

Finding a Stock's "True Value" Using The Price-Earnings Relative Screen

By Wayne A. Thorp, CFA

Since the S&P 500 fell almost 40% in 2008, there are now bargains to be had in the stock market. That is not to say, however, that all stocks are priced attractively.

The price-earnings ratio (P/E)—or earnings multiple—is one of the most popular measures of company value. It is the current stock price divided by earnings per share for the most recent 12 months.

The popularity of the price-earnings ratio stems from how it relates the market's expectation of future company performance—embedded in the stock price component of the equation—to a company's actual recent earnings performance.

The price-earnings ratio is primarily driven by stock prices, although earnings also respond to changing business conditions. When greater risk and uncertainty in company prospects are perceived, valuations decline as investors are only willing to pay a small amount for a given level of company earnings. The greater those expectations, the higher a multiple of current earnings investors are willing to pay for the promise of future earnings.

But price-earnings ratios are not across-the-board comparable in terms of value. How, then, do you judge whether a company's price-earnings ratio represents good value?

There are models that help gauge whether a company's price-earnings ratio is reasonable. The price-earnings relative ratio approach looks back at the relationship of the price-earnings ratio of a stock to the price-earnings ratio either of the overall market or of the company's industry.



Price-Earnings Relative

The price-earnings relative is determined by dividing a company's price-earnings ratio by the market multiple. A price-earnings relative averaging above 1.0 would indicate that a company's price-earnings ratio is typically above the market's price-earnings

ratio, and vice versa.

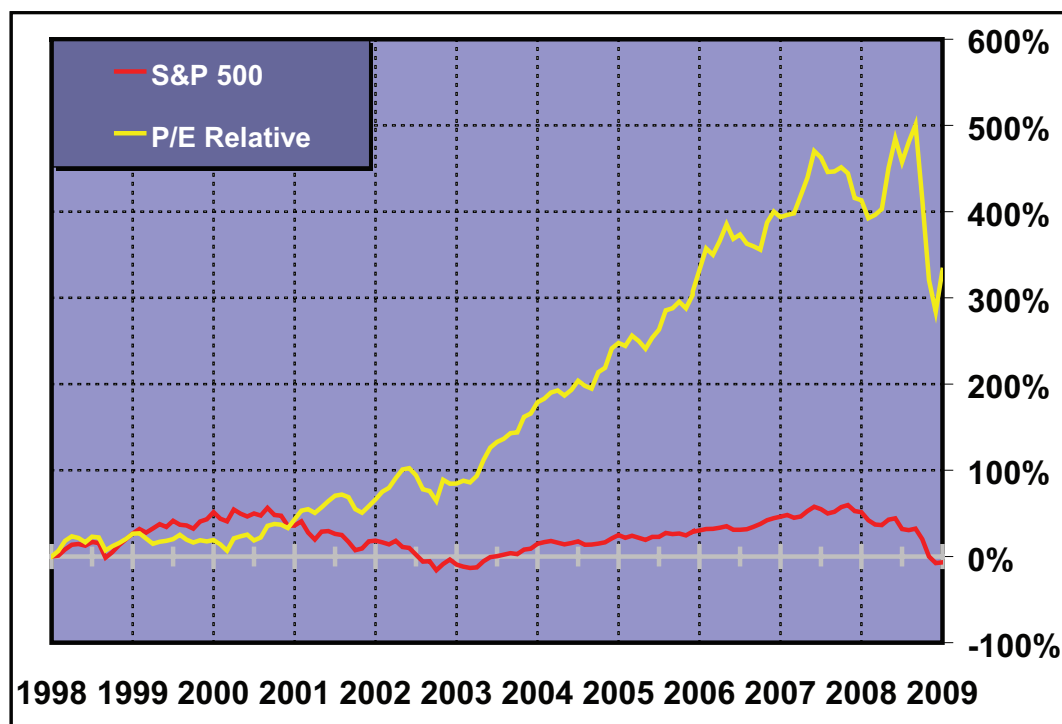
Based on relative growth and risk expectations, companies trade at multiples greater or smaller than that of the market multiple. One would expect a company with prospects better than the market, or with lower risk, or both, to have a higher price-earnings ratio than the market. Comparing a firm to its industry is an equally useful technique that has the benefit of isolating interesting candidates within a specific industry.

Changes in the relative levels of the price-earnings ratio may signal that the market, for whatever reason, is changing its expectations about the future earnings potential of a firm, or losing track of this and mispricing the stock. The price-earnings relative valuation model, however, assumes that the long-term growth and risk profile of the firm has not fundamentally changed over time.

Publications such as Value Line publish price-earnings relative ratios, but you can also calculate the figure yourself. The following is a summary of the process. For a more detailed explanation, with numerical examples, please refer to the Price-Earnings Relative Screen Overview at the Stock Screens area of AAIL.com.

