

## Which Stocks And What Dollar?

Several years ago some brokers offered the following criticism of a research format: “It has words.” *Pardon moi*, but what should it have? “Just the picture and maybe an up or down arrow to signify where you are bullish or bearish.”

Oh. We live in a soundbite world where even professional investors want the answer reduced to a cartoon icon and where the same information is recirculated endlessly with no value-added in the blogosphere. Analysts are forced to succumb sooner or later to the demand for content-robbing shorthand and start flinging about terms such as “the dollar,” which usually refers to the U.S. dollar index (DXY).

Or not: You only can be abused if you allow yourself to be abused, and with the richness of data available in financial markets there is no reason not to split the shorthand of the DXY into its component currencies. Moreover, if our goal is to analyze the impact of currency changes on the world of equities, we have thousands of ways to split that universe, too.

Many commentators are schizophrenic on what the proper relationship should be between stocks and currencies. This may be an artifact of the implied value judgment in terms such as “stronger” or “weaker;” who aspires to being weaker when the opportunity to be stronger presents itself? The simple fact of the matter, which will be stated here without going into all of the history, is the U.S. stock market does not care so much whether the DXY is rising or falling as much as it does whether the greenback is perceived as being fairly valued. If the DXY is weakening because of excess dollar liquidity, as was the case in periods such as 1987 and 2009, stocks can do fine until short-term interest rates start to rise. If the DXY is strengthening as capital is being attracted to high U.S. investment returns, as was the case in 1989 and 2005, stocks can do fine, too.

### Setting The Stage

The DXY is an amalgam of six different currencies whose weights have been fixed since 1973. The euro and its predecessors are the largest component at 57.6%, followed by the Japanese yen (13.6%), the British pound (11.9%), the Canadian dollar (9.1%), the Swedish krona (4.2%) and the Swiss franc (3.6%). The internal correlation of these components is anything but stationary, as witnessed by active spread trades between the euro and yen, the pound and the euro, etc. This suggests we should look at the effects of individual currencies against the U.S. equity markets as opposed to the single impact of the DXY. We will look at the euro, yen, British pound and Canadian dollar separately. As both Sweden and Switzerland have chosen to remain neutral in their affairs, we shall not violate the sanctity of their currencies here; it only seems fair.

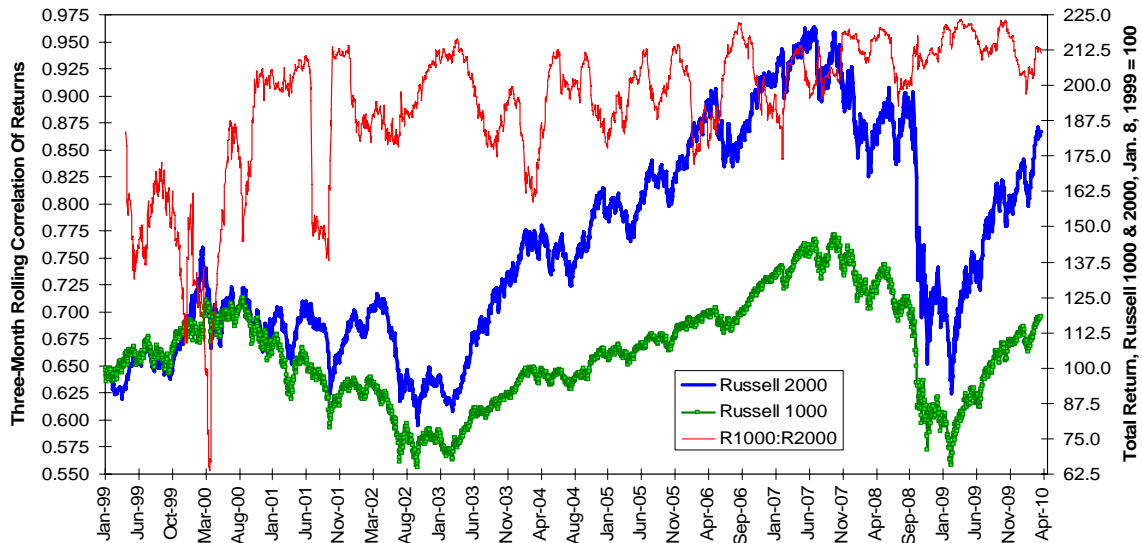
On the stock side, let’s stick with one split, that between large- and small-capitalization stocks. It is taken almost as an article of faith a weak dollar is a boon to firms with large overseas operations. We can split the analysis between the Russell 1000 and Russell 2000 indices for large- and small-capitalization issues, respectively.

