Stock Screener introduction – A value application

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Research Signals

As the latest enhancement to our Research Signals web platform, we introduce a new Stock Screener application which allows users to screen across global equities and test new strategies, using 400+ signals from our signals library. To demonstrate the Stock Screener's functionality, we investigate market developments subsequent to the 9 September 2019 **outlying event** marking the exceptional outperformance of value factors relative to momentum and growth in the US.

- We introduce a framework to quickly design, test and generate custom strategies by filtering on factors and style models across multiple global universes
- The Stock Screener offers detailed attribution analysis of classification and factor exposures along with return series over time
- We present an example demonstrating the ease of exploring value and growth portfolio attributes, establishing a conceptual basis to generate trade ideas centered on value candidates with defensive characteristics and projected growth attributes

Stock Screener

The Stock Screener tool, located in the Analyze group of functions, provides users with a framework to quickly design trade ideas using multi-layered filters on our extensive library of 400+ factors and five central thematic style models – Deep Value, Earnings Momentum, Price Momentum, Relative Value and Value Momentum. Factors range from classical value, quality, growth, momentum and risk factors to proprietary measures such as securities lending, CDS, cybersecurity and dividend forecasts. The screens can be applied across multiple global universes along with sector and industry groupings, several of which can be enhanced with our industry-specific factors – Banks and Thrifts, Airlines, Oil and Gas, Insurance and Automotive.

It also offers numerous ways to further review universe exposures, both current and over time. At the classification level, market cap, sector and regional exposures provide a quick overview of the changing dynamics of the filtered universe over the selected timeframe. Additional attribution analysis is conveyed via factor exposures for a few of the more common risk factors, including Short Interest, Adjusted Beta, Book-to-Price, Dividend Yield, Price Momentum, Growth, Leverage and Estimates Revisions.

Detailed returns analysis rounds out the universe exposures based on the selected frequency. Holding period returns and cumulative results are displayed, with a toggle between equal and market cap weighted results. Up to three prior saved screened universes and MSCI indices – World, USA and Emerging Markets – can be overlaid on the return

series. Lastly, summary statistics include returns mean, standard deviation and information ratio along with average number of stocks and market cap.

A list of the resulting filtered securities is made available for further analysis of single name positioning and attribution. Pertinent filtering criteria and basic stock classifications and details are displayed along with a heatmap allowing users to simultaneously visualize market cap exposures and returns at the stock level. Holdings can also be exported for use in other platforms.

Value application

To demonstrate the utility and simplicity of our Stock Screener, we develop an example for use in a value application. To set the stage, we first acknowledge developments in the extended growth cycle during the low interest rate post-financial crisis period that we **reported** on in July of last year. In particular, we drew attention to some signs of convergence in institutional and retail investor sentiment favoring value stocks and the rich earnings multiples of growth stocks relative to value. In fact, with the help of the boost in value versus growth and momentum on 9 September 2019, value made up considerable ground on growth (Figure 1), keeping pace with it on a cumulative basis and finishing the year slightly in the lead, while giving up just a slight bit of ground on momentum at the year's end (Figure 2), after topping the strategy in early November, according to the IHS Markit ETF Analytics database.

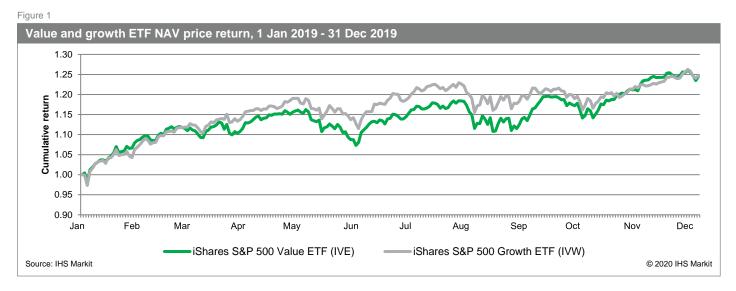
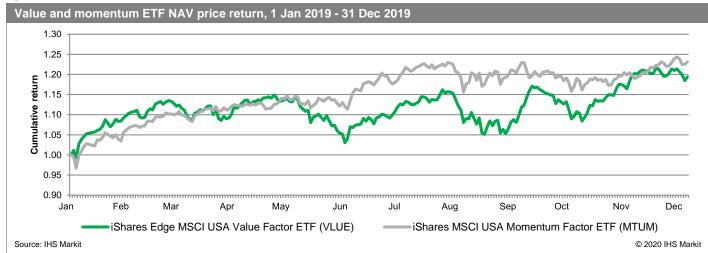


Figure 2



We thus turn to the Stock Screener to evaluate value and growth strategies. First, we look at the factor exposures of stocks ranked in the top decile of two common factors representative of value and growth styles, namely TTM Earnings Yield and Reinvestment Rate, respectively. Figure 3 details the Stock Screener interface where we select the US Large Cap universe (approximately 1,000 names) with results on a monthly frequency. Figure 4 demonstrates the filter criterion with the selection of TTM Earnings Yield for which we screened for stocks which fall between percentile rankings between 1 and 10 in order to arrive at the top decile of the most undervalued names.

