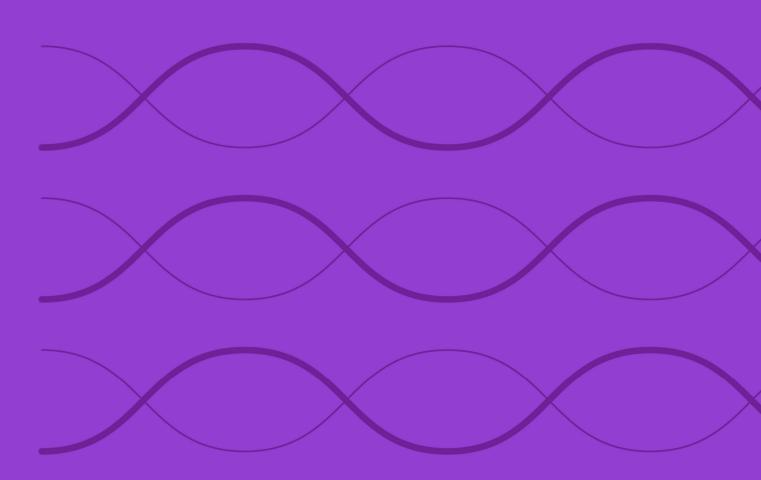


Morningstar Equity Indexes Price Methodology



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Introduction

Prices are used to display performance at both the security level and the index level. Morningstar Indexes sources the close price from multiple data vendors for end-of-day index-level calculations.

Morningstar will carry forward the close price from the previous day if there is a trading holiday or a trading suspension for an exchange on a specific day. When unforeseen interruptions, trading halts, or trading closures occur and the exchange did not announce a close price, the previous day's close price will be utilized.

Stock Exchange Close Price and Close Time

Country	Exchange (MIC)	MIC	Close Price	Close Time (Local Time)
Australia	Australia Stock Exchange	XASX	Auction Close	4:12 p.m.
Austria	Wiener Bourse	XWBO	Auction Close	5:45 p.m.
Belgium	Euronext Brussels - Equities	XBRU	Auction Close	5:30 p.m.
Brazil	B3, B3	BVMF	Auction Close	6:00 p.m.
Canada	Toronto Stock Exchange	XTSE	Close Price	4:00 p.m.
Chile	Santiago Stock Exchange	XSGO	VWAP	5:00 p.m. (March to Oct)/4:00 p.m. (Nov to Feb)
China	Shanghai Stock Exchange	XHSG	Auction Close	3:00 p.m.
China	Shenzhen Stock Exchange	XSHE	Auction Close	3:00 p.m.
Colombia	Bolsa de Valores de Colombia	XBOG	Auction Close	3:00 p.m.
Czechia	Prague Stock Exchange	XPRA	Close Price	4:25 p.m.
Denmark	Nasdaq OMX Copenhagen	XCSE	Auction Close	5:00 p.m.
Egypt	Egyptian Stock Exchange	XCAI	VWAP	2:30 p.m.
Finland	Nasdaq OMX Helsinki	XHEL	Auction Close	6:30 p.m.
France	Euronext Paris - Equities	XPAR	Auction Close	5:30 p.m.
Germany	Boerse Frankfurt	XFRA	Auction Close	5:30 p.m.
Germany	Deutsche Boerse Xetra	XETR	Auction Close	5:30 p.m.
Greece	Athens Exchange - Equities	ASEX	Auction Close	5:20 p.m.
Hong Kong	Hong Kong Stock Exchange	XHKG	Auction Close	4:10 p.m.
Hungary	Budapest Stock Exchange	XBUD	Last Traded Price	5:20 p.m.
India	Bombay Stock Exchange	XBOM	Close Price	3:30 p.m.
India	National Stock exchange	XNSE	Close Price	3:30 p.m.
Indonesia	Indonesia Stock exchange	XIDX	Auction Close	3:15 p.m.
Ireland	Iris Stock Exchange	XDUB	Auction Close	5:28 p.m.
Israel	Tel-Aviv Stock Exchange	XTAE	Auction Close	5:25 p.m.
Italy	Borsa Italiana	XMIL	Auction Close	5:42 p.m.
Japan	Tokyo Stock Exchange	XJPX	Auction Close	3:00 p.m.
Kuwait	Kuwait Stock Exchange	XKUW	Auction Close	12:45 p.m.
Malaysia	Bursa Malaysia	XKLS	Last Traded Price	5:00 p.m.



