

# RUSSELL GROWTH AND VALUE:

# Adding Value Via Large-Capitalization Style Index Futures

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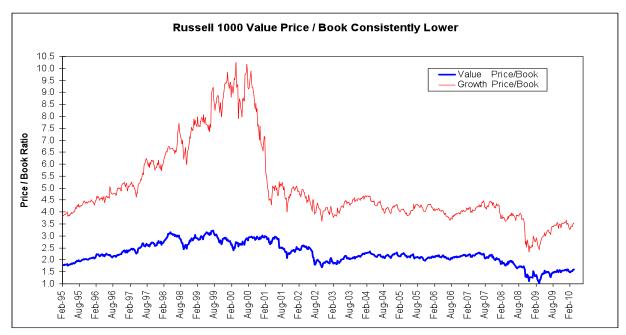
Institutional large-capitalization managers benchmarked to either a value or a growth style now have index futures on the Russell 1000° Value and Growth indices traded on ICE Futures U.S.° with which to work. These same index futures can be used by large-capitalization managers not benchmarked to a given style to add or shed exposure to a given style and to the particular issues included in those indices. These futures are cash-settled to the underlying Russell 1000 Value and Growth indices and thus assure managers of achieving the identical risk and return characteristics of those indices in a passive manner while adjusting individual issues to add alpha actively.

The Russell 1000 Value and Growth index futures join ICE Futures U.S. slate of Russell index futures on the Russell 1000 and Russell 2000° indices. In addition, both the Russell 1000 Value and Growth indices are accessible via popular exchange-traded funds, the best-known of which are the iShares IWD and IWF, respectively, in addition to the index futures traded on ICE Futures U.S.

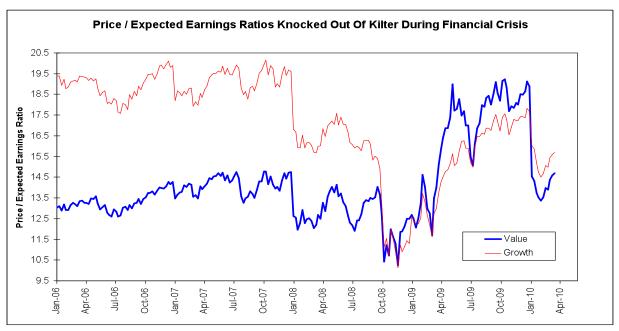
## THE RUSSELL 1000 STYLE INDICES

The Russell 1000 includes 1,000 or fewer of the largest U.S. firms by market capitalization and represents about 90% of the U.S. market; if an issue disappears because of bankruptcy, merger or other corporate action, it is not replaced until the next index reconstitution. The index is reconstituted on a June 30<sup>th</sup> annual cycle.

The Russell 1000 Growth index measures the performance of the Russell 1000's growth segment, which is defined to include firms whose share prices have higher price-to-book ratios and higher expected earnings growth rates. The Russell 1000 Value index measures the performance of the Russell 1000's value segment, which is defined to include firms whose share prices have lower price-to-book ratios and lower expected long-term mean earnings growth rates.



The importance of using a bottom-up long-term growth rate for earnings is underscored by the variability of forward-looking top-down expected price-to-earnings ratios. These market-driven estimates can and do become unstable during times of financial stress.

