JPY: Not Quite Ready to Crack

By Michael Hart

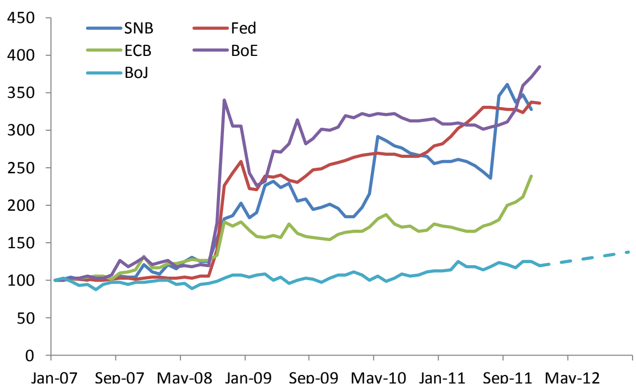
- **The yen has remained strong through much of the risk rally underway since November and in particular since the start of the year. But the announcement of a trade deficit for 2011 and the expansion of the BoJ's QE program triggered a sharp selloff in JPY, now down 6% against USD.**
- **However, focusing on these factors alone amounts to only a partial analysis. Of the four major elements influencing the exchange rate, we think that:**
  1. **The BoJ's recent surprise move to boost its QE program by 50% is much less dramatic than it appears: It widens its balance sheet only by 40% relative to pre-crisis levels and merely puts it on par with the ECB's balance sheet relative to GDP. Japanese yields remained unfazed, providing no support to the yen move.**
  2. **The current account is a mild negative for JPY, though not as adverse as the 2011 trade deficit might suggest. What is more, this development was well anticipated.**
  3. **More importantly, the capital account shifted into surplus in 2011 and is thus not putting downward pressure on JPY. It also remains vulnerable to adverse changes in risk sentiment.**
  4. **Exchange rate valuation represents a mild negative but JPY remains far off the 1995 peak in real terms. Official intervention need not be feared.**
- **In sum, we modify our JPY forecasts to the downside, but not dramatically so: We expect USDJPY at 82 at end-Q1 (compared with 77 previously) and in the mid-80 range for the remainder of the year (compared with the mid-70s previously).**

The rapid deterioration in Japan's trade balance (recording the first annual deficit since 1980), together with yet another significant expansion of the Bank of Japan's (BoJ) quantitative easing (QE) program has revived long-standing market expectations that the yen is due for a selloff. However, these arguments represent a partial analysis at best as they ignore other elements of the current account and other parts of the balance of payments in general, disregard the interplay between stocks and flows and pay too little attention to fundamental exchange rate valuation. For FX purposes, the BoJ cannot be seen in isolation but has to be viewed in the context of other central banks' actions.

BoJ Finally Joins the Fray

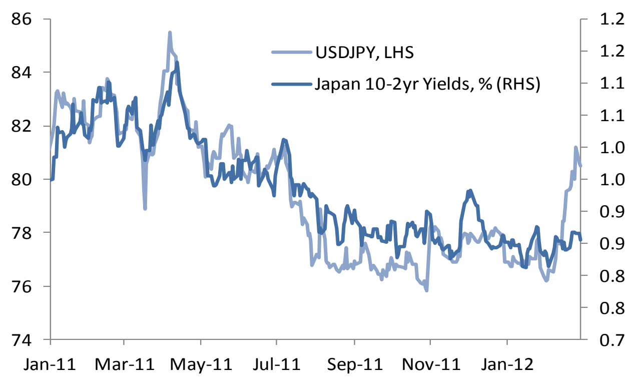
While the BoJ has ample experience with QE (notably in 2003-04), it has been somewhat gun-shy to deploy this tool in the wake of the financial crisis: Whereas other major central banks have doubled, tripled or even further expanded their balance sheets, the BoJ's assets are currently a mere 20% larger than before the financial crisis (Figure 1). This is partly because the BoJ started from a higher level: Even with so little an

Figure 1: Major Central Bank Balance Sheets (index, Jan 2007 = 100)



Source: Haver, Author

Figure 2: USDJPY and Japan Yield Curve (%)



Source: Haver, Author

expansion, the BoJ's balance sheet is equivalent to 30% of GDP, not far from the ECB's current position and 1.5 times the size of the Federal Reserve or the Bank of England.

But not only have the BoJ's plans been timid, the execution has been tepid as well. Of the JPY20 trillion of financial assets it intended to buy originally, it had purchased only about half as of January (of which only 40% of the targeted JPY9 trillion JGB purchases had been achieved). In contrast, the BoJ had done better on the credit easing part of its policy, extending 94% of the planned JPY35 trillion in collateralized loans. With the JPY10 trillion increase in JGB purchases and an acceleration of the program, the BoJ committed to buying JPY20 trillion of financial assets by year-end. This implies an increase of its balance sheet to some JPY160 trillion, nearly 40% above pre-crisis level: a meaningful increase, but one that still falls significantly short of the efforts made by other central banks. In level terms, this will put the BoJ's balance sheet at 34% of GDP, exactly on par with that of the ECB.

