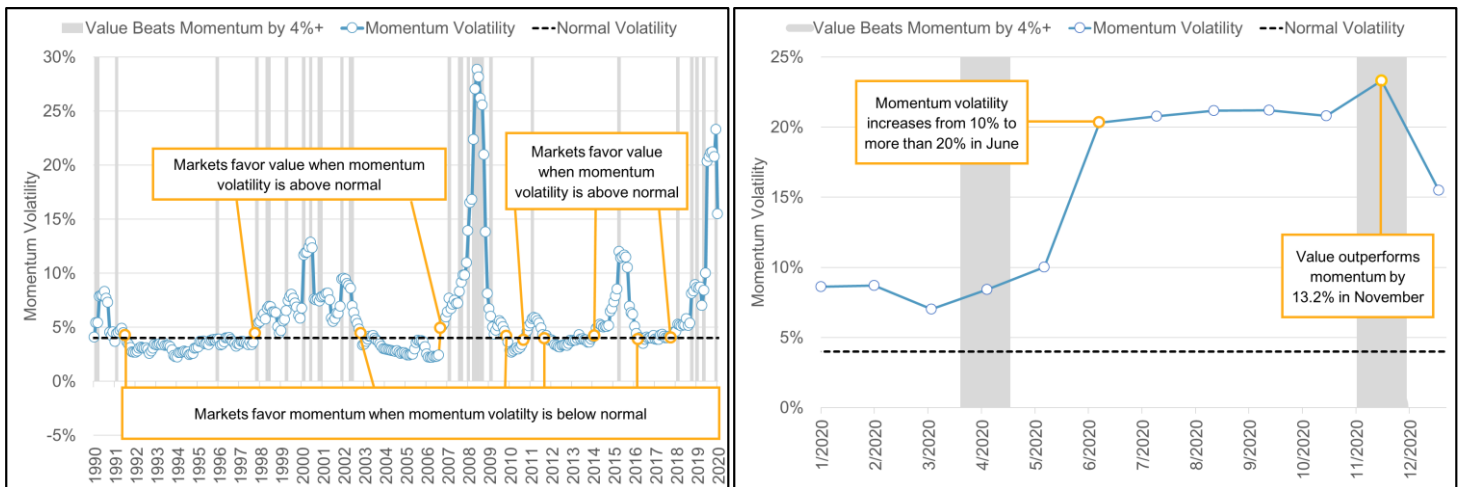


Leadership Change That Matters: A Value and Momentum Story

Markets rotate between types of stocks when investment attributes fall in and out of favor. By at least one indicator, the rotation from momentum to value which began last summer appears to be aging. Cheap stocks (value stocks) earned a premium over stocks with high prior returns (momentum stocks) across the globe in the second half of 2020. Value stocks have historically outperformed momentum stocks when the volatility of returns to momentum is elevated, a previously documented¹ relationship that has held globally.

- **The volatility associated with momentum began to climb in June 2020, peaked in November, and has declined since. Value outperformed momentum over the same time.**
- **Volatility remains at elevated levels, indicating that the rotation may continue until momentum again resumes its leadership.**
- **Investors should monitor how the volatility of momentum evolves as value stocks have historically led until the volatility of returns to momentum returns to normal. Current volatility remains at high levels, not seen since the Great Financial Crisis.**

Figure 1. Style Outperformance Coupled with Momentum Volatility (Russell 3000)