Using *Stock Investor Pro*, AAIL's fundamental screening and research program, "market" price-earnings ratios are calculated for each of the last five years and are then used

Figure 1. Performance of the Price-Earnings Relative Screen



	Price Gain (%)											Monthly Std Dev (%)
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Cum'l
Price-Earnings Relative Screen*	26.5	(6.0)	20.3	16.1	11.1	51.1	24.7	17.2	21.2	3.9	(15.8)	332.3
S&P 500	26.7	19.5	(10.1)	(13.0)	(23.4)	26.4	9.0	3.0	13.6	3.5	(38.5)	(6.9)
S&P MidCap 400	17.7	13.3	16.2	(1.6)	(15.4)	34.0	15.2	11.3	9.0	6.7	(37.3)	61.5
S&P SmallCap 600	(2.1)	11.5	11.0	5.7	(15.3)	37.8	21.4	6.7	14.1	(1.2)	(32.0)	48.3
All Exchange-Listed Stocks	5.9	35.1	(14.2)	21.2	(13.3)	81.1	22.8	4.5	17.2	(4.5)	(46.3)	80.2

*Price performance of hypothetical portfolio rescreened and rebalanced monthly using month-end closing prices.

Does not include transaction costs or dividends. Screen results do not reflect those that an investor could achieve in the real world.

Data as of December 31, 2008.

to calculate annual price-earnings relatives for individual companies for each of the last five years (in order to calculate a price-earnings relative value, a company must have positive earnings). Based on these annual price-earnings relative values, we arrive at a five-year average price-earnings relative value for the company.

Multiplying the average stock price-earnings relative by the market's current price-earnings ratio provides an adjusted price-earnings ratio. The assumptions behind this model are that the market is fairly valued, which is not always the case, and that the company's relationship to the market has not changed.

A stock price valuation can be determined by multiplying this adjusted price-earnings ratio by the company's trailing 12-month earnings per share. Dividing the current share price by the valuation provides a useful screening measure; 1.00, or 100%, indicates that the valuation and current stock price are equal. Figures above 100% point to prices above valuation estimates, while figures below 100% may highlight undervalued companies.

The P/E Relative Screen

AAII has developed a screen based on this price-earnings relative that seeks stocks that have:

- A current stock price below its adjusted-price-earnings-relative valuation;
- Recent upward revisions in annual

Table 1. Portfolio Characteristics of the Price-Earnings Relative Screen

Portfolio Characteristics (Median)	Price-Earnings Relative Portfolio	Exchange-Listed Stocks
Price-earnings ratio (X)	11.1	11.9
Price-to-book-value ratio (X)	1.2	1.0
Adj price-earnings rel ratio (X)	17.13	12.3
Price-earnings-to-EPS est growth (X)	1.0	1.0
EPS 5-yr. historical growth rate (%)	66.4	13.0
EPS 3-5 yr. estimated growth rate (%)	10.3	12.5
Market cap. (\$ million)	1,649.8	245.0
Relative strength vs. S&P (S&P=0) (%)	42	-10
Current stock price as % of P/E rel (%)	64.7	94.2
Monthly Observations		
Average no. of passing stocks	33	
Highest no. of passing stocks	110	
Lowest no. of passing stocks	0	
Monthly turnover (%)	77.1	

Data as of January 9, 2009.

Table 2. Stocks Passing the Price-Earnings Relative Screen

Company (Exchange: Ticker)	Price per Share (\$)	Price as % of 52-Wk High (%)	12- Mo EPS (\$)	EPS Grth Est (%)	P/E Ratio (X)	Indus P/E Ratio (X)	P/E Rel Avg 5-Yr (X)	Adj P/E Rel Ratio (X)	P/E Rel Val per Share (\$)	Price as % of P/E Rel Val (%)	Description
ProAssurance Corp. (N: PRA)	49.24	54	4.44	10.33	11.1	10.8	1.52	17.13	76.07	64.73	insur hldg co

Exchange Key: M = NASDAQ, N = New York Stock Exchange, O = over the counter.
Source: AAIL's Stock Investor Pro/Reuters Research, Inc. Data as of January 9, 2009.

See the AAIL Stock Screens area of AAIL.com for more details on this approach.

earnings estimates;

- Recent increases in annual consensus earnings estimates.

Screen Performance

The price-earnings relative screen is built into *Stock Investor Pro*. In addition, the companies passing this screen are posted each month on AAIL.com and the performance of these stocks in a hypothetical portfolio is tracked on-line.

The price-earnings relative screen has outperformed the large-cap S&P 500 index and other broad market indexes since the beginning of 1998. Over that period, the screen has posted only two down years—1999 and 2008. However, in 2008, the screen's 15.8% decline was less than half that of the S&P 500, which lost 38.5%.

Figure 1 shows that the price-earnings relative approach has generated a cumulative return of 332.3% over the period from January 1998 through December 2008, while the S&P 500 is down 6.9% over the same period.

Overview of Passing Firms

The characteristics of the stocks currently matching the price-earnings relative criteria are presented in Table 1. Note, however, that currently only a single stock passes the screen. The price-earnings relative requirement resulted in 459 passing stocks; however, all but one were knocked out by the other two filters concerning recent upward revisions and

increases in annual consensus earnings estimates—tough filters given the current market environment.

