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Yen Carry Trade: Fact or Fiction?

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Executive Summary

Many commentators point to the so-called yen carry trade, in which investors borrow Japanese yen at low interest rates to finance purchases of high-yielding assets, as a major reason why the prices of these assets have risen significantly over the past few years. The sharp unwinding of yen carry trades in October 1998 led to significant volatility in global financial markets, and some commentators fret that history could repeat itself soon. How prevalent is the yen carry trade today?

After examining a few data sources, we conclude that the yen carry trade might not be as prevalent today as many market participants believe. Balance of payments data indicate that Japanese banks reduced the amount of loans they extended to foreigners in the second half of last year. Indeed, the total amount of outstanding yen-denominated loans made by Japanese and non-Japanese banks (via the euro-yen market) is smaller today than it was in 1998.[1] Therefore, foreigner investors do not appear to be engaged in unprecedented amounts of yen carry trades. Likewise, Japanese investors do not appear to be the driving force either, because capital outflows from Japan weakened in the second half of last year.

We do not mean to suggest that the yen carry trade is a figment of traders' imaginations. There are surely market participants who use yen carry trades to enhance returns. However, the data seem to suggest that the yen carry trade is less prevalent today than it was in 1998. Therefore, the risk of extreme financial market volatility today resulting from massive unwinding of yen carry trades might be overstated.

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The Mechanics of the Carry Trade

With short-term Japanese interest rate remaining close to zero percent, the financial press is filled with stories of how the so-called "yen carry trade" is helping to fuel run-ups in the prices of many financial assets. The yen carry trade works this way: an investor borrows Japanese yen at very low interest rates. He then sells the yen and buys another currency—say, U.S. dollars. The dollars are used to buy a high-yielding U.S. asset—say, a non-investment-grade corporate bond. After the bond matures, the

[1] A "euro" market is one in which offshore banks lend foreign currencies. Thus, a British bank in London that lends yen is doing so in the euro-yen market.

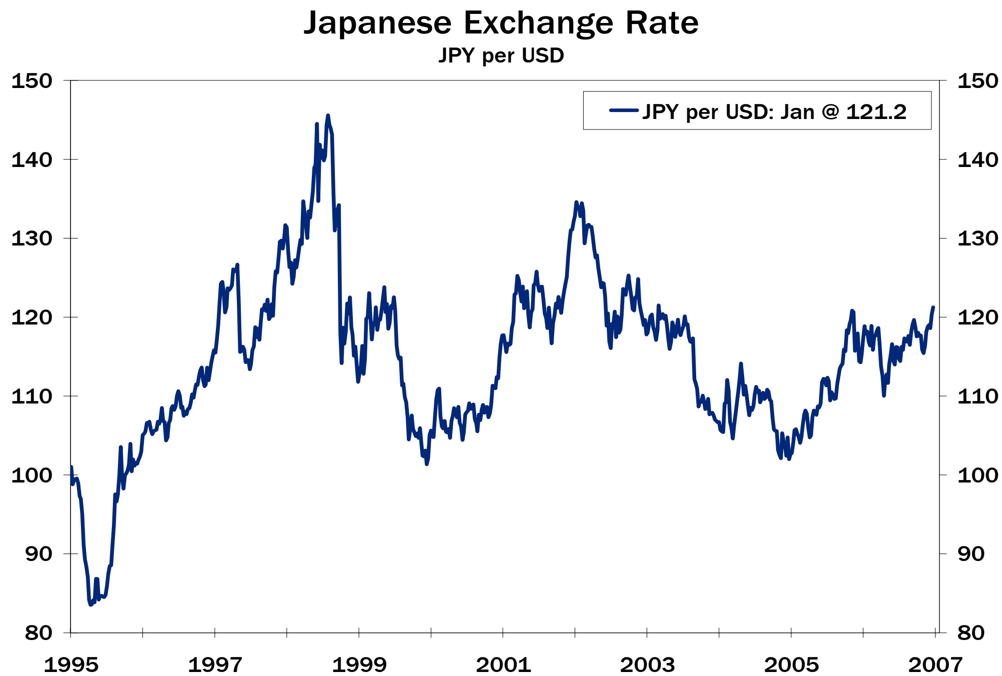
investor collects his principal and interest and sells the dollars for yen, which he subsequently uses to repay his original yen loan. In sum, the investor has borrowed yen at a low interest rate and has used them to buy a high-yield U.S. corporate bond. The same strategy can be employed to buy other high-yielding assets, such as Brazilian bonds, Hong Kong stocks, etc.

