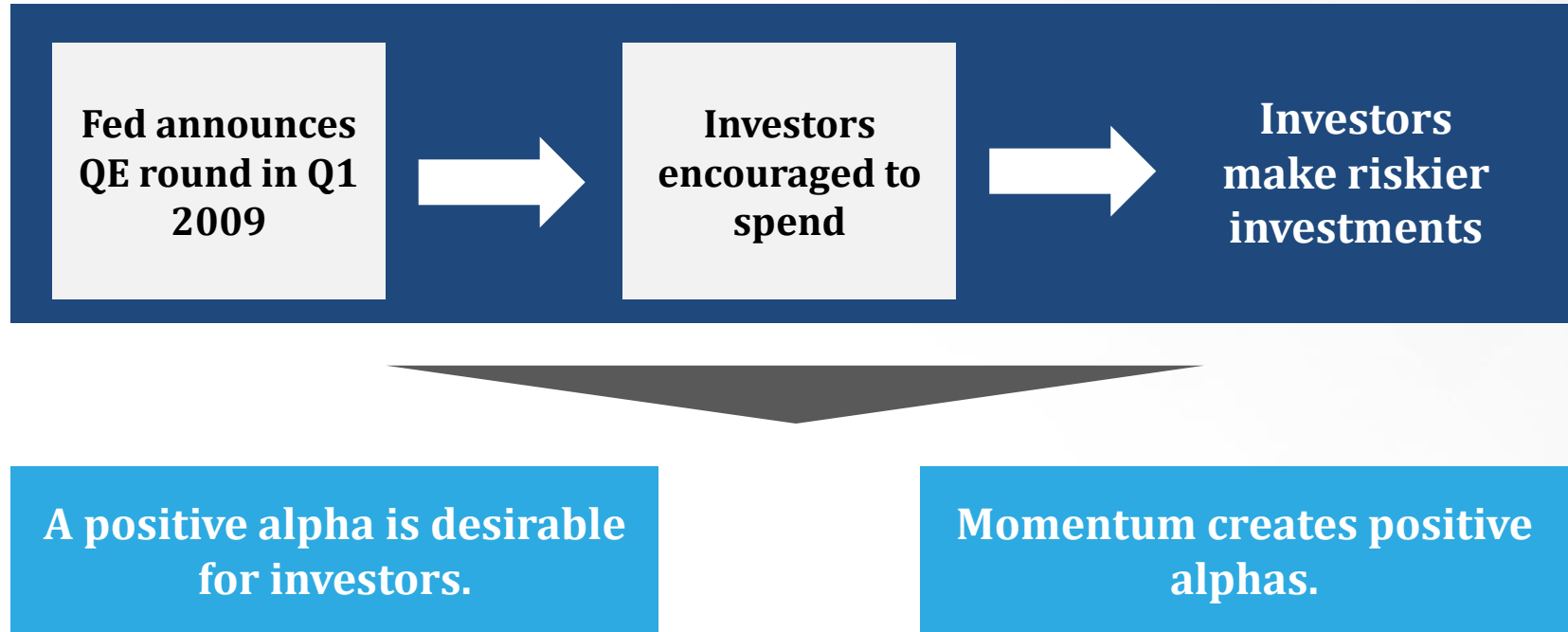


**2009: THE YEAR OF
“I GOTTA FEELING”**

Do the Strengths Outweigh the Pitfalls?



Understanding the 2009 Environment: Retailers are Hungry for New Investment Strategies



Evidence Supports Momentum Strategies in Mutual Funds

1926-2009	Market	Large Cap Momentum
Avg monthly return (μ)	0.88%	1.19%
Std. Deviation (σ)	5.49%	5.64%
Sharpe Ratio	.1042	.1314
β (CAPM)	1.0000	0.9617*
α (CAPM)	-	0.0034
α (Fama3)	-	0.0038
α (Fama3 + Mom)	-	-0.0005*

