

Size Doesn't Matter In Index Spreads

If indices did not exist, would we have to create them? As the Dow Jones Industrial Average was created in 1896, none of us has lived in a world without stock indices; apologies to anyone older than 112 offered in advance. The original DJIA was created not to support performance analysis or to underlie futures, options or ETFs, but rather to give a shorthand description of what was then a newfangled asset class, common stocks of non-railroads, did on a given day.

All of this has changed, of course. In a variation of the Heisenberg Uncertainty Principle, we now know the act of indexation changes investor behavior and therefore affects the behavior of the stocks in that index regardless of their so-called fundamentals. And once we create indices, we created all manner of derivative trading strategies that would not exist in their absence.

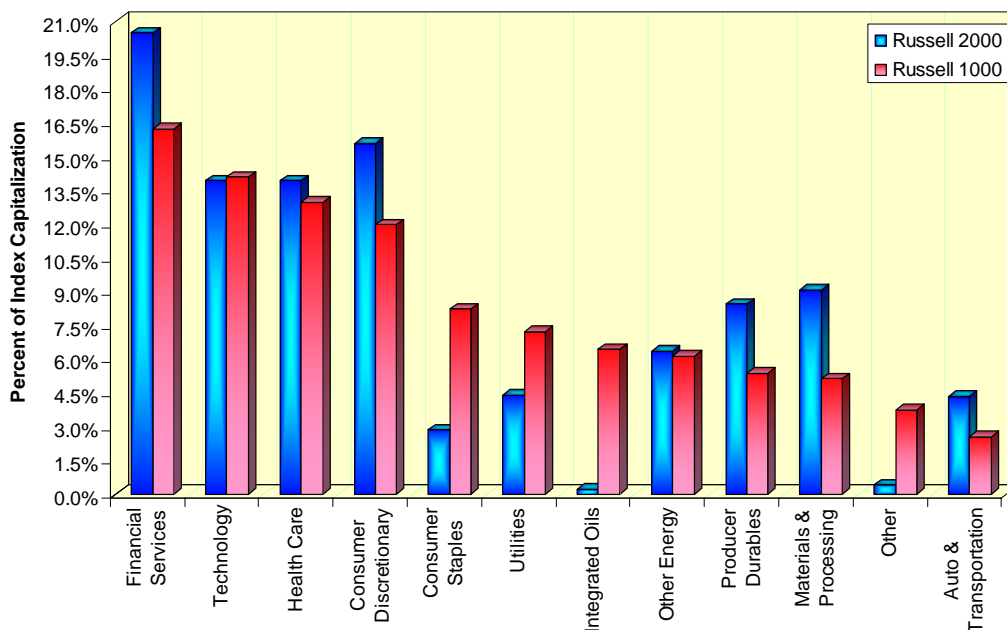
Intrinsically, there is no such thing as a big capitalization stock or a small capitalization stock. Until we aggregate them together and create both trading instruments and performance benchmarks around them, the simple reality is both “big” and “small” are states of mind, not properties that should matter a whit in valuation.

The Russell 1000-Russell 2000 Spread

All of that is a noble sentiment well-expressed in a world drowning in indices. Let's take a look at a common size trade, the large-capitalization Russell 1000 (R1) versus the small-capitalization Russell 2000 (R2). A tradable spread needs something to generate different returns between the two legs. In the case of the R1-R2 spread, the generator is the different weights in its economic sectors and industry groups. The R1 has a greater weight in consumer staples, utilities, integrated oils and my personal favorite, “other.”

In case you are wondering what is included in “other,” the answer is some minor stocks like General Electric, 3M, Honeywell and Tyco. The sector accounts for 3.733% of the R1's capitalization. As an aside, the United Nations has a region called, “Western Europe and Other.” Here “other” is the United States and Canada.