The upside to these trades is that investors can realize significant returns by borrowing low and lending high. The downside is that they can become unprofitable if short-term Japanese interest rates rise, which increases borrowing costs, and/or the yen appreciates. In the event of yen appreciation, the investor would need to sell more foreign currency than he originally anticipated to purchase the same amount of yen. Although yield differentials could continue to exist, the profitability of the trade could get wiped out if the yen appreciates too much.

The unwinding of the yen carry trade in October 1998 contributed to extreme volatility in financial markets at the time.

Indeed, an unwinding of yen carry trades contributed to volatility in financial markets in October 1998. As shown in Exhibit 1, the Japanese yen, which had been depreciating versus the dollar for three years, began to appreciate in August 1998. In early October, jittery investors unwound their yen carry trades *en masse* by selling their high-yielding assets and the underlying currencies for yen to retire their yen obligations. Not only did the Japanese currency appreciate very sharply in early October as investors scrambled to buy yen, but prices of high-yielding assets tanked. The Federal Reserve cut the Fed funds rate twice (for a total of 50 bps) in the subsequent month to bring liquidity back to financial markets. Thus, the existence of a significant amount of carry trades is more than just an academic curiosity. They can potentially lead to significant amounts of financial market volatility if they are unwound at the same time.

Exhibit 1



Source: Global Insight

Conditions are in place to make the carry trade attractive again.

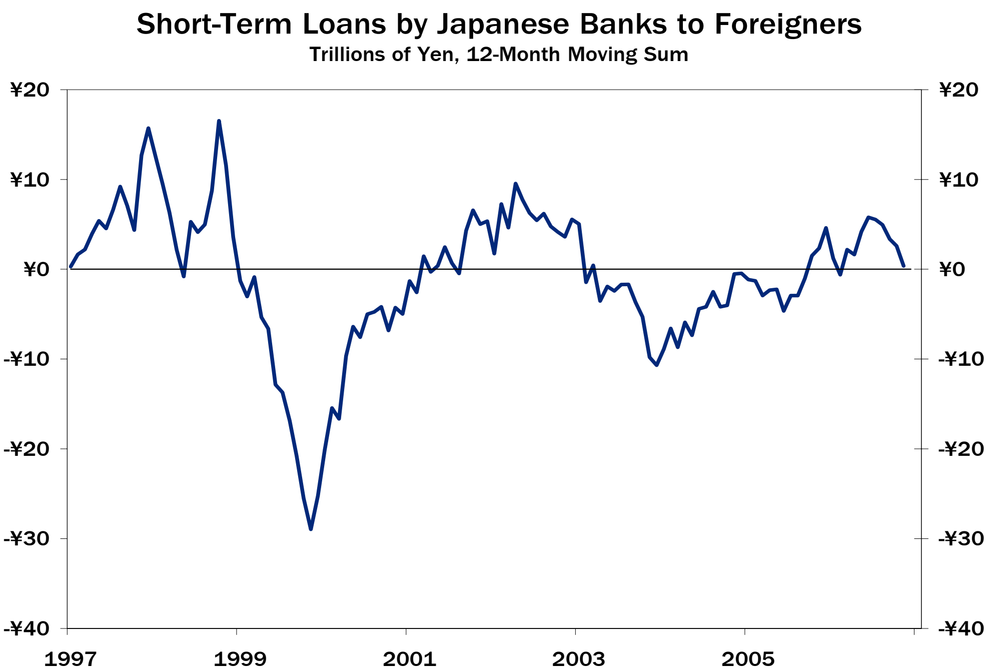
Fast forward to today. Interest rates in Japan are again low relative to most other countries, and the yen has depreciated on balance over the past two years. In short, the carry trade appears to be attractive, and there is anecdotal evidence to suggest that some investors have been employing it again. Could lightning strike twice? Could a replay of the extreme financial market volatility of October 1998 occur if a significant number of yen carry trades unwind?

