

# **Revisiting Core Principles**

The FTSE RAFI Index series utilizes fundamental measures of company size (sales, cash flow, dividends, and book value) as a rebalancing anchor to trade against the constantly shifting expectations of the market.

This approach results in overweights to out-of-favor securities, which are often undervalued, and underweights to popular securities, which are often overvalued.

Over the short term, these exposures can cause relative performance to vary, but this simple, disciplined approach has historically outperformed the cap-weighted benchmark over the long-term.

As a rebalancing strategy that trades against recent winners, the Fundamental Index™ methodology will often face performance headwinds during periods of trending prices, sustained momentum, or extreme value underperformance - and benefit from performance tailwinds during periods of security mean reversion or value outperformance.

The FTSE RAFI UK 300 Index is comprised of the 300 companies with the largest fundamental scores in the UK.

## **Performance**

Exhibit 1: Performance Table

Exhibit 2: Rolling 1-Year Excess Returns

i. Exhibit 1.

Performance derived from FactSet. All returns are total returns in GBP. All returns greater than one year are annualized. Standard deviation and tracking error require a minimum of 1 year return history. \*Inception to Date (ITD) returns are calculated starting the first full month of returns following March 16, 2012.

#### ii.Exhibit 2.

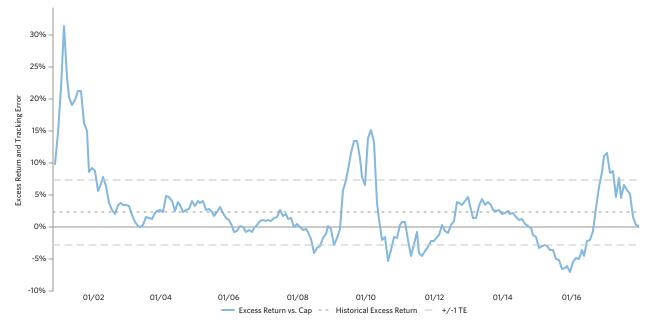
Performance derived from FactSet. All returns are total returns in GBP. Rolling 1-year excess returns and tracking error are calculated starting December 31, 1000

If applicable, strategy returns prior to inception are simulated. Inception date is March 16, 2012.

# **Exhibit 1: Performance Table** i

	QTD	1-Yr	3-Yr	5-Yr	10-Yr	ITD*
FTSE RAFI™ UK 300 Index	5.8%	13.3%	10.8%	10.7%	7.2%	10.6%
FTSE All-Share Index	5.0%	13.1%	10.1%	10.3%	6.3%	9.9%
Value Added	0.9%	0.2%	0.7%	0.4%	0.9%	0.6%
MSCI UK	4.9%	11.8%	9.3%	9.2%	5.6%	8.9%
Portfolio Standard Deviation		7.7%	10.6%	10.5%	16.3%	10.6%
Benchmark Standard Deviation		7.8%	9.3%	9.7%	14.0%	9.8%
Tracking Error		2.8%	4.1%	3.3%	4.8%	3.1%

Exhibit 2: Rolling 1-Year Excess Returns ii



#### **The Value Premium**

The strategy invests broadly across the entire economy; however a byproduct of the strategy's rebalancing process is a value tilt.

On a one-year rolling basis, the FTSE RAFI™ UK 300 Index outperformed 84% of the time when value won and 51% of the time when growth won.

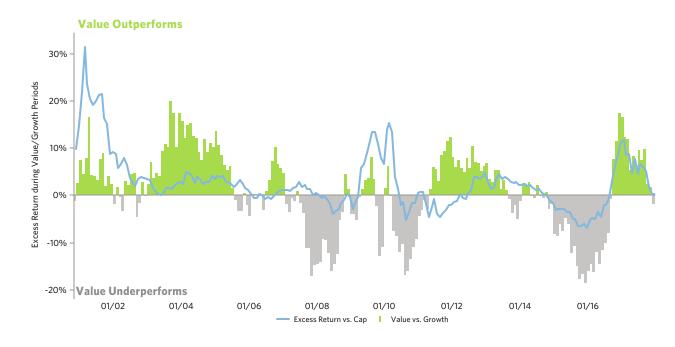
Generally, excess returns were achieved by taking advantage of mean reversion in stock prices which can sometimes take several years to run its course.

The FTSE RAFI™ UK 300 Index delivered consistent outperformance over full market cycles, with positive excess returns in 69% of rolling 1-year periods, 75% of rolling 3-year periods, and 87% of rolling 5-year periods.