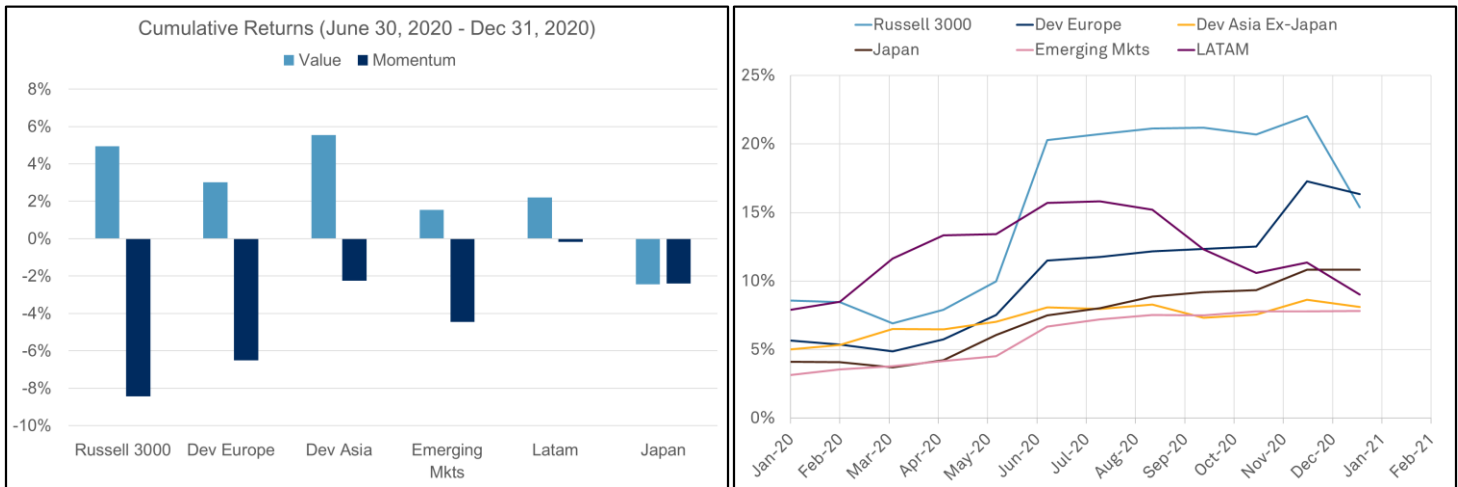
Source: S&P Global Market Intelligence Quantamental Research. Data as of January 11, 2021. Indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results.

Historically, the momentum style (also called ‘trend following’) has worked well when trends persist but crashes when trends change. For example, as markets began to recover from the Great Financial Crisis in 2009, momentum in the Russell 3000 universe saw a 48% drawdown. Just prior to this drawdown, momentum’s volatility² increased to 28%, seven times higher than the median 4.05% over the 30-year period (Figure 1). Value continued to dominate momentum until volatility returned to its baseline in 2010. Momentum returns were positive over the next 5 years (2010-2015), averaging a 6% return per year. Then in 2016, momentum’s volatility again saw double digits and returned -9.6% over the year. **In June of 2020, volatility in the**

¹ Sandberg, D.J., 2019. “Value and Momentum: Everywhere, But Not All the Time.” S&P Global Quantamental Research <https://www.spglobal.com/marketintelligence/en/news-insights/research/value-and-momentum-everywhere-but-not-all-the-time>
² Volatility is defined as the standard deviation of daily returns over the previous 126 trading days.

momentum style reached levels that have not been seen since the Great Financial Crisis. The value style outperformed the momentum style in the second half of 2020 by more than 10%. Volatility in momentum remains near its highs as of year-end 2020, which has historically indicated additional upside to value stocks.

Figure 2. Value and Momentum Style Performance (Left) and Momentum Volatility (Right), Global Regions



Source: S&P Global Market Intelligence Quantamental Research. Data as of January 11, 2021.

A similar rotation, favoring value stocks over momentum stocks, has been seen in most regions of the world (Figure 2, left). Momentum volatility has increased globally (Figure 2, right): in the Russell 3000 index, momentum breached 15% in June, a level not seen since the Great Financial Crisis; in the Developed Europe BMI, volatility reached all-time highs over the study period; in the Developed Asia (ex-Japan) BMI and in the Japan BMI, volatility reached levels not seen since 2009; and levels in the Emerging Markets BMI and Latin America (LATAM) BMI are at 5- and 3-year highs, respectively.

