

FTSE Global Sustainable Yield Methodology

Identifying relatively high yield stocks
with sustainable yields



January 2015

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1. Introduction
2. High yield indices in general
3. FTSE Sustainable Yield Indices
4. Index Methodology
5. List of Indices
- 6-10. Performance and analysis
11. Conclusion

- High yield equity strategies can produce steady payouts to investors seeking income
- High yield equity strategies can be affected by the following issues:
 - Extreme yields may indicate distress rather than a sustainable yield
 - The yield may be sustained by financing rather than operating activities of a company
 - A weak financial & operating position increases the likelihood of future dividend cuts
- FTSE Sustainable Yield Indices aim to reflect the performance of sustainable relatively high yielding companies

- **Dividend sustainability**

Companies are included for index inclusion without reference to whether the forecast dividend is likely to be paid

- **Industry Biases**

Industries are cyclical – during the global financial crises, many financial companies with unrealized high yields were selected

- **Poor Country Representation**

High yield indices tend to have a country bias

- **Other concerns**

- High turnover
- Low capacity
- Appropriate weighting scheme

FTSE Sustainable Yield Indices address some of these indexing concerns:

A. Reasonable Yield

Companies with extreme yield are more likely to experience dividend cuts

B. No Dividend Cut

Companies with past dividend cuts are more likely to experience subsequent dividend cuts

C. Sustainable Payout Ratio

Companies with high payout ratio are more likely to experience dividend cuts

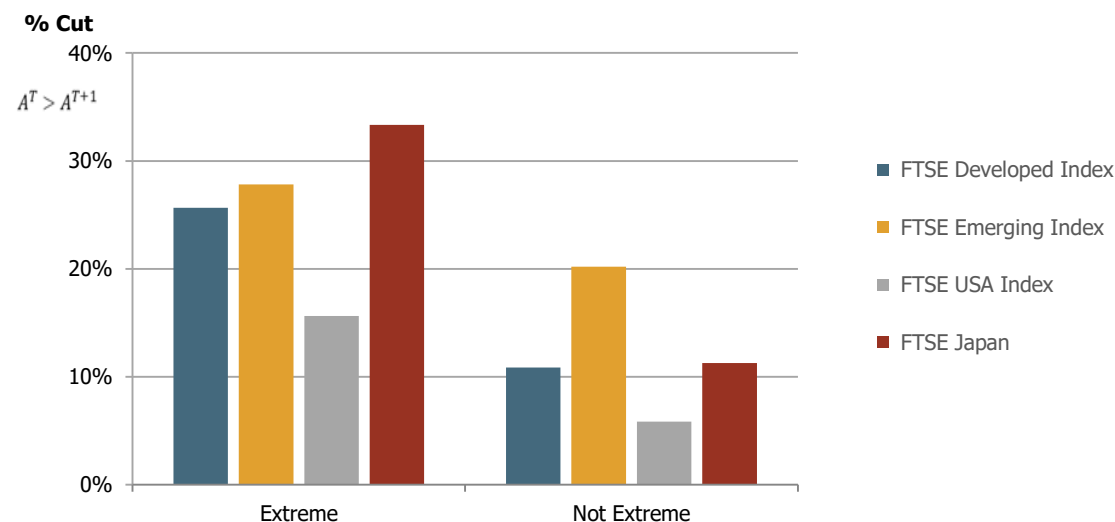
D. Financial & Operating Strength

Companies with weak balance sheets and the inability to generate cash flow are less likely to sustain current dividend payments

3.A Criterion: Reasonable Yield

- The desire is to exclude extreme yielding stocks but NOT high yielding industries
- Extreme yield stocks are more likely to experience dividend cuts, resulting in yield disappointment
- The effectiveness of the signal can vary across markets

Percentage of stocks subsequently experiencing a dividend cut (2003-2014)



Extreme yielding stocks have historically experienced more historic dividend cuts

Source: FTSE Group, data as at 31 December 2014. Past performance is no guarantee of future results. Data shown may reflect historical data. Please see the final page for important legal information and disclaimers.

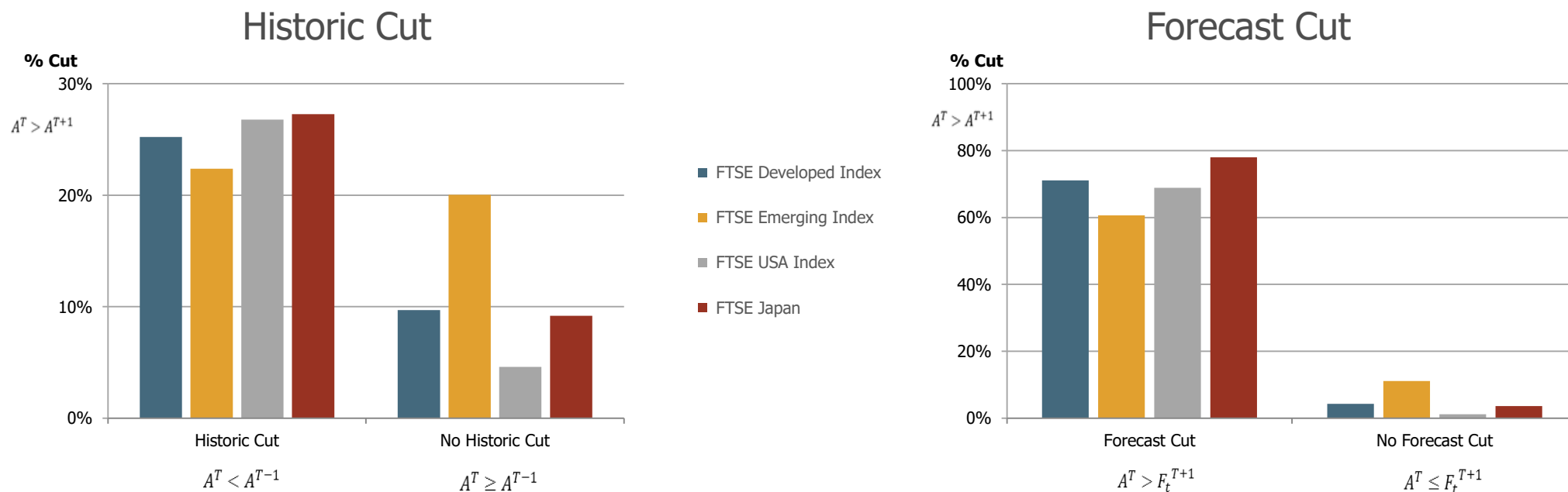
Reasonable Criteria	Yield	Inclusion
12-month forward yield is less than the 99th percentile	excess	dividend
Where excess yield =		
stock yield	–	equally weighted industry average yield

3.B Criterion: No Dividend Cut

- Stocks with an historic dividend cut are more likely to cut their dividends again
- The effectiveness of the signal can vary across markets

- A forecast cut is typically realised
- Forecast cuts signal:
 - Future downward DPS revisions
 - A lower subsequent actual
- Leading to yield disappointment

Percentage of stocks subsequently experiencing a dividend cut (2003-2014)



Stocks failing the screening criteria for cuts have historically experienced more subsequent dividend cuts

Source: FTSE Group, data as at 31 December 2014. Past performance is no guarantee of future results. Data shown may reflect historical data. Please see the final page for important legal information and disclaimers.