Exhibit 3: Rolling 1-Year Excess Returns

i. Exhibit 3.
FTSE RAFI™ UK 300 Index rolling 1-year excess returns are measured against FTSE All-Share Index. Value / Growth periods measured by rolling 1-year excess returns of MSCI United Kingdom Value vs. MSCI United Kingdom Growth. Calculation starts on December 31, 1999. Strategy returns prior to inception are simulated. Strategy inception is March 16, 2012.

Exhibit 3: Rolling 1-Year Excess Returns



## **Portfolio Characteristics**

The FTSE RAFI™ UK 300 Index is attractively positioned relative to the capweighted benchmark.

Exhibit 4: Portfolio Characteristics

Exhibit 5: Historical Portfolio Characteristics

i. Exhibit 4.

Portfolio characteristics data derived from FactSet.

\*Sharpe Ratio, Information Ratio, and Tracking Error are
calculated starting the first full month of returns
following March 16, 2012. Minimum 1-year return
history. The 3-mo US Treasury Bill return is used as a
proxy for risk-free rate. If applicable, strategy returns
prior to inception are simulated. Inception date is March
16, 2012.

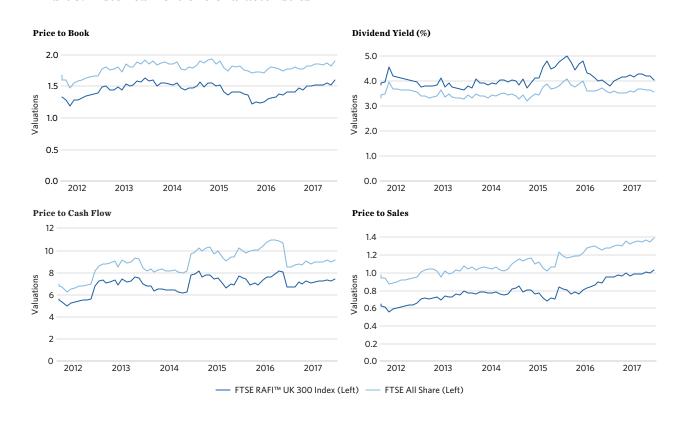
ii.Exhibit 5.

Portfolio characteristics derived from FactSet. Data prior to strategy inception is simulated. Strategy inception is March 16, 2012.

**Exhibit 4: Portfolio Characteristics** i

	Number of Holdings	Active Share	Price to Sales	Price to Cash Flow	Price to Book	Div. Yield	Market Cap. (Billions)	Sharpe Ratio*	Info. Ratio*	Tracking Error*
FTSE RAFI™ UK 300 Index	291	25.5	1.0	7.4	1.6	4.1%	89	0.70	0.21	3.1%
FTSE All Share	641		1.4	9.2	1.9	3.5%	71	0.69		

Exhibit 5: Historical Portfolio Characteristics ii

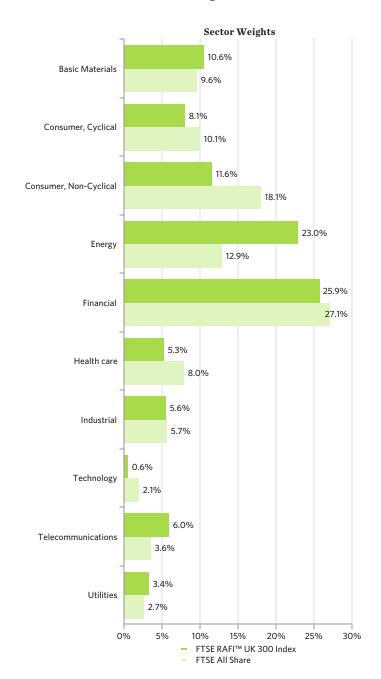




# **Current Position**

## Exhibit 6: Sector Weights

Exhibit 6: Sector Weights



i. Exhibit 6.
Portfolio characteristics data derived from FactSet.



# **Current Position**

Exhibit 7: Top 10 Holdings

Exhibit 8: Top Over/Underweights

i. Exhibit 7, Exhibit 8.

Portfolio characteristics and securities data derived from FactSet. 1-Yr Total Effect is calculated using a holdings based attribution, and measures the impact that a security had on relative performance. It is a function of the active weight of a company as well as that company's performance versus the overall benchmark.

