

Morningstar Index Methodology

Definition of Terms

Block Ownership

The following types of stock ownership constitute “block ownership” and are considered during float adjustment:

- ▶ Cross ownership—shares owned by other companies (including banks and life insurance companies)
- ▶ Government ownership—shares owned by governments (central or municipal) or their agencies
- ▶ Private ownership—shares owned by individuals or families
- ▶ Restricted shares—shares that cannot be traded during a certain time period

Book Value Growth

An average of up to five historical growth rates of book value per share, calculated using the process outlined in “Calculated Growth Rate.”

Book Value Per Share

Shareholders’ equity for a particular fiscal year-end, divided by the weighted-average shares outstanding for that fiscal year.

Book Value Yield

Book value per share for the current fiscal year divided by the current stock price.

Calculated Growth Rate

An average of up to five historical growth rates. The example calculation below determines the growth rate in EPS ($g'(e)$). The same process is used to determine growth rates for revenue and book value.

The Formula:

$$g'(e_t) = ((e_n / e_t)^{1/(n-t)}) - 1$$

is used to calculate growth rates for as many as possible of the periods from $t=0, -1, -2, -3,$ and -4 , where “ t ” denotes the number of fiscal years prior to “ n ”, and “ n ” denotes the latest period (fiscal year-1, current fiscal year (0), or fiscal year + 1) for which EPS is positive.

For example, if forecast EPS for the current fiscal year is positive, then $n=1$ and setting $t=0$ gives $g'(e_0)$ the estimated growth rate in EPS for the current fiscal year. If e_t is negative for any t , no growth rate is calculated that begins in that period. When all available growth rates are calculated, the results are averaged to yield:

$$g'(e) = \text{Average} [g'(e_{-4}), g'(e_{-3}), g'(e_{-2}), g'(e_{-1}), g'(e_0)].$$

Cash Flow Growth

An average of up to three historical growth rates of cash flow.

As many as possible of the three most recent periodic growth rates (as opposed to five for other growth variables) are averaged using the process outlined in “Calculated Growth Rate.”

Note: Under GAAP rules, companies are required to provide only three years of cash flow information.

Cash Flow Per Share

Cash flow from operations, including change in non-cash working capital balance, for a particular fiscal year divided by the weighted average shares outstanding for that fiscal year. This information is taken from the cash flow statement of the company’s annual reports.

Cash Flow Yield

Cash flow per share for the current fiscal year divided by the current stock price.

Dividend Per Share

The dollar amount paid out by the company to its common shareholders during a fiscal year divided by the weighted-average shares outstanding.

Dividend Yield

Regular dividend per share for the current fiscal year divided by the current stock price.

Earnings Per Share	The company's earnings from operations during a fiscal year divided by the weighted-average shares outstanding. It does not include contribution from discontinued operations, extraordinary items, and accounting changes.
Earnings Growth	An average of up to five historical growth rates of earnings per share, calculated using the process outlined in "Calculated Growth Rate."
Free-float Shares	A company's outstanding shares adjusted for non-trading blocks of 5% or more of total share capitalization, to reflect shares available for investment.
Float-adjusted Market Cap	The number of free-floating shares multiplied by current share price.
Long-term Projected Earnings Growth	The median estimate of long-term EPS growth (varies from three to five years), derived from all polled analysts' estimates. This information is provided by IBES.
Price/Book Ratio	The current stock price divided by its book value per share for the most recent fiscal year-end.
Price/Cash Flow Ratio	The current stock price divided by its cash flow per share for the most recent fiscal year-end.
Price/Sales Ratio	The current stock price divided by sales per share for the most recent fiscal year-end.
Price/Projected Earnings Ratio	The current stock price divided by the median EPS estimate derived from all polled analysts' estimates for the current fiscal year. EPS estimates are provided by IBES.

Projected Earnings Estimate The median EPS estimate of all polled analyst estimates for the current fiscal year. This information is provided by IBES.

Projected Earnings Yield The median EPS estimate of all polled analysts' estimates for the current fiscal year divided by the current stock price. EPS estimates are provided by IBES.

Restated Financials Financial statements normalized for prior years to reflect mergers, acquisitions, spin off' or other major corporate activities that significantly impact company financials. Morningstar uses restated data (as opposed to "as originally reported") for calculating growth rates and price yields. This prevents abrupt jumps in growth rates attributed purely to changes in corporate structures.

For example, when Travelers acquired Citicorp, the financial statements for Citigroup—the new entity formed as a result of the acquisition—were restated for prior years as if it were a single entity.

Sales Per Share Total sales generated in a particular fiscal year divided by the weighted average shares outstanding for that fiscal year. Sales is defined as one or more of the following:

- ▶ Net sales of retail and manufacturing companies
- ▶ Interest income, fees, service charges, and investment gains for banks and savings and loan associations
- ▶ Premiums and investment income for insurance companies
- ▶ All other income from financial services
- ▶ All transportation service revenue from airlines and railroads
- ▶ All utility service revenue from electric, gas, and telecommunications

Sales Yield Sales per share for the current fiscal year divided by the current stock price.

Sales Growth An average of up to five historical growth rates of sales per share, calculated using the process outlined in "Calculated Growth Rate."