

# MSCI EMERGING MARKETS EASTERN EUROPE INDEX (USD)

The MSCI Emerging Markets (EM) Eastern Europe Index captures large and mid cap representation across 4 Emerging Markets (EM) countries\* in Eastern Europe. With 49 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

## CUMULATIVE INDEX PERFORMANCE - NET RETURNS (USD) (APR 2004 – APR 2019)



## ANNUAL PERFORMANCE (%)

| Year | MSCI EM Eastern Europe | MSCI Emerging Markets | MSCI ACWI IMI |
|------|------------------------|-----------------------|---------------|
| 2018 | -4.16                  | -14.57                | -10.08        |
| 2017 | 17.21                  | 37.28                 | 23.95         |
| 2016 | 37.79                  | 11.19                 | 8.36          |
| 2015 | -4.69                  | -14.92                | -2.19         |
| 2014 | -37.59                 | -2.19                 | 3.84          |
| 2013 | 0.72                   | -2.60                 | 23.55         |
| 2012 | 17.84                  | 18.22                 | 16.38         |
| 2011 | -21.58                 | -18.42                | -7.89         |
| 2010 | 15.88                  | 18.88                 | 14.35         |
| 2009 | 83.53                  | 78.51                 | 36.41         |
| 2008 | -69.10                 | -53.33                | -42.34        |
| 2007 | 25.66                  | 39.42                 | 11.16         |
| 2006 | 46.31                  | 32.14                 | 20.95         |
| 2005 | 49.18                  | 34.00                 | 11.54         |

## INDEX PERFORMANCE — NET RETURNS (%) (APR 30, 2019)

|                        | 1 Mo | 3 Mo | 1 Yr  | YTD   | ANNUALIZED |      |       |                    |
|------------------------|------|------|-------|-------|------------|------|-------|--------------------|
|                        |      |      |       |       | 3 Yr       | 5 Yr | 10 Yr | Since Dec 29, 2000 |
| MSCI EM Eastern Europe | 2.94 | 0.77 | 8.14  | 11.80 | 13.29      | 3.67 | 5.84  | 8.98               |
| MSCI Emerging Markets  | 2.11 | 3.19 | -5.04 | 12.23 | 11.25      | 4.04 | 7.50  | 9.17               |
| MSCI ACWI IMI          | 3.31 | 7.28 | 4.28  | 16.01 | 11.20      | 6.89 | 11.32 | 5.75               |

## FUNDAMENTALS (APR 30, 2019)

| Div Yld (%) | P/E   | P/E Fwd | P/BV |
|-------------|-------|---------|------|
| 4.79        | 7.06  | 6.57    | 1.01 |
| 2.66        | 13.57 | 12.23   | 1.66 |
| 2.42        | 18.09 | 15.49   | 2.25 |

## INDEX RISK AND RETURN CHARACTERISTICS (APR 30, 2019)

|                        | Turnover (%) <sup>1</sup> | ANNUALIZED STD DEV (%) <sup>2</sup> |       |       | SHARPE RATIO <sup>2,3</sup> |      |       | Since Dec 29, 2000 | MAXIMUM DRAWDOWN (%) | Period YYYY-MM-DD     |
|------------------------|---------------------------|-------------------------------------|-------|-------|-----------------------------|------|-------|--------------------|----------------------|-----------------------|
|                        |                           | 3 Yr                                | 5 Yr  | 10 Yr | 3 Yr                        | 5 Yr | 10 Yr |                    |                      |                       |
| MSCI EM Eastern Europe | 2.44                      | 15.68                               | 21.38 | 25.33 | 0.78                        | 0.23 | 0.33  | 0.39               | 77.75                | 2008-05-21—2009-03-02 |
| MSCI Emerging Markets  | 6.94                      | 13.03                               | 15.27 | 18.01 | 0.77                        | 0.27 | 0.46  | 0.44               | 65.25                | 2007-10-29—2008-10-27 |
| MSCI ACWI IMI          | 2.46                      | 10.26                               | 11.20 | 13.63 | 0.95                        | 0.57 | 0.81  | 0.33               | 58.59                | 2007-10-31—2009-03-09 |

<sup>1</sup> Last 12 months      <sup>2</sup> Based on monthly net returns data      <sup>3</sup> Based on ICE LIBOR 1M

\* EM Eastern Europe countries include: the Czech Republic, Hungary, Poland and Russia.

