# **Currencies And Relative Stock Index Performance**

The problem with holding truths to be self-evident is the numbers often dictate otherwise. As few other human endeavors generate so much data as conducive to systematic analysis as finance, the habits of some in making unsupported assertions are regrettable.

Of course, the sword cuts two ways, as we shall see below. The ocean of data can overwhelm us. Such is the case with assessing the impact of currencies on country-specific stock indices. Morgan Stanley Capital International maintains a set of country-specific total return indices in both local currency and U.S. terms. Included is a global series. MSCI maintains separate European-country indices in addition to a Eurozone index; we will use the Eurozone index below.

If we index each of these series' relative performance to the global series, we can test each of them against all of their underlying currencies to see which currencies have a statistically significant contribution (90 percent level) to which country-specific relative performance indices. The regression is of the returns of the country-specific index' performance against the world index as a function of the returns on each currency.

## World Rankings

The relative country-specific performances for the 40 countries from May 2001 through February 2008 are displayed below. The starting date corresponds to the availability of the MSCI global index. That index had a USD total return of 150.6% over the period in question. The most striking aspect of the rankings is how the larger markets, such as the U.S., the U.K., Japan and the Eurozone all underperformed the global index. It helped to be a country such as Colombia or the Czech Republic, although this may have been a difficult sell at the time.





## **Country-Specific Contributions**

Each of the charts below depicts the statistically significant regression betas of relative performance indices against a specific currency. The more positive the beta, the stronger the degree of positive contribution; the more negative the beta, the stronger the degree of negative contribution. The currencies will be grouped into regional clusters regardless of whether they are considered major or minor.

This month we will take a look at Canada, Europe and Africa/Middle East. Next month we will take a look at East and South Asia and Latin America.

## Canada

Canada has two distinguishing features. The first is its high reliance on commodity exports, especially crude oil and natural gas to the United States, and the second is its huge bilateral trade with the U.S.

Countries whose relative stock market performances rose with the CAD include Canada itself, other commodity producers such as South Africa, Norway and Australia, and several Latin American countries, including Brazil, Mexico, Argentina and Peru. Outside of the U.S., countries whose relative performance had a negative beta to the CAD are concentrated in the Middle East and South Asia.



### Influence of Canadian Dollar On Relative Performance Betas

## Europe

Only one market has a negative relative performance beta to the EUR, and that is the U.S. The large number of markets with positive relative performance betas to the EUR are so diversified geographically and economically as to preclude recognizing a pattern.



Influence of Euro On Relative Performance Betas

Now let's move down to the other European major currencies, such as the British pound and the Swiss franc. The most striking feature for both is, just like for the EUR, the negative relative performance beta to the U.S. In all cases, we can say a stronger European currency coincides with the American market underperforming the global market. The CHF has a negative contribution to the Mexican stock market; it is impossible to ascertain why this might be the case.



What about the Nordic currencies? The largest is the Swedish krona, and it has a strikingly different pattern than the other European majors. In addition to the negative relative performance beta for the U.S., Israel, Pakistan, Egypt and Jordan all underperform when the SEK strengthens.



Influence of Swedish Krona On Relative Performance Betas

Even though the Norwegian and Danish economies are quite different, with Norway's being dominated by its oil sector, the two sets of relative performance betas are similar. Once again, the negative relative performance beta to the U.S. stands as an exception for both the NOK and the DKK.





Influence of Danish Krone On Relative Performance Betas

Let's move on now to Eastern Europe, including Russia. With the exception of major commodity-producer Russia, the Eastern European economies face the odd set of circumstances of having many of their imports, primarily in commodities, priced in USD, while the bulk of the exports are priced in EUR. That combination has redounded to their benefit since mid-2002. However, the investment flows out of Eastern Europe remain small by global standards, and we should not expect to see strong influences outside of Europe, and we do not.



## Africa And Middle East

The most striking aspect of the Middle Eastern economies is their singular dependence on a single commodity, one whose price has tripled over the period in question. However, most of the Middle Eastern oil exporters either tie their currencies closely to the dollar – much to their regret by the end of 2007 – and once petroleum is eliminated from the economic mix, the countries themselves are hollowed-out shells. A few of the Persian Gulf bourses enjoyed spectacular stock market bubbles in 2005 and 2006, but those are simply sideshows.

We are left with five countries in this group who have tradable currencies and functioning stock markets. One, Israel, is an obvious exception to the comments above. Another, South Africa, is dependent on the exports of metals, not crude oil. A third, Turkey, is a perpetual supplicant for membership in the European Union and derives much of its wealth from the repatriated earnings of its citizens working in Europe. A fourth, Jordan, is one of the most artificial countries in human history and is supported by the kindness of strangers while being flooded with refugees from Iraq. Finally, we have Morocco, whose economy is linked far more closely to Spain and Portugal than to anything in Africa or the Middle East.

Restated, if you are seeking the influence of oil in these currencies, you will not find it.

What you will find in the case of Turkey, the largest of these economies, is a massively positive relative performance beta between the Turkish lira and its own stock market. And, curiously enough, both Morocco and Jordan underperform when the TRL strengthens. The TRL with its high interest rates, is a major beneficiary of the yen carry trade, so it is no accident a large number of other high interest-rate markets, such as those of Eastern Europe, have positive relative performance betas to the TRL. It is all about money flow here.

#### Influence of Turkish Lira On Relative Performance Betas



Neither Egypt nor Jordan can be expected to influence other stock markets much, and they do not. The Egyptian pound – and we do not recommend pyramiding positions here – influences its own stock market more than any other. The Jordanian dinar has the unique attribute of have only negative relative performance betas, chiefly to Asian countries whose financial ties to Jordan are not apparent on the surface to say the least. These probably are statistical anomalies more than anything else.







Israel has a large technology export business, and it should be no surprise the shekel has a positive relative performance beta to Europe. It has a negative relative performance beta to other Middle Eastern and South Asian countries, even those with which Israel has diplomatic relations such as Jordan and Egypt. The Moroccan dirham has positive relative performance betas with a large number of European countries; this follows its natural trade flow.







Two conclusions emerge from the data analyses above. The first is national stock markets tend to have strongly positive relative performance betas to their own currencies. This flies in the face of all those who persist in believing, for example, a weak dollar benefits the U.S. stock market.

The second is strong currencies tend to induce negative performance effects on the U.S. stock market. Perhaps this is an artifact of the general underperformance of the larger stock markets noted at the beginning of the article. But perhaps something deeper is at work: When investors gain confidence in their own currency, they tend to hold it and invest in their own markets.

This is a policy lesson to be learned by those who persist in extolling competitive devaluation. We will examine this hypothesis further next month when we look at the Asian and Latin American currencies.