Many top momentum names (first quantile), such as Apple (APPL +46.01%), Alphabet (GOOGL +23.6%), and Amazon (AMZN +18.1%), had positive double digit returns for the second half of 2020. In the Russell 3000, the long side of the momentum style returned 28.1% from June 30, 2020 through December 31, 2020. However, the short side did better at 47.1%, breaking the momentum strategy. Many of the 'momentum underdogs' (stocks in the bottom quantile ranked by the momentum factor) are considered top value stocks (stocks in the top quantile ranked by the value factor). Some of these 'high value momentum underdogs' had notable performance in the second half of 2020, such as home storage product provider The Container Store (TCS +194.4%); home comfort and security solutions provider Resideo Technologies (REZI +81.4%); financial services and car finance provider Ally Financial (ALLY +82.8%); and non-invasive depression therapy provider Neuronetics (STIM 475.7%). However, the rotation was driven by more than just a few names. The median 6-month return, a measure less impacted by outliers than the average return, for stocks in the top quantile of momentum was 17.8% whereas the bottom quantile return was 36.2%.

Value and Momentum Style Portfolios

The value investment style involves buying (sell) stocks that have a low (high) price relative to some intrinsic value; whereas the momentum investment style involves buying (sell) stocks that have performed well (poorly) over some previous period. In the implementation used here, value stocks were scored by the ratio of the company's book value to its market value; momentum stocks were scored by the trailing 12-month return less the trailing one-month return. All stocks are ranked and quantiled³ relative to the other securities in the same sector.⁴ A style portfolio is then formed from equally-weighted long positions in the top quantile stocks and equally-weighted short positions in the bottom quantile stocks, rebalanced monthly.

Data

This research utilizes S&P Global's Alpha Factor Library and Compustat Point-in-Time Fundamentals. Alpha Factor Library includes 500 stock selection and industry-specific signals spanning seminal academic literature and S&P Global's Quantamental Research articles. Signals cover a global universe of over 40,000 securities including both Developed and Emerging Markets. Compustat Point-in-Time Fundamentals provides financial statement data and common ratios with history back to 1950 and point-in-time snapshots since 1987.

Conclusion

A previously published metric that has historically signaled a rotation out of the momentum style and into the value style, successfully signaled the momentum-to-value rotation that occurred in the last quarter of 2020. The signal, increased volatility in the momentum style portfolio, has been heavily favoring value since June 2020 in six geographies. Historically, increased volatility in the momentum style preceded a decline in momentum returns. The market participants using this indicator would have seen a signal to overweight value and underweight momentum for the second half of 2020. This research brief details the indicator values and timing of the rotation that occurred in 2020 and shows that the mechanics of the rotation, i.e. outperformance of the short side of the momentum style and long side of the value style, were consistent with previous rotations. Historically, value has continued to outperform momentum until the volatility of returns in the momentum portfolio returns to baseline.

³ Top (bottom) quantile represents the 20% of names in the universe with the most (least) attractive factor value after ranking within the same sector.

⁴ Global Industry Classification Standard (GICS) Level 1.

Our Recent Research

December 2020: Warranted Optimism: Sentiment vs. Supply Chains

December 2020: A Dark Winter for REITs: Trouble Brewing

October 2020: Sweet Spots in the C-Suite: Executive Best Practices for Shareholder Friendly Firms

The Business Roundtable, an association of CEOs of America's leading companies, published a new statement on corporate responsibility in August 2019. The statement identifies five important corporate stakeholders: customers, employees, suppliers, communities and shareholders.¹ This report highlights four key types of executive policy that drive value creation for stakeholders: profitability vs. growth decisions, mergers & acquisitions policy, return of cash to shareholders, and insider stock ownership. In it, we demonstrate empirically those practices that increase corporate value over time, thereby rewarding shareholders, employees, and other stakeholders. These practices also form a scorecard by which stakeholders can evaluate whether or not management is undertaking actions likely to increase corporate prosperity.

