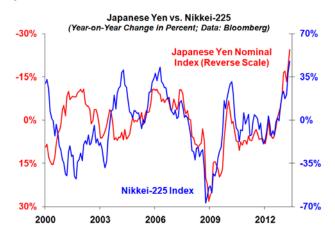


Nikkei-225 and the Yen: Optics vs. Data

Over the past year, the Japanese yen has weakened dramatically, losing more than 20 percent of its value versus the U.S. dollar. The Nikkei-225 Index, meanwhile, has risen three times as much. As Figure 1 shows, there has been a growing covariance between the performance of the currency and Japanese equities in the wake of the financial crisis, with the Nikkei-225 rallying in lock-step with a falling yen. Not surprisingly, there is a broad perception that the stock market's recovery reflects the yen's beneficial impact on Japanese exporters' relative competitiveness, presaging a bottom-line boost that justifies higher share prices.

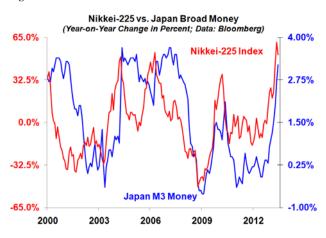
Figure 1.



Indeed, a pick-up in real Japanese exports in the first two quarters of 2013 would seem to indicate that there is a material link between the fundamental performance of Japan's corporate sector and changes in the relative value of the nation's currency. Nevertheless, evidence suggests that the relationship is spurious. Among other things, the currency-equity linkage is fairly recent; prior to the financial crisis the correlation was close to zero. Further, the apparent connection between the Japanese currency and equity markets is less helpful as a trading signal than optics would suggest. While it is true that the correlation between the yen's relative value and the equity benchmark is approaching 70 percent, the respective moves are contemporaneous—they lack any lagging properties. In other words, the dollar-yen is an effective tool for trading the Nikkei-225 only if we can predict the dollar-yen—not a particularly attractive proposition.

In contrast, there has been a more robust and intuitive relationship between credit conditions—using growth in Japan's broad money supply (M3) as a proxy—and equity market performance. As detailed in Figure 2, the linkage was present well before the crisis emerged and remains important to date. In fact, one could argue that the more critical driver of rising Japanese stock prices is not a weaker yen but a more accommodative Bank of Japan and consequently easier credit conditions.





Mapping the relative U.S.-Japanese broad money relationship to moves in the exchange rate can further clarify the underlying linkage and help compensate for noise stemming from liquidity dislocations, geopolitical disruptions, and other such events. As detailed in Figure 3, the dollar has for many decades tended to gain ground on the yen when Japanese money is growing more rapidly than its U.S. counterpart. Conversely, a comparatively stronger yen has normally been accompanied by relatively stingy Japanese money growth.

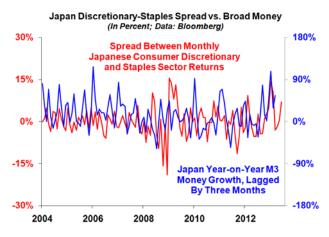
Figure 3.



Unfortunately, because there is high crosscovariance between credit creation and the Japanese yen, running a regression of the Nikkei-225 against these two variables suffers from multicollinearity. This biases the coefficients and the t-statistics (though not the overall implied projected Nikkei values), making it difficult if not impossible to shed light on which is dominant. While it is intuitively easier to see how money growth would feed through to currency markets than that yen performance is driving monetary conditions, little statistical evidence exists of the causality or the lag. As a time series, credit conditions suffer, too, from the pitfall of being contemporaneous.

That said, statistical evidence exists for leading indicators that foreshadow credit trends. These include well-studied equity market cross-sector relationships—the performance of one group in comparison to another—that have demonstrated strong correlation to future credit conditions. As Figure 4 shows, monthly broad Japanese money growth has been coincident with the relative performance of two domestic equity sectors, consumer discretion and consumer staples—a popular example—by the lag order of three. Further analysis indicates a significant crossautocorrelation between current credit conditions and this particular ratio. By inference, the relative performance of these two sectors could be seen as a leading indicator of the general equity market.

Figure 4.



In sum, it appears that the importance of a weakening Japanese currency to maintaining an uptrend in the Nikkei-225 has been exaggerated. In trying to anticipate where Japanese share prices are headed next, it may well be more appropriate to focus on indicators—in equity markets and elsewhere—that can signal impending developments in the broader credit environment.

Q3 2013

Disclaimer

Information contained herein is only current as of the printing date and is intended only to provide the observations and views of Apex Capital Management (New York) LLC ("Apex") as of the date of writing without regard to the date on which the recipient may receive or access the information. Apex has no obligation to provide recipients hereof with updates or changes to the information contained herein. Performance and markets may be higher or lower than what is shown herein and the information, assumptions and analysis that may be time sensitive in nature may have changed materially and may no longer represent the views of Apex. We consider information from external sources to be reliable, we do not independently verify information obtained from external sources and we make no representation or warranty as to the accuracy, completeness or reliability of such information. This material is for informational and educational purposes only and is not an offer to sell or the solicitation of an offer to buy any securities. Any statements containing forward-looking views or expectations are subject to a number of risks and uncertainties and are informational in nature. Actual performance could, and may have differed materially from the information presented herein. Past performance is not indicative of future results. No part of this material may be reproduced in any manner without the prior written consent of Apex.