Results from Fama-French Data Library, * indicates significance



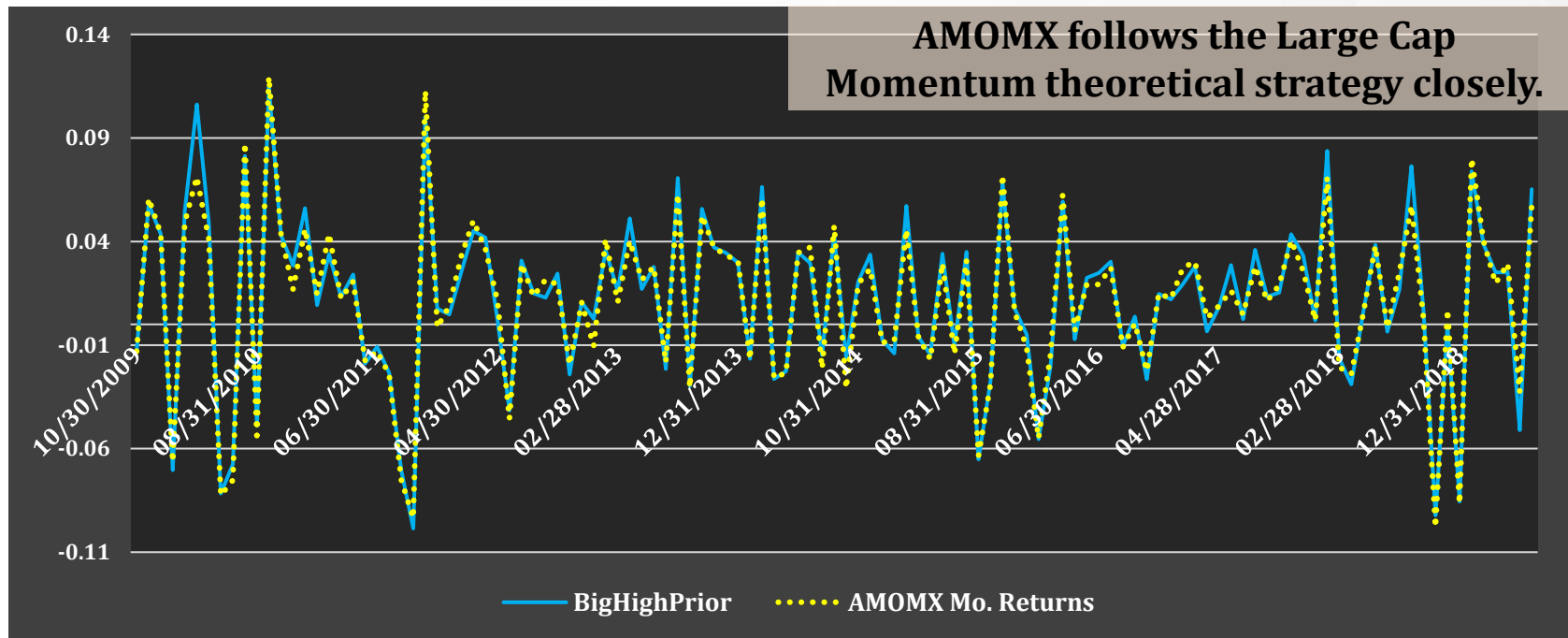
COULDA, WOULD, SHOULD

It is Not Always about the Sharpe Ratio

2009-2019	Market	AMOMX
Avg monthly return (μ)	1.13%	1.12%
Std. Deviation (σ)	3.79%	4.01%
Sharpe Ratio	.30	.27
β (CAPM)	1.000	-0.1925
α (CAPM)	0.000	0.01300
α (Fama 3)	0.000	0.01349