The MSCI Emerging Markets Eastern Europe 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

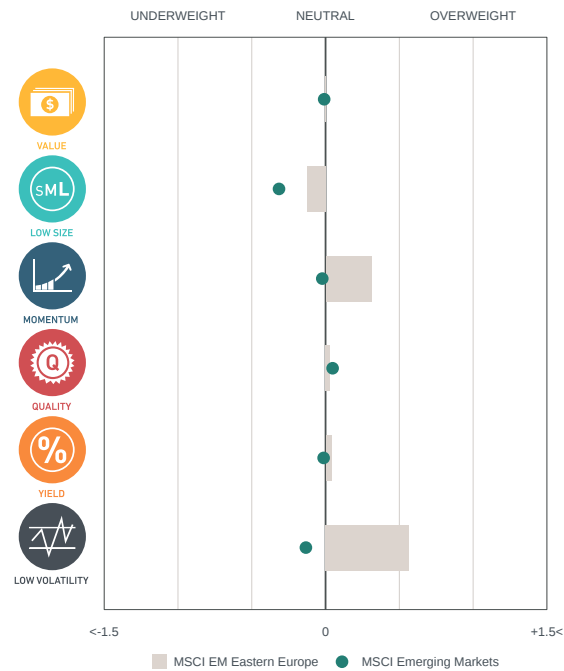
| MSCI EM Eastern Europe  |            |
|-------------------------|------------|
| Number of Constituents  | 49         |
| Mkt Cap ( USD Millions) |            |
| Index                   | 293,402.51 |
| Largest                 | 41,602.92  |
| Smallest                | 530.75     |
| Average                 | 5,987.81   |
| Median                  | 2,901.23   |

## TOP 10 CONSTITUENTS

|                          | Country | Float Adj Mkt Cap ( USD Billions) | Index Wt. (%) | Sector     |
|--------------------------|---------|-----------------------------------|---------------|------------|
| LUKOIL HOLDING(RUB)      | RU      | 41.60                             | 14.18         | Energy     |
| SBERBANK RUSSIA COM(RUB) | RU      | 37.63                             | 12.83         | Financials |
| GAZPROM (RUB)            | RU      | 27.05                             | 9.22          | Energy     |
| TATNEFT COMMON (RUB)     | RU      | 17.89                             | 6.10          | Energy     |
| NOVATEK GDR              | RU      | 17.55                             | 5.98          | Energy     |
| NORILSK NICKEL MMC(RUB)  | RU      | 14.06                             | 4.79          | Materials  |
| OTP BANK                 | HU      | 9.92                              | 3.38          | Financials |
| PKO BANK POLSKI          | PL      | 8.97                              | 3.06          | Financials |
| ROSNEFT (RUB)            | RU      | 7.74                              | 2.64          | Energy     |
| POLSKI KONCERN NAF ORLEN | PL      | 7.66                              | 2.61          | Energy     |
| <b>Total</b>             |         | <b>190.07</b>                     | <b>64.78</b>  |            |

## FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN

### MSCI FACTOR BOX



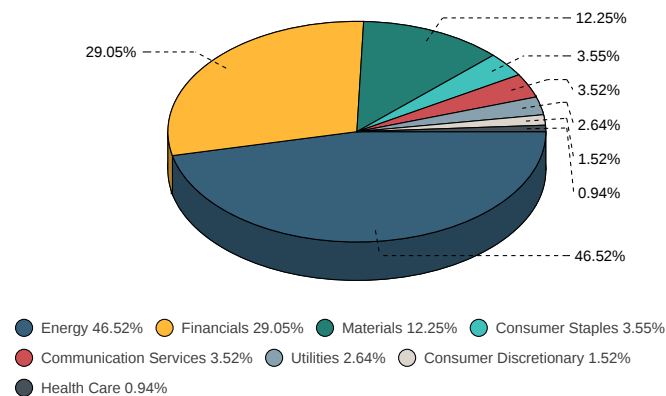
### MSCI FaCS

- 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

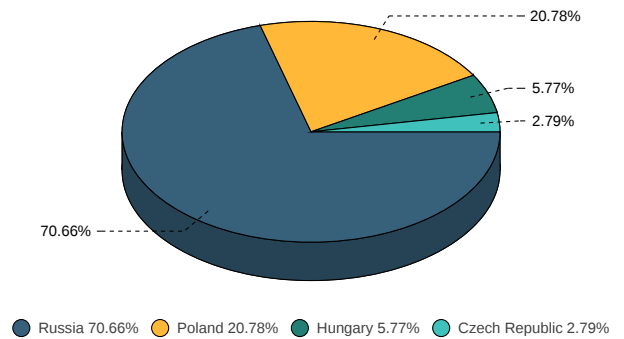
MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

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

## SECTOR WEIGHTS



## COUNTRY WEIGHTS



## INDEX METHODOLOGY

The index is based on the [MSCI Global Investable Market 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, mid and small 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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