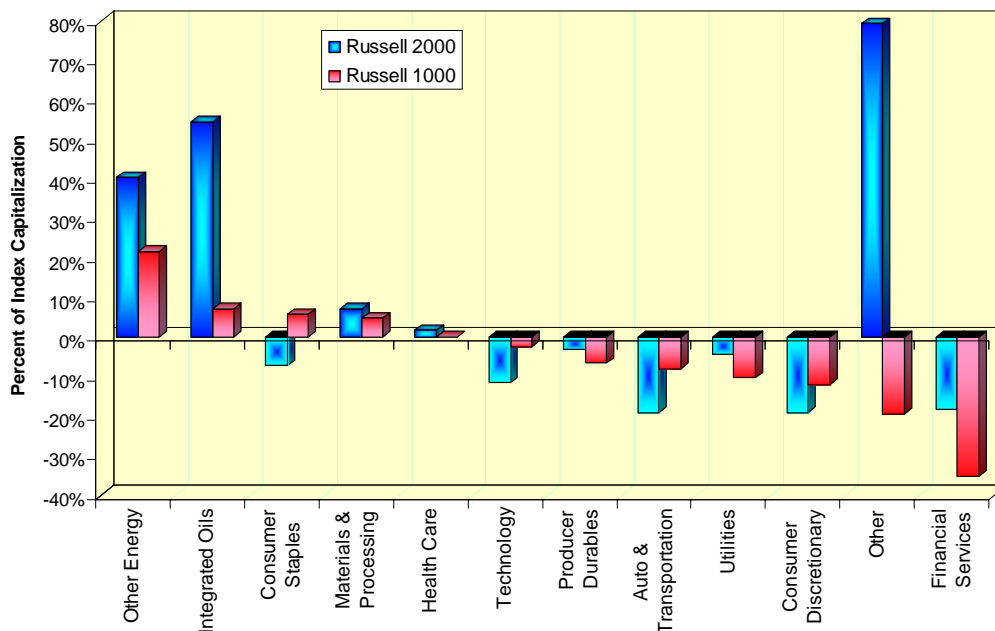
Comparative Economic Sector Weights



The comparative total returns of these sectors over the past year is somewhat deceptive in telling us where some of the spread potential lies. For example, the R1's financial services sector has taken a beating, as has R1's Other sector. But look at that outsized performance of the R2's Other sector; this index includes Brunswick, Compass Diversified Holdings, Gencorp, Gentek, Kaman, Lancaster Colony, Raven Industries and United Capital and accounts for only 0.398% of the R2's capitalization.

Also, take a look at the performance of the R2's integrated oil sector. Before you get in a lather about its 54.5% trailing total return, ask yourself what a small integrated oil company may be. The answer, for inquiring minds, is Delta Petroleum, GMX Resources, Ram Energy and Vaalco Energy. Not the crowd to go mano-a-mano with ExxonMobil and Chevron, is it?

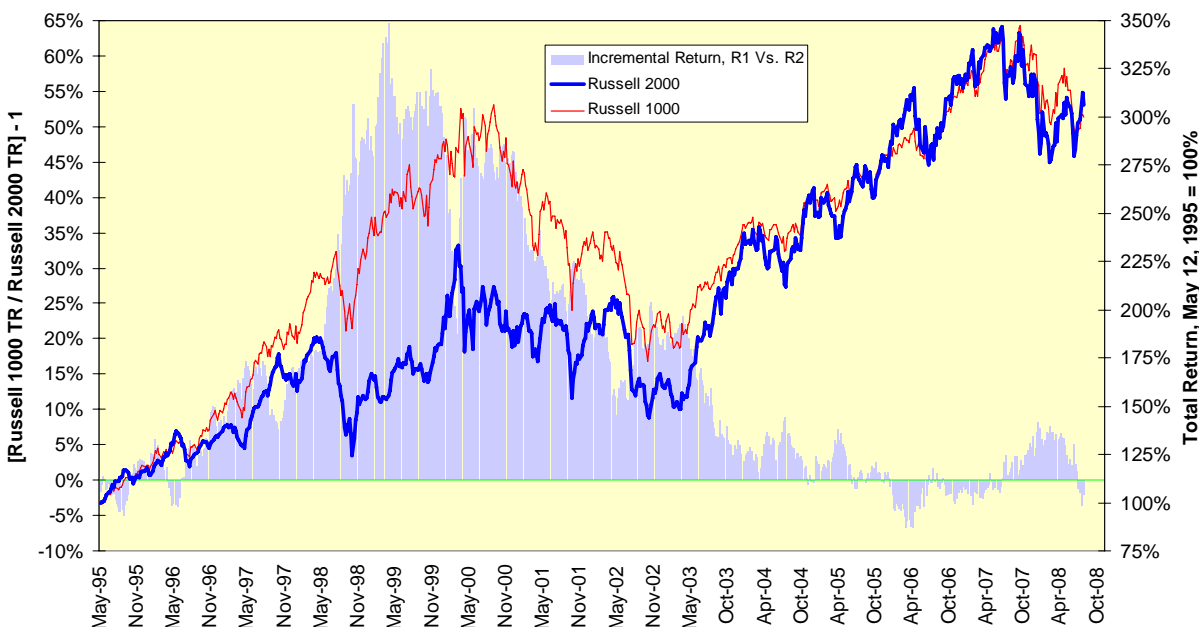
Comparative Economic Sector Returns



Spread Convergence

The most interesting development in the R1-R2 spread is how it has ceased trending strongly in recent years. The R1 outperformed massively during the technology bull market of the late 1990s. The reason was simple: Stocks such as Microsoft, Intel and Cisco Systems became the titans of the U.S. stock market. When the technology bubble burst, the R2 outperformed. After the beginning of 2004, the spread has continued to trend but on a much smaller scale. The current outperformance of the R2 would scarcely have been noticed in 1999.