3.C Criterion: Sustainable Payout Ratio

- Industry variation - avoid high absolute and relative payout ratios
- REITs are treated as a distinct industry
- An extreme payout ratio signals an increased likelihood of subsequent dividend cuts

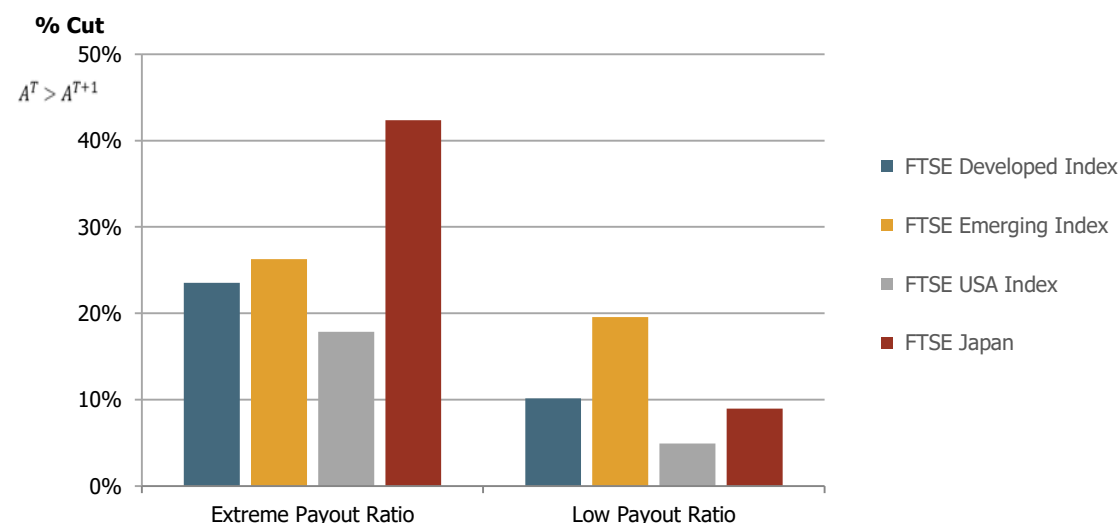
Sustainable Payout Inclusion Criteria

The forward payout ratio is less than or equal to 70%

OR

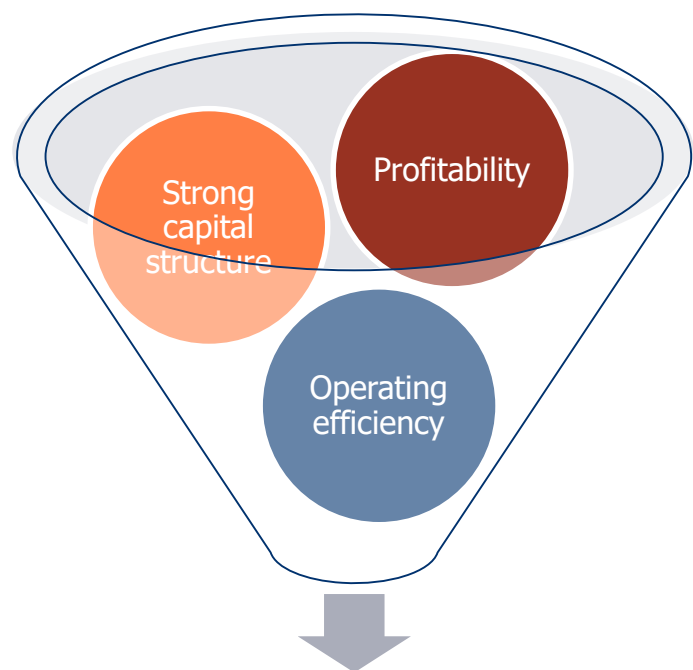
The forward payout ratio less than or equal to the equally weighted industry payout ratio + 30%

Percentage of stocks subsequently experiencing a dividend cut (2003-2014)



High payout ratio stocks have historically experienced more historic dividend cuts

Source: FTSE Group, data as at 31 December 2014. Past performance is no guarantee of future results. Data shown may reflect historical data. Please see the final page for important legal information and disclaimers.



Sustainable dividends
Financial and operating strength
Avoid value traps

- Identifying companies with **strong balance sheets and the ability to generate cash flow** is relevant when seeking constituents for the indices with **sustainable yield** under a range of market conditions, but particularly in a low growth environment
- Financial and operating strength is measured via three key criteria:

Profitability - Profitability and cash flow demonstrate a capacity to generate funds through operating activities. Accruals are a signal of earnings quality

Capital structure - Financial leverage and liquidity measure changes in capital structure and a firm's ability to meet current and future obligations. External financing may suggest firms cannot generate sufficient internal funds to service their obligations

Operating efficiency - Improvements in gross (operating) margins suggest a stronger competitive position. Higher asset turnover (net income per employee) indicates improvements in productivity

3.D Key Criteria Measuring Financial & Operating Strength*

- Three key criteria and signals:

Key Criteria	Non-Financials	Financials	Signal
Profitability	Return on Assets	Return on Assets	Positive = 1
	Change in Return on Assets	Change in Return on Assets	Positive = 1
	Cash Flow from Operations	Change in Net Margin	Positive = 1
	Accruals		Positive = 0
Capital structure	Change in Leverage	Change in Leverage	Increase = 0
	Change in Current Ratio	Change in Current Ratio	Positive = 1
	Issuance	Issuance	Rights issues = 0
Operating Efficiency	Change in Gross Margin	Change in Operating Margin	Positive = 1
	Change in Asset Turnover	Change in Net Income per Employee	Positive = 1