Mexico	Bolsa Mexicana de Valores (BMV)	XMEX	VWAP	3:00 p.m.
Netherlands	Euronext Amsterdam - Equities	XAMS	Auction Close	5:30 p.m.
New Zealand	New Zealand Stock Exchange	XNZE	Last Traded Price	4:45 p.m.
Norway	Oslo Stock Exchange	XOSL	Auction Close	4:20 p.m.
Pakistan	Karachi Stock Exchange	XKAR	Close Price	3:30 p.m. (Mon - Thu) 4:30 p.m. (Fri)
Peru	Bolsa de Valores de Lima	XLIM	Last Traded Price	3:10 p.m. (March to Nov)/ 4:10 p.m. (Nov to March)
Philippines	Philippines Stock Exchange	XPHS	Auction Close	3:00 p.m.
Poland	Warsaw Stock Exchange	XWAR	Auction Close	5:05 p.m.
Portugal	Euronext Lisbon	XLIS	Auction Close	5:30 p.m.
Qatar	Qatar Stock Exchange	DSMD	Auction Close	1:15 p.m.
Russia	Moscow Exchange-MICEX	MISX	Auction Close	6:50 p.m.
Singapore	Singapore Stock Exchange	XSES	Auction Close	5:16 p.m.
South Africa	Johannesburg Stock Exchange	XJSE	Close Price	5:00 p.m.
South Korea	Korea Exchange	XKRX	Auction Close	3:30 p.m.
Spain	Bolsa Y Mercados Espanoles	BMEX	Auction Close	5:35 p.m.
Saudi Arabia	Saudi Stock Exchange	XSAU	Auction Close	3:20 p.m.
Sweden	Nasdaq OMX Stockholm	XSTO	Auction Close	5:30 p.m.
Switzerland	SIX Swiss Exchange	XSWX	Auction Close	5:30 p.m.
Taiwan	Taiwan Stock Exchange	XTAI	Auction Close	1:30 p.m.
Taiwan	Taipei Exchange	ROCO	Auction Close	1:30 p.m.
Thailand	Stock Exchange of Thailand	XBKK	Auction Close	5:00 p.m.
Turkey	Borsa Istanbul A.S.	XIST	Auction Close	6:10 p.m.
United Arab Emirates	Abu Dhabi Securities Exchange	XADS	Auction Close	3:00 p.m.
United Arab Emirates	Dubai Financial Market	XDFM	Last Traded Price	3:00 p.m.
United Arab Emirates	Nasdaq Dubai	DIFX	Close Price	3:00 p.m.
United Kingdom	London Stock Exchange	XLON	Auction Close	4:30 p.m.
United States	Nasdag	XNAS	Close Price	4:00 p.m.
United States	NYSE American, NYSE Arca	XNYS	Auction Close	4:00 p.m.
	New York Stock Exchange			

VWAP Methodology

The following markets use VWAP Pricing. Please find the calculation methodology below for these:

1) EGYPT: Egyptian Exchange XCAI

Local Hours: 10:00-14:30, Sunday-Thursday

Effective Oct. 4, 2012, EGX applied a new mechanism to calculate closing prices after the successful update of the current trading system (X Stream OMX). This change aims to reduce price volatility resulting from the limited volume of trading of shares on the EGX. The Egyptian Financial Supervisory Authority, or EFSA, approved the revised



closing price policy for securities listed on the Egyptian Exchange EGX. To calculate the closing price, provided a minimum volume traded is 100 shares, the following formula must be applied: (total value traded during the last three months / number of trading days) * 0.5% or EGP 10,000, whichever is higher.

