Quant Keys

What does splitting the financials sector change? - Erratum

Equities

Global
Quantitative

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The GICS classification structure is creating a separate Real Estate sector

Back in March 2015, S&P Dow Jones and MSCI, the custodians of the GICS industry classification announced that they were going to split up the Financials sector and create a new top level Real Estate sector, thus moving from 10 top level sectors to 11. This change will be implemented at the close on the 31st August, 2016.

How does this change backtesting?

This split leads to an interesting challenge for quantitative investors. Many of them run their screens in a sector neutral way, so this change could involve changing their portfolios to be neutral to the new 11 sector classifications. But it also throws up an intriguing question. When running backtests should one use the sector classifications which existed at the time or the new ones? In our view both are meaningful: the first approach shows the performance one would have been likely to achieve, but the second perhaps gives more guide to the future behaviour of a sector neutral factor or portfolio.

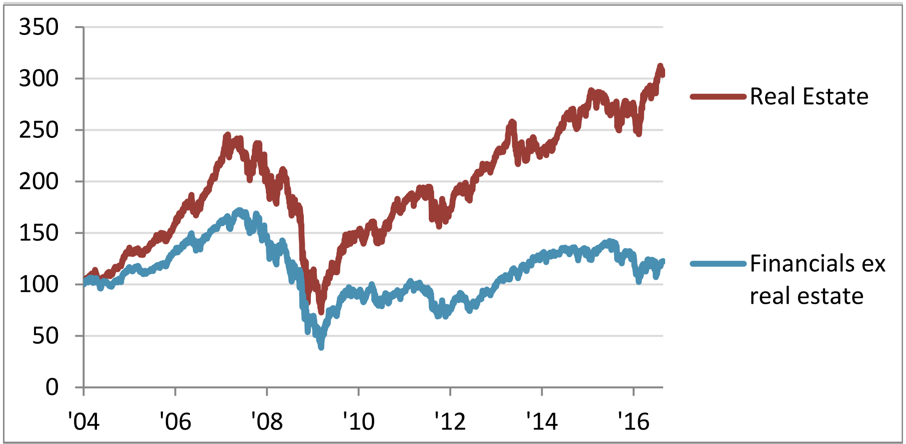
How does this change factor performance for financials?

In this brief note we show the results of backtesting our factors in both the old and new Financials sector together with the new Real Estate sector and highlight where there are significant changes.

Small-caps and high forecast growth outperform in real estate

Styles performed very differently in the two sectors in the US, but were more similar in other regions. Notable cross-region differences include size, where small-caps outperform in real estate and underperform elsewhere, and in forecast earnings growth, which outperforms in real estate but typically does poorly elsewhere.

Figure 1: How would the new sectors have performed historically?



Source: UBS Quantitative Research

*** This document replaces one published earlier which claimed high forecast growth had tended to outperform in the financials ex real estate.***

How might the new GICS sector definitions affect you?

What's happening?

On the 31st of August, S&P Dow Jones and MSCI are changing the GICS classification structure. The current financial sector will split into two sectors, with the real estate stocks (currently a sub-group within financials) becoming a sector in their own right[1]. This will increase the number of top level sectors from ten to eleven.

What does that mean for backtesting?

Quant investors often prefer to create sector neutral screens and carefully monitor their sector risk exposures, so sector definitions really do matter and, as GICS is the prevailing sector classification, this change will affect a large number of investors.

This will also have significant implications for backtesting. Should you use the sector classifications which were historically used when backtesting or should you use the new sector classifications? We can see advantages and disadvantages to both approaches.

Using the new sector classification makes your historic backtested strategy more similar to the strategy you intend to implement, and so should perhaps be a better guide to the future performance of your strategy. However, backtesting strategies using information that you would not have known at the time (commonly known as lookahead bias) is usually seen as unfair and misleading. To get a better idea of how the portfolio would have been implemented, it is better to use the old sector classification system. Which approach you choose depends on what you want to get out of the analysis.

Styles in real estate vs styles in financials ex real estate

Figure 2 compares the performances of different styles amongst the real estate stocks and amongst the other financial stocks, in each region[2]. For some styles, there are big differences in performances. For example, small-caps have typically outperformed in the financials ex real estate, but large-caps have been more successful amongst real estate stocks. Also, the high forecast earnings growth style has tended to underperform in financials ex real estate, but outperform amongst real estate stocks, suggesting that investors pay too much for growth in most of the financial sector, but have been more cautious in the real estate.

In the US, there were particularly pronounced differences in which styles worked in the real estate universe and which styles worked in the financials ex real estate universe. In fact, there is a negative correlation between the excess style returns in the two universes. In the other regions, style performances were more closely aligned.

[1] For a detailed discussion of how UBS expect this change to impact financials ETFs and the REIT space, see "GICS Changes: One giant leap for REIT-kind"
[2] A word of caution: the real estate sector is small in Europe and Japan (currently less than 20 names), so style analysis in these regions should be cautiously interpreted. With only a few names in each style basket, returns can be heavily influenced by idiosyncratic news to a single company, so may be less representative of the style than in other regions.

