## Yen And Treasuries: Back To The Future

If you climbed into your time machine and set the dial to 1985, what would the markets' shared wisdom be regarding the Japanese yen and U.S. Treasuries have been at the time? The answers could be summarized neatly and succinctly: Treasury yields were being driven lower by Japanese inflows but these inflows would stop and reverse should the yen start to strengthen against the dollar.

This fear of the Japanese selling U.S. bonds if the dollar weakened had something of a spiders-and-snakes primal nature to it. However, that is where the parallel does or should end. A cobra or a black widow can ruin your day, but the Japanese selling their bond holdings into a hole would ruin their day. The logic is and always will be simple: A country running a current account surplus has to run a capital account deficit. If they reduce their capital account deficit, their exports must be reduced proportionately, and that is a self-destructive act. Moreover, economic decisions are made at the margin, and the weaker dollar made U.S. Treasury securities cheaper for Japanese investors.

Japanese investors have understood this even if perpetually fretful American bond traders have not. If we map net Japanese portfolio investment over all categories tracked by the U.S. Treasury's International Capital Statistics report, including Treasuries and Agencies, corporate bonds and equities, we find no discernible relationship between the course of the yen and monthly portfolio purchases three months hence. A green vertical line here and subsequently marks the September 1985 Plaza Accord to weaken the dollar; we can climb back into the time machine and go to the 1971 movie Plaza Suite, produced on Broadway in 1968 when exchange rates still were fixed under the Bretton Woods Agreement.

Japanese Portfolio Investment And Yen/Dollar Rate


Once the yen rose in 1985, it never looked back no matter how much abuse Japan hurled at its own economy or how low it pushed its own interest rates. The dollar had two rather substantial rallies in 1988-1989 and again in 19951998, both of which seemed like major secular moves at the time but which now look like notches on the chart.

This might not have surprised our Back to the Future movie-viewers in 1985 as much as the subsequent course of American interest rates, both long-term and short-term. While a link between the yen and one-year U.S. Treasuries existed prior to September 1985, it disappeared afterwards, never to return. No link ever existed between the yen and ten-year U.S. Treasuries.


Yen And Long-Term Treasuries


Yield Curve And Yen Carry
We can rearrange the data in the preceding charts to ask whether the U.S. Treasury yield curve as measured by the forward rate ratio between one and ten years $\left(\mathrm{FRR}_{1,10}\right)$ has affected the yen. The $\mathrm{FRR}_{1,10}$ is the rate at which we can lock in borrowing for nine years starting one year from now, divided by the ten-year rate itself. The more this measure exceeds 1.00 , the steeper the yield curve is. Many bond traders and indeed many currency traders have managed to convince themselves a steeper U.S. yield curve leads to yen strength against the dollar on the notion a looser monetary policy in the U.S. makes the dollar increasingly worthless.

This viewpoint is, however, nothing more than the sound of one hand clapping; currencies are priced off relative interest rate expectations. A comparison of an exchange rate dominated by differential short-term interest rate expectations to a yield curve in one of the countries should not be valid.


Let's add a carry trade into the mix and see if this can explain the linkage between the yen and long-term U.S. Treasuries. Instead of doing a standard currency carry trade done at the same maturity, such as swapping threemonth yen for three-month dollars, or instead of doing a single-currency yield curve trade such as borrowing twoyear Treasuries and lending ten-year Treasuries, let's do the equivalent of a calendar diagonal trade and borrow three-month yen and lend ten-year Treasuries. This can be depicted as the forward rate ratio between the two markets, a required normalization given the huge swings in both interest rates.

Two dates stand out since the introduction of JPY LIBOR in 1989; these are bounded by the turquoise rectangle in the chart below. The first occurred just before the yen's April 1995 peak and Japan's decision to start driving shortterm interest rates lower more aggressively than it had been doing. The second occurred in March 2009 when the U.S. moved to quantitative easing. Two countries, two currencies, one answer: Just start printing money and hope for the best.


The spot rate of the yen paralleled the yen carry into ten-year Treasuries both before the Japanese era of ease and after the U.S. began to fight Japan for the title of World’s Cheapest Currency To Borrow ${ }^{\mathrm{TM}}$. Restated, the fourteen-
year period when the yen was the unquestioned holder of this dubious title was the only period when the yen's rise did not parallel the carry trade.

The post-March 2009 period, therefore, is one where the yen can strengthen and long-term Treasuries can rally simultaneously, a combination seen as impossible in those Back to The Future days.

It may come as a further surprise to many the net carry return in USD terms of borrowing either three-month JPY or three-month USD and lending in U.S. 7-10 year Treasuries has been parallel to the course of the spot yen since the JPY bottom during the October 1998 Long Term Capital Management fiasco. The net carry return is the total return on the Treasury index less the total cost of borrowing at the three-month horizon. This relationship essentially has been hidden in plain sight for almost thirteen years, the best place to hide something, past, present or future.
U.S. 7-10 Year Treasuries Gained As Yen Strengthened


