# Morningstar Quantitative Equity Ratings

**Learn More**
http://global.morningstar.com/EquityResearch

**Benefits**
- Provides expanded global and sector coverage
- Helps investors evaluate the most attractively priced stocks in each category
- Complements our existing analyst ratings and analysis, which serves as a second opinion for investors to consider

With about 120 equity and credit analysts, Morningstar has one of the largest independent equity research teams in the world. Morningstar analysts cover approximately 1,700 equities, using a consistent, proprietary methodology that focuses on fundamental analysis, competitive advantage assessment, and intrinsic value estimation. To complement our analysts' work, we've introduced quantitative equity ratings, which are forward-looking and generated by a statistical model that is based on Morningstar's analyst-driven equity ratings and quantitative statistics.

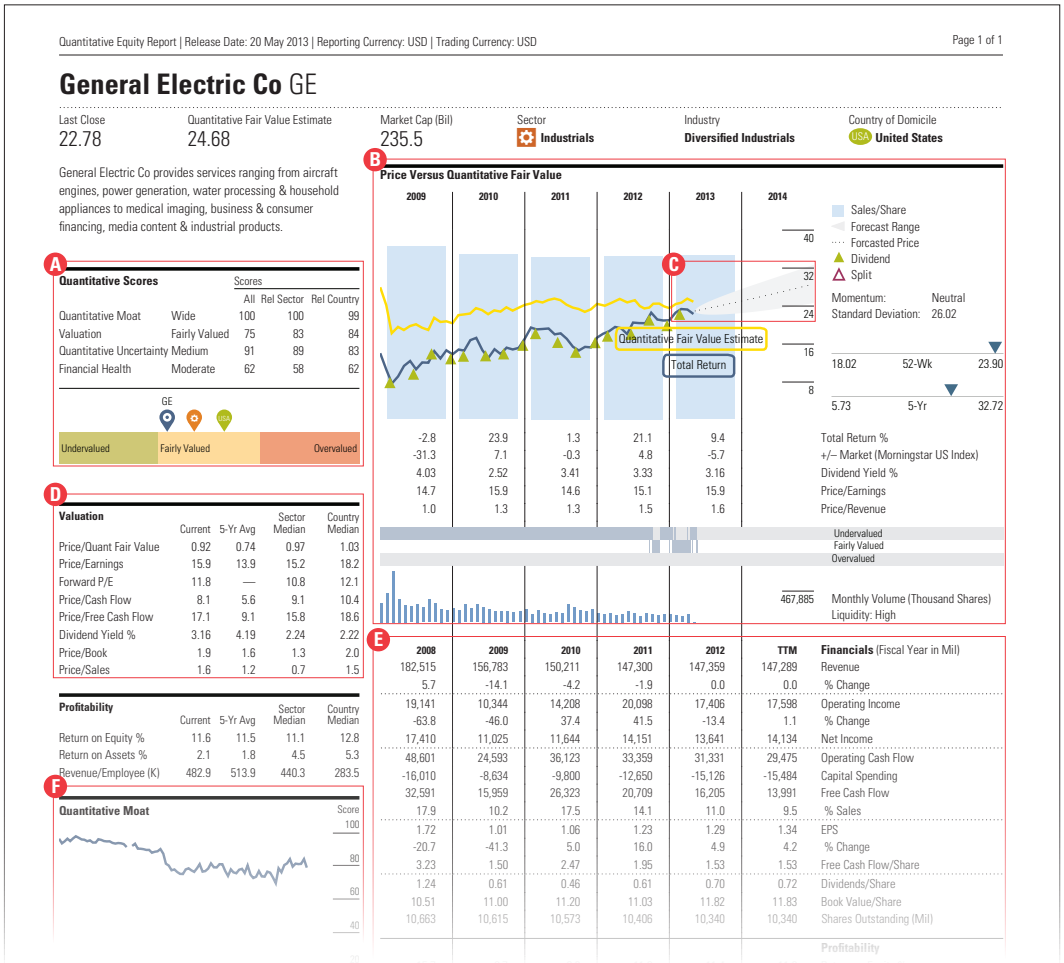
## A Quantitative Approach

Morningstar's quantitative ratings are available for more than 28,000 companies in 86 countries that trade on 64 exchanges, allowing investors to obtain a much greater breadth of the independent perspective they know and trust from Morningstar. These ratings—Quantitative Fair Value Estimate, Quantitative Valuation, Quantitative Economic Moat, Quantitative Uncertainty, and Quantitative Financial Health—set out to replicate the projections of our analyst team as accurately as possible. To this end, our quantitative metrics are derived from a statistical model designed to mimic our analyst-driven ratings.