Are Investors Employing the Yen Carry Trade?

We must look at a number of different sources to find out if the carry trade is important again.

To answer that question, we must first investigate whether a significant number of investors are again employing the yen carry trade. As described previously, a carry trade leaves a paper trail that should make it easy to trace, at least in theory. However, international financial data is very aggregated, and statistical agencies do not provide a line item in their data releases on "yen carry trades." Therefore, we must look at the evidence from a number of different sources to get a general sense of whether the yen carry trade is important today.

Exhibit 2



Source: CEIC and Wachovia Corporation

Let's start by looking at Japanese balance of payments data. After all, a yen carry trade involves borrowing yen, often by a foreign investor from a Japanese bank, and these transactions should show up in the Japanese balance of payments. Exhibit 2 shows flows in short-term loans by Japanese banks to foreigners. Note that roughly ¥16 trillion (about $130 billion at today's exchange rates) were lent to foreigners in the 12 months to December 1997. Troubles related to the financial crises that swept through Asia in late 1997/early 1998 led to a big pullback in bank loans, but lending soared again in 1998 as the yen carry trade took flight.[2] However, the carry trade

[2] The Bank of Japan (BoJ) was guiding short-term interest rates lower during 1998, which increased the attractiveness of the carry trade at that time.

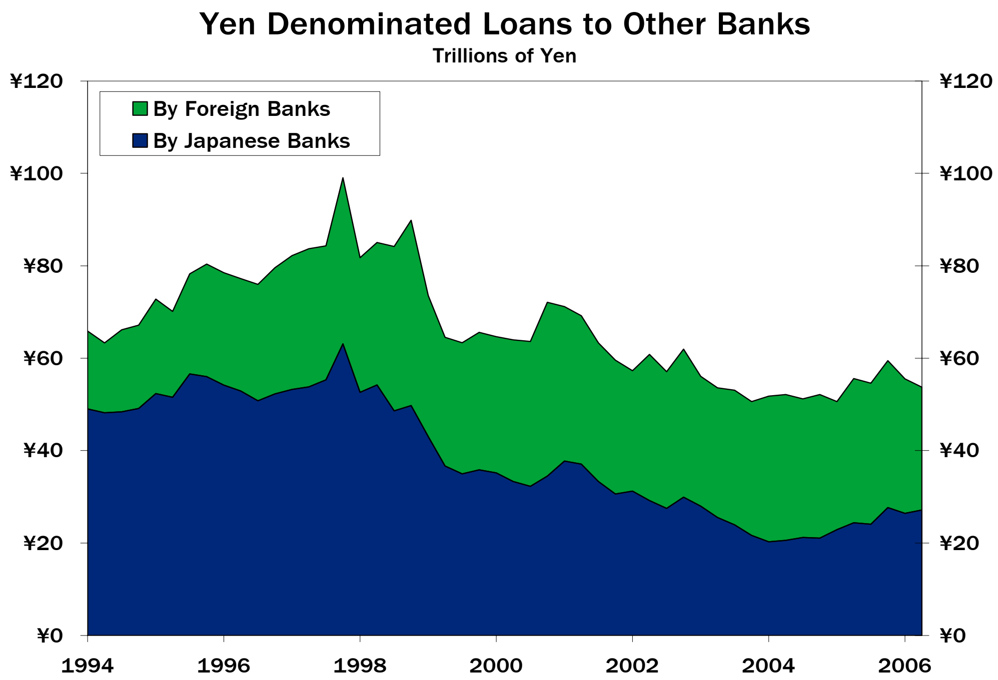
collapsed in October 1998, and lending by Japanese banks dropped sharply throughout 1999.

