

Market Spin Cycle

The rotation continues...

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Introduction

In "Market Spin-cycle: Understanding Style and Sector Rotation in a Flat Market", we investigated the sector and investment style rotations in the US market from March 1st through May 8th, 2014. In particular, we identified declining performance in growth-oriented styles associated with risk-taking behavior, such as Beta, Growth, and Momentum, with improving performance in Value, Profitability, and Size suggesting rotation in investment styles.

We provided evidence of significant differences in performance across sectors suggesting a sector rotation. We concluded that "the rotation of sectors and styles signals greater uncertainty about the speed of the economic recovery". Our view was supported by the revised GDP numbers which were released on June 25th, 2014, and showed that the economy registered a 2.9% decline in Q1 of 2014 rather than the earlier 0.1% GDP growth announcement of April 30th.

In this follow-up paper, we extend this analysis through the end of June 30th, 2014 and observe a significant *reversal in the rotation in investment styles* seen between March 1st and May 8th, 2014. Using MSCI Barra models, we identify a *decline in performance* of quality-oriented investment styles that appeal to risk-averse investors, such as *Asset Turnover, Profitability, Earnings Quality, Value* and *Size*¹ and an *outperformance of Beta, Growth, Momentum, and Residual Volatility*, growth-oriented investment styles that are associated with risk-taking behavior.

This reversal in style performance is observed across both *large- and small-capitalization segments* of the US market and *within majority of GICS® sectors*. As an example, *Growth* investment style has *outperformed in 9 out of 10 sectors* while *Asset Turnover underperformed in 9 out of 10 sectors*. An exception is the behavior of these investment styles in Financials. *Financials* is the only sector in which *Growth* investment style *performed poorly* while the quality-oriented style *Asset Turnover performed well* suggesting lingering concerns about financials among investors.

We also find that the performance impact of style rotation from March 1st through May 8th, 2014 and its reversal from May 9th through June 30th, 2014, has been significant for mutual fund managers. Both *large cap and total market mutual fund managers*, on average, have *significantly underperformed* their benchmarks from *March* 1st *through May* 8th, 2014, while *recovering* only a fraction of the underperformance from *May* 9th *through June* 30th, 2014².

The observed reversal in style rotation is supported by strong performance of major U.S. indexes; Dow Jones Industrial Average Index reached 17,000 points and S&P 500 Index climbed to 1985.

Investment Style Performance Update

In Figure 1 we present cumulative performance of Growth, Momentum, Beta, Value, Profitability, and Size investment styles from March 1st, 2013 through June 30th, 2014. We identify turning points in performance of the investment styles on March 1st, 2014 and on May 9th, 2014. Growth, Beta, and Momentum investment styles performed strongly prior to March 1st, 2014, performed poorly between March 1st and May 8th, and outperformed since May 9th.

¹ Size style refers to an investment strategy that takes long positions in large capitalization stocks while taking short positions in small capitalization stocks.

² In an upcoming paper, we will be directly attributing the performance of mutual funds to the style rotation we have observed during these periods.

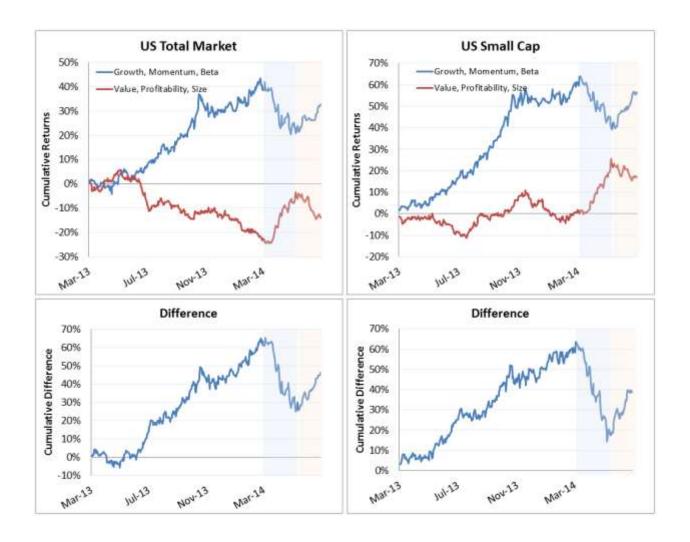


Performance of Value, Profitability, and Size investment styles is close to a mirror reflection of Growth, Beta, and Momentum. While we think that the change in investment style performance on March 1^{st} , 2014 was driven by economic growth concerns, the performance since May 9^{th} signals a positive change in sentiment.

