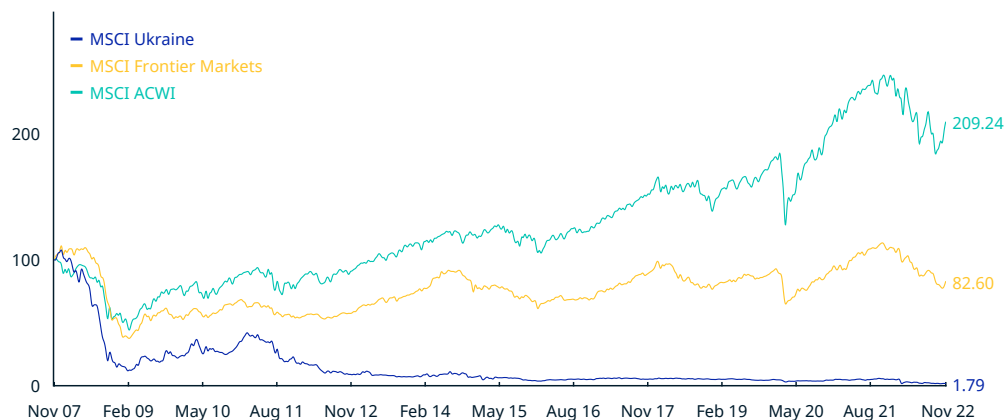


# MSCI Ukraine Index (USD)

The MSCI Ukraine Index is designed to measure the performance of the large and mid cap segments of the Ukraine market. With 2 constituents, the index covers approximately 85% of the Ukraine equity universe.

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (NOV 2007 – NOV 2022)



## ANNUAL PERFORMANCE (%)

Year	MSCI Ukraine	MSCI Frontier Markets	MSCI ACWI
2021	15.65	19.73	18.54
2020	-5.84	1.43	16.25
2019	-4.33	17.99	26.60
2018	-4.09	-16.41	-9.41
2017	4.67	31.86	23.97
2016	18.42	2.66	7.86
2015	-39.77	-14.46	-2.36
2014	-8.99	6.84	4.16
2013	-15.61	25.89	22.80
2012	-49.20	8.85	16.13
2011	-45.80	-18.73	-7.35
2010	49.19	23.75	12.67
2009	29.05	11.61	34.63
2008	-83.86	-54.15	-42.19

## INDEX PERFORMANCE – NET RETURNS (%) (NOV 30, 2022)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since May 31, 2006
					3 Yr	5 Yr	10 Yr		
MSCI Ukraine	14.95	-11.23	-65.08	-65.59	-25.44	-19.01	-14.70	-21.53	
MSCI Frontier Markets	5.19	-8.67	-24.12	-25.24	-1.79	-1.58	3.59	1.16	
MSCI ACWI	7.76	3.32	-11.62	-15.02	6.63	6.41	8.66	6.18	

## FUNDAMENTALS (NOV 30, 2022)

Div Yld (%)	P/E	P/E Fwd	P/BV
9.79	1.43	na	0.23
4.52	9.91	na	1.66
2.22	17.16	15.28	2.63

## INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2022)

	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2,3</sup>			Since May 31, 2006	MAXIMUM DRAWDOWN	
		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr		(%)	Period YYYY-MM-DD
MSCI Ukraine	4.01	47.21	38.38	36.49	-0.38	-0.37	-0.26	-0.41	98.76	2007-05-17–2022-11-01
MSCI Frontier Markets	16.86	19.40	16.69	14.31	-0.03	-0.08	0.26	0.09	67.47	2008-01-15–2009-03-03
MSCI ACWI	2.62	20.04	17.60	14.24	0.39	0.37	0.60	0.37	58.38	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 NY FED Overnight SOFR from Sep 1 2021 & on ICE LIBOR 1M prior that date

The MSCI Ukraine Index was launched on Dec 18, 2007. Data prior to the launch date is back-tested test (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**

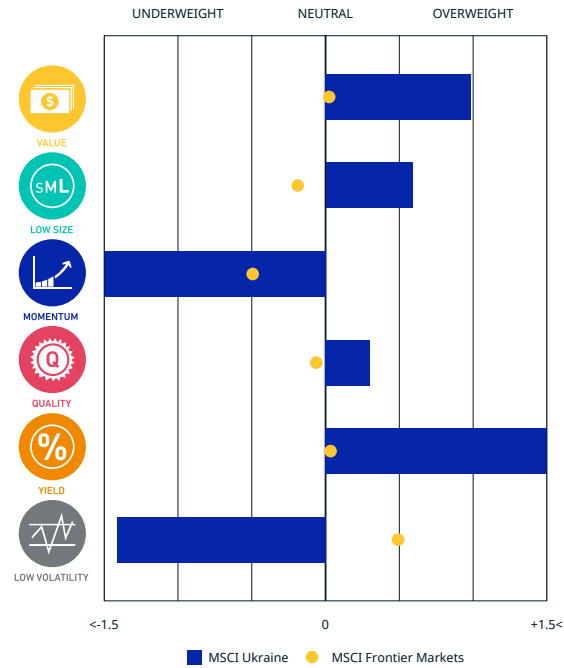
MSCI Ukraine	
Number of Constituents	2
Mkt Cap ( USD Millions)	
Index	334.53
Largest	186.09
Smallest	148.43
Average	167.26
Median	167.26

**TOP 2 CONSTITUENTS**

	Float Adj Mkt Cap ( USD Billions)	Index Wt. (%)
KERNEL HOLDING (UA)	0.19	55.63
MHP GDR	0.15	44.37
Total	0.33	100.00

**FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN**

**MSCI FACTOR BOX**



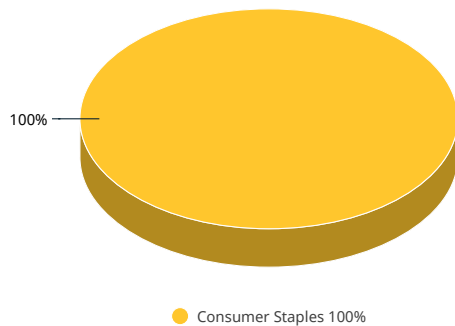
**MSCI FaCS**

- 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**



## INDEX FRAMEWORK

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.

This summary is provided for illustrative purposes only and does not include all material elements of the index or its methodology. For a complete description of the index methodology, please see [Index methodology - MSCI](#).

## MSCI FACTOR BOX AND FaCS FRAMEWORK (Please refer to complete description of the MSCI FaCS methodology [here](#))

MSCI FaCS is a standard method 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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