VALUE IN SELECTING SECTORS

Sector rotation strategy based on the Shiller CAPE ratio

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FROM CAPE TO RELATIVE CAPE

Each year there are significant differences between the performance of the best sector and the worst, making it more attractive to invest in the former rather than the latter.

To try identifying potential market performance in advance, in 1988 US economist professor Robert Shiller introduced a valuation metric called CAPE® ratio – Cyclically Adjusted Price Earnings – a ratio of the current value of a portfolio to inflation-adjusted aggregated earnings of its constituents averaged over a sufficiently long period of time to remove the effects of business cycles. Shiller showed that for the S&P 500 index since the 1880s, high CAPE® ratios tended to indicate weak market performance in subsequent years.

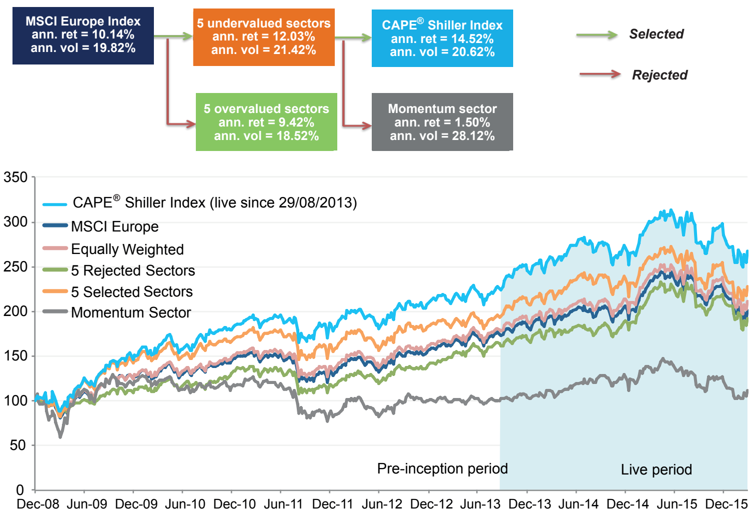
In his later research, professor Shiller introduced a normalised CAPE® ratio, called Relative CAPE® ratio, to be able to compare two sectors at the same point in time. This new indicator is the CAPE® ratio divided by its mean value over the past 20 years. This ratio was the basis for the Shiller Barclays CAPE® Sector index family.

The first step of the Shiller Barclays CAPE® Sector strategy is to discard five sectors that have the highest Relative CAPE® ratios. Next, the sector that exhibited the weakest momentum over the prior 12 months is eliminated from the remaining five. This step in the index methodology is designed to avoid the so-called "value trap", ie, the sector with the worst market sentiment in recent history.

Calculations 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 December 2008 and October 2015 by an annual 4.2% with comparable volatility.

As figure 1 shows, the five undervalued sectors initially chosen performed on average 2.46% better than the five that were rejected; the momentum filter garnered an additional 2.58% compared to the five eliminated sectors. In seven of the ten sectors the index succeeded in identifying periods of above-average performance.

Figure 1 Value and Momentum drivers of the Shiller CAPE sector rotation strategy.



Source Barclays. All data in Euro. Data as at the end of February.

SHILLER BARCLAYS CAPE® EUROPE SECTOR VALUE VERSUS TRADITIONAL VALUE

Is this strategy a substitute or a complement for the traditional value portfolio?

Figure 2 gives correlation matrix among excess returns of four different value-oriented portfolios: MSCI Europe Value index, Stoxx Strong Value 20 index, FTSE RAFI Europe index and Shiller Barclays CAPE® Europe sector index.

The CAPE-based sector rotation strategy has strikingly low correlation to other value indices, ranging between 9.2% and 28.1%. For comparison, excess returns of other strategies are correlated in the range 59.4%-77.8%. There are three reasons for this. First, the value in the CAPE-based strategy is assessed at the sector level, not at the stock level as is commonly done in traditional value indices or value-oriented alternative beta strategies. Second, the Shiller CAPE strategy explicitly uses momentum as a secondary variable, acting on sectors that have already undergone a CAPE-based screening. And finally, the very definition of value is different in the Shiller CAPE strategy compared with traditional value portfolios.

Despite originating from the same idea of traditional value investing, the Shiller CAPE-based portfolios differ from the existing value indices and strategies in several important ways. This makes the approach a valuable addition to the diversified investment set.

Figure 2 Excess return correlation matrix for value-oriented indices

Simulated correlation of excess return

From 02/12/2008 to 30/10/2015	Shiller Barclays CAPE® Europe Sector Value Net TR Index	MSCI Europe Daily Value EUR TR Net EUR	STOXX Strong Value 20 Return Index EUR	FTSE RAFI Europe Net Index TR EUR
Shiller Barclays CAPE® Europe Sector Value Net TR Index	1.000			
MSCI Europe Daily Value EUR TR Net EUR	0.281	1.000		
STOXX Strong Value 20 Return Index EUR	0.092	0.586	1.000	
FTSE RAFI Europe Net Index TR EUR	0.103	0.778	0.594	1.000

Source: Bloomberg - Calculations by OSSIAM for the period 02/12/2008 to 30/10/2015

SHILLER CAPE: ANOTHER FACE OF VALUE

The concept of value investing, initiated from the research of Benjamin Graham, dates back to 1930s. His idea of identifying securities priced below their fair value brought a research-based approach to investing, where speculation and insider-trading had dominated before.

Value investing, the exercise of detecting undervalued securities using fundamental analysis, was by the 1970s one of the mainstream mutual fund styles. This led to the introduction in the 1980s of style benchmark indices. The latter were based on screening stocks on their fundamental characteristics, like Book-to-Market ratio, and were used by managers as style benchmarks.

Academic recognition of value investing came in 1990s, the result of seminal work by Eugene Fama and Kenneth French, revealing that the value factor explained performance differences across stocks. Fama-French value factor, also known as HML (High-Minus-Low), has since become one of the most recognised return drivers, and is used both in risk modelling and in performance attribution.

Yet, this was not the only side of value. A different approach based on Graham's idea of value investing was proposed by professor Robert Shiller in 1988. Shiller focused on a top-down view, assessing an aggregate value of the entire equity market portfolio to see if this asset class is fairly valued. To do that, professor Shiller used the ratio of total value of market portfolio to the aggregated stock earnings, cyclically adjusted – the Shiller CAPE ratio. When compared to its time average, CAPE indicates whether the particular market is overvalued or undervalued.

Despite being inspired by the same idea of value investing (Shiller and Fama even shared the Nobel prize in Economics in 2013), the approaches of the two economists have profound theoretical differences. Fama believes in efficient markets, and in his view value is a factor, exposing an investor to additional risks for which they require a premium. In contrast, Shiller, who has claimed that the Efficient Market Hypothesis was one of the "most remarkable errors in the history of economic thought", sees value as a form of mispricing that can be exploited without taking on additional risk. Hence the Relative CAPE ratio, built from the traditional Shiller CAPE to make valuation comparisons across sectors and build value-oriented portfolios, allows the weight to be dynamically shifted to mispriced market segments.