



There are many fundamental measures by which to judge the relative value of an ETF, and the portfolio Price-to-Earnings ratio (P/E) is one that is frequently mentioned.

**Yahoo! Finance** includes a pre-built screen for ETF's by P/E, for example:

<http://finance.yahoo.com/etf/browser/hl?c=0&k=6&f=0&cs=1&ce=20&o=a>

But what does the P/E ratio of an ETF actually tell you? This is a more complex question than you might imagine. While there is a body of research that shows that buying stocks at low P/E ratios will tend to generate higher returns than buying at high P/E ratios, this does not mean that you can assume that an ETF is an attractive investment because it sports a low P/E ratio.

To begin with, the different providers of ETF's may actually calculate the P/E ratio of their ETF's quite differently. An article in March 2006 reported that Barclays (the provider of iShares ETF's) accounted for ETF components that were unprofitable (i.e. had a negative Earnings Per Share (EPS)) by simply dropping them from the calculation of an aggregate value for P/E for the ETF:

<http://etf.seekingalpha.com/article/7769>

The significance here is simply that knowing the P/E ratio for an ETF tells you a great deal less than knowing the P/E ratio for an individual stock. Specifically, if you simply exclude companies with negative EPS, the P/E for the ETF will look lower than the P/E ratio for the median component stock in the ETF.

Aside from the basic calculation of P/E ratio, there is the broader issue at hand. The P/E ratio can be low for a variety of reasons—and only some of these would suggest that the ETF or the stocks that comprise the ETF are under-valued.

To examine this issue, I used the **Yahoo! Finance** screener for low P/E ratio ETF's and looked at the group of ETF's with P/E less than 12. I then removed all those that have less than three years of history and removed obvious duplicates in terms of style of ETF. The final list that I ended up with contained only eight ETF's:

Name	Ticker	Sector	Reported P/E
iShares MSCI Brazil Index	EWZ	Latin America Stock	9.2
iShares Dow Jones US Energy	IYE	Specialty-Natural Res	9.9
iShares S&P Global Energy Sector	IXC	Specialty-Natural Res	10.1
iShares MSCI Austria Index	EWO	Europe Stock	10.9
iShares MSCI South Korea Index	EWY	Pacific/Asia ex-Japan Stk	11.0
BLDRS Developed Markets 100 ADR Index	ADRD	Foreign Large Blend	11.7
BLDRS Europe 100 ADR Index	ADRU	Europe Stock	11.7
Financial Select Sector SPDR	XLF	Specialty-Financial	11.9

### *Selected Low P/E ETF's*

To put these P/E ratios in perspective, SPY (which tracks the S&P500) is currently listed as having a P/E of 14.6, so that even XLF (with the highest P/E in the group) has a P/E that is more than 20% below that of the S&P500. There are two energy focused ETF's here (IYE and IXC), three country-specific ETF's (EWZ, EWO, and EWY) and two more international ETF's (ADRD and ADRU). The sectors represented here will go a long way to explaining why P/E ratios are not a very good way to screen ETF's. When people focus on P/E ratios as the basis for selecting an ETF (or any stock or fund, for that matter), the component that often gets lost is **risk**. Risk is typically thought of as the potential for an investments price to change, but what is the source of that risk?

Ultimately, a large component of price risk naturally springs from uncertainty in earnings. If P/E ratios are low, this may be telling you that there is a high level of uncertainty in future earnings. Different countries have different levels of risk:

[http://www.duke.edu/~charvey/Country\\_risk/couindex.htm](http://www.duke.edu/~charvey/Country_risk/couindex.htm)

Similarly, a sector may be facing a high degree of uncertainty in its future earnings—as is currently the case with the energy industry as a whole. We have seen spectacular returns over the past several years for IYE and IXC. Even though the P/E ratios are around ten, there is high uncertainty as to whether future earnings will be able to support the current prices, much less future gains. Ultimately, the issue of assessing the relative attractiveness of these low P/E ETF's is a function of risk.

In light of what we have discussed in the previous paragraph, the key question we want to look at is the expected future rate of return conditioned by the risk for these ETF's.

Quantext Portfolio Planner (QPP) is a Monte Carlo simulation that projects future performance of individual equities and funds on a standalone and portfolio basis. One of

QPP's core modules combines risk and return data on securities to project future average return that is consistent with the risk associated with those securities. This process is called ***Risk-Return Balancing***. When I entered the eight ETF's into QPP and used all default settings for the projection, I obtained the following projected average annual returns---all of them less than the trailing three-year average annual returns:

Name	Ticker	Trailing 3-Year Average Annual Return	Risk-Return Balanced Predicted Average Annual Return
iShares MSCI Brazil Index	EWZ	46%	18%
iShares Dow Jones US Energy	IYE	31%	20%
iShares S&P Global Energy Sector	IXC	29%	19%
iShares MSCI Austria Index	EWO	38%	11%
iShares MSCI South Korea Index	EWY	30%	16%
BLDRS Developed Markets 100 ADR Index	ADRD	18%	8%
BLDRS Europe 100 ADR Index	ADRU	14%	13%
Financial Select Sector SPDR	XLF	12%	7%

***Quantext Portfolio Planner's Risk-Adjusted Predicted Returns Compared to History***

When I examined a portfolio equally weighted between these eight ETF's, the trailing average annual return for the last three years was 27.2% (with a standard deviation in annual return of 14.2%). To put this in context, the S&P500 over this period has returned an average of 9.6% per year (with a standard deviation of 7.7% per year). The standard deviation in return is a basic measure of risk and this portfolio has almost twice the total volatility of the market as a whole. As I have noted in the past, a reasonable rule of thumb for real portfolios is that you cannot expect a long-term ratio of average return to standard deviation in return much above 1.0 and this equally weighted portfolio is running at a ratio of 1.9 (27.2%/14.2%). While the S&P500 itself has been running at a ratio greater than 1 for the past several years (9.6%/7.7%), history suggests that this is an anomaly. Quantext Portfolio Planner projects that the future average annual rate of return for the equally-weighted basket of these ETF's is 14%, with a standard deviation of 24%--an average rate of return far below what we have seen for the past several years, but with a higher level of risk.

We started this discussion by looking at P/E ratios for a series of ETF's with at least three years of track record. On the basis of P/E alone, these ETF's look cheap compared to the

overall market. When we look at these ETF's inside Quantext Portfolio Planner, a Monte Carlo portfolio planning tool, a more complex picture emerges. A number of these ETF's are high risk / high return propositions and QPP suggests that a considerable fraction of recent return in these is attributable to froth—i.e. part of the normal ebb and flow of high volatility sectors. The high trailing (and projected) volatility of these ETF's as a group confirms that the market is attributing a high level of uncertainty in future earnings to these ETF's. This means that the trailing realized earnings are probably not very useful as a basis for planning—making the current P/E ratios a questionable metric of value. Combine this information with the fact that an equally weighted portfolio of these ETF's have dramatically exceeded a sustainable risk/return balance and that projected future returns (accounting for volatility) on these ETF's are uniformly lower than we have seen over the past several years and it is hard to conclude that these ETF's are in any way under-valued, in spite of the relatively low P/E ratios.

Note: All of the calculations and results discussed in this article were generated using default settings from Quantext Portfolio Planner (QPP), having specified that the model use three years of trailing historical data through August 2006.

*Quantext Portfolio Planner is a Monte Carlo portfolio management tool. Extensive case studies, as well as access to a free extended trial, are available at <http://www.quantext.com/gpage3.html>*