## What it Means for Investors

By introducing quantitative equity ratings, Morningstar is extending a useful tool to thousands of securities around the world that might otherwise not be analyzed. A forward-looking quantitative assessment, rooted in our analyst process, is far more useful than a data page containing historical financial numbers. The quantitative ratings are relative to the full investment universe, each country, and each sector, which helps investors evaluate the most attractively priced stocks in each category. We expect to have instances where our qualitative and quantitative

**Key Features and Ratings**
A. Quantitative Equity Ratings
B. Price versus Quantitative Fair Value Estimate comparison
C. Forecasted price range
D. Valuation data
E. Historical financials
F. Competitive Advantage Trend chart



Quantitative Equity Report | Release Date: 20 May 2013 | Reporting Currency: USD | Trading Currency: USD — Page 1 of 1

**General Electric Co** GE

| Last Close | Quantitative Fair Value Estimate | Market Cap (Bil) | Sector | Industry | Country of Domicile |
|---|---|---|---|---|---|
| 22.78 | 24.68 | 235.5 | Industrials | Diversified Industrials | United States |

General Electric Co provides services ranging from aircraft engines, power generation, water processing & household appliances to medical imaging, business & consumer financing, media content & industrial products.

A — Quantitative Scores

| | | Scores All | Rel Sector | Rel Country |
|---|---|---|---|---|
| Quantitative Moat | Wide | 100 | 100 | 99 |
| Valuation | Fairly Valued | 75 | 83 | 84 |
| Quantitative Uncertainty | Medium | 91 | 89 | 83 |
| Financial Health | Moderate | 62 | 58 | 62 |

GE — Undervalued | Fairly Valued | Overvalued

B — Price Versus Quantitative Fair Value

2009 2010 2011 2012 2013 2014

C — Quantitative Fair Value Estimate; Total Return

Sales/Share; Forecast Range; Forcasted Price; Dividend; Split

Momentum: Neutral
Standard Deviation: 26.02

18.02 52-Wk 23.90
5.73 5-Yr 32.72

| | | | | | |
|---|---|---|---|---|---|
| -2.8 | 23.9 | 1.3 | 21.1 | 9.4 | Total Return % |
| -31.3 | 7.1 | -0.3 | 4.8 | -5.7 | +/– Market (Morningstar US Index) |
| 4.03 | 2.52 | 3.41 | 3.33 | 3.16 | Dividend Yield % |
| 14.7 | 15.9 | 14.6 | 15.1 | 15.9 | Price/Earnings |
| 1.0 | 1.3 | 1.3 | 1.5 | 1.6 | Price/Revenue |

Undervalued; Fairly Valued; Overvalued

467,885 Monthly Volume (Thousand Shares)
Liquidity: High

D — Valuation

| | Current | 5-Yr Avg | Sector Median | Country Median |
|---|---|---|---|---|
| Price/Quant Fair Value | 0.92 | 0.74 | 0.97 | 1.03 |
| Price/Earnings | 15.9 | 13.9 | 15.2 | 18.2 |
| Forward P/E | 11.8 | — | 10.8 | 12.1 |
| Price/Cash Flow | 8.1 | 5.6 | 9.1 | 10.4 |
| Price/Free Cash Flow | 17.1 | 9.1 | 15.8 | 18.6 |
| Dividend Yield % | 3.16 | 4.19 | 2.24 | 2.22 |
| Price/Book | 1.9 | 1.6 | 1.3 | 2.0 |
| Price/Sales | 1.6 | 1.2 | 0.7 | 1.5 |

Profitability

| | Current | 5-Yr Avg | Sector Median | Country Median |
|---|---|---|---|---|
| Return on Equity % | 11.6 | 11.5 | 11.1 | 12.8 |
| Return on Assets % | 2.1 | 1.8 | 4.5 | 5.3 |
| Revenue/Employee (K) | 482.9 | 513.9 | 440.3 | 283.5 |

F — Quantitative Moat (Score 100 / 80 / 60 / 40)

