

RAFI Roadmap: A guide to better investor outcomes

RAFI™ Fundamental US Index

BENCHMARK US Cap-Weight 500
ASSET CLASS Equity

What Is the Process?

Investment Process

1	Determine size of companies using fundamental measures	Fundamental size is the equally weighted average of four fundamental measures: 1) Adjusted Sales 2) Cash Flow 3) Dividends + Buybacks 4) Book Value
2	Segment companies by region and size	Six Regions US Japan UK Europe ex UK Other Developed Emerging Markets Large Co.: Top 86% by cumulative fundamental weight Small Co.: 86-98% by cumulative fundamental weight
3	Select securities	Combine region and size constructs to create desired exposure. <i>For example, RAFI Developed is the top 86% of stocks by RAFI weight in the US, Japan, UK, Europe ex UK and Other Developed regions.</i>
4	Renormalize	Renormalize company weights so that sum of weights equal 100%.
5	Rebalance	Quarterly Staggered Rebalance Portfolio is reconstituted annually on the last business day of March and is rebalanced the last business day of March, June, September, and December.

Will the Strategy Deliver?

This strategy is expected to deliver excess returns in the future because it is theoretically and empirically robust. Every investor should ask five questions before investing:

1. Who is on the other side of the trade?
2. Has the strategy worked over long and varying time periods net of changes in valuation?
3. Does the strategy produce similar results across different regions?
4. Does the the strategy produce similar results across slightly different definitions (e.g., P/B vs. P/S)?
5. Is the strategy investable in the real world net of costs?

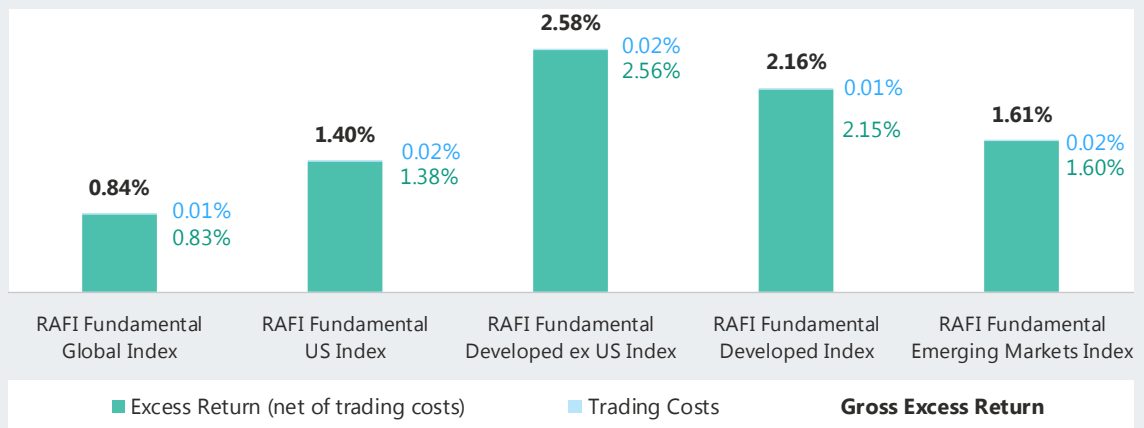
Why This Strategy Delivers

	Theory	Empirical Evidence			
Factor	1. Who's on the Other Side of the Trade?	2. Excess Return*	3. Regions That Work	4. Definitions That Work	5. Trading Costs**
RAFI Fundamental US Index	The Performance Chaser Rebalancing premium delivers by trading counter to performance chasers: Buys what has done poorly and become newly cheap, and sells what has done well and become newly expensive.	1.40%	8 of 8	4 of 4	0.02%

SOURCE: CRSP/Compustat and Worldscope/Datastream | DATA: From 7/1/1968 to 06/30/2018 | *Gross of trading costs.