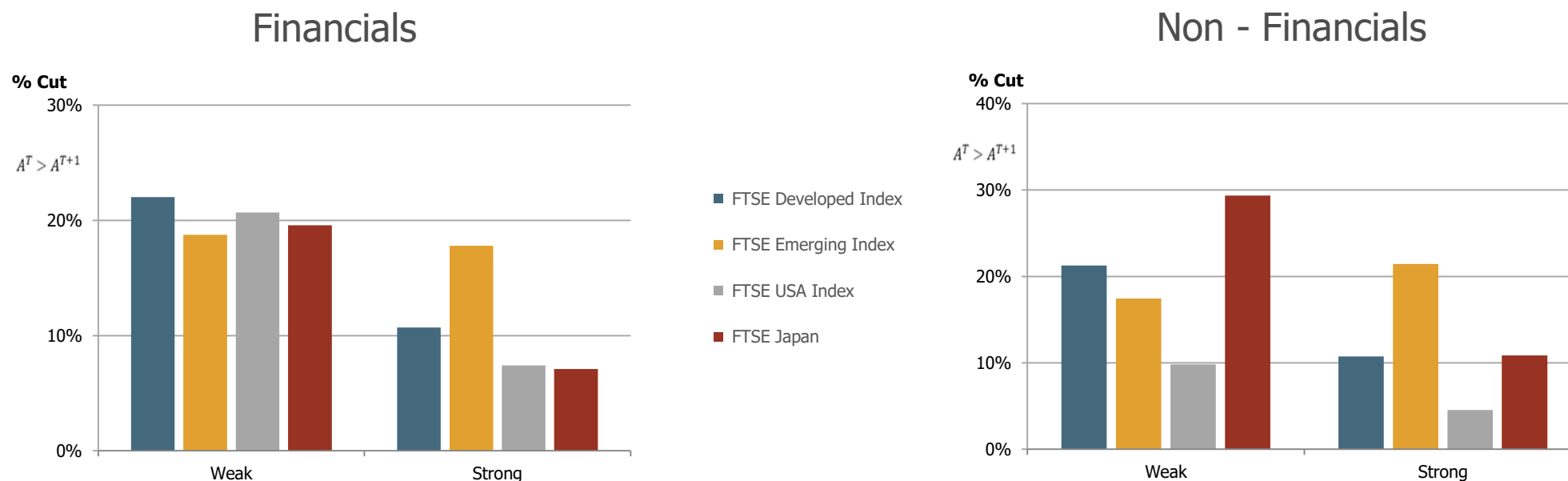
- Each signal is scored **one** if it is good, otherwise **zero**. The total score is the sum of all nine (or eight) signals. Companies are required to score at least four to pass the balance sheet strength screen.

* Piotroski, J. D., Journal of Accounting Research, Vol. 38, 2000

3.D Financial & Operating Strength

- A weak financial and operating position generally signals an increased likelihood of future dividend cuts

Percentage of stocks subsequently experiencing a dividend cut (2003-2014)



Stocks with weak scores have historically experienced dividend cuts

Source: FTSE Group, data as at 31 December 2014. Past performance is no guarantee of future results. Data shown may reflect historical data. Please see the final page for important legal information and disclaimers.

Inclusion Criteria at the Semi-Annual Review

Constituents of the Underlying Indices have the following screens applied:

- Reasonable Yield
- No Dividend Cut (historic or forecast)
- Sustainable Payout Ratio
- Financial and Operating Strength
- The yield is greater than cap weighted Country Index yield

Existing constituents remain in the index unless:

- The stock is deleted from the Parent Index
- The yield is too high (extreme yield)
- The yield is too low (less than the 80% of Relevant Country Index yield)
- Historic or forecast dividend cut and does not pass the Sustainable Payout Ratio or Financial & Operating Strength

No constituent limits are required

Constituents are weighted by investable market capitalisation with a 5% company limit

Global:

- FTSE All-World Sustainable Yield Index
- FTSE Developed Sustainable Yield Index
- FTSE Developed ex US Sustainable Yield Index
- FTSE Emerging Sustainable Yield Index

Regional:

- FTSE Developed Asia Pacific ex Japan Sustainable Yield Index
- FTSE Developed Europe Sustainable Yield Index
- FTSE Developed Europe ex UK Sustainable Yield Index

Country:

- FTSE ASFA Australia 300 Sustainable Yield Index
- FTSE Japan Sustainable Yield Index
- FTSE UK All-Share ex Investment Trusts Sustainable Yield Index
- FTSE USA Sustainable Yield Index

6. Performance (Sep 2003 – Dec 2014)

Compared to their underlying indices, FTSE Sustainable Yield Indices:

- **Yield Premium** – deliver a higher yield
- **Performance** – have historically shown higher absolute and risk adjusted returns
- **Tracking Error** – display relatively low tracking error

Index Name	Geo. Return pa %	Volatility pa %	Reward/Risk Ratio	Max DD %	Relative Return pa %	Tracking Error pa %	Information Ratio	Alpha pa %	Beta*	Turnover pa %**	Yield %***	Avg No of Cons	Max No of Cons	Min No of Cons
FTSE All-World Sustainable Yield Index	8.91	15.68	0.57	-58.30	0.62	2.49	0.25	1.00	0.95	36.75	3.51	1020	1121	802
FTSE All-World Index	8.24	16.38	0.50	-57.95						12.97	2.50	2875	2998	2763
FTSE Developed Sustainable Yield Index	8.62	15.79	0.55	-58.09	0.55	2.65	0.21	0.92	0.95	35.33	3.51	723	816	573
FTSE Developed Index	8.02	16.45	0.49	-57.37						12.80	2.48	2031	2100	1941
FTSE Emerging Sustainable Yield Index	14.29	19.91	0.72	-61.83	2.40	3.31	0.72	2.72	0.97	55.07	3.57	297	335	229
FTSE Emerging Index	11.62	20.32	0.57	-64.46						24.41	2.74	844	898	762
FTSE USA Sustainable Yield Index	9.39	18.06	0.52	-54.04	0.76	3.77	0.20	1.30	0.93	33.65	3.21	209	254	160
FTSE USA Index	8.57	19.14	0.45	-54.73						13.22	1.98	648	737	593
FTSE Japan Sustainable Yield Index	5.25	20.91	0.25	-58.22	0.79	3.78	0.21	1.00	0.92	40.54	2.24	191	221	157
FTSE Japan Index	4.42	22.32	0.20	-60.97						8.46	1.70	463	486	448
FTSE UK All-Share ex Inv. Trusts Sustainable Yield Index	9.26	16.72	0.55	-49.69	0.83	5.01	0.17	1.70	0.88	50.71	4.38	112	131	99
FTSE UK All-Share ex Inv. Trusts Index	8.36	18.24	0.46	-45.29						13.59	3.42	312	322	303

Note: All Figures are Total Return USD except of FTSE Japan: Total Return JPY and FTSE UK All-Share: Total Return GBP.

