

Revisiting Core Principles

The RAFI Fundamental Index series utilizes fundamental measures of company size (de-levered sales, cash flow, dividends plus buybacks, 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 RAFI Fundamental Europe Index is comprised of the largest 86% of companies listed in Developed European countries by cumulative fundamental weight.

Performance

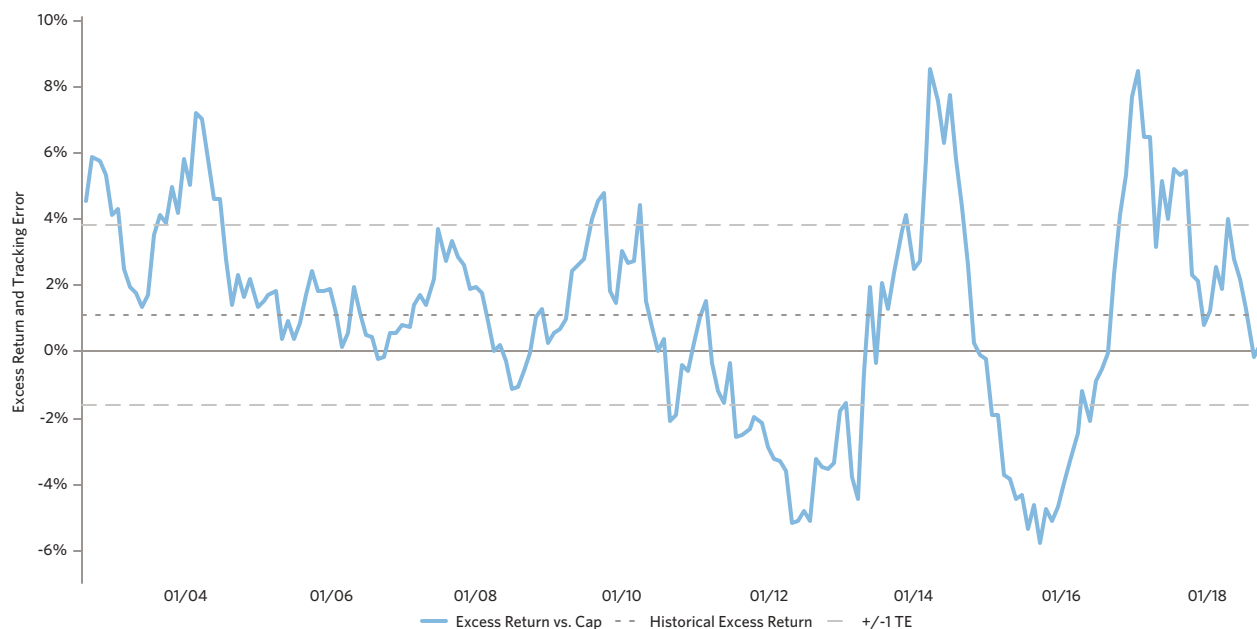
Exhibit 1:
Performance Table

Exhibit 2:
Rolling 1-Year Excess Returns

Exhibit 1: Performance Tableⁱ

	QTD	1-Yr	3-Yr	5-Yr	10-Yr	ITD*
RAFI Fundamental Europe Index	1.2%	2.5%	9.5%	8.4%	7.9%	7.8%
FTSE All World Series Europe Index	1.3%	2.3%	7.0%	7.7%	7.6%	7.7%
Value Added	-0.2%	0.2%	2.5%	0.7%	0.3%	0.1%
MSCI Europe	1.4%	2.1%	6.9%	7.5%	7.5%	7.5%
Portfolio Standard Deviation		9.9%	11.3%	11.9%	15.3%	9.1%
Benchmark Standard Deviation		8.6%	10.7%	11.3%	14.1%	8.3%
Tracking Error		2.5%	3.2%	2.9%	3.1%	2.5%

Exhibit 2: Rolling 1-Year Excess Returnsⁱⁱ



i. Exhibit 1.
Performance derived from FactSet. All returns are total returns in EUR. 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 January 31, 2017.

ii. Exhibit 2.
Performance derived from FactSet. All returns are total returns in EUR. Rolling 1-year excess returns and tracking error are calculated starting September 30, 2001.
If applicable, strategy returns prior to inception are simulated. Inception date is January 31, 2017.