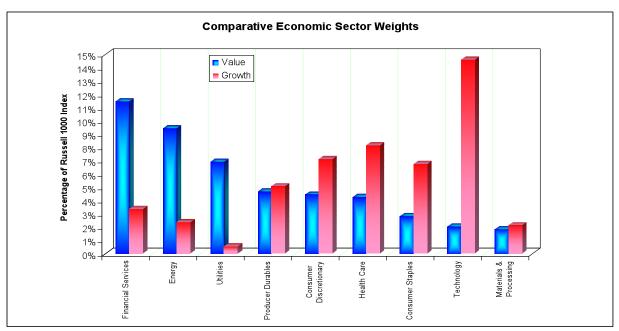


Source: Bloomberg

Once each stock in the Russell 1000 index is ranked along the variable of price-to-book and I/B/E/S' forecast long-term growth rates, a composite value score (CVS) is created. Each stock is ranked along the CVS dimension and a non-linear probability algorithm is applied thereto to determine style membership weights. Approximately 70 percent of the issues are classified as uniquely Value or Growth; the remaining approximately 30 percent receive a proportional weighting between the two style indices. A full discussion of the methodology is available at <a href="http://www.russell.com/indexes/documents/Methodology.pdf">http://www.russell.com/indexes/documents/Methodology.pdf</a>.

#### SECTOR WEIGHTINGS: THE KEY DRIVER

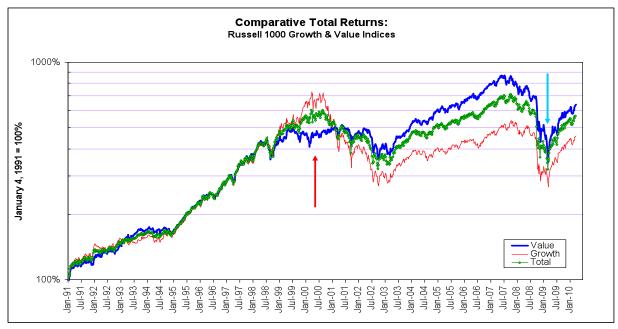
The sector composition of the Value and Growth indices differ significantly. The Value index is comparatively overweighted in the Financial Services, Energy and Utility sectors. The Growth index is overweighted in the Technology, Consumer Staples, Health Care and Consumer Discretionary sectors.



Source: Bloomberg

The different weights for the two indices are critical in determining return differentials, not only for the Value and Growth indices themselves, but for the individual sectors themselves. If the total returns for each style are mapped by economic sector relative to those for the entire Russell 1000, key differences emerge. For example, the Value index' Consumer Discretionary and Materials & Processing sectors outperformed both their Growth index counterparts and the Russell 1000 index handily over the period selected, while the Growth index' Utility and Energy sectors underperformed both their Value index counterparts and the Russell 1000 index itself.

The net result over two decades has been a highly sector-driven relative return history. Two dominant features are visible. The first, highlighted with a red arrow, is the outperformance of the Growth sector during the 1990s technology bubble; it returned to and through the mean during the 2000-2002 bear market. The second, highlighted with a blue arrow, is the 2007-2009 underperformance of the Value sector as financial issues collapsed. These two episodes are so large they visually obscure all other developments in relative performance.



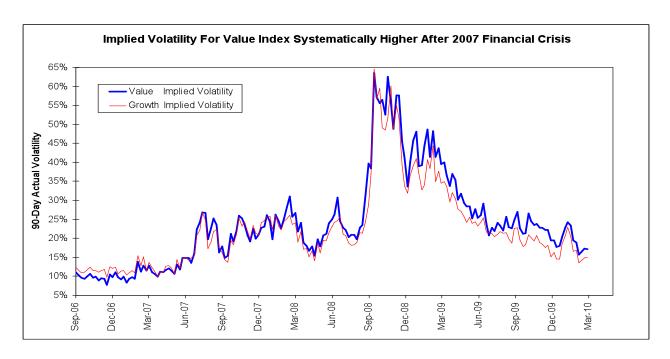
Source: Bloomberg

#### INDEX CHARACTERISTICS

Just as a book cannot be judged by its cover, an index cannot be judged by its name. As economic sectors rotate into and out of favor, risks and returns for those sectors shift and their unbalanced representation within the Russell 1000 Value and Growth indices produces significant shifts in index characteristics. While "growth" sounds more volatile than "value," the data do not confirm the prejudice.