The following conditions should be taken into account when calculating the closing price:

- The above-mentioned value should be calculated every three months.
- If the trading value of a security is less than the above-mentioned value, a new closing price will not be calculated.
- If the trading value of a security is equal to or greater than the above-mentioned value, a new closing price will be calculated as a volume-weighted average price.

(Previous Close: The EGX close price is a weighted average of the total value of all trades for a security, divided by the total volume of shares traded, if trading exceeds 100 shares during the session. If trading is below 100 shares, the previous day's close price is used for the day.)

2) INDIA: Bombay Stock Exchange BSE

Local Hours: 09:15-15:30

The weighted average price, or VWAP, is based on all trades in the last 30 minutes of continuous trading. If no trades occur in the last 30 minutes, the close will be the last trade during the continuous session. There is also a weighted average price published of all the day's trades; however, it is the closing weighted average of the last 30 minutes trading that is available through Exshare/FTS, and this is also used for local index calculations. Effective June 15, 2015, pricing was introduced for the BSE "Unofficial Foreign Premium" trading, under the exchange code of "FI-E".

3) MEXICO: Bolsa Mexicana de Valores BMV

Local Hours: 08:30-15:00

VWAP: Calculated from trades in the last 10 minutes. If not available, the last trade will replace last trade with VWAP as of the close, on July 19, 2004. VWAP: Calculated from trades in the last 10 minutes. If not available, the last trade will be used. Last trade replaced with VWAP as of the close, on July 19, 2004.¹.

Exceptions

While Morningstar will seek to apply the methodology as described within this document, the market environment, supervisory, legal, financial, or tax reasons may require an alternative approach to be adopted. A decision to take an alternative approach will be made by the Morningstar Index Operations Committee solely and, where appropriate, in conjunction with the relevant Morningstar Index Methodology Committee. Any application of a nonstandard process will be reported to the Morningstar Index Oversight Committee.





Methodology Update History

Version	Date	Description
1	June 2023	First published version
2	September 2023	Updated VWAP Pricing
3	March 2024	Updated close price terminology based on Exchange definition
4	October 2024	Updated close price terminology based on Exchange definition
5	June 2025	Minor format changes.



About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers, and advisors in navigating investment opportunities across major asset classes, styles, and strategies. From traditional benchmarks and unique IP-driven indexes to index design, calculation, and distribution services, our solutions span an investment landscape as diverse as investors themselves.

Morningstar Index Methodology Committee

The Morningstar Index Methodology Committee oversees all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar owns the intellectual property. This committee is also charged with ensuring that indexes align with Morningstar Research principles and values. The group comprises members of the index team with index research, product development, product management, client service, index implementation, and operation expertise who provide the first layer of governance over index design and methodology.

Morningstar Index Services Methodology & Administration Committee

The purpose of the Morningstar Index Services Methodology & Administration Committee is to oversee all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar provides calculation and administration services but does not own the Intellectual Property of the indexes. The group is comprised of members of the index team with index research, product development, product management, client service, index implementation and operation expertise who provide the first layer of governance over the index calculation services and administration business, with regard to index design and methodology.

Morningstar Index Operations Committee

The Morningstar Index Operations Committee governs the processes, systems, and exception handling of the day-to-day management of all live indexes, including index rebalancing and reconstitution, restatements, market classification, and contingency management. The committee oversees the annual review of index methodology, as required by the European Benchmarks Regulation ("BMR"), ensuring that methodologies remain fit for purpose and continue to achieve their stated investment objectives. The group comprises members of the index team with data, operations, corporate actions, product development, index launch, client service, and index management experience who provide the first layer of governance over index operations.

Morningstar Index Oversight Committee

The Morningstar Index Oversight Committee is responsible for the index oversight function as per the requirements of the European Benchmarks Regulation ("BMR"), providing independent oversight of all aspects of the governance of benchmark administration. Its remit extends to all calculation and administration-related business activities of Morningstar Indexes, including administration of Morningstar-owned benchmarks as well as client-owned benchmarks and index calculation. The oversight function is part of the organizational structure of Morningstar but is separate and independent from the index business, index management, and the other index committees.

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