

FTSE4Good Developed Minimum Variance Index

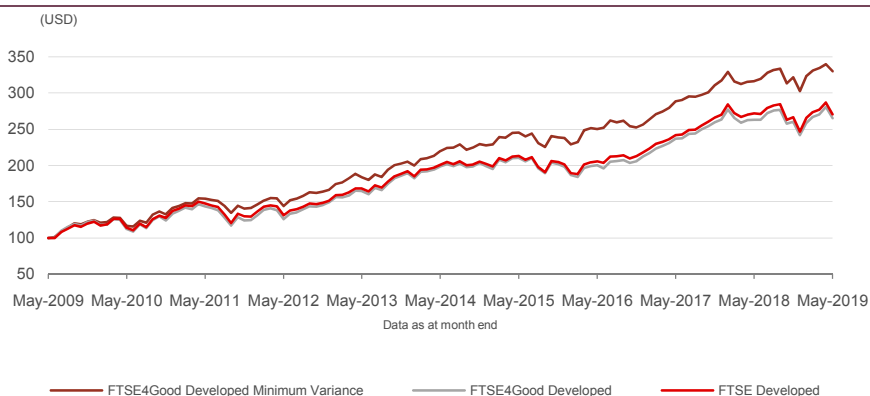
Data as at: 31 May 2019

The FTSE Developed Minimum Variance Index Series aims to deliver reduced index volatility based on historical return information, thereby offering potential improvements to the risk reward trade-off, whilst maintaining full allocation to the relevant equity market.

Reduced volatility is achieved by applying a transparent rules-based approach which minimizes historical variance subject to additional constraints on the weight of individual stocks within an index, and, at aggregate level on the weight of countries and industries represented in the index.

The FTSE4Good Developed Minimum Variance Index is based on the FTSE4Good Developed Index, which is designed to objectively measure the performance of companies that meet globally recognised environmental, social and governance (ESG) standards, and to facilitate investment in those companies. Constituents are selected from the corresponding underlying universe at the time of the review and aspects such as index reviews and company classification are governed by the corresponding Ground Rules of the universe index.

10-Year Performance - Total Return



Performance and Volatility - Total Return

Index (USD)	Return %						Return pa %*		Volatility %**		
	3M	6M	YTD	12M	3YR	5YR	3YR	5YR	1YR	3YR	5YR
FTSE4Good Developed Minimum Variance	-0.3	2.5	9.0	4.4	32.0	50.2	9.7	8.5	8.1	8.7	9.5
FTSE4Good Developed	-0.7	1.8	9.6	0.8	32.2	33.6	9.8	6.0	11.6	10.9	11.4
FTSE Developed	-1.2	1.5	9.6	-0.5	31.5	34.6	9.6	6.1	11.7	10.7	11.4

* Compound annual returns measured over 3 and 5 years respectively

** Volatility – 1YR based on 12 months daily data. 3YR based on weekly data (Wednesday to Wednesday). 5YR based on monthly data

FEATURES

Methodology

The approach applies a rules-based strategy to minimise volatility. Some constraints are applied, for example, to avoid over concentration in any particular stock, sector or country.

Objective

The indexes are designed for the creation of index tracking funds, derivatives and as a performance benchmark.

Investability

Stocks in the underlying universe are free-float weighted to ensure that only the investable opportunity set is included.

Liquidity

Stocks in the underlying universe are screened to ensure that the indexes are tradable.

Transparency

Index methodologies are freely available on the FTSE Russell website.

Availability

The indexes are calculated based on price and total return methodologies.

Industry Classification Benchmark (ICB)

Index constituents are categorized in accordance with the Industry Classification Benchmark (ICB), the global standard for industry sector analysis.

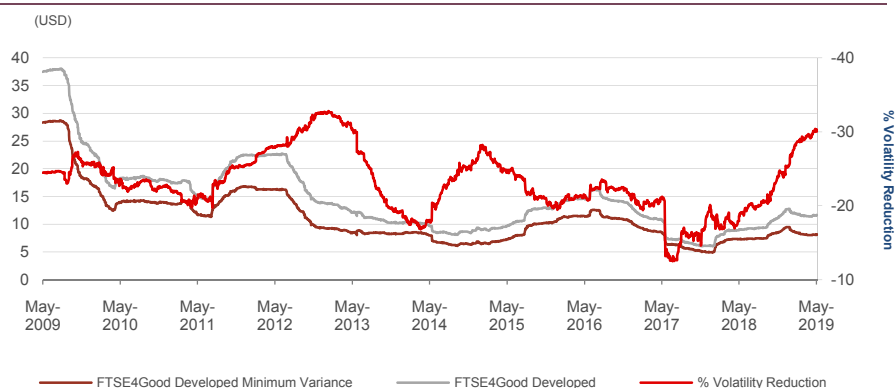
Criteria

The ESG criteria is based on the underlying FTSE4Good Index which is overseen by the independent FTSE Russell ESG Advisory Committee.