Figures are annualized assuming 252 business days

Time period: 22/09/2003 - 31/12/2014

* Statistically significant at the 5% level.

** Average annual two-way turnover (2004 - 2014)

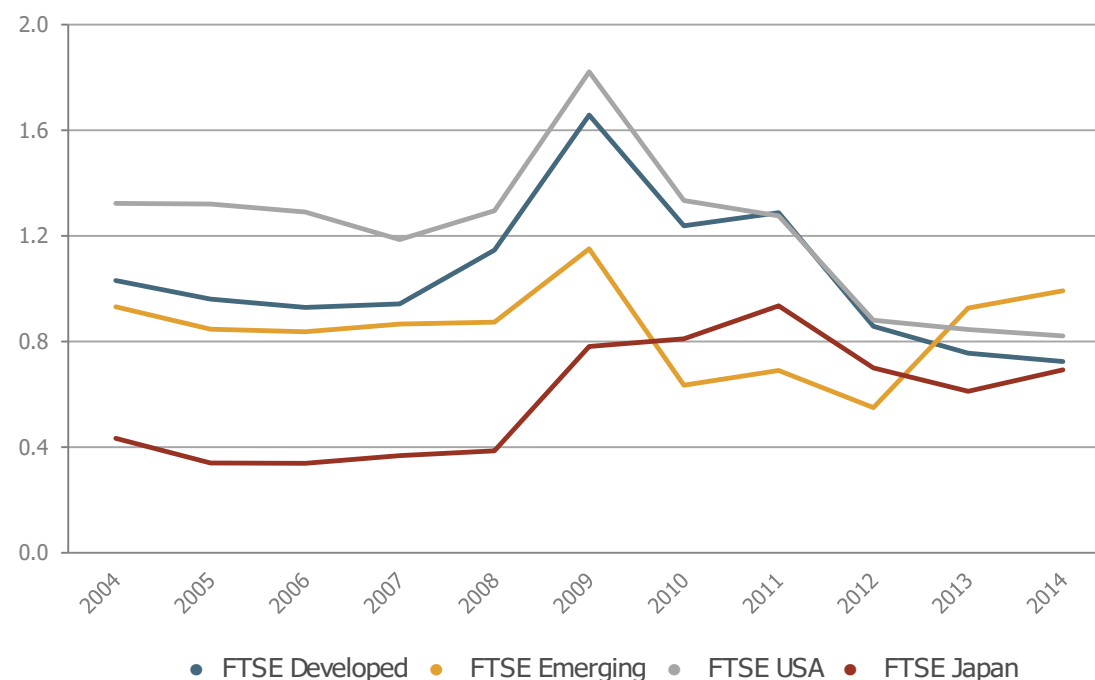
*** Average yield.

Source: FTSE Group, data as at 31 December 2014. Past performance is no guarantee of future results. Data shown may reflect historical data. Please see the final page for important legal information and disclaimers.

7. Historical Yield (2004 – 2014)

Annual yield relative to underlying index

Absolute Annual Average Historic Yield								
	FTSE Dev Sustaina ble Yield Index	FTSE Dev Index	FTSE Emerg Sustaina ble Yield Index	FTSE Emerg Index	FTSE USA Sustaina ble Yield Index	FTSE USA Index	FTSE Japan Sustaina ble Yield Index	FTSE Japan Index
2004	3.0	2.0	3.4	2.5	3.0	1.7	1.4	0.9
2005	3.0	2.0	3.6	2.7	3.0	1.7	1.3	1.0
2006	3.0	2.1	3.3	2.4	3.1	1.8	1.3	1.0
2007	3.1	2.1	3.0	2.1	3.0	1.8	1.5	1.1
2008	4.2	3.0	3.7	2.9	3.6	2.3	2.3	1.9
2009	4.9	3.2	4.3	3.1	4.2	2.4	3.3	2.5
2010	3.7	2.5	2.9	2.3	3.3	1.9	2.8	2.0
2011	3.9	2.6	3.5	2.8	3.3	2.0	3.1	2.2
2012	3.6	2.8	3.7	3.2	3.0	2.1	3.2	2.5
2013	3.3	2.5	3.9	3.0	2.9	2.1	2.4	1.8
2014	3.1	2.4	4.0	3.0	2.8	2.0	2.5	1.8

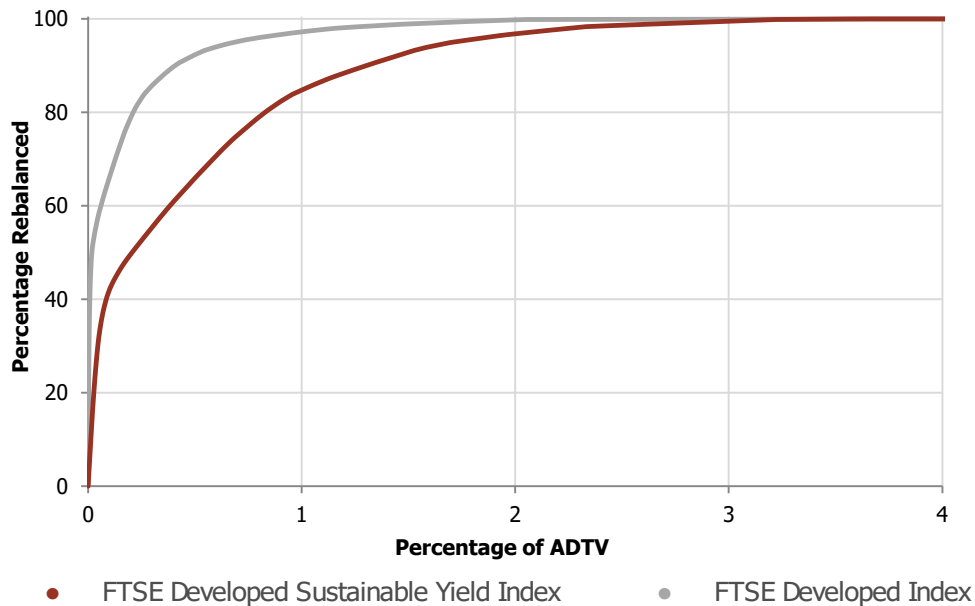


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8. Liquidity – September 2014 Rebalance