Results from Fama-French Data Library

Looking at AMOMX vs. Large Cap Momentum Returns since 2009

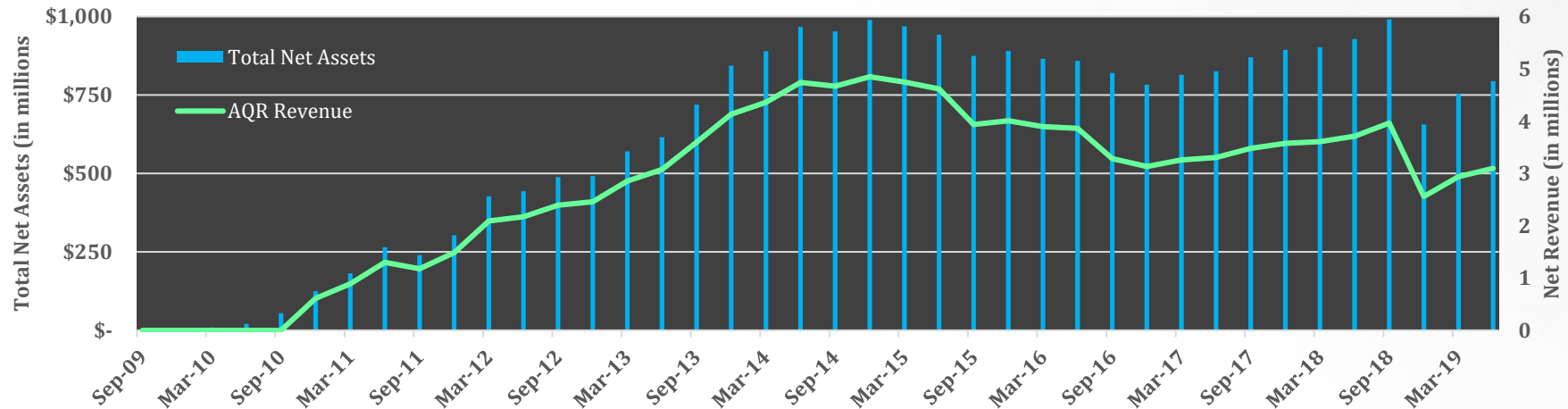


Results from Fama-French Data Library

AQR has Experienced Tremendous Growth Overall. How has AMOMX Done?