Balance of payments data suggest that the carry trade is not as prevalent now as in 1998.

More recently, Exhibit 2 shows that short-term net lending by Japanese banks to foreigners totaled nearly ¥6 trillion (about $50 billion) in the 12 months to June 2006, which is not an insignificant amount. However, net lending fell to essentially zero by the end of last year, which likely reflects, at least in part, the 25 bp rate hike by the BoJ in July that reduced the relative attractiveness of the carry trade. Thus, there are two important takeaways from Exhibit 2. First, if the yen carry trade was an "issue" last year, it appears to have become less important as the year wore on. Second, the yen carry trade does not appear to have been as prevalent last year as it was in the late 1990s.

There are two problems with Exhibit 2. First, it includes loans that Japanese banks make for completely "legitimate" reasons (i.e., not related to the yen carry trade). For example, a Korean manufacturer could be financing its working capital via short-term borrowing from a Japanese bank. These loans should not be included when trying to determine whether the carry trade is an "issue" again. The second problem is that Japanese banks are not the only financial institutions that can make yen-denominated loans. Non-Japanese banks can make yen-denominated loans in the euro-yen market, and these loans would not show up in the Japanese balance of payments data that are portrayed in Exhibit 2.

Exhibit 3



Source: Bank for International Settlements and Wachovia Corporation

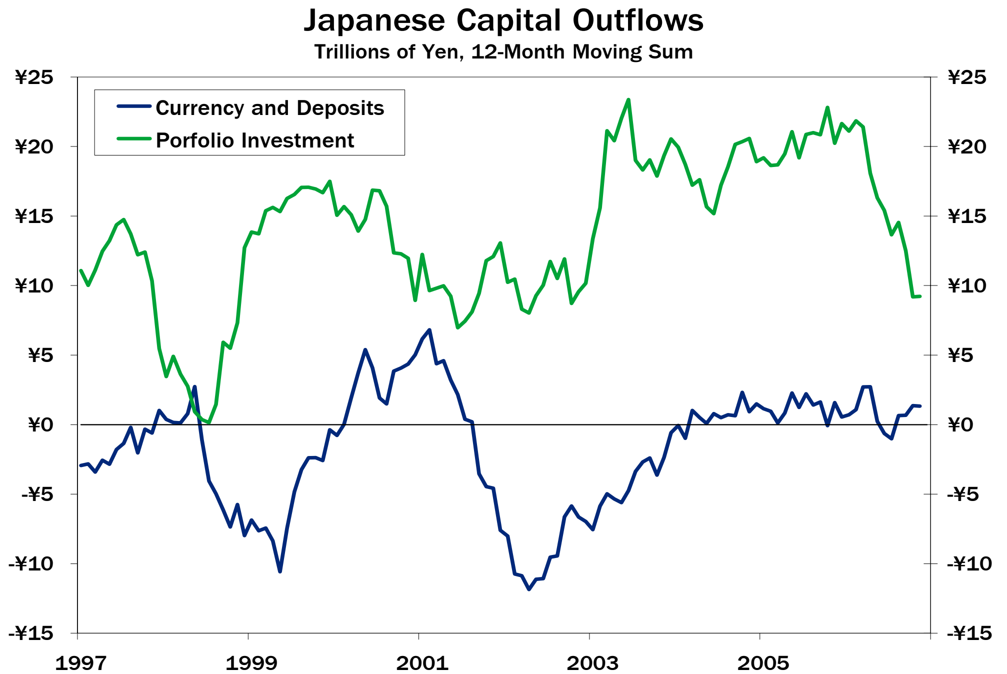
These problems are addressed in Exhibit 3, which shows loans extended by Japanese and foreign banks to other banks. We exclude loans to non-banks under the assumption that non-financial institutions use yen-denominated loans only for "legitimate" purposes. A skeptic could claim that Exhibit 3 overstates the carry trade issue, because not all yen-denominated loans extended to other banks are used to finance the yen carry trade. True enough. However, an increase in carry trade activity, which is the major area of our focus, should show up as a rise in the amount of loans outstanding.[3] In that regard, Exhibit 3 differs from Exhibit 2 in that the former plots the total amount of outstanding yen-denominated loans, whereas the latter plots flows of loans.