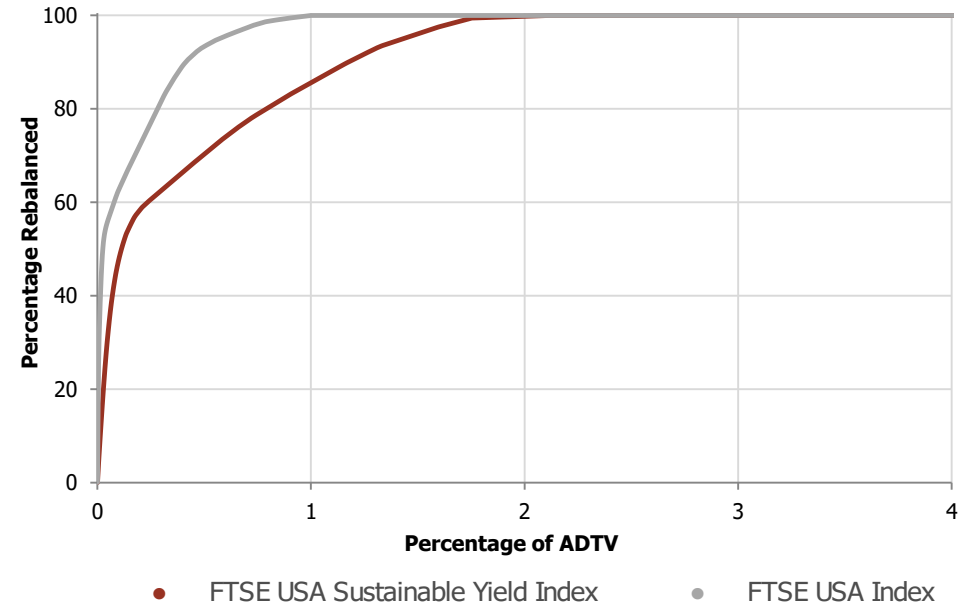
USD 1Bn Portfolio Rebalance as a % of Average Daily Traded Value (ADTV)

FTSE Developed Indices



95% of the FTSE Developed Sustainable Yield Index (FTSE Developed Index) can be implemented at less than 1.7% (0.7%) of ADTV

FTSE USA Indices



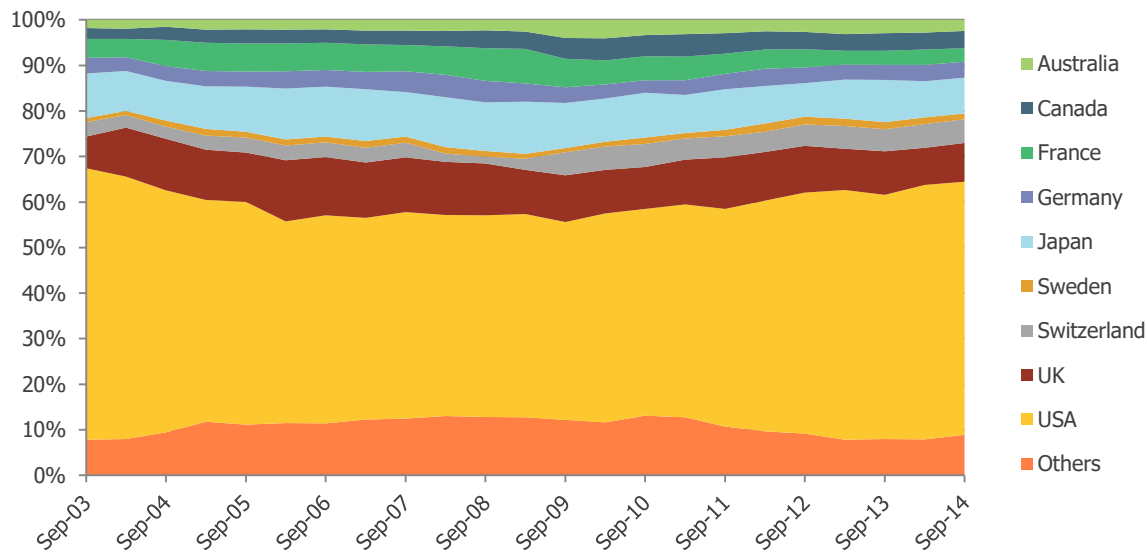
95% of the FTSE USA Sustainable Yield Index (FTSE USA Index) can be implemented at less than 1.4% (0.6%) of ADTV

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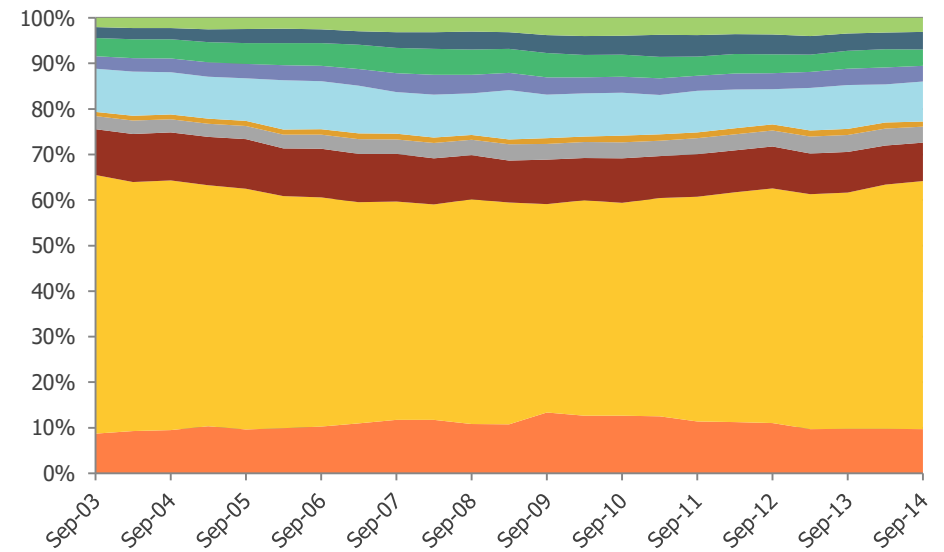
9. Developed - Country Breakdown (2003 – 2014)