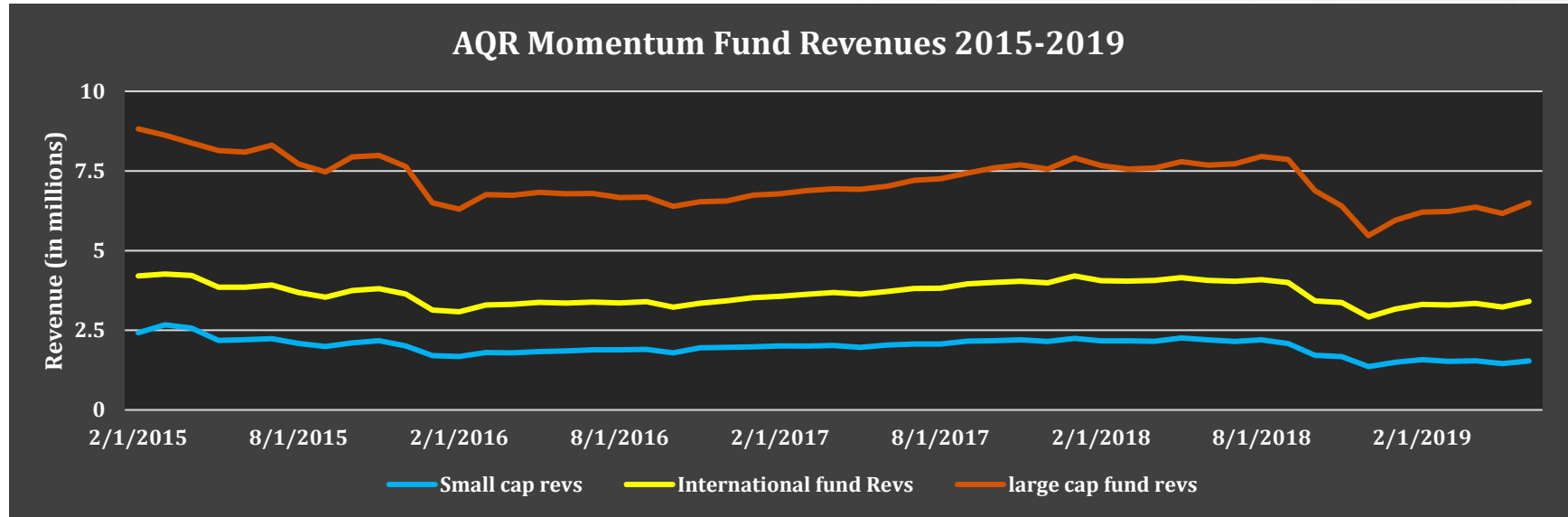


AQR Momentum Large Cap Mutual Fund Revenue to Total Net Assets



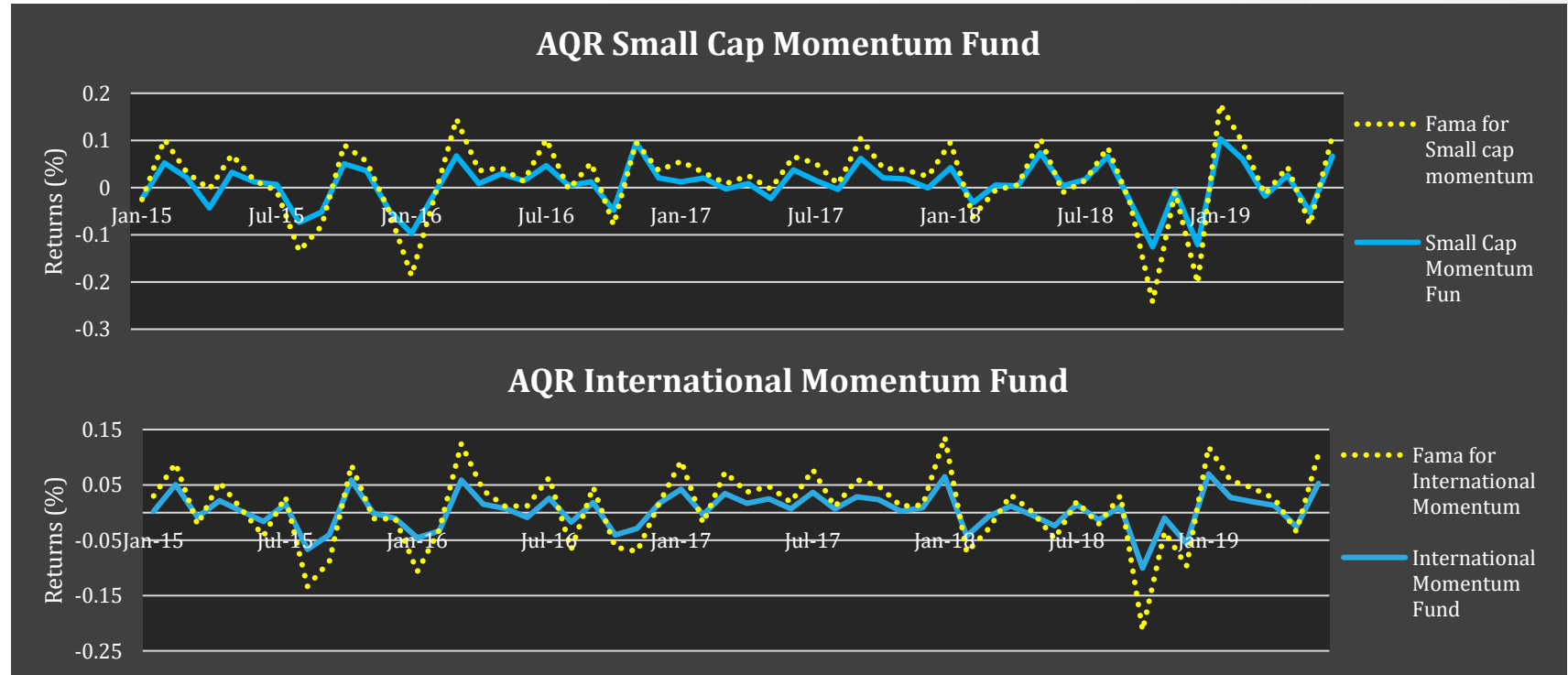
Results from CRSP Mutual Funds Data from WRDS

So has the Juice Always been Worth the Squeeze? Not for all AQR Momentum Funds.




Results from CRSP Mutual Funds Data from WRDS and Fama-French Data Library . Revenue is a function of net asset value and expense ratio.

Tracking Error Returns of Other AQR Momentum Funds



AMOMX was the Better Bet for AQR

**Present Value of Cash Flows
(Revenue)
highest for AMOMX**



AQR should have...

**Gone long on
AMOMX**

**Pivoted away
from Small
Cap and Int'l**

**Diverted all marketing efforts and
resources on AMOMX**



APPENDIX

Performance of Other Two AQR Momentum Funds

2015-2019	Small Cap Fund	Int'l Fund
Sharpe Ratio	0.0921	0.1235
α	-0.0019	-0.0021
β	0.9865*	0.8845*

- * Represents statistical significance
- Small Cap Fund is regressed to Fama-3 Factors.
- International Fund is regressed to the market using the Vanguard World Index Fund minus the U.S. risk-free rate.