# Exhibit 7: Top 10 Holdings i

Index	Weights	1-Yr Perf.	Benchmark	Weights	1-Yr Perf.
Royal Dutch Shell	13.6%	15.9%	Royal Dutch Shell	8.3%	15.9%
BP	8.9%	9.2%	HSBC	6.2%	24.9%
HSBC	8.1%	24.9%	British American Tobacco	4.6%	14.0%
Vodafone	4.8%	24.3%	ВР	4.1%	9.2%
Glencore plc	3.1%	43.9%	Diageo	2.7%	33.1%
Barclays PLC	2.4%	-7.4%	AstraZeneca	2.6%	21.4%
GlaxoSmithKline	2.3%	-10.8%	GlaxoSmithKline	2.6%	-10.8%
AstraZeneca	2.2%	21.4%	Vodafone	2.5%	24.3%
Lloyds Banking Group plc	2.0%	13.9%	Prudential plc	2.0%	21.1%
British American Tobacco	1.9%	14.0%	Lloyds Banking Group plc	2.0%	13.9%

# Exhibit 8: Top Over/Underweights

Top Overweights	Active Weights	1-Yr Total Effect	Top Underweights	Active Weights	1-Yr Total Effect
Royal Dutch Shell	5.3%	0.1%	British American Tobacco	-2.8%	0.1%
BP	4.8%	-0.2%	Diageo	-1.4%	-0.2%
Vodafone	2.2%	0.2%	Shire	-1.1%	0.4%
HSBC	1.9%	0.1%	Reckitt Benckiser Group plc	-1.0%	0.1%
Glencore plc	1.3%	0.7%	Unilever	-0.8%	-0.2%
Barclays PLC	1.0%	-0.3%	Reed Elsevier	-0.5%	0.0%
Tesco	0.9%	-0.1%	AstraZeneca	-0.4%	-0.1%
Standard Chartered	0.8%	0.1%	Compass Group PLC	-0.4%	0.0%
BHP Billiton	0.6%	0.0%	Micro Focus International plc	-0.4%	0.0%
Aviva plc	0.4%	0.0%	Experian PLC	-0.3%	0.0%

#### **Attribution**

# **Exhibit 9: Sector Attribution**

Exhibit 9: Sector Attribution 1-Quarter Ending 12/31/2017

#### Allocation Selection + Interaction Total Sector Portfolio Bench. Effect Excess Sector Weight Weight Effect Return Effect **Basic Materials** 10.64% 9.61% 5.22% 0.03% 0.18% 0.21% -0.42% Consumer, Cyclical 10.13% -0.01% -0.09% -0.10% 8.07% Consumer, Non-Cyclical -0.09% 11.61% 18.10% -1.81% 0.07% -0.03% 22.97% 12.91% 0.03% Energy 6.35% 0.61% 0.64% Financial 25.87% 27.11% 0.17% 0.00% -0.01% -0.01% Health care 5.28% 7.95% -8.05% 0.19% -0.06% 0.12% Industrial 5.59% 5.74% -2.85% 0.00% 0.02% 0.02% Technology 2.08% 4.00% -0.03% 0.01% -0.02% 0.62% Telecommunications 5.95% 3.64% 5.01% 0.07% 0.12% 0.18% 3.41% Utilities 2.74% -13.36% -0.09% -0.05% -0.14%

1-Year Ending 12/31/2017

	Sector	Portfolio Weight	Bench. Weight	Sector Excess Return	Allocation	Selection + Interaction Effect	Total Effect
	Basic Materials	10.64%	9.61%	16.93%	0.22%	6.03%	6.25%
	Consumer, Cyclical	8.07%	10.13%	-3.97%	0.04%	-0.97%	-0.93%
)	Consumer, Non-Cyclical	11.61%	18.10%	-4.02%	-0.03%	-4.21%	-4.24%
	Energy	22.97%	12.91%	-0.77%	-0.10%	-0.16%	-0.26%
	Financial	25.87%	27.11%	2.88%	-0.03%	-2.71%	-2.73%
<u> </u>	Health care	5.28%	7.95%	-11.28%	0.42%	3.89%	4.32%
	Industrial	5.59%	5.74%	4.04%	-0.01%	0.19%	0.18%
	Technology	0.62%	2.08%	23.75%	-0.30%	-1.94%	-2.23%
	Telecommunications	5.95%	3.64%	-0.18%	-0.13%	2.15%	2.02%
	Utilities	3.41%	2.74%	-26.88%	-0.16%	-2.06%	-2.21%
					Excess	Return	0.17%

i. Exhibit 9 Portfolio characteristics and securities data derived from FactSet. The attributions have been normalized to match the return of the strategy, as presented in the performance table on page 2. Data prior to strategy inception is simulated. Strategy inception is March 16, 2012.



Excess Return

0.88%



#### **Disclosures**

Source: FactSet based on data from FTSE Russell.

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Prior to 11/1/2016, the 1-yr performance values reported in the Top 10 Holdings exhibit and the Top Over/Underweights exhibit were incorrect. The calculation has been modified to report the appropriate values moving forward.

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