Finally, many analysts make the critical error of comparing spot currency rates to spot stock index quotes. All stock market investments are a spread trade; you are selling cash and buying stocks whether you put it in those terms or not. We should measure both on a total return basis. For the Russell indices this means adding back the cumulative dividends and accrued interest. For the currencies, the foregone total return on three-month dollar deposits will be subtracted from the total return on the three-month foreign currency deposit. This comparison allows us to compare income streams between the stock and currency markets.

### Size Matters: A Short History

How do the total returns of the Russell 1000 and 2000 indices compare since the January 1999 advent of the euro? The Russell 2000 clearly has been the more volatile of the two indices; it reached a higher high in 2007 and then collapsed further and faster during the unpleasantness of 2008. Interestingly, though, a rolling three-month correlation of returns for the two series has been greater than 0.85 for nearly all of the post-2001 history, and by April 2010, it was near 0.94. While the cumulative history differs, the short-term relative behavior of the two indices has been remarkably similar in recent years.

### U.S. Large- And Small-Capitalization Stocks Near Maximum Correlation

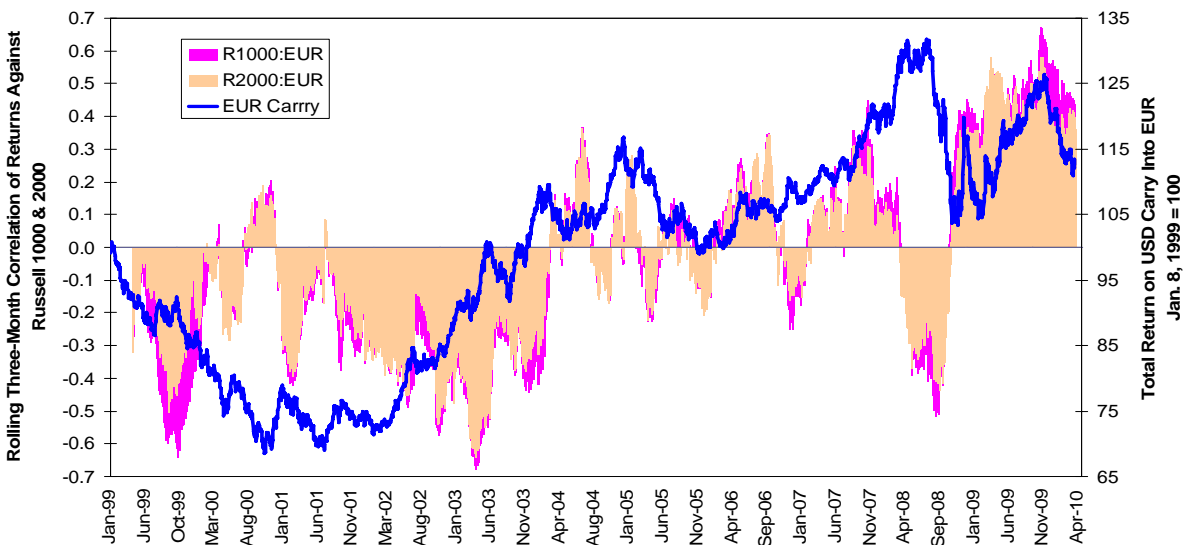


### Correlation Of Returns Against Currencies

Now let's construct the same rolling three-month correlation of returns for these Russell total return series against those for the individual currencies' carry trade returns. Each of the charts below depicts the history of a currency's carry trade in blue. The rolling three-month correlation of returns against those of the Russell 1000 and 2000 series are in magenta and tan, respectively.

By November 2009, the correlations of returns between the euro and both Russell indices moved to an all-time high. Anyone who thought U.S. stocks and the euro were trading as one market during this period certainly could be excused for doing so. But this is hardly an eternal verity: Please note how deep and prolonged the negative correlation of returns was all the way into 2004. Lost in the collective memory is the euro launched into a two year-long bear market in 1999, and it stabilized only in time to watch U.S. stocks suffer through the first burst financial bubble of the last decade.