AQR Fund 2015-2019	PV of Generated Revenue
Large Cap	\$156 million
Small Cap	\$73 million
Int'l	\$87 million

- Present Value calculated by using a monthly rate of 0.8%, the average return that could have been obtained by investing in the market.
- Revenue is a function of net asset value times the expense ratio.

Results from CRSP Mutual Funds Data from WRDS and Fama-French Data Library.

Average Differences in Returns

AQR Large Cap – Expected Fama Large

-0.0009

AQR Small Cap – Expected Fama Small Returns

-0.0048

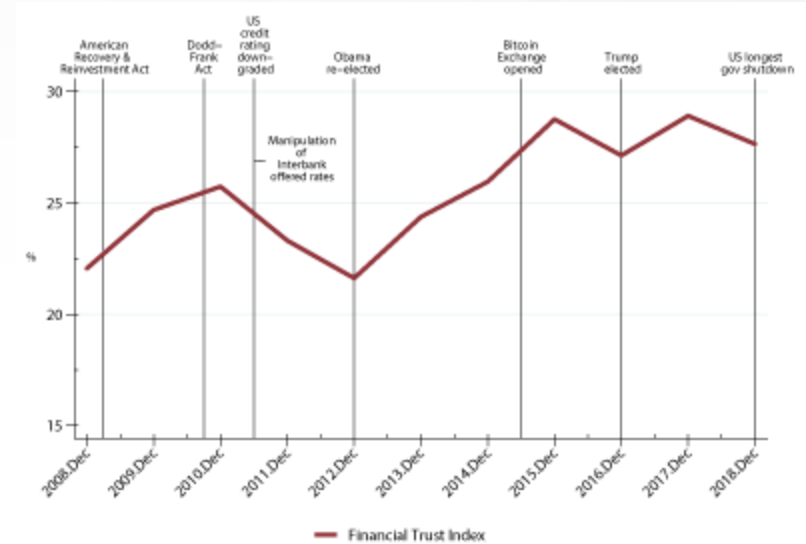
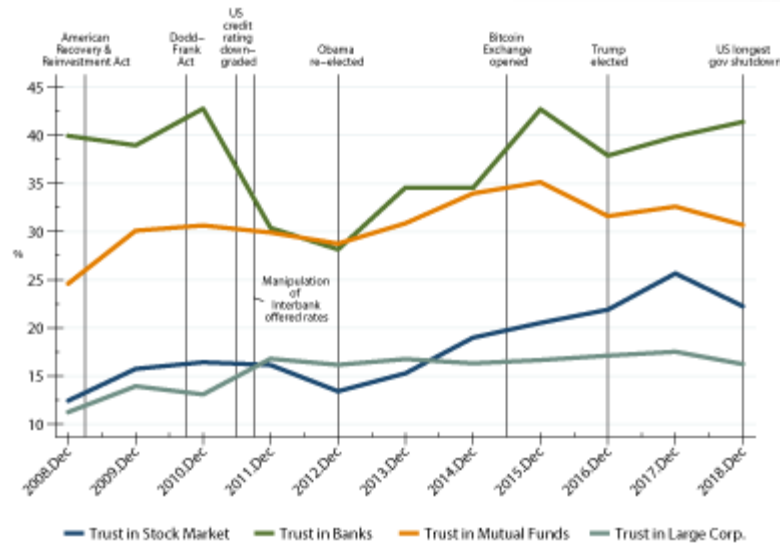
AQR Int'l – Expected Fama Int'l without U.S.

-0.0086

Marketing to the Right People

	Pros	Cons
Retail Investor	<ul style="list-style-type: none">• Easy to market the benefits for individual investors who have become cynical of the market• Would require high volume of investors to affect AUM	<ul style="list-style-type: none">• Taxes to investors because of increased turnover of positions• The average investor wealth has decreased
Institutional Investor	<ul style="list-style-type: none">• Tax efficient• Trades in large quantities	<ul style="list-style-type: none">• Looking for safer investments due to economic climate• Isolated individual investors to momentum strategy• Can lose AUM quickly if a single investor pulls out

Investor Trust in Mutual Funds Increase since 2008, but is now on the decline



Results from Wave 27 of Financial Trust Index – Booth and Kellogg Schools of Business