European Sector Rotation Allocation Based on US Economist Robert Shiller CAPE® Ratio

Ksenya Rulik, CFA
Head of Quantitative Research

Ksenya Rulik *joined Ossiam in August 2010. She entered quantitative research field in 2007, after a 7-year experience in academic research. She worked as a quantitative analyst first at Systeia Capital Management, then at Amundi. She has designed systematic trading strategies on equities and conducted numerous research projects on data modeling, portfolio construction and risk management. Ksenya Rulik holds a PhD in theoretical physics and a Master's Degree in Quantitative methods in Finance from the University of Turin. She also is a CFA Charterholder.*

A new ETF to invest in the most attractive European stock market sectors from a valuation perspective – using the CAPE® ratio method developed by Professor Robert Shiller has been launched by Ossiam.

In recent years, smart beta strategies have become more popular. Constructed systematically to counter the weaknesses of traditional equity, bond or commodity indices, smart beta methods aims to deliver better risk/adjusted returns by relying on an alternative weighting process. Because the strategies follow specific rule based indices, they are ideal for passive investments using ETFs.

By means of different approaches, an improved risk return trade-off or specific investment objectives can be achieved. Smart beta solutions can be based on diversification principles, for example by assigning all securities in the index an equal weighting (so-called equal weight indices). They can be geared towards a specific investment objective such as volatility reduction, with minimum variance or risk-weight indices being good examples. Or they can be constructed towards an allocation based on fundamental criteria such as dividend yields or P/E ratio, or another measure of value.

The Shiller Barclays CAPE® Europe Sector Value TR index launched in August 2013 belongs to the third category. Like the US index family established in 2012 by Professor Robert Shiller and Britain's Barclays Bank, the index sets out to identify the most attractive European equity sectors from a long-term valuation perspective.

The idea behind it is simple: equity sectors performance can be volatile. Each year there are significant differences between the performance of the best sector and that of the worst. For example in 2014 the energy sector shed some 10 percent in the wake of the collapse in the oil price, while the defensive healthcare sector surged 17 percent. The difference of an immense 27 percentage points but is actually mild on an historical comparison; in volatile crisis years it is often far higher. If the best sectors can be identified in advance then you can consistently invest in them and ignore the weak sectors.

US economist professor Robert Shiller, who joined forces with Barclays to develop the Shiller Barclays CAPE® Sector index family, laid the foundations for identifying attractive sectors as long ago as 1988. He argued that valuation metrics with long-term focus are helpful in detecting in advance the future poor performers. Together with his graduate student John Campbell he devised the CAPE® ratio as the relevant valuation metric and published it in The Journal of Finance in an article entitled "Stock Prices, Earnings, and Expected Dividends". CAPE® stands for cyclically adjusted price earnings. The idea behind the CAPE® ratio is simple: compare the current value of a portfolio to inflation-adjusted aggregated earnings of its constituents averaged over sufficiently long period of time to remove the effects of business cycles.

The price/earnings ratio is one of the most widespread variables used to evaluate equities, but Professor Shiller showed that it has disadvantages specifically for investors with a long-term focus. The CAPE® ratio therefore relies not on the earnings of a single year, which is what the classic P/E ratio does, but on an inflation-adjusting sliding average for earnings over the prior decade. This enables the economist to factor out short-term volatility in earnings to get a smoothed-out P/E ratio that considers earnings independent of the respective point in the cycle. Unlike classic P/E ratios, the CAPE® ratio therefore provides no short-term signals that active traders can use in their work, and instead an orientation for investors with a long-term approach.

Shiller and Campbell succeeded in showing that high CAPE® ratios in the US equities market reliably indicated a weak performance in subsequent years. For example, the historical Shiller CAPE® ratio for the S&P 500 since the 1880s reveals a pronounced negative correlation to the index performance in the respective next decade.

In his later research, Professor Shiller proved that the negative correlation between the CAPE® ratio and the long-term performance of the US stock market, following the point in time when the data was collected, also applied to studying individual sectors.

In order to identify the most attractive (i.e. undervalued) sectors in terms of CAPE® ratio, it is not enough to simply compare the figures for the individual sectors. Since sectors differ in terms of degree of maturity (and by extension how dynamic profits are) and other factors such as regulatory regime, volatility levels can vary, as can the average CAPE® ratio for a particular industry. A figure of 25 is, for example, close to the historical max for utilities and points to a clear over-valuation of the sector, whereas in the case of industrial corporations the same figure is bang in the middle of the historical corridor and thus points to a fair valuation. The figure is often even higher for tech stocks. In other words, considering the absolute figure hardly provides reliable data for a sector strategy. Indeed, using the CAPE® ratio you would invariably prefer defensive utilities to tech corporations for an investment portfolio.

The partnership of Professor Shiller and Barclays resulted in a normalized CAPE® ratio, called Relative CAPE® ratio, in order to be able to compare two sectors at the same point of time. This new indicator is just the CAPE® ratio divided by its mean value over past several years. The averaging produces a valuation metrics with comparable scale across the sectors: a Relative CAPE® of 1 indicates that the current valuation is in line with the historical average, while the values smaller than 1 point at undervaluation of the sector.

The Shiller Barclays CAPE® Sector Indices therefore rely on the relative CAPE® ratio, which for the US stock market is composed of the current CAPE® value in relation to the 20-year average and adjusted for extreme fluctuations that distort the picture. Since there is not yet sufficient historical data available on the European equity markets, the relative CAPE® indicator for the European index version differs from the US indices by relying on average figures since the beginning of 2008, and thus at present has an average covering seven years. As time progresses, the period considered automatically grows. Using this relative CAPE® ratio, the Shiller Barclays CAPE® Europe Sector Value Index first of all identifies the five most undervalued sectors from ten in the European stock market. As a next step, the sector that exhibited the weakest momentum over the prior 12 months is eliminated from the remaining five. This additional step in the index methodology is designed to avoid the so-called “value trap”, i.e., the sector with the worst market sentiment in recent history. Value trap is a well-known issue in value investing, representing the risk that investors purchase a distressed stock or sector that takes a significant amount of time to improve, if ever.

Computations of what the performance of the Shiller Barclays CAPE® Europe Sector Value TR index would have been in the past show that the strategy would have outperformed the MSCI Europe between September 2008 and year-end 2014 by an annual 5.67 percent – assuming comparable volatility and a slightly lower maximum loss of 21.05 percent as opposed to 24.63 for the classic index.

The five undervalued sectors initially chosen performed on average 4.74 percent better than the five that were rejected; the momentum filter garnered an additional 2.73 percent compared to the five eliminated sectors. In seven of the ten sectors the index succeeded in identifying periods of above-average performance.

The Ossiam ETF, tracking this index is therefore an ideal substitute or supplement for a value portfolio or a sector rotation strategy. The strategy aims at achieving consistent outperformance in the long-term due to its value focus and its timing ability to select the industries during the periods of above-average performance.

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