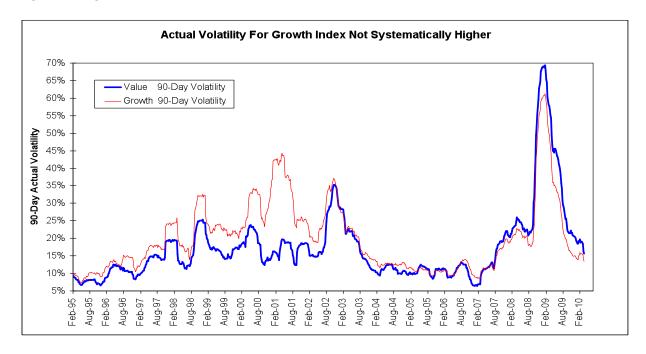
The implied volatility of the Value index has been consistently higher than that of the Growth index since the start of the financial crisis in 2007. These volatilities are measured using the IWD for the Value index and the IWF for the Growth index as the respective futures did not exist over this period.

This shift in forward-looking insurance costs is attributable to the aforementioned collapse of the financial sector during this period. While data are unavailable for the 2000-2002 bear market, we can surmise the implied volatility for the Growth index would have been greater given the collapse in the technology sector.



Source: Bloomberg

A comparison of 90-day historic volatilities for the two style indices confirms the absence of a systematic bias. The historic volatility of the Growth index was higher during the 1990s, a reflection of the technology sector's dominance. Unsurprisingly, the historic volatility of the Value sector was higher during the financial crisis in reflection of the financial sector's dominance.



The sector- and regime-dependence of the Value and Growth indices both in terms of return and of volatility means are betas are highly time-variant. Over the past five years, the following betas are calculated:

- Growth = 0.926 \* Russell 1000 + .033; r<sup>2</sup> = .966
- Value = 1.08 \* Russell 1000 .033; r<sup>2</sup> = .972
- Value = 1.092 \* Growth .066; r<sup>2</sup> = .88

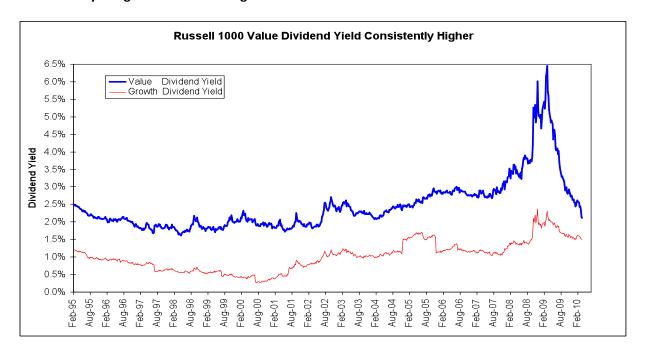
These betas reflect the greater variance of returns for the Value index. Adding Value index futures to a large-capitalization portfolio will, as of early 2010, raise both its risk and its expected return. Such a statement would have been considered perfectly absurd in 1999 and no doubt will be considered perfectly absurd again someday.

As noted above, the CVS score used to classify a stock's membership, unique or weighted, in a style index uses the I/B/E/S mean growth rate of earnings. A backward-looking measure familiar to many investors, adjusted (exclusive of extraordinary items) twelve-month trailing price-to-earnings ratios, varies significantly over time for the Value and especially for the Growth index.

The Growth index' price-to-earnings ratio reached unsustainably high levels sometime in the 1998 timeframe and then proceeded to move significantly higher into the eventual bust in 2000. The Value index' price-to-earnings ratio never reached similar heights before its downturn starting in 2007; it rose into 2009 as trailing earnings had declined.



As dividend payouts tend to be higher for the Value index – 2.11 percent as opposed to 1.50 percent for the Growth index at the end of the first quarter of 2010 – the dividend yield of the Value index tends to be both higher and more variable than the Growth index' dividend yield. Its jump during the 2007-2009 financial crisis stands as a counterpoint to the trailing price-to-earnings ratio jump witnessed by the growth index during the 2000-2002 bear market.