October 2020: Just the (Build)Fax: Property Intelligence from Building Permit Data

August 2020: The Analyst Matrix: Profiting from Sell-Side Analysts' Coverage Networks

Sell-side analyst coverage data provides a new and rich source of establishing connections between firms, as analysts (given their industry expertise) are likely to cover fundamentally related firms. This report uses sell-side analysts' coverage data to build a connected-firm network (CFN) - a portfolio of companies that are covered by analyst(s) that follow a focal firm. This network has three broad applications: measuring the "strength" of economic relationships between companies; forecasting fundamentals of companies in the network; and as a stock selection signal.

June 2020: The Information Supply Chain Begins Recovering From COVID

May 2020: Never Waste a Crisis: Following the Smart Money Through Beneficial Ownership Filings

May 2020: Risky Business: Foot Traffic, Vacancy Rates and Credit Risks

May 2020: Finding the Healthy Stocks in Health Care During Lockdown

May 2020: No More Walks in the (Office) Park: Tying Foot Traffic Data to REITs

May 2020: Do Markets Yearn for the Dog Days of Summer: COVID, Climate and Consternation

April 2020: Cold Turkey - Navigating Guidance Withdrawal Using Supply Chain Data

April 2020: Data North Star - Navigating Through Information Darkness

March 2020: Long Road to Recovery: Coronavirus Lessons from Supply Chain and Financial Data

COVID-19 continues to disrupt global supply chains in unprecedented ways. Leveraging maritime shipping data from Panjiva, this report includes a review of trade and financial data to analyze the impact of the SARS-CoV-2/ COVID-19 coronavirus outbreak. Findings include:

- Second-order supply chain effects are also emerging with the apparel industry now seeing a shortage of materials globally due to earlier outages in China.
- Retailers including Costco and Target are gaining from increased sales of health- and personal care products. Yet, supply shortages are rapidly emerging in part due to medical supply export restrictions in several countries.
- There is a notable, but not statistically significant, relationship with firms with higher exposure to Asia having seen a weaker sector neutral stock price performance.

February 2020: Ship to Shore: Mapping the Global Supply Chain with Panjiva Shipping Data in Xpressfeed™

World merchandise trade accounted for an estimated \$19.7 trillion in 2018, about 90% of which is by sea. While financial data tells us “how a company has done in the past,” shipping data provides a closer-to-real time indicator of “what a company is doing now.” Panjiva’s shipping data allows investors to track trends, identify anomalies, and assess risks for companies engaged in international trade. This paper illustrates how to find investment insights in Panjiva’s US seaborne and Mexican datasets using the US auto parts industry as a case study.

Findings include:

- Shipment trends often lead fundamentals: Rising shipments amid flat or declining fundamentals may signal future financial trend reversal
- Growth in the number of a company's suppliers and in the types of products it imports may signal strengthening demand and/or product line diversification.
- Tracking industry-level product-line trends can help identify companies with significant exposure to rising or declining product lines.

January 2020: Natural Language Processing – Part III: Feature Engineering Applying NLP Using Domain Knowledge to Capture Alpha from Transcripts

Unstructured data is largely underexplored in equity investing due to its higher costs. One particularly valuable unstructured data set is S&P Global Market Intelligence's machine readable earnings call transcripts.

- Topic Identification – Firms that referenced the most positive descriptors around their financials outperformed historically.
- Transparency – Firms that provided greater call transparency exhibited by executives' behaviors and decisions outperformed historically.
- Weighted Average Sentiment – Quantifying call sentiment using a weighted average construct led to better returns and less volatility historically.
- Additive Forecasting Power – The newly introduced signals demonstrated additive forecasting power above commonly used alpha and risk signals historically.

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