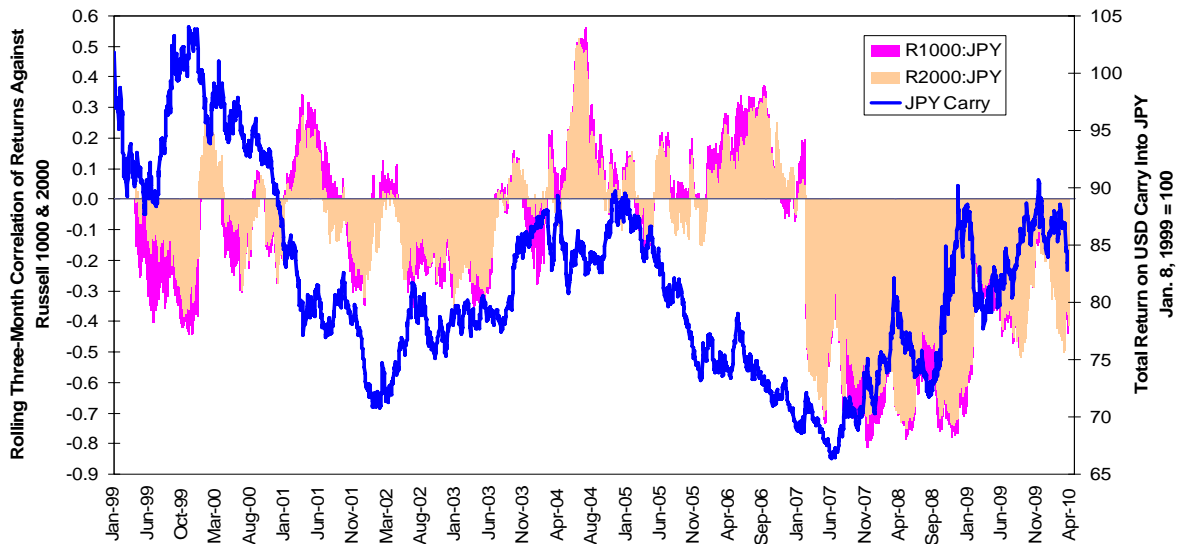
### Correlation Of Returns, Russell Indices Vs. Euro



What about the notion large-capitalization stocks benefit from a stronger euro? No great divergence is visible; at best we can note the magnitude of correlation, both positive and negative, is greater for the Russell 1000 index, but even here the differences are minor.

Let's move on to the yen. Here the correlation of returns has been negative since March 2007, the period just after the non-stop bull market rise of 2006 first encountered turbulence. The dollar carry into the yen had been an unprofitable venture as U.S. rates were almost always higher than Japanese rates, but the difference began to erode quickly after late 2007 when the Federal Reserve decided the answer to every question was lower interest rates.

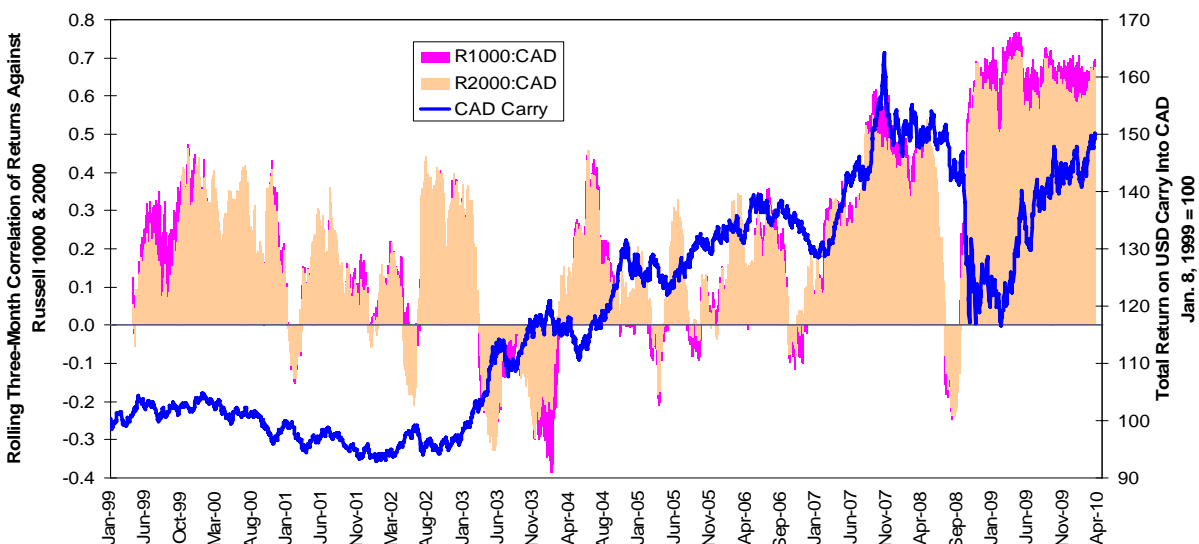
**Correlation Of Returns, Russell Indices Vs. Japanese Yen**



