

MSCI TURKEY INDEX (EUR)

The MSCI Turkey Index is designed to measure the performance of the large and mid cap segments of the Turkish market. With 18 constituents, the index covers about 85% of the equity universe in Turkey.

CUMULATIVE INDEX PERFORMANCE - NET RETURNS (EUR) (DEC 2003 – DEC 2018)



ANNUAL PERFORMANCE (%)

Year	MSCI Turkey	MSCI Emerging Markets	MSCI ACWI IMI
2018	-38.45	-10.27	-5.55
2017	21.53	20.59	8.87
2016	-5.72	14.51	11.60
2015	-24.10	-5.23	8.96
2014	35.19	11.38	18.24
2013	-29.92	-6.81	18.21
2012	61.69	16.41	14.60
2011	-33.25	-15.70	-4.81
2010	29.20	27.14	22.29
2009	91.35	72.94	32.16
2008	-60.34	-50.92	-39.36
2007	57.02	25.74	0.26
2006	-16.99	18.20	8.19
2005	79.84	54.41	28.54

INDEX PERFORMANCE — NET RETURNS (%) (DEC 31, 2018)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED			
					3 Yr	5 Yr	10 Yr	Since Dec 29, 2000
MSCI Turkey	-6.07	6.44	-38.45	-38.45	-10.99	-6.27	3.07	0.99
MSCI Emerging Markets	-3.59	-5.99	-10.27	-10.27	7.41	5.52	10.15	7.46
MSCI ACWI IMI	-8.12	-11.89	-5.55	-5.55	4.70	8.14	11.91	3.85

FUNDAMENTALS (DEC 31, 2018)

Div Yld (%)	P/E	P/E Fwd	P/BV
5.16	6.59	6.03	0.99
2.91	12.00	10.50	1.52
2.72	15.87	13.18	1.98

INDEX RISK AND RETURN CHARACTERISTICS (DEC 31, 2018)

	Turnover (%) ¹	ANNUALIZED STD DEV (%) ²			SHARPE RATIO ^{2,3}			Since Dec 29, 2000 (%)	MAXIMUM DRAWDOWN	
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI Turkey	10.77	30.72	29.42	31.07	-0.21	-0.06	0.24	0.20	68.07	2013-05-15—2018-08-13
MSCI Emerging Markets	6.54	11.07	13.01	15.04	0.74	0.49	0.71	0.39	59.79	2007-10-29—2008-10-27
MSCI ACWI IMI	2.32	9.77	11.00	11.61	0.56	0.79	1.02	0.23	53.48	2007-06-15—2009-03-09

¹ Last 12 months

² Based on monthly net returns data

³ Based on ICE LIBOR 1M

The MSCI Turkey Index was launched on Jan 01, 2001. Data prior to the launch date is back-tested data (i.e. calculations of how the index might have performed over that time period had the index existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance.

INDEX CHARACTERISTICS

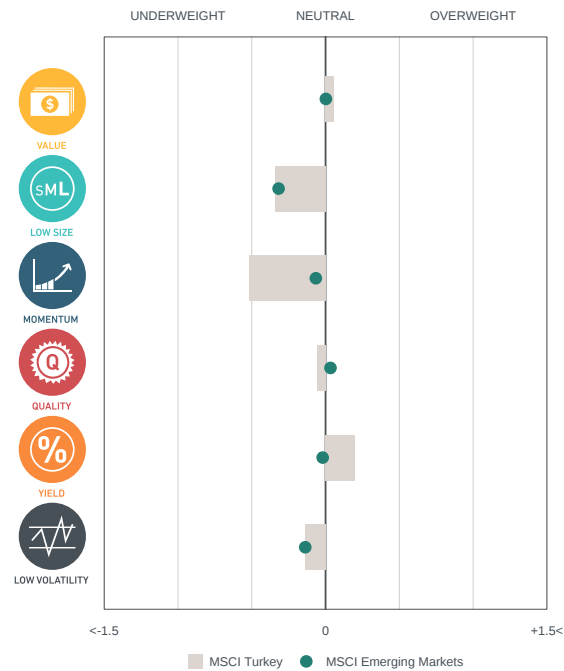
MSCI Turkey	
Number of Constituents	18
Mkt Cap (EUR Millions)	
Index	26,267.27
Largest	3,040.27
Smallest	526.34
Average	1,459.29
Median	1,263.69