Table 2 lists the single stock currently passing the screen as of January 9, 2009—ProAssurance Corporation (PRA). This is a holding company for property and casualty insurance companies focused on professional liability insurance—primarily for physicians, dentists, other healthcare providers and healthcare facilities.

While the price-earnings relative approach does not contain explicit “value” filters that you may be more accustomed to, it is seeking undervalued stocks. In this case, the methodology identifies companies trading at no more than 75% of the valuation derived from the company's price-earnings relative ratio. As a result, it is perhaps not surprising to see that ProAssurance has a price-earnings ratio of 11.1, which is below the median value for all exchange-listed stocks of 11.9. However, the stock's price-to-book-value ratio of 1.2 is slightly higher than the median value of 1.0 for exchange-listed stocks.

Given the cap that the price-earnings relative methodology places on the current stock price as a percentage of the price-earnings relative valuation, the median value for the price-earnings relative approach is 64.7%. In contrast, the median value for exchange-listed stocks is 94.2%.

The price-earnings relative screen does not require minimum historical growth rates, but ProAssurance has a five-year earnings growth rate of 66.4%,

compared to 13.0% for exchange-listed stocks. ProAssurance's \$1.65 billion market capitalization is also much higher than the \$245 million median for all exchange-listed stocks.

ProAssurance has outperformed the S&P 500 by 42% over the last 52 weeks. Meanwhile, the typical exchange-listed stock has underperformed the S&P by 10% over the same period.

Finally, the single company currently meeting the price-earnings relative screen criteria is well below the monthly average of 33 passing companies since the start of 1998. Given the current business climate, it is difficult to find many companies experiencing upward revisions in their expected future earnings. This methodology also has a fairly high monthly turnover, with only 23% of the stocks passing the screen month-to-month.

Investors often look for a catalyst to help attract attention to a company and boost its stock price. The prices of many attractively priced stocks often languish until investors find a reason to re-evaluate the prospects of the firm or its industry.

Upward earnings revisions are events that make investors take notice of a company. Revisions in earnings estimates lead to price adjustments and when earnings estimates are revised upward significantly, stocks tend to show above-average performance. Stock prices of firms with downward revisions tend to show below-average price performance following the adjustment.

The price-earnings relative screen

What It Takes: Price-Earnings Relative Criteria

- Companies that trade as American depositary receipts (ADRs) are not included
- Companies that trade on the over-the-counter (OTC) market are not included
- The average price-earnings ratio for each of the last five fiscal years is less than or equal to 100
- The current stock price as a percentage of the price-earnings relative valuation is less than 75%
- At least three analysts provide earnings estimates for the current fiscal year (Y0)
- The current consensus earnings estimate for the current fiscal year (Y0) is greater than it was one month ago
- The number of upward revisions in earnings estimates for the current fiscal year (Y0) over the last month is greater than the number of downward revisions in earnings estimates for the current fiscal year (Y0) over the same period
- There has been at least one upward revision in the earnings estimates for the current fiscal year (Y0) over the last month
- The current consensus earnings estimate for the next fiscal year (Y1) is greater than it was one month ago
- The number of upward revisions in earnings estimates for the next fiscal year (Y1) over the last month is greater than the number of downward revisions in earnings estimates for the next fiscal year (Y1) over the same period
- There has been at least one upward revision in the earnings estimates for the next fiscal year (Y1) over the last month

requires at least one upward revision in the current and next year's earnings estimates over the last month. It also requires that there be more upward revisions than downward revisions in the current and next year's earnings estimates over the last month. Lastly, it calls for an increase in the consensus estimate for both the current and next fiscal year over the last month.

Intuitively, you may expect that if there has been at least one upward revision and upward revisions outnumber downward revisions, the consensus estimate would automatically increase. However, this is not always the case, as analysts may drop coverage, which could lower the consensus estimate without an actual downward revision.

In the case of ProAssurance, it has six analysts providing current quarterly and annual earnings estimates. Over the

last month, there has been one upward revision in its annual earnings estimate for the current fiscal year and two upward revisions for next year's estimated earnings.

Conclusion

Screening for stocks by looking at price-earnings ratios can help highlight firms that have fallen out of favor. Price-earnings relatives establish benchmark comparisons that help identify firms that have deviated from their normal valuation levels—with the critical assumption that nothing fundamental to the company, industry, or market has changed significantly. The analysis can highlight companies worthy of further analysis, given the expectation they will move back to their typical levels.

In constructing screening criteria—especially for value-oriented approaches—you may wish to include a number of conditioning criteria that help indicate items such as the future earnings potential of the firm, the financial strength of the firm, as well as the strength of the firm within its industry. Investing in low price-earnings stocks can be rewarding, but caution is required.

Finally, it is important to keep in mind that stock screening is only the first step in the stock selection process. The stocks passing the price-earnings relative screen do not represent a “recommended” or “buy” list. Due diligence must be performed to verify the financial strength of the companies and to identify those stocks that match your investing tolerances and constraints before committing your investment dollars. ▲

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