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In a similar manner, we create a filter on the top decile of Reinvestment Rate for comparison with the highest growth names. The tool allows us to visualize various exposures over time, where we focus on factor exposures, particularly that of Book-to-Price for both the value (Figure 5) and growth (Figure 6) screens. Of the approximately 100 names which passed the screens, we find that the spread between Book-to-Price z-scores has recently widened, particularly driven by the increase in that for TTM Earnings Yield.

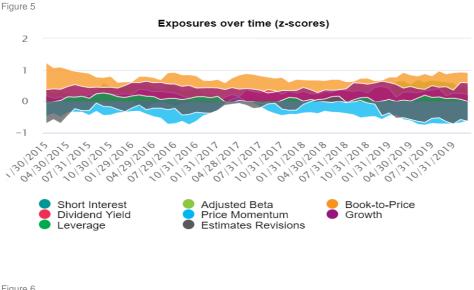
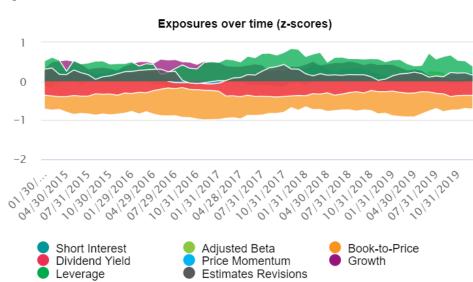
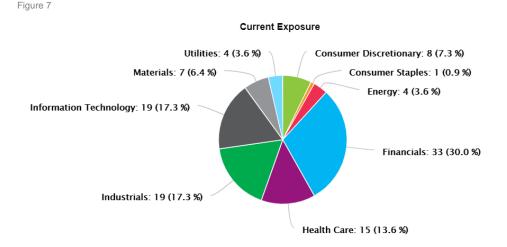


Figure 6

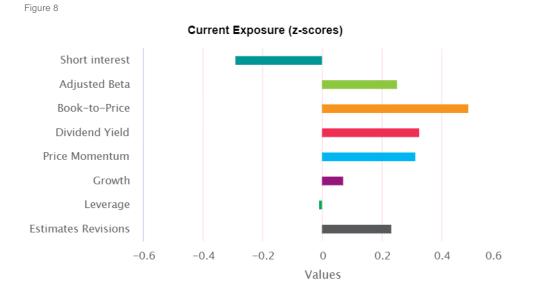


Thus, we turn to our Deep Value Model as an example of a systematic process for value investing for further analysis. Here we again use the Stock Screener platform to quickly design and test a sample value portfolio. In particular, looking at the sector exposures of decile 1 stocks, the results reveal the largest exposure is to Financials at 30.0% (Figure 7), consistent with the industry practice of associating Financials as a value sector.



Building on our analysis of value stocks, particularly those in the Financials sector, we can easily construct a defensive strategy for stock selection if one expects the value cycle to continue. The defensive strategy is based on the assumption that share buybacks can help buffer recently improved stock prices, while an improving dividend policy would also provide evidence of healthy earnings. With these assumptions, we can create a screen which filters on Financials stocks with negative (< -1%) Percent Change in Shares Outstanding and positive (> 5%) 1-Year Growth of Quarterly Regular Dividend.

Again, under the expectations of an extension in value's recent outperformance, factor exposures (Figure 8) show positive Price Momentum, Growth and, most interestingly, Estimates Revisions, which all align with an assumption that value is expected to outperform growth when earnings are expected to grow.



Conclusion

We introduce the newest feature on the Research Signals platform, the Stock Screener, enhancing our framework from which strategies can be prototyped, tested and developed using our suite of tools. This new module offers clients an efficient way to quickly design, evaluate and launch custom strategies using multi-layered factor and model filters

across regional universes. Features include charts to analyze classification, factor and return exposures of generated trade ideas and monitor their changing dynamics over time, along with an exportable security list for use in other platforms.

To demonstrate the ease in conducting a detailed stock-level analysis of a systematic strategy, we took the opportunity to explore value and growth filtered portfolios in light of recent market anomalies. Current valuations suggested that, if we expect a continuation in the value style, we should pursue a trading strategy based on our Deep Value Model where we found a large exposure to Finanicals. Using these results, we created a two-layered defensive strategy which revealed desirable momentum and expected growth attributes.

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