**Annualized trading costs are estimated as the market impact of transactions, assuming \$10B in AUM.

Historical Excess Return

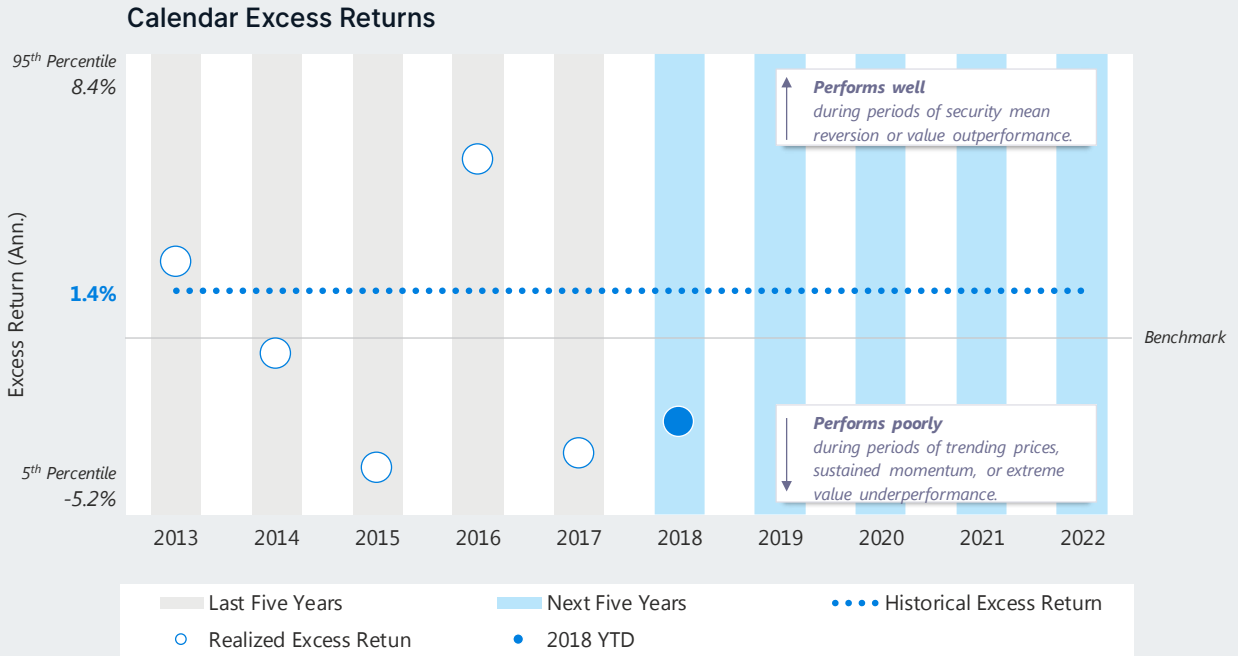


SOURCE: CRSP/Compustat and Worldscope/Datastream | DATA: From inception to 06/30/2018 | NOTE: Annualized trading costs are estimated as the market impact of transactions, assuming \$10B in AUM for US and Global portfolios and \$1B for Emerging Markets.

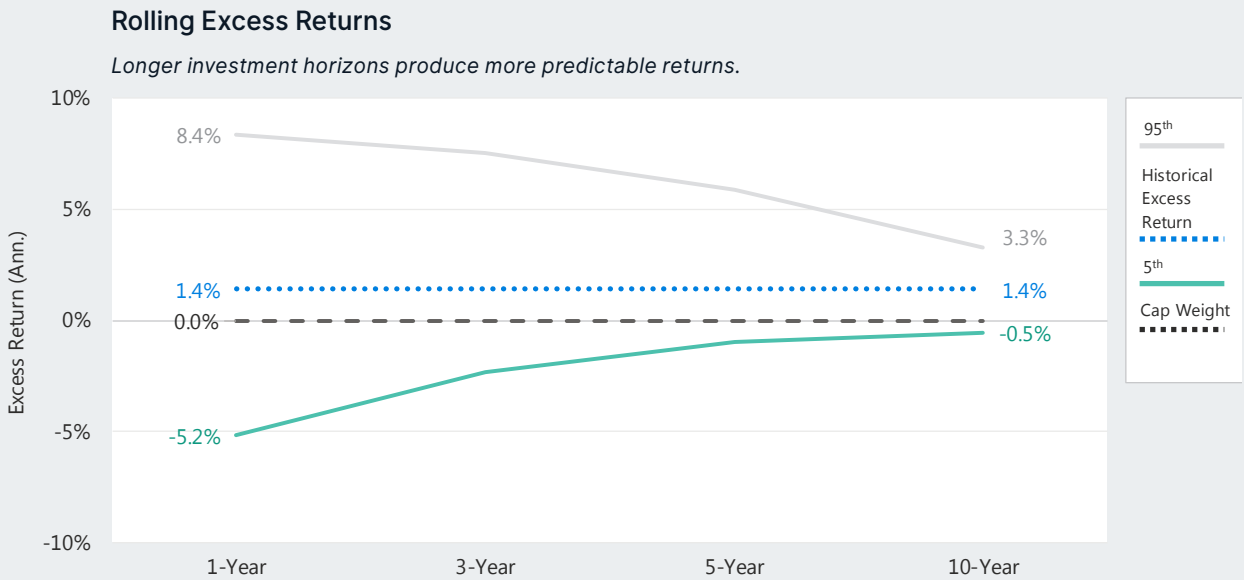
INCEPTION DATES: Global 07/01/2002 | US 07/01/1968 | DEV ex US 07/01/1989 | EM 07/01/2002

What to Expect?