Figure 2: Excess returns to style baskets in real estate and financials ex real estate

		US		Europe		Japan		Asia ex Japan	
	Style basket	Financials ex real estate	Real estate	Financials ex real estate	Real estate	Financials ex real estate	Real estate	Financials ex real estate	Real estate
High value	High Book / Price	-0.2%	0.4%	-2.0%	-2.8%	1.9%	0.3%	0.8%	3.4%
	High Dividend Yield	0.9%	-0.9%	1.4%	6.7%	1.3%	2.2%	-0.5%	1.0%
	High Earnings Yield	0.5%	-1.2%	0.3%	2.6%	1.5%	3.7%	0.5%	0.6%
	Low PEG	-1.7%	1.5%	-1.5%	-2.5%	1.1%	0.0%	0.4%	-2.5%
Low value	Low Book / Price	-0.1%	-1.1%	1.0%	2.8%	-0.5%	-1.9%	0.9%	-2.6%
	Low Dividend Yield	0.3%	0.4%	-1.3%	-3.3%	-2.3%	-1.4%	1.3%	-1.3%
	Low Earnings Yield	-0.9%	1.0%	0.1%	-2.7%	-2.2%	-1.6%	-1.5%	-1.3%
	High PEG	2.5%	-2.1%	2.0%	-0.1%	-0.4%	0.4%	-0.4%	2.7%
High growth	High Dividend Growth	-0.7%	-1.8%	0.7%	1.4%	1.2%	0.3%	1.4%	-0.2%
	High Earnings Growth	-2.1%	1.4%	-1.3%	-0.9%	0.9%	1.0%	-1.1%	-0.5%
	High Historical EPS Growth	2.2%	0.7%	1.8%	1.3%	-0.6%	-0.5%	1.9%	2.6%
Low growth	Low Dividend Growth	2.2%	0.9%	-1.1%	-1.4%	-1.4%	0.5%	-2.4%	0.7%
	Low Earnings Growth	2.6%	-1.8%	1.4%	-0.8%	0.2%	-0.5%	0.8%	0.8%
	Low Historical EPS Growth	-2.2%	-0.5%	-1.0%	-2.5%	0.6%	2.5%	-1.1%	-1.6%
High quality	High Dividend Cover	0.8%	0.1%	-0.4%	-3.1%	0.1%	-0.6%	-1.7%	-1.1%
	High ROE	2.5%	-2.3%	-0.1%	2.4%	0.0%	1.6%	0.8%	-0.3%
	High ROIC	2.7%	0.6%	2.2%	3.1%	-0.2%	2.9%	0.3%	-2.3%
Low quality	Low Dividend Cover	-0.2%	-1.6%	0.4%	4.4%	-0.9%	2.1%	0.8%	-0.2%
	Low ROE	-1.5%	1.4%	0.0%	-1.9%	-0.3%	-0.6%	0.0%	0.1%
	Low ROIC	-2.2%	-0.8%	-2.6%	-2.2%	0.3%	-2.4%	1.0%	2.0%
High momentum	High 12m Price Momentum	1.4%	1.2%	2.6%	3.2%	0.5%	-1.1%	0.4%	2.4%
	High 1m Price Momentum	2.8%	-0.9%	0.2%	-1.9%	-2.6%	-2.4%	-2.7%	-3.2%
	High 6m Price Momentum	-0.3%	1.0%	-1.3%	-0.9%	-1.5%	-4.9%	-0.8%	3.4%
	High Earnings Momentum	0.7%	-0.1%	2.8%	-0.6%	-1.1%	-0.2%	- 2.7%	-2.3%
Low momentum	Low 12m Price Momentum	-1.3%	-2.1%	-2.2%	-6.7%	-1.3%	-1.6%	1.0%	-2.2%
	Low 1m Price Momentum	-2.5%	0.2%	-0.4%	0.7%	1.7%	4.6%	3.3%	3.6%
	Low 6m Price Momentum	0.9%	-1.9%	1.8%	0.7%	1.5%	5.2%	1.4%	-3.3%
	Low Earnings Momentum	-0.3%	-1.6%	-2.1%	-0.9%	-0.1%	-0.4%	3.6%	1.8%
High Risk	High Beta	-1.5%	-1.4%	-1.2%	-2.6%	-0.4%	-2.1%	-1.5%	0.9%
	High Volatility	-1.8%	-2.5%	-2.6%	-1.9%	-0.6%	0.1%	2.5%	-2.3%
Low risk	Low Beta	1.0%	0.8%	0.9%	2.7%	0.7%	3.7%	1.3%	-0.6%
	Low Volatility	0.8%	1.8%	1.8%	0.8%	0.7%	-1.7%	-1.7%	2.1%
Size	Large-cap	-0.5%	1.4%	-0.4%	1.9%	-0.7%	0.2%	-0.1%	-0.5%
	Small-cap	3.0%	-4.6%	3.2%	-4.9%	4.1%	-1.5%	0.5%	0.1%

Key: Top 3 | Bottom 3

Source: UBS Quantitative Research, Sample period is from Dec-2003 to Jul-2016, Portfolios are the top or bottom half of each MSCI universe by each factor (e.g. high ROIC in MSCI Japan real estate), cap weighted and rebalanced monthly. All returns are total returns and are in USD. Table shows excess annualised returns to each basket e.g. the annualised return to US high ROIC real estate stocks was 0.6% higher than the annualised return to US real estate.

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Sell	FSR is > 6% below the MRA.	15%	21%
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