Country representation mirrors underlying indices

FTSE Developed Sustainable Yield Index



FTSE Developed Index

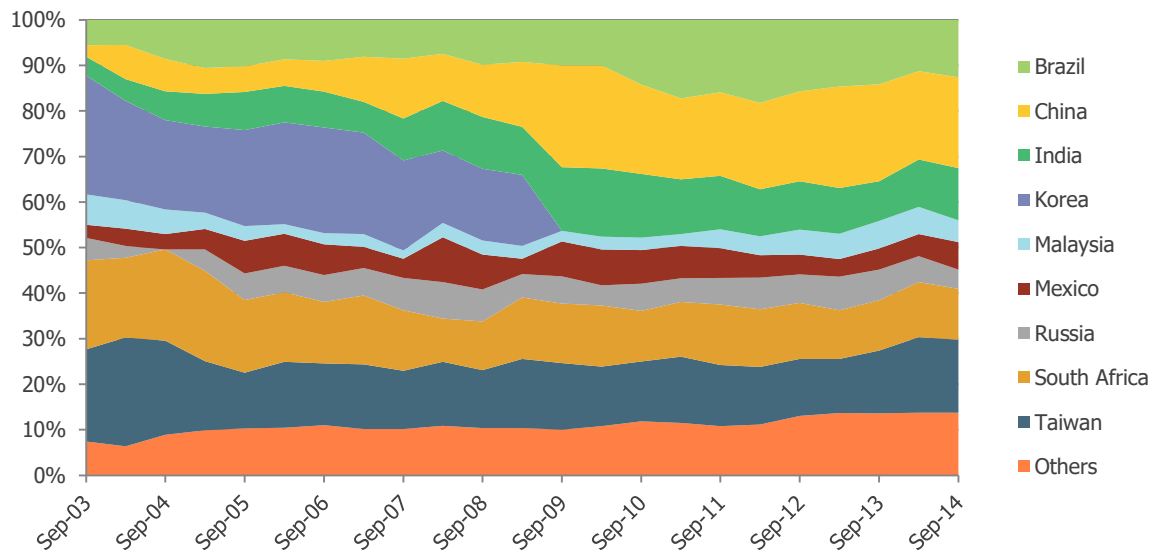


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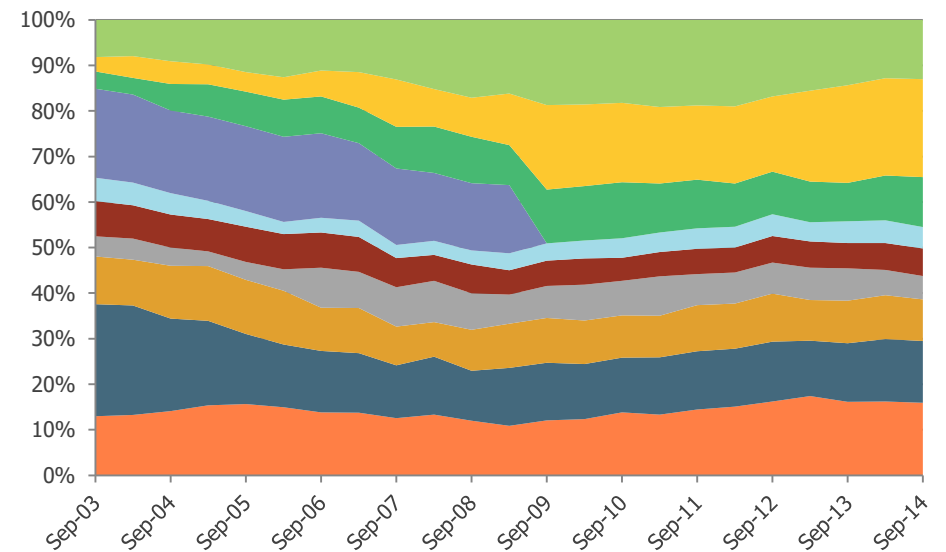
9. Emerging - Country Breakdown (2003 – 2014)

Country representation mirrors underlying indices

FTSE Emerging Sustainable Yield Index



FTSE Emerging Index



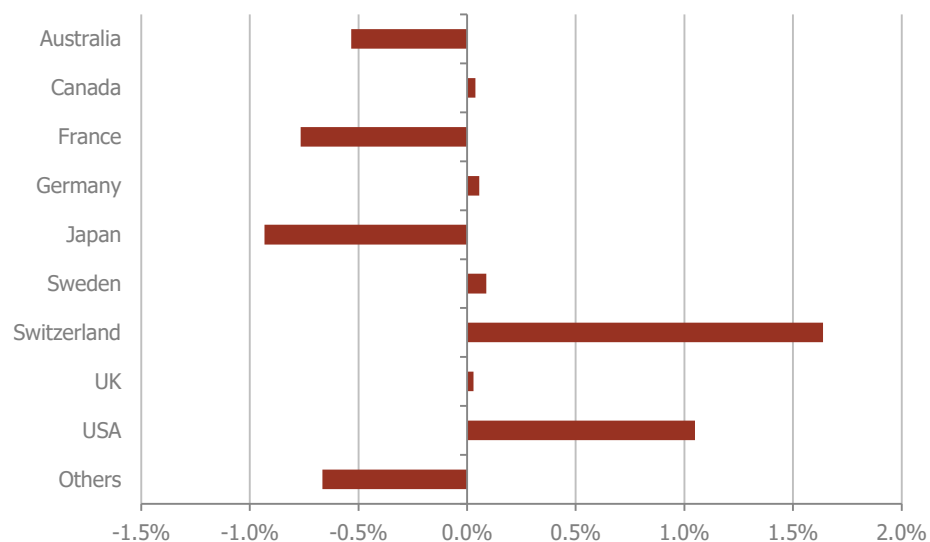
*South Korea was promoted from Emerging to Developed Market in September 2009.