The Value Premium

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

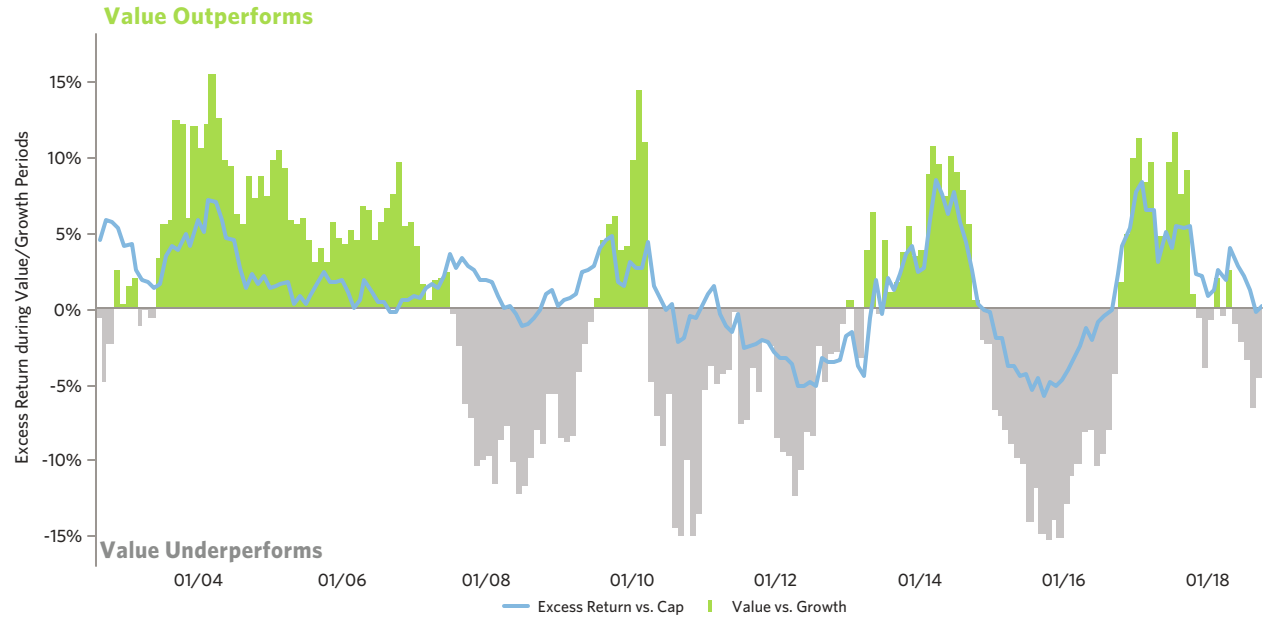
On a one-year rolling basis, the RAFI Fundamental Europe Index outperformed 96% of the time when value won and 41% of the time when growth won.

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 RAFI Fundamental Europe Index delivered consistent outperformance over full market cycles, with positive excess returns in 68% of rolling 1-year periods, 70% of rolling 3-year periods, and 65% of rolling 5-year periods.

Exhibit 3: Rolling 1-Year Excess Returns

Exhibit 3: Rolling 1-Year Excess Returnsⁱ



ⁱ Exhibit 3.
RAFI Fundamental Europe Index rolling 1-year excess returns are measured against FTSE All World Series Europe Index. Value / Growth periods measured by rolling 1-year excess returns of MSCI Europe Value vs. MSCI Europe Growth. Calculation starts on September 30, 2001. Strategy returns prior to inception are simulated. Strategy inception is January 31, 2017.

Portfolio Characteristics

The RAFI Fundamental Europe Index is attractively positioned relative to the cap-weighted benchmark.

[Exhibit 4:](#)
Portfolio Characteristics

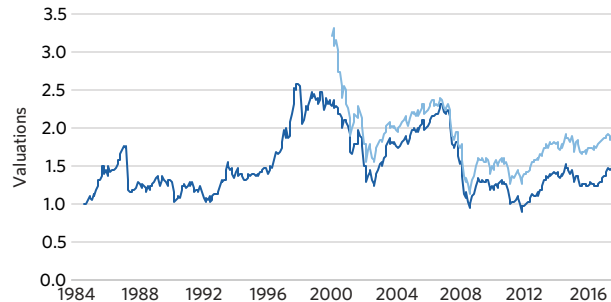
[Exhibit 5:](#)
Historical Portfolio Characteristics