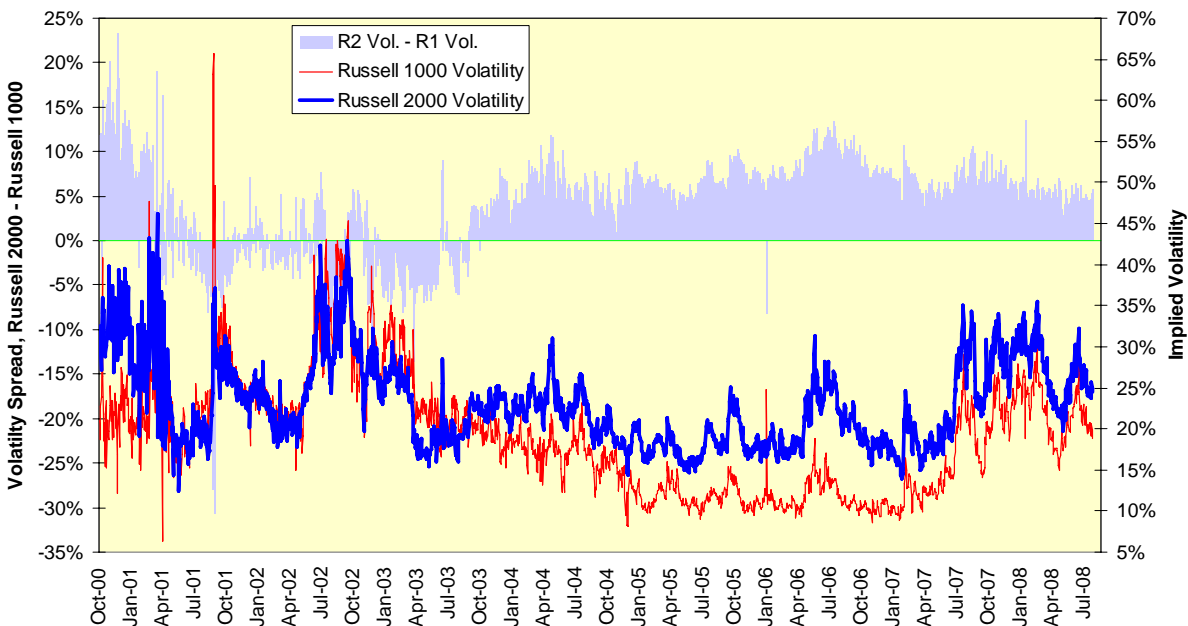
The Russell 1000 - Russell 2000 Spread



I used to say diversification is to investing what location is to real estate. But the unhappy experience of the past decade has shown diversification too often means losing money simultaneously in a large number of different asset classes. As international markets converged and as hedge fund flows produced commonality of behavior, the gains from diversification disappeared. A glance at the spread above indicates diversification according to size of the asset class has disappeared as well.

Another factor to account for is the relative volatility of the two indices. After 2004, the R2's volatility has remained steadily higher than the R1's.

Russell 2000 Volatility Tends To Be Higher



This affects any spread trade you might contemplate. A long-term daily regression of the Russell 1000 on the Russell 2000 produces the following synopsis:

$$Russell_{1000} = 180.33 + .85 * Russell_{2000}, r^2 = .76$$

The 0.85 hedge ratio is close to 5/6, or 0.8333. If we take the reciprocal, the appropriate trade sizes are 5 Russell 2000 futures against 6 Russell 1000 futures. The same ratio applies if you trade index futures on the Intercontinental Exchange, or the IWB and IWM ETFs on the R1 and R2, respectively.

Notes On Spread Trading

Just as I break with doctrinaire technicians on a one-size-fits-all approach to individual markets, I break on spreads as well and have developed a classification scheme for different types of spreads. The R1-R2 spread falls into what I call an "unrelated spread;" the NASDAQ 100-S&P 500 spread falls into the same classification as well. These spreads can form very persistent and unbounded spreads. Quite simply, then can trend forever, which is more than most of us can say for ourselves.

If you trade the R1-R2 spread, do not outsmart yourself. Just use a simple moving average crossover system or other basic trend identification system. However you approach this, you should get the answer of being short the R1 against the R2 since October 2007.