There are fewer yen-denominated loans today than in 1998.

Exhibit 3 shows a jump in yen-denominated loans in 1997 and again in 1998, with a subsequent marked decline in 1999. In addition, some buildup in yen-denominated lending has occurred over the past year or so, but nothing approaching the scale of 1997-1998. The messages from Exhibit 3 and Exhibit 2 are consistent: the yen carry trade does not appear to be as prevalent today as it was in 1998.

Could Japanese investors be driving the carry trade? After all, yen borrowing by Japanese non-financial institutions (e.g., hedge funds) to finance foreign securities purchases would not show up in the Japanese balance of payments data, which are plotted in Exhibit 2, nor in Exhibit 3, which shows yen-denominated loans extended by banks to other banks. However, the subsequent purchases of foreign assets by Japanese non-financial institutions would leave a paper trail in the Japanese balance of payments data. Have there been massive purchases of foreign assets by Japanese investors recently?

Exhibit 4



Source: CEIC and Wachovia Corporation

Exhibit 4 shows that between early 2003 and early 2006 the annual rate of Japanese foreign securities purchases fluctuated between ¥15 trillion and ¥23 trillion (between

[3] Trading desks of non-Japanese banks finance yen carry trades by borrowing from Japanese banks. Although lending by Japanese banks would show up in the balance of payments data, which is shown in Exhibit 2, lending by non-Japanese banks *via* the euro-yen market would not be captured in balance of payments statistics.

$125 billion and $190 billion), which exceeded the amounts registered in 1998. However, foreign portfolio investment by Japanese investors has slowed sharply since early last year, and the amount of Japanese funds held in foreign currencies and foreign bank deposits remains rather small. Therefore, if Japanese investors have indeed been the driving force behind the yen carry trade, they have become less active over the past year or so.

Conclusion

There may be less to the yen carry trade today than widely perceived.

The evidence above suggests that there may be less to the so-called yen carry trade today than widely perceived. Balance of payments data show that there has been little net lending by Japanese banks to foreigners over the past 12 months. Another data source shows that total yen-denominated loans by Japanese and foreign banks (via the euro-yen market) have trended higher over the past year or so, but the amount of outstanding loans remains well short of the levels that were reached in the late 1990s. Purchases of foreign securities by Japanese investors, which were quite strong in 2003-2005, have weakened over the past year.

We do not mean to suggest that the existence of yen carry trades today is just an urban legend. After all, market chatter and media reports surely are grounded in reality, and we have no reason to doubt market participants who claim that they have a significant amount of yen carry trades on the books. Indeed, the outstanding amount of yen-denominated loans extended by Japanese and foreign banks to other banks totaled nearly ¥54 trillion (about $440 billion) at the end of June 2006. Although this amount grossly overstates yen carry trades, their true value is likely not a trivial number either.

The risk of another October 1998 may be overstated.

Our point is that the data sources referenced above consistently show that the yen carry trade probably is not as prevalent today as it was in the late ‘90s when it was in full swing. This finding is consistent with anecdotal evidence that hedge funds are less leveraged today than they were in 1998. Therefore, the implication is that the global financial system may not be as vulnerable to a sudden unwinding of yen carry trades as some commentators predict. In other words, a replay of October 1998, when the mass unwinding of yen carry trades contributed to the "lock up" in global capital markets, may not necessarily follow a faster pace of BoJ tightening than currently expected or an appreciation of the yen. The risk of another October 1998 might be overstated.

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