Exhibit 4: Portfolio Characteristicsⁱ

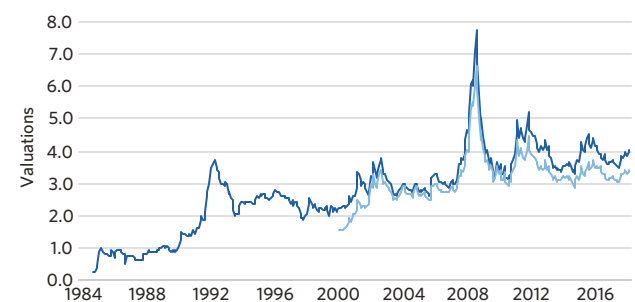
	Number of Holdings	Active Share	Price to Sales	Price to Cash Flow	Price to Book	Div. Yield	Market Cap. (Billions)	Sharpe Ratio*	Info. Ratio*	Tracking Error*
RAFI Fundamental Europe Index	414	29.5	0.8	5.9	1.4	4.0%	74	1.20	0.05	2.5%
FTSE All-World Developed Europe	595	--	1.2	7.9	1.8	3.4%	71	1.29	--	--

Exhibit 5: Historical Portfolio Characteristicsⁱⁱ

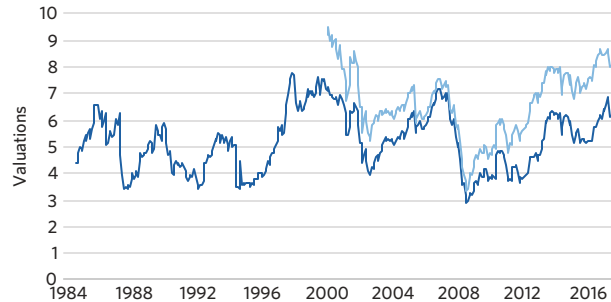
Price to Book



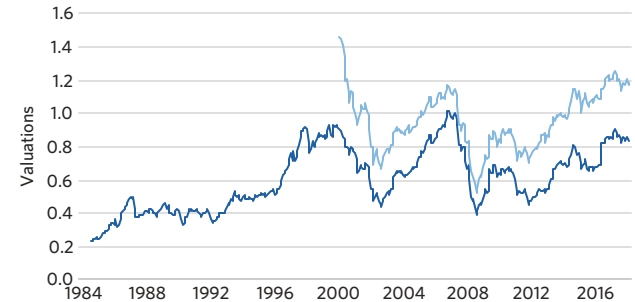
Dividend Yield (%)



Price to Cash Flow



Price to Sales



— RAFI Fundamental Europe Index (Left) — FTSE All-World Developed Europe (Left)

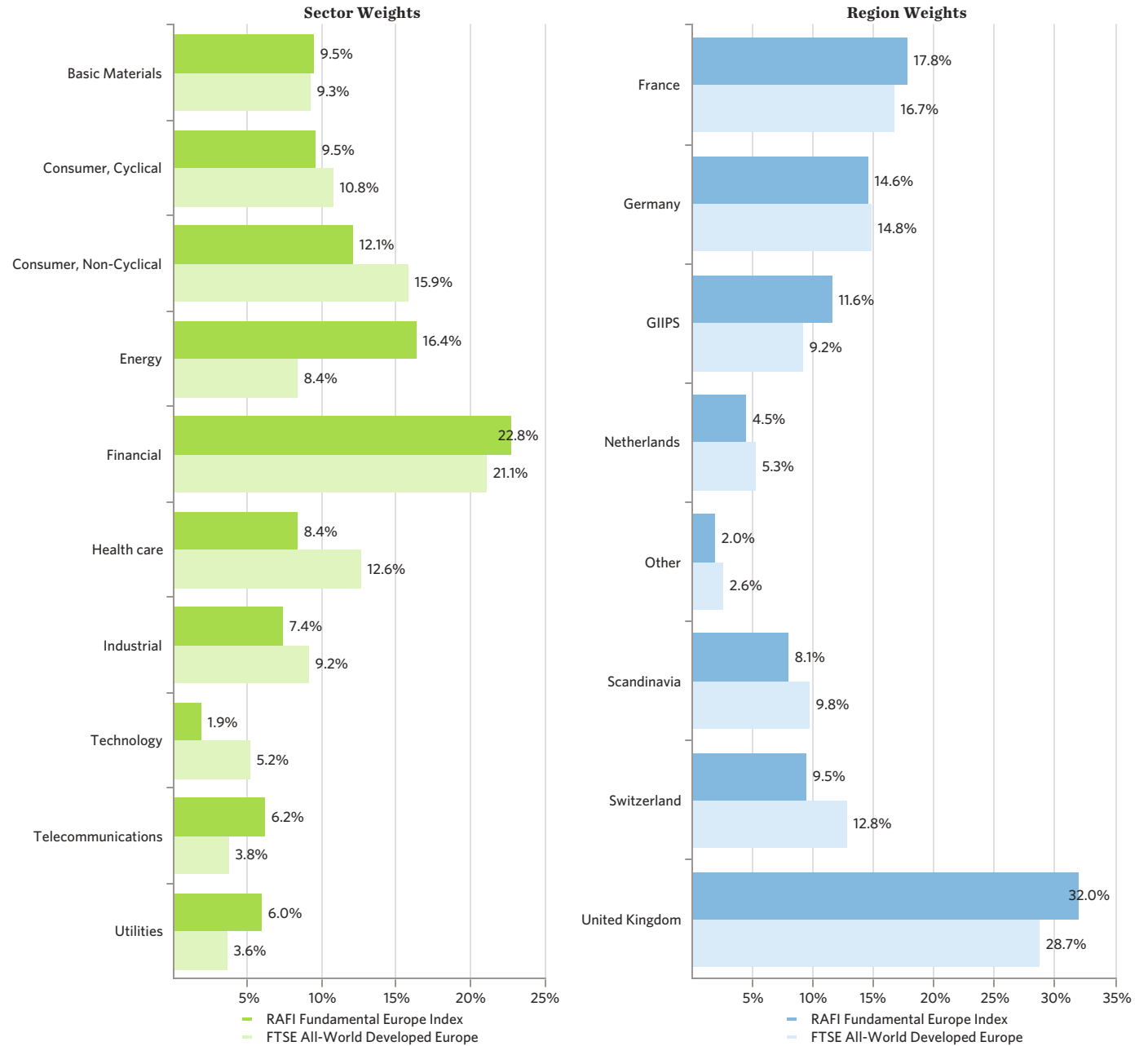
i. Exhibit 4.
Portfolio characteristics data derived from FactSet.
*Sharpe Ratio, Information Ratio, and Tracking Error are calculated starting the first full month of returns following January 31, 2017. Minimum 1-year return history. The 3-mo US Treasury Bill return is used as a proxy for risk-free rate. If applicable, strategy returns prior to inception are simulated. Inception date is January 31, 2017.