The RAFI Fundamental US Index shows 1.4% in annualized excess returns since 1968. However, those results have come with a wide range of outcomes (+/- 7% or more) in any given year.



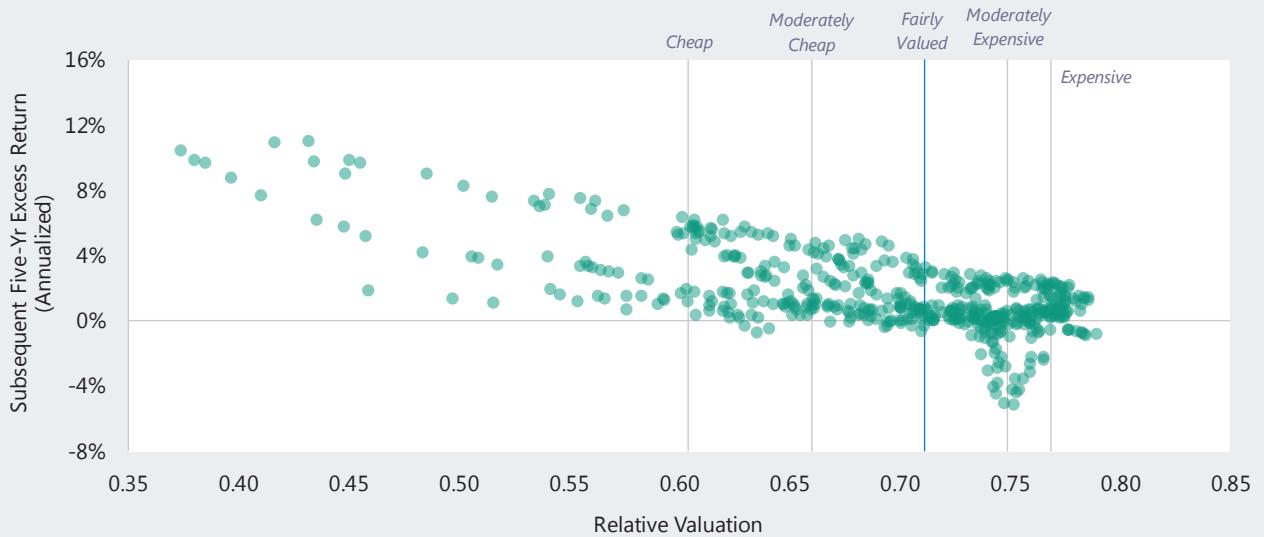
NOTE: Based on rolling returns from simulated data | SOURCE: CRSP/Compustat and Worldscope/Datastream | DATA: As of 06/30/2018



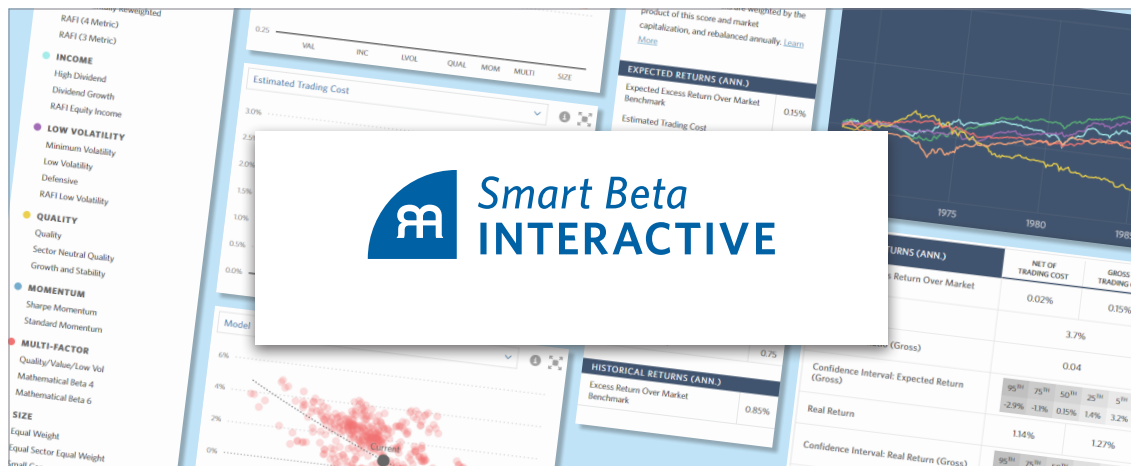
NOTE: Based on rolling returns from simulated data | SOURCE: CRSP/Compustat and Worldscope/Datastream | DATA: As of 06/30/2018