TOP 10 CONSTITUENTS

	Float Adj Mkt Cap (EUR Billions)	Index Wt. (%)	Sector
BIM BIRLESIK MAGAZALAR	3.04	11.57	Cons Staples
TURKIYE GARANTI BANKASI	3.02	11.51	Financials
AKBANK	2.48	9.45	Financials
TUPRAS TURKIYE PETROL	2.40	9.15	Energy
TURKCELL ILETISIM HIZMET	2.20	8.38	Communication Services
KOC HOLDING	1.78	6.76	Industrials
EREGLI DEMIR CELIK FABRI	1.66	6.33	Materials
TURK HAVA YOLLARI	1.46	5.57	Industrials
AESLAN ELEKTRONIK	1.35	5.16	Industrials
TURKIYE IS BANKASI C	1.17	4.47	Financials
Total	20.58	78.34	

FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

MSCI FACTOR BOX



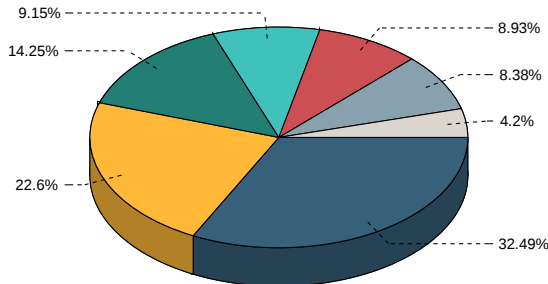
MSCI FaCS

- VALUE**
Relatively Inexpensive Stocks
- LOW SIZE**
Smaller Companies
- MOMENTUM**
Rising Stocks
- QUALITY**
Sound Balance Sheet Stocks
- YIELD**
Cash Flow Paid Out
- LOW VOLATILITY**
Lower Risk Stocks

MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

Neutral factor exposure (FaCS = 0) represents MSCI ACWI IMI.

SECTOR WEIGHTS



- Financials 32.49%
- Industrials 22.6%
- Consumer Staples 14.25%
- Energy 9.15%
- Materials 8.93%
- Communication Services 8.38%
- Consumer Discretionary 4.2%

INDEX METHODOLOGY

The index is based on the [MSCI Global Investable Indexes \(GIMI\) Methodology](#)—a comprehensive and consistent approach to index construction that allows for meaningful global views and cross regional comparisons across all market capitalization size, sector and style segments and combinations. This methodology aims to provide exhaustive coverage of the relevant investment opportunity set with a strong emphasis on index liquidity, investability and replicability. The index is reviewed quarterly—in February, May, August and November—with the objective of reflecting change in the underlying equity markets in a timely manner, while limiting undue index turnover. During the May and November semi-annual index reviews, the index is rebalanced and the large and mid capitalization cutoff points are recalculated.

FACTOR BOX AND FaCS METHODOLOGY

MSCI FaCS is a standard method ([MSCI FaCS Methodology](#)) for evaluating and reporting the Factor characteristics of equity portfolios. MSCI FaCS consists of Factor Groups (e.g. Value, Size, Momentum, Quality, Yield, and Volatility) that have been extensively documented in academic literature and validated by MSCI Research as key drivers of risk and return in equity portfolios. These Factor Groups are constructed by aggregating 16 factors (e.g. Book-to-Price, Earnings/Dividend Yields, LT Reversal, Leverage, Earnings Variability/Quality, Beta) from the latest Barra global equity factor risk model, GEMLT, designed to make fund comparisons transparent and intuitive for use. The MSCI Factor Box, which is powered by MSCI FaCS, provides a visualization designed to easily compare absolute exposures of funds/indexes and their benchmarks along 6 Factor Groups that have historically demonstrated excess market returns over the long run.

ABOUT MSCI

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