ii. Exhibit 5.
Portfolio characteristics derived from FactSet. Data prior to strategy inception is simulated. Strategy inception is January 31, 2017.

Current Position

Exhibit 6:
Sector and Region Weights

Exhibit 6: Sector and Region Weightsⁱ



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

Current Position

Exhibit 7: Top 10 Holdings

Exhibit 8: Top Over/Underweights

Exhibit 7: Top 10 Holdingsⁱ

RAFI Fundamental Europe Index vs. FTSE All World Series Europe Index					
Index	Weights	1-Yr Perf.	Benchmark	Weights	1-Yr Perf.
Royal Dutch Shell	5.7%	22.6%	Royal Dutch Shell	3.1%	22.5%
BP	3.7%	28.9%	Nestle	2.7%	5.1%
Total	3.3%	29.8%	Novartis	2.0%	7.0%
HSBC	2.3%	-5.2%	HSBC	1.9%	-5.2%
Nestle	2.0%	5.1%	Roche Holding	1.9%	0.8%
Novartis	1.7%	7.0%	Total	1.7%	29.8%
Banco Santander	1.6%	-23.9%	BP	1.6%	28.9%
ENI	1.5%	22.7%	Unilever	1.6%	0.2%
Sanofi	1.3%	-4.6%	SAP	1.3%	16.7%
Roche Holding	1.3%	0.8%	British American Tobacco	1.1%	-21.5%

Exhibit 8: Top Over/Underweightsⁱ

RAFI Fundamental Europe Index vs. FTSE All World Series Europe Index					
Top Overweights	Active Weights	1-Yr Total Effect	Top Underweights	Active Weights	1-Yr Total Effect
Royal Dutch Shell	2.7%	0.5%	SAP	-0.7%	-0.1%
BP	2.1%	0.5%	Nestle	-0.7%	0.0%
Total	1.5%	0.4%	Unilever	-0.6%	0.0%
ENI	0.9%	0.2%	ASML Holding NV	-0.6%	0.0%
Banco Santander	0.7%	-0.2%	Roche Holding	-0.6%	0.0%
Vodafone	0.6%	-0.1%	Novo Nordisk	-0.5%	0.0%
Daimler	0.5%	-0.1%	British American Tobacco	-0.5%	0.2%
ENGIE	0.5%	-0.1%	LVMH	-0.5%	-0.1%
Volkswagen AG Pref	0.5%	0.1%	Airbus SE	-0.5%	-0.1%
Telefonica	0.5%	-0.1%	Diageo	-0.5%	0.0%

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.