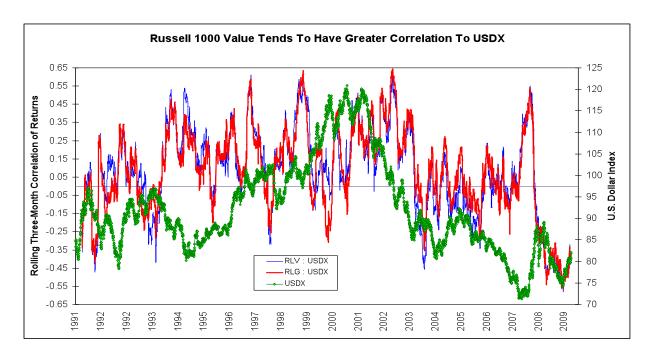


Source: Bloomberg

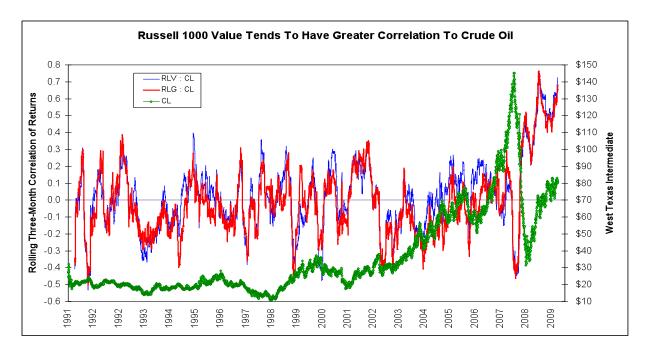
#### LINKS TO EXTERNAL MARKETS

The differential performance and characteristics of the Russell 1000 Value and Growth indices tend to derive more from events than from stable factor arbitrages. This is readily obvious with the two extreme developments, the bear markets of 2000-2002 and of 2007-2009, referenced above. However, certain key external markets such as the U.S. dollar index (USDX°) and crude oil do have differential effects across the style indices.

Two key points emerge. First, a rolling three-month correlation of returns between both external markets and the Russell 1000 Value and Growth indices is highly unstable; there is no definite relationship such as "USDX down / stocks up," or "crude oil up / stocks down." Both oscillate significantly over time and change signs. Second, the Value index is given to greater absolute changes in both directions against both external markets. The supposedly more placid Value index is in fact buffeted about more by external developments.



Source: Bloomberg



## **CONCLUSION**

The Russell 1000 Value and Growth futures are suited perfectly for institutional investors needing to equitize cash or to add or shed exposure to or from their portfolios before and after stock exchange hours. Each future represents \$100 times the value of its respective index. The cash-settled futures can be retained to expiration and settled as cash, or they can be exchanged for ETFs such as the IWD or IWF or liquidated before expiration for a basket of specific stocks designed to add alpha. The respective betas of 1.08 for the Value index and .926 for the Growth index allow a large-capitalization manager to add or shed market risk by tilting the portfolio with futures.

Finally, the style index futures can be traded as separate instruments as well, or in spreads against each other and against the Russell 1000 future or the ETFs. The futures' trading hours, from 2000 EST to 1800 the next day, allow managers to react to events in non-U.S. trading hours, an increasingly important concern.

This paper serves as an overview of the Russell Index futures and options markets of ICE Futures U.S. Examples and descriptions are designed to foster a better understanding of the Russell Index futures and options market. The examples and descriptions are not intended to serve as investment advice and cannot be the basis for any claim. While every effort has been made to ensure accuracy of the content, ICE Futures U.S. does not guarantee its accuracy, or completeness or that any particular trading result can be achieved. ICE Futures U.S. cannot be held liable for errors or omissions in the content of the paper. Futures and options trading involves risk and is not suitable for everyone. Trading on ICE Futures U.S. is governed by specific rules and regulations set forth by the Exchange. These rules are subject to change. For more detailed information and specifications on any of the products traded on ICE Futures U.S., contact ICE Futures U.S. or a licensed broker.

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