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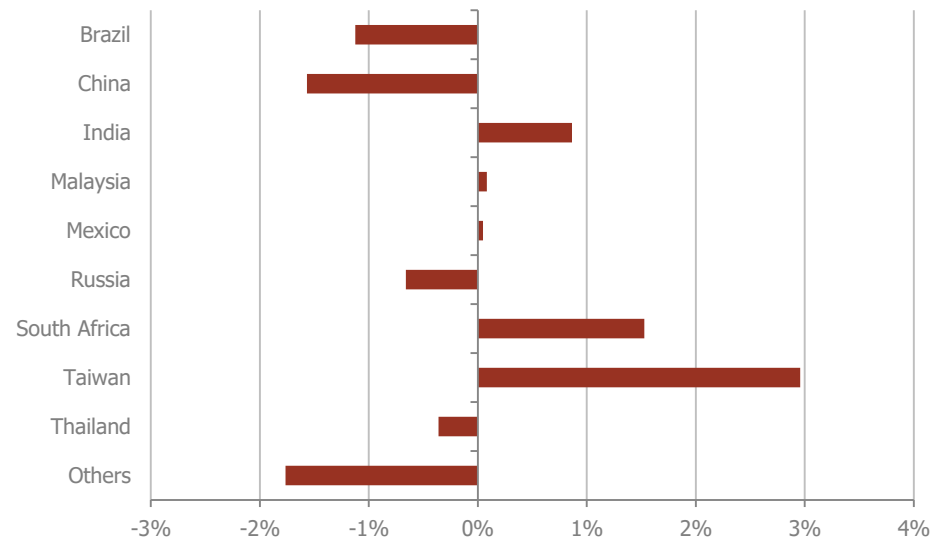
Active Country Weights

FTSE Sustainable Yield Indices' country weights relative to their underlying country weights

FTSE Developed Indices



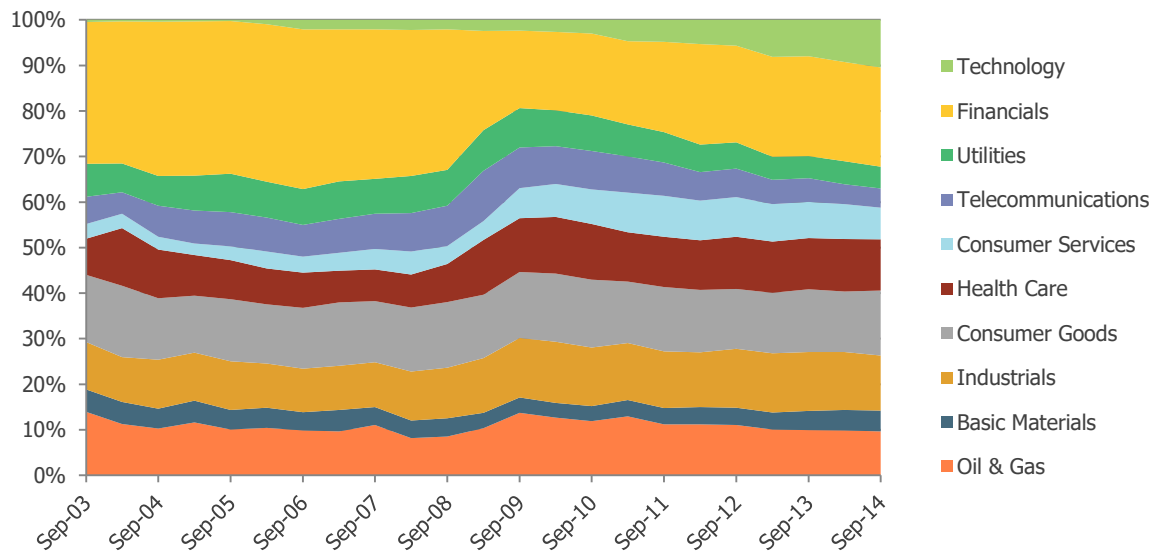
FTSE Emerging Indices



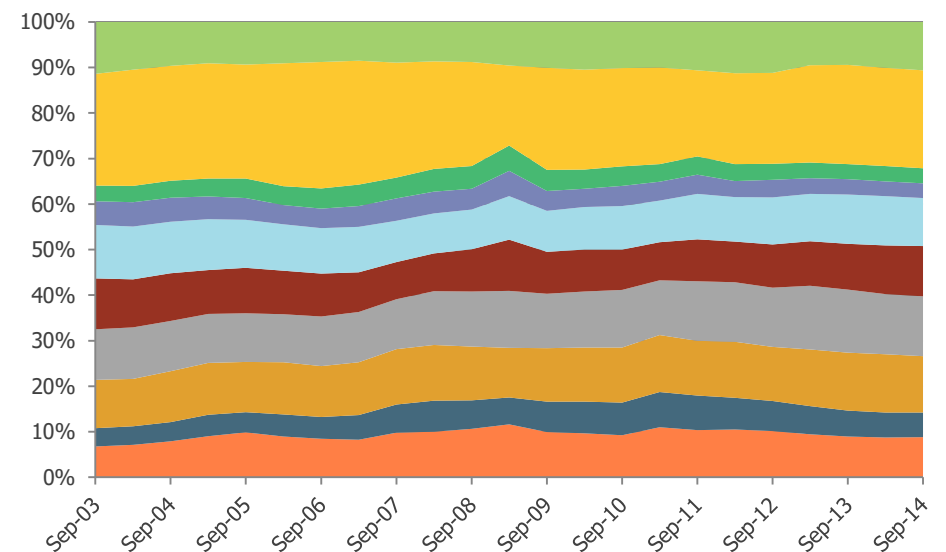
10. Developed - Industry Breakdown (2003 – 2014)