As the dollar carry into the yen only stops being unprofitable when things are going well both in the American economy and stock market, the net effect is a stronger yen carry generally is a bad sign for the U.S. stock market. The divergence between the Russell 1000 and 2000 correlations of returns used to be much larger in 1999-2000, but once China started to displace Japan as an exporter to the U.S., the greater sensitivity of the Russell 1000 index started to abate.

The Canadian dollar presents yet another mix. Year of generally positive correlation of returns were interrupted briefly during the 2008 financial crisis and soon jumped to record high levels, especially for the Russell 1000 index. Yet even as the loony has gained against the greenback into 2010, the correlation of returns has stalled below record-high levels and the differences between the correlations for the two Russell indices largely have disappeared.

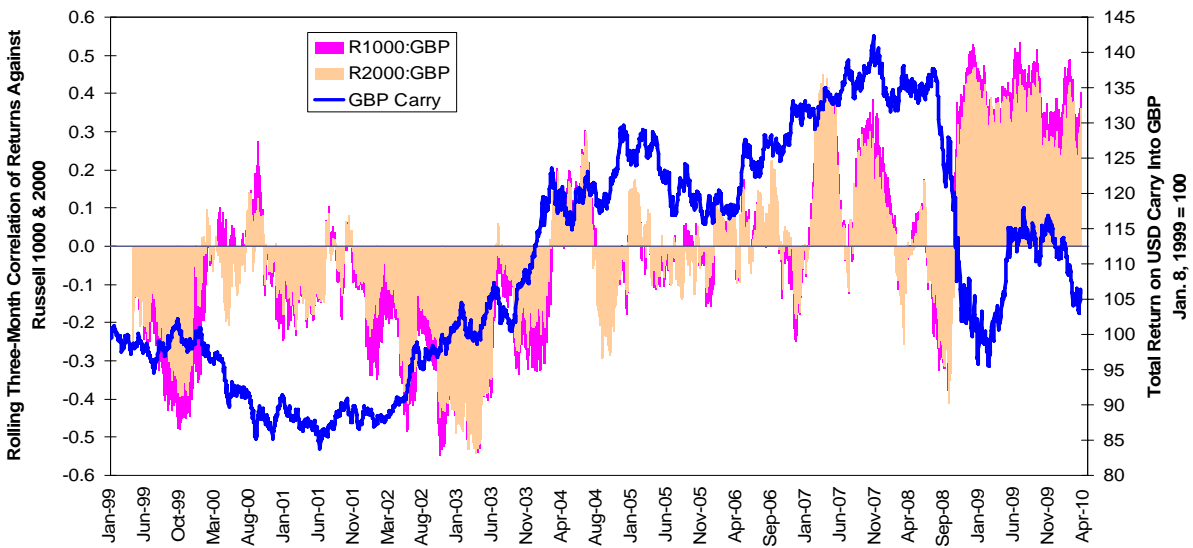
**Correlation Of Returns, Russell Indices Vs. Canadian Dollar**



Finally, let's take a look at the British pound. The correlation of returns between the pound's carry and U.S. stock indices had been strongly negative through 2003, then trended higher before collapsing during 2007-2008, only to jump to a record high level in 2009. As the pound fell in early 2010, correlations of returns oscillated within a broad

range. If anyone can claim a direct relationship between the dollar's exchange rate to the pound and U.S. equities they have a vivid imagination indeed.

**Correlation Of Returns, Russell Indices Vs. British Pound**



**And The Answer?**

It should be obvious after this brief survey there is no one answer between currencies or even within a single currency as to what its relationship is or should be against either large- or small-capitalization U.S. stocks. This must frustrate the soundbite crowd, but who cares about them; they will be on to the next market fashion soon enough.

Your lesson is clear: Stay away from the quick-and-dirty answers. You can trade currencies or you can trade equities, both as separate markets, but do not use one to trade the other.