The Index trades at a **discount of 32% (0.68x)** the relative valuation of its cap-weighted benchmark. This is **fairly valued** relative to its **median discount of 29% (0.71x)**. Given current valuations, our [Smart Beta Interactive](#) website forecasts an annualized excess return of **1.9%** over the next five years (gross of costs).

Valuations & Return Expectations



SOURCE: CRSP/Compustat and Worldscope/Datastream | DATA: From 07/01/1968 to 06/30/2018



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JASON HSU, VITALI KALESNIK, NOAH BECK, AND HELGE KOSTKA

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Past Performance & Characteristics

AS OF 09-30-2018

Quarterly Commentary

The RAFI Fundamental US Index underperformed its benchmark, the Russell 1000, by 47 bps for the quarter driven by continued headwinds in value (7.4% for Russell 1000 vs. 5.7% for Russell 1000 Value). The consumer cyclical and energy sectors were the biggest detractors to return at -27 bps and -24 bps, respectively. Meanwhile, the financial and consumer non-cyclical sectors were the biggest contributors to excess return at 12 bps and 8 bps, respectively. From a stock level perspective, the biggest detractors were Amazon (-24 bps), General Electric (-14 bps), and Chevron Corporation (-12 bps). Facebook (33 bps), Pfizer (9 bps), and CVS Health (9 bps) were the largest contributors to returns.

Full attributions and performance commentary: <https://www.rafi.com/investor-support/resources>

Trailing Returns

Index	QTD	1 Yr	3 Yr	5 Yr	10 Yr	ITD*	10-Yr Volatility	10-Yr TE**
RAFI Fundamental US Index	6.9%	15.2%	16.5%	12.8%	12.1%	14.6%	15.5%	2.8%
S&P 500	7.7%	17.9%	17.3%	13.9%	12.0%	18.6%	14.4%	N/A
Russell 1000	7.4%	17.8%	17.1%	13.7%	12.1%	18.4%	14.6%	N/A
Russell 1000 Value	5.7%	9.5%	13.6%	10.7%	9.8%	10.0%	15.3%	3.0%

SOURCE: FactSet | Data: As of 09/30/2018 in USD | INCEPTION DATE: 01/31/2017

* Inception to Date (ITD) uses the first full month of returns after inception date. All returns prior to inception are simulated. Please see disclosures for important information regarding simulated performance.

** Annualized Tracking Error calculated against each index's appropriate benchmark using the first full month of returns following index inception. Index returns prior to inception are simulated.

Characteristics

Index	Number of Holdings	P/E	P/B	P/S	Dividend Yield	Market Cap / \$B
RAFI Fundamental US Index	541	17.10	2.47	1.43	2.31	176.24

SOURCE: FactSet | Data: As of 09/30/2018 in USD | INCEPTION DATE: 01/31/2017

NOTE: Portfolio characteristics derived from FactSet. Data prior to launch are simulated. One-way turnover data are historical averages based on simulated history. Capacity is estimated at 50-basis-point market-impact level.

Top 10 Holdings

RAFI Fundamental US Index		Weights (%)
1	Apple	3.72
2	Exxon Mobil	2.77
3	Microsoft	2.16
4	Chevron	1.97
5	AT&T	1.81
6	JPMorgan Chase	1.70
7	Pfizer	1.64
8	Berkshire Hathaway	1.62
9	Walmart	1.30
10	Wells Fargo	1.29

SOURCE: FactSet | DATA: As of 09/30/2018 in USD

Sectors

RAFI Fundamental US Index		Sector Weight
1	Basic Materials	3.62%
2	Consumer, Cyclical	13.85%
3	Consumer, Non-Cyclical	7.69%
4	Energy	11.51%
5	Financial	17.73%
6	Health Care	12.02%
7	Industrial	9.11%
8	Technology	16.49%
9	Telecommunications	4.17%
10	Utilities	3.82%

SOURCE: FactSet | DATA: As of 09/30/2018 in USD

Disclosures (1/2)

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Disclosures (2/2)

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