Figure 1:

Growth, Momentum, and Beta vs. Value, Profitability, and Size Styles

March 1st, 2013 through June 30th, 2014



The change in investor sentiment since March 1st is further supported by performance of *Leverage* investment style in U.S. total market universe in Figure 2.

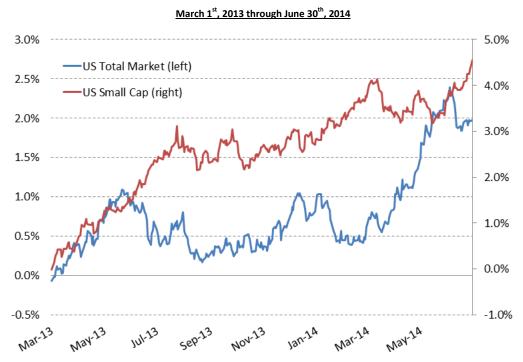
The strong performance of the *Leverage* style, which represents an investment strategy that takes long positions in highly-levered companies and short positions in less-levered companies, from March 1st through May 8th, 2014, is consistent with concerns of low economic growth and expectations about the Federal Reserve's continuation of accommodative policies. Highly-levered firms are expected to be beneficiaries of low interest rates. The sharp drop in the Leverage style performance in total market universe in June is consistent with a change in investor sentiment about economic growth and rising interest rates. Interestingly, the behavior of Leverage style in small cap segment of the market exhibits a



different behavior from the total market dominated by large cap firms. This may be partially related to the lower (vs. large capitalization firms) level of leverage used among small capitalization firms.

Figure 2:

Cumulative Returns of Leverage Style Factor



In Table 1 we look at the risk-adjusted performance of MSCI Barra US Sector Model styles across three periods identified in Figure 1: (i) March 1st, 2013 – February 28th, 2014, (ii) March 1st – May 8th, 2014, (iii) May 9th - June 30th, 2014. Growth-oriented styles were the top performers for the most recent period. Beta, Growth, Momentum and Residual Volatility all had positive returns. On the other hand, styles appealing to risk-averse investors, such as Value, Profitability, Size, Earnings Quality, and Asset Turnover have performed poorly during this period.

These observations suggest that investors are now more optimistic about the recovery of the U.S. economy and have become less risk-averse in their investment strategies.



Table 1:

Risk-Adjusted Performance of Select Investment Styles

March 1st, 2013 through June 30th, 2014

	Mar '13 - Feb '14	Mar 1 - May 8	May 9 - Jun 30	
Asset Turnover	1.2	0.8	(3.2)	
Profitability	(1.7)	2.7	(2.6)	
Earnings Quality	1.9	2.3	(1.8)	
Size	(0.7)	0.9	(0.6)	
Value	(0.9)	2.2	(0.2)	
Sentiment	(1.3)	2.3	(0.1)	
Momentum	1.1	(1.0)	1.0	
Residual Volatility	0.1	(1.6)	1.0	
Beta	0.4	(1.1)	1.1	
Growth	2.8	(1.2)	1.1	

Style by Sector Performance Update

To understand whether this rotation was consistent across all sectors, we examined the risk-adjusted performance of each of the investment style factors within and across sectors from the MSCI Barra US Sector Model in Table 2. We found that Beta and Growth styles performed positively across all sectors, with the only exception being Growth in Financials. This suggests that the shift in investment strategies has been broad-based rather than being driven by a few sectors.

Quality-oriented investment styles, such as Profitability, Earnings Quality, Asset Turnover, and Size, which tend to perform well when investors become more risk averse, have all underperformed recently. Both Profitability and Size had negative performance across 9 out of 10 sectors. The magnitude of the shift in investment styles varied across sectors. The shift from Profitability and Size to Beta, Momentum and Residual Volatility was more pronounced for Information Technology, Health Care and Consumer Discretionary, the same sectors in which these investment styles underperformed from March 1st through May 8th, 2014. The positive return of *Short-Term Reversal* style in 9 out of 10 sectors indicates that underperformers within these sectors from approximately 1 month ago are now favored by investors. This is especially true for Health Care stocks.

Financials, the exception in our analysis, is the only sector in which Growth investment style performed poorly and the quality-oriented investment style, Asset Turnover, performed well suggesting lingering concerns among investors.