E — Financials (Fiscal Year in Mil)

| 2008 | 2009 | 2010 | 2011 | 2012 | TTM | |
|---|---|---|---|---|---|---|
| 182,515 | 156,783 | 150,211 | 147,300 | 147,359 | 147,289 | Revenue |
| 5.7 | -14.1 | -4.2 | -1.9 | 0.0 | 0.0 | % Change |
| 19,141 | 10,344 | 14,208 | 20,098 | 17,406 | 17,598 | Operating Income |
| -63.8 | -46.0 | 37.4 | 41.5 | -13.4 | 1.1 | % Change |
| 17,410 | 11,025 | 11,644 | 14,151 | 13,641 | 14,134 | Net Income |
| 48,601 | 24,593 | 36,123 | 33,359 | 31,331 | 29,475 | Operating Cash Flow |
| -16,010 | -8,634 | -9,800 | -12,650 | -15,126 | -15,484 | Capital Spending |
| 32,591 | 15,959 | 26,323 | 20,709 | 16,205 | 13,991 | Free Cash Flow |
| 17.9 | 10.2 | 17.5 | 14.1 | 11.0 | 9.5 | % Sales |
| 1.72 | 1.01 | 1.06 | 1.23 | 1.29 | 1.34 | EPS |
| -20.7 | -41.3 | 5.0 | 16.0 | 4.9 | 4.2 | % Change |
| 3.23 | 1.50 | 2.47 | 1.95 | 1.53 | 1.53 | Free Cash Flow/Share |
| 1.24 | 0.61 | 0.46 | 0.61 | 0.70 | 0.72 | Dividends/Share |
| 10.51 | 11.00 | 11.20 | 11.03 | 11.82 | 11.83 | Book Value/Share |
| 10,663 | 10,615 | 10,573 | 10,406 | 10,340 | 10,340 | Shares Outstanding (Mil) |

Profitability

ratings differ; however, we make a purposeful distinction between the methodologies, believing that multiple perspectives will allow investors to make better, more informed choices. Quantitative equity ratings also provide additional benefits beyond our qualitative research, including the ability to analyze portfolios by aggregating data, and providing history on a daily frequency to track changes over time.

## Quantitative Equity Ratings Descriptions

Our ratings are composed of the Quantitative Fair Value Estimate, Quantitative Valuation, Quantitative Economic Moat, Quantitative Uncertainty, and Quantitative Financial Health. These data points are described below.

### Quantitative Fair Value Estimate

Morningstar's Quantitative Fair Value Estimate is our estimate of the per share dollar amount that a company's equity is worth today. Morningstar calculates the Quantitative Fair Value Estimate using a statistical model derived from the Fair Value Estimate our equity analysts assign to companies.

### Quantitative Valuation

The Quantitative Valuation is the ratio of a stock's Quantitative Fair Value Estimate to its most recent close price and is similar to the analyst-driven Fair Value Estimate to last market close price ratio. The rating is expressed as Overvalued, Fairly Valued, and Undervalued.

### Quantitative Economic Moat

The Quantitative Economic Moat rating is analogous to Morningstar's Economic Moat™ rating in that both are meant to describe the strength of a firm's competitive position. It is calculated using an algorithm designed to predict the Economic Moat rating a Morningstar analyst would assign to the stock. The quantitative rating is expressed as None, Narrow, and Wide.

### Quantitative Uncertainty

Any equity valuation involves some degree of uncertainty. Quantitative Uncertainty describes our level of uncertainty about the accuracy of our Quantitative Fair Value Estimate. In this way, it is analogous to Morningstar's Uncertainty Ratings. The lower the Quantitative Uncertainty, the narrower the potential range of outcomes for that particular company. The rating is expressed as Low, Medium, High, Very High, and Extreme.

### Quantitative Financial Health

Morningstar's Quantitative Financial Health rating reflects the probability that a firm will face financial distress in the near future. Our calculation uses a predictive model designed to anticipate when a company may default on its financial obligations. The quantitative rating is expressed as Weak, Moderate, and Strong.

## Quantitative Equity Research Report

The quantitative equity ratings are available in the Quantitative Equity Research Report, which can be generated from Morningstar's key software platforms for individual investors, institutions, and financial advisors. We also compare these ratings with aggregate ratings of companies in their sector and country to give investors an effective context for making decisions. The report contains a Competitive Advantage Trend chart, which displays the historical values of the Quantitative Economic Moat over the last seven years. In addition, we list five years of historical financials. The quantitative equity ratings are also available in other Morningstar products and platforms, can be included in customized tools or reports, or delivered via a datafeed.

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