Attribution

Exhibit 9: Sector Attribution

Exhibit 10: Region Attribution

Exhibit 9: Sector Attributionⁱ

1-Quarter Ending 09/30/2018

Sector	Portfolio Weight	Bench. Weight	Sector Excess Return	Allocation Effect	Selection + Interaction Effect	Total Effect
Basic Materials	9.45%	9.28%	-2.31%	0.00%	-0.08%	-0.08%
Consumer, Cyclical	9.54%	10.81%	-1.05%	0.02%	0.09%	0.12%
Consumer, Non-Cyclical	12.07%	15.88%	-0.75%	0.02%	-0.03%	0.00%
Energy	16.37%	8.44%	2.38%	0.19%	0.00%	0.19%
Financial	22.76%	21.12%	-0.97%	-0.02%	-0.01%	-0.03%
Health care	8.37%	12.61%	4.92%	-0.18%	0.05%	-0.13%
Industrial	7.41%	9.20%	0.47%	-0.03%	-0.08%	-0.11%
Technology	1.88%	5.23%	0.37%	-0.03%	-0.02%	-0.05%
Telecommunications	6.19%	3.81%	-3.07%	-0.08%	0.00%	-0.08%
Utilities	5.97%	3.63%	-2.38%	-0.08%	0.06%	-0.02%
Excess Return						-0.19%

1-Year Ending 09/30/2018

Sector	Portfolio Weight	Bench. Weight	Sector Excess Return	Allocation Effect	Selection + Interaction Effect	Total Effect
Basic Materials	9.45%	9.28%	4.15%	0.02%	0.05%	0.07%
Consumer, Cyclical	9.54%	10.81%	-2.05%	0.01%	-0.13%	-0.12%
Consumer, Non-Cyclical	12.07%	15.88%	-0.35%	0.07%	0.11%	0.17%
Energy	16.37%	8.44%	23.53%	1.93%	-0.24%	1.68%
Financial	22.76%	21.12%	-10.67%	-0.16%	-0.65%	-0.82%
Health care	8.37%	12.61%	0.01%	-0.05%	-0.07%	-0.11%
Industrial	7.41%	9.20%	-2.05%	0.00%	-0.15%	-0.16%
Technology	1.88%	5.23%	10.12%	-0.39%	-0.03%	-0.42%
Telecommunications	6.19%	3.81%	-9.29%	-0.23%	0.07%	-0.16%
Utilities	5.97%	3.63%	-2.31%	-0.11%	0.14%	0.03%
Excess Return						0.17%

Exhibit 10: Region Attributionⁱ

1-Quarter Ending 09/30/2018

Region	Portfolio Weight	Bench. Weight	Country Excess Return	Allocation Effect	Selection + Interaction Effect	Total Effect
France	17.79%	16.71%	3.12%	0.02%	0.18%	0.20%
Germany	14.55%	14.82%	-1.00%	0.00%	0.06%	0.07%
GIIPS	11.63%	9.22%	-3.78%	-0.09%	-0.03%	-0.12%
Netherlands	4.53%	5.32%	-0.02%	0.01%	0.06%	0.07%
Other	1.96%	2.58%	-3.19%	0.01%	0.01%	0.02%
Scandinavia	8.06%	9.82%	5.40%	-0.06%	0.12%	0.06%
Switzerland	9.53%	12.84%	6.15%	-0.21%	-0.05%	-0.26%
United Kingdom	31.95%	28.70%	-3.01%	-0.09%	-0.13%	-0.22%
Excess Return						-0.19%

1-Year Ending 09/30/2018

Region	Portfolio Weight	Bench. Weight	Country Excess Return	Allocation Effect	Selection + Interaction Effect	Total Effect
France	17.79%	16.71%	1.64%	0.05%	-0.78%	-0.73%
Germany	14.55%	14.82%	-7.20%	-0.01%	-0.46%	-0.47%
GIIPS	11.63%	9.22%	-9.64%	-0.22%	-0.25%	-0.47%
Netherlands	4.53%	5.32%	2.05%	0.01%	0.17%	0.17%
Other	1.96%	2.58%	-6.91%	0.01%	0.08%	0.10%
Scandinavia	8.06%	9.82%	5.80%	-0.03%	0.41%	0.38%
Switzerland	9.53%	12.84%	0.72%	-0.08%	-0.20%	-0.28%
United Kingdom	31.95%	28.70%	5.55%	0.07%	1.38%	1.46%
Excess Return						0.17%

i. Exhibit 9, Exhibit 10. 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 January 31, 2017.



Disclosures

Source: FactSet based on data from Solactive.

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