Year-on-Year Performance - Total Return

Index % (USD)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FTSE4Good Developed Minimum Variance	30.8	13.3	0.0	18.0	23.3	11.0	4.6	7.7	23.8	-4.6
FTSE4Good Developed	33.5	7.9	-6.8	19.8	27.0	5.1	-0.3	7.1	24.1	-8.2
FTSE Developed	31.4	12.3	-5.5	17.0	26.8	5.1	-0.3	8.2	23.9	-8.6

Annualised Rolling 252 Day Volatility - Total Return



Return/Risk Ratio and Drawdown - Total Return

Index (USD)	Return/Risk Ratio				Drawdown (%)			
	1YR	3YR	5YR	10YR	1YR	3YR	5YR	10YR
FTSE4Good Developed Minimum Variance	0.5	1.1	0.9	1.1	-12.5	-12.5	-12.5	-15.4
FTSE4Good Developed	0.1	0.9	0.5	0.7	-17.0	-17.8	-18.4	-22.7
FTSE Developed	0.0	0.9	0.5	0.8	-17.9	-18.5	-18.5	-22.3

Return/Risk Ratio – based on compound annual returns and volatility in Performance and Volatility table
 Drawdown - based on daily data

Top 10 Constituents (by Wgt %) - FTSE4Good Developed Minimum Variance Index

Constituent	Country	ICB Sector	FTSE4Good Developed Minimum Variance (Wgt %)	FTSE4Good Developed (Wgt %)	Diff %
Newmont Goldcorp	USA	Mining	0.89	0.11	0.78
WEC Energy Group	USA	Gas Water & Multiutilities	0.89	0.11	0.79
Disney (Walt) Company	USA	Media	0.82	0.96	-0.14
Nisource	USA	Gas Water & Multiutilities	0.78	0.04	0.74
Hershey Company	USA	Food Producers	0.77	0.08	0.70
American Water Works Company	USA	Gas Water & Multiutilities	0.74	0.08	0.65
MTR Corp	Hong Kong	Travel & Leisure	0.73	0.04	0.70
CLP Holdings	Hong Kong	Electricity	0.72	0.08	0.65
PPL Corporation	USA	Electricity	0.64	0.09	0.56
Link Real Estate Investment Trust	Hong Kong	Real Estate Investment Trusts	0.64	0.10	0.54
Totals			7.62	1.69	

INFORMATION

Index Universe

FTSE4Good Developed Index

Index Launch

May 2013

Base Date

15 May 2012

Base Value

100

Investability Screen

Actual free float applied and liquidity screened

Index Calculation

End of day

End-of-Day Distribution

Via FTP and email

Currency

USD, EUR, GBP, JPY, AUD

Review Dates

Semi-annually in June and December

History

From 19 March 2004

Country Breakdown

Country	FTSE4Good Developed Minimum Variance		FTSE4Good Developed		Diff %
	No. of Cons	Wgt %	No. of Cons	Wgt %	
Australia	38	5.82	57	3.48	2.34
Austria	2	0.22	5	0.09	0.12
Belgium	5	0.71	8	0.47	0.25
Canada	18	3.84	27	3.37	0.47
Denmark	9	1.93	13	0.78	1.15
Finland	4	0.50	12	0.51	-0.01
France	25	2.61	67	5.06	-2.45
Germany	16	1.44	40	3.47	-2.02
Hong Kong	18	5.49	18	1.17	4.32
Ireland	1	0.08	2	0.09	-0.01
Israel	4	0.81	5	0.14	0.67
Italy	1	0.06	20	1.00	-0.95
Japan	82	12.85	149	7.23	5.63
Korea	13	1.38	22	0.49	0.90
Netherlands	10	1.14	21	1.86	-0.72
New Zealand	7	1.30	7	0.10	1.21
Norway	2	0.30	10	0.32	-0.01
Portugal	2	0.23	4	0.09	0.14
Singapore	10	2.39	11	0.42	1.97
Spain	8	0.49	28	1.69	-1.20
Sweden	6	0.45	28	1.08	-0.63
Switzerland	17	3.02	29	4.61	-1.59
UK	51	8.30	103	8.07	0.23
USA	174	44.64	256	54.47	-9.82
Totals	523	100.00	942	100.00	

ICB Supersector Breakdown

ICB Code	ICB Supersector	FTSE4Good Developed Minimum Variance		FTSE4Good Developed		Diff %
		No. of Cons	Wgt %	No. of Cons	Wgt %	
0500	Oil & Gas	8	1.07	32	3.60	-2.53
1300	Chemicals	14	2.07	42	3.07	-1.00
1700	Basic Resources	8	2.04	29	1.71	0.33
2300	Construction & Materials	7	0.45	24	1.10	-0.65
2700	Industrial Goods & Services	58	9.04	135	9.99	-0.94
3300	Automobiles & Parts	13	1.93	23	1.51	0.42
3500	Food & Beverage	36	9.56	42	4.47	5.09
3700	Personal & Household Goods	34	6.02	58	5.80	0.22
4500	Health Care	48	10.22	70	13.26	-3.04
5300	Retail	39	7.88	49	3.21	4.67
5500	Media	27	5.01	39	3.04	1.97
5700	Travel & Leisure	26	5.76	36	1.78	3.98
6500	Telecommunications	21	4.88	32	3.85	1.04
7500	Utilities	28	8.08	35	1.88	6.20
8300	Banks	40	5.36	72	10.43	-5.06
8500	Insurance	39	6.78	55	4.63	2.15
8600	Real Estate	25	6.10	40	1.75	4.36
8700	Financial Services	16	2.49	54	5.45	-2.96
9500	Technology	36	5.26	75	19.49	-14.23
Totals		523	100.00	942	100.00	

Index Characteristics

Attributes	FTSE4Good Developed Minimum Variance	FTSE4Good Developed	FTSE Developed
Number of constituents	523	942	2176
Dividend Yield %	2.94	2.78	2.56
Constituent (Wgt %)			
Average	0.19	0.11	0.05
Largest	0.89	3.89	2.36
Median	0.16	0.04	0.02
Top 10 Holdings (Wgt %)	7.62	17.01	12.29

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