Table 2:

Investment Style Risk-Adjusted Returns by Sector

May 9th through June 30th, 2014

	IT	EN	HC	UT	CD	MA	FIN	IND	CS	TEL
Short-Term Reversal	0.9	0.3	3.0	0.1	(0.1)	1.5	1.2	1.5	0.9	1.4
Growth	1.8	0.5	0.6	0.8	0.2	1.2	(0.9)	0.1	0.0	0.7
Beta	0.8	0.1	1.1	1.1	0.5	0.5	0.3	0.3	0.5	0.6
Residual Volatility	0.7	(0.7)	1.3	(0.8)	0.2	(0.1)	0.1	(0.0)	0.5	0.2
Momentum	0.1	1.2	0.2	(0.3)	1.6	0.8	0.3	(0.8)	0.0	(0.1)
Liquidity	1.2	(0.6)	(0.8)	1.2	1.5	0.5	(0.3)	0.8	0.2	0.1
Prospect	0.2	(0.4)	0.6	0.3	0.1	(0.6)	0.3	1.4	(1.2)	0.3
Seasonality	1.4	(1.5)	(1.7)	(0.2)	0.5	0.7	0.6	0.4	(0.7)	0.1
Leverage	(0.0)	1.6	0.5	(0.2)	(0.3)	(0.6)	0.1	0.3	0.0	0.1
Long-Term Reversal	(0.1)	0.4	0.7	0.6	(1.7)	(0.9)	0.0	0.8	1.1	(0.2)
Sentiment	0.5	(0.7)	(0.9)	0.4	(0.1)	0.7	0.5	0.6	0.5	(1.2)
Value	0.1	0.6	0.2	0.4	1.0	(0.4)	0.5	(0.6)	0.1	(0.4)
Size	(0.3)	(0.4)	0.3	(0.4)	(0.5)	(0.4)	(0.5)	(0.9)	(1.2)	(0.1)
Earnings Quality	0.3	(1.2)	(0.3)	(1.3)	0.1	0.5	(1.2)	0.1	(1.7)	(0.8)
Industry Momentum	(1.2)	1.4	(0.1)	(0.4)	(1.4)	(0.4)	(1.5)	0.6	(1.1)	(1.1)
Profitability	(1.0)	(0.7)	(1.9)	(1.2)	(1.3)	(0.4)	(0.6)	(0.7)	0.6	(1.4)
Asset Turnover	(0.1)	(2.7)	(0.4)	(0.2)	(1.1)	(0.7)	1.1	(1.6)	(1.1)	(0.4)

TEL: Telecom, EN: Energy, CS: Consumer Staples, UT: Utilities, IND: Industrials, MA: Materials

FIN: Financials, IT: Information Technology, HC: Health Care, CD: Consumer Discretionary

Mutual Fund Performance

Mutual funds have been impacted by the recent style rotation and its reversal. While both Large Cap and Total Market managers have underperformed their benchmarks, -1.9% and -2.0%, respectively, from March 1^{st} through May 8^{th} , they have recovered only a fraction of this underperformance since May 9^{th} (Table 3).

The outperformance of the Large Cap and Total Market funds mirrors the outperformance of the Growth/Beta/Momentum styles and suggests that these represent the style tilts of the average fund manager during this period. In an upcoming research paper, we will expand on this observation to take a deeper look at the recent performance of mutual funds as well as their style tilts.



Table 3:

Mutual Fund Active Returns

March 1st, 2013 through June 30th, 2014

Mar '13 - Feb '14 Mar 1 - May 8 May 9 - Jun 30

Large Cap	0.3	(1.9)	0.3
Total Market	1.1	(2.0)	0.6
Small Cap	(1.0)	1.1	(1.3)

Conclusion

In this paper, we extend the analysis in "Market Spin-cycle: Understanding Style and Sector Rotation in a Flat Market" through June 30th, 2014 and identify a shift in investor sentiment with respect to economic growth from pessimistic back to optimistic on May 9th, 2014.

We identified declining performance in quality-oriented investment styles that appeal to risk-averse investors, such as Asset Turnover, Earnings Quality, Profitability, Size, and Value and improving performance in Beta, Growth, Momentum, Residual Volatility, growth-oriented styles that are associated with risk-taking behavior.

The reversal in the style rotation appears to be broad-based and consistent across most sectors of the economy. An exception is the behavior of Asset Turnover and Growth investment styles in Financials. Financials is the only sector in which the Growth style performed poorly but the quality-oriented Asset Turnover style performed well, suggesting lingering concerns about Financials.

The effect of this rotation can be seen in the performance of mutual funds. Large Cap and Total Market managers significantly underperformed their benchmarks from March 1st to May 8th, 2014 and recovered only a fraction of this underperformance through June 30th, 2014. In an upcoming paper, we will be attributing the performance of mutual fund managers to the rotation in investment styles we observed over this period.



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¹ As of September 30, 2013, as reported on January 31, 2014 by eVestment, Lipper and Bloomberg