Stable industry representation

FTSE Developed Sustainable Yield Index



FTSE Developed Index

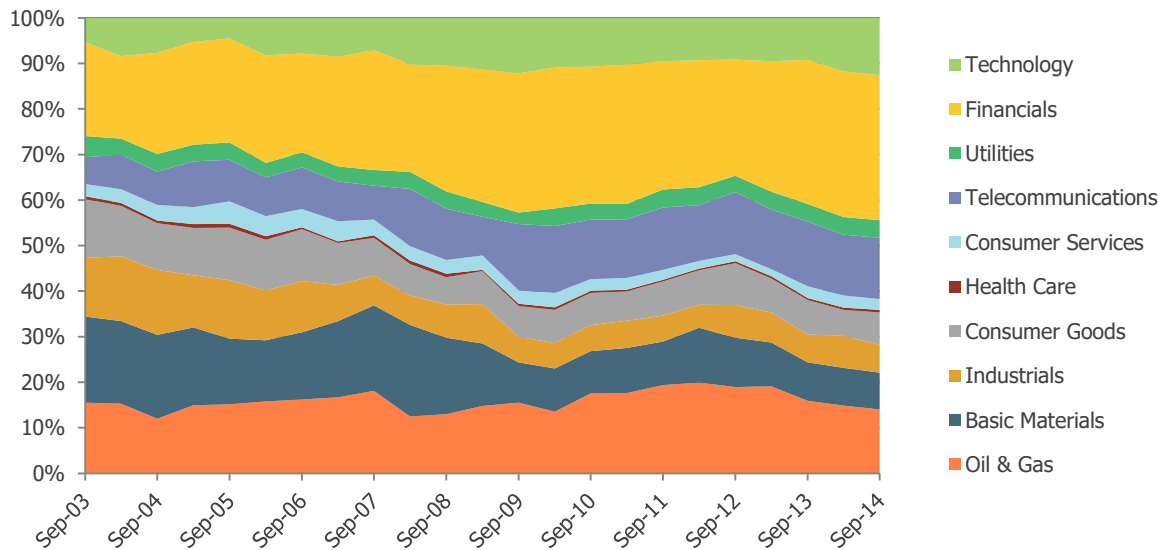


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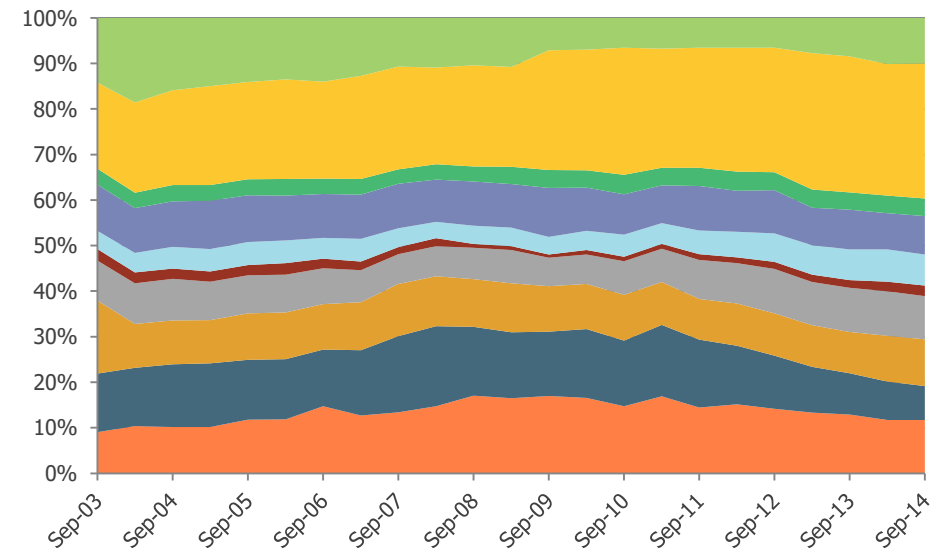
10. Emerging - Industry Breakdown (2003 – 2014)

Stable industry representation

FTSE Emerging Sustainable Yield Index



FTSE Emerging Index



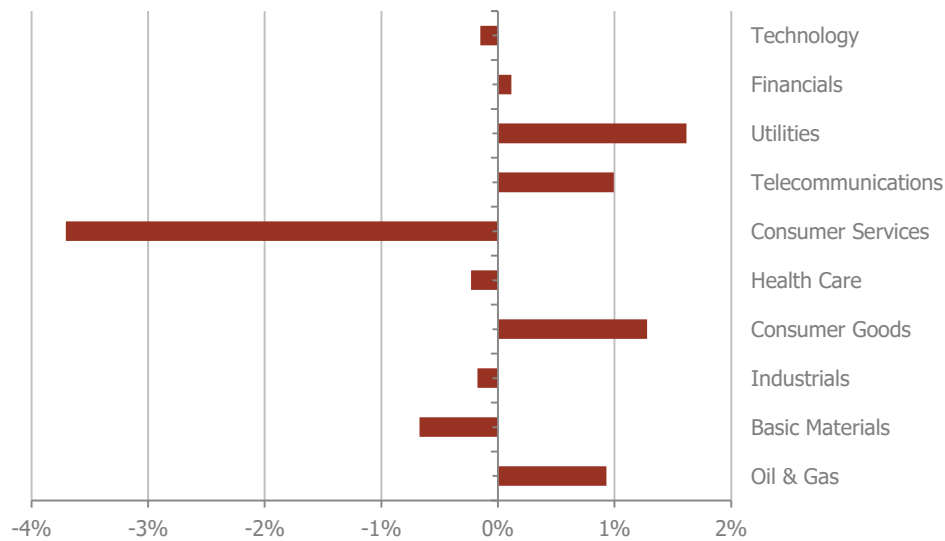
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10. Industry Breakdown as of 31 December 2014

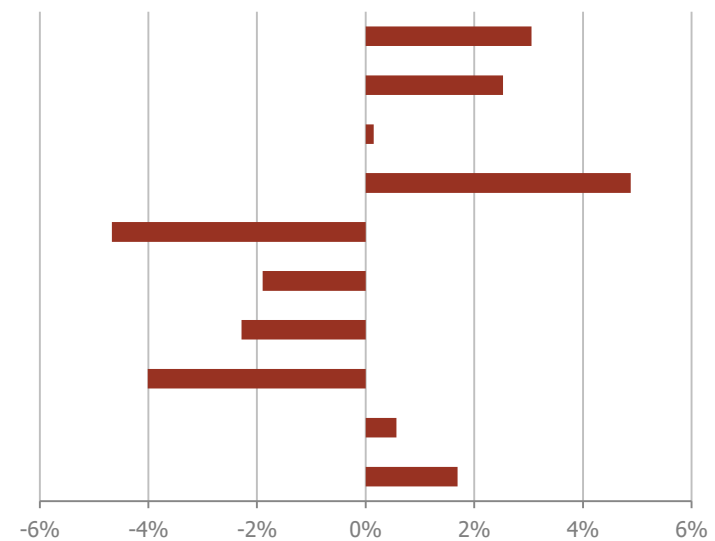
Active Industry Weights

FTSE Sustainable Yield Indices' industry weights relative to their underlying industry weights

FTSE Developed Indices



FTSE Emerging Indices



Relative to their underlying indices, the FTSE Sustainable Yield Indices have historically shown:

- Higher yield
- Stable industry and country diversification
- Sustainability – lower exposure to companies with greater probability of dividend cuts

FTSE Sustainable Yield Indices have addressed some of the concerns raised by other high yield indices by:

- Reducing turnover
- Increasing capacity

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