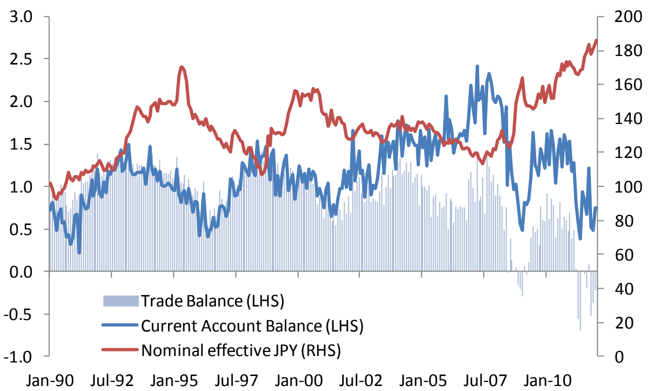
Of course, the planned doubling of JGB purchases should have a significant impact on yields, with the yield curve expected to flatten. So far, this hasn't been the case, with USDJPY decoupling from its traditional link with the yield curve (Figure 2). As a result, either fixed income markets have yet to catch up to the prospect of increased BoJ purchases or the yen's fall will be halted before long. But the latest move is clearly not simply reflecting the change in risk sentiment as AUDUSD had been rallying for a while whereas JPY remained strong and, similarly, CHF is not following the yen into weaker territory.

The Full Current Account Matters, Not Just the Trade Deficit

Japan's trade balance moved from a surplus of JPY8.0 trillion in 2010 to a deficit of JPY1.6 trillion in 2011. After pre-crisis surpluses in the order of JPY10-13 trillion and as high as JPY15 trillion in the 1990s, the sudden lurch into the red by one of the world's biggest external creditors came as a shock to the market. With the yen appreciating by some 50% between mid-2007 and the end of 2010, the exchange rate is generally held accountable for this deterioration (see Figure 3). However, it is important to note that the economy lived for three years under a rising exchange rate without any adverse trade effects, save the crisis-induced deficit in the aftermath of the Lehman Brothers collapse in 2008. In addition, it is necessary to distinguish structural developments from special, temporary effects. While there is evidence of production outsourcing given relative price differentials (owing to the strength of the exchange rate), the weakness in exports reflects to a large extent the supply-chain disruptions wrought by the March 2011 earthquake and the associated energy shortages. Conversely, imports were boosted by the need to replace lost nuclear energy capacity (beyond Fukushima, as most plants were shut down for testing), boosting imports of mineral fuels in particular (Figure 4).

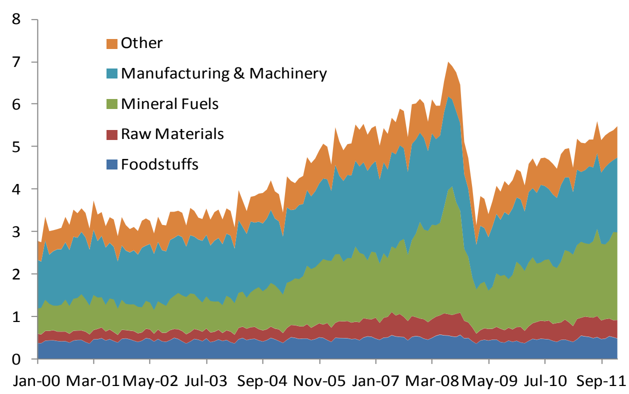
It is worth noting that the external balance affects the exchange rate not merely through the trade account but more importantly through the entirety of the current account (and, critically, through the capital/financial account, as discussed below). Indeed, despite the trade deficit in 2011, Japan continued to run a current account surplus in line with historical levels. This owes primarily to a rising surplus in the income balance,

Figure 3: Current Account and JPY (JPY trn)



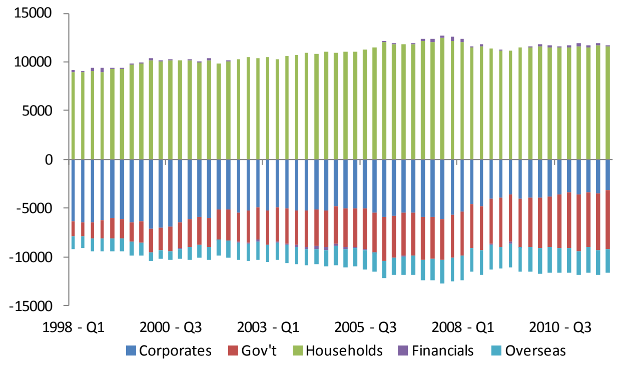
Source: Haver, Author

Figure 4: Imports by Principal Commodity Groups (JPY trn)



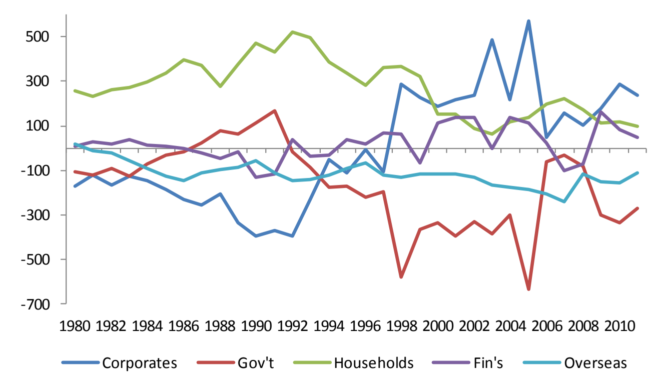
Source: Haver, Author

Figure 5: National Balance Sheet (Stocks) (JPY100 bn)



Source: Haver, Author

Figure 6: Flow of Funds by Sector (JPY100 bn)



Source: Haver, Author

which led to a decoupling of the current account and trade performance since 2003 (Figure 3). In turn, this reflects the strength of Japan's national balance sheet and its position as a large creditor to the rest of the world, the indebtedness of the public sector notwithstanding. On a net basis, Japan's external assets generate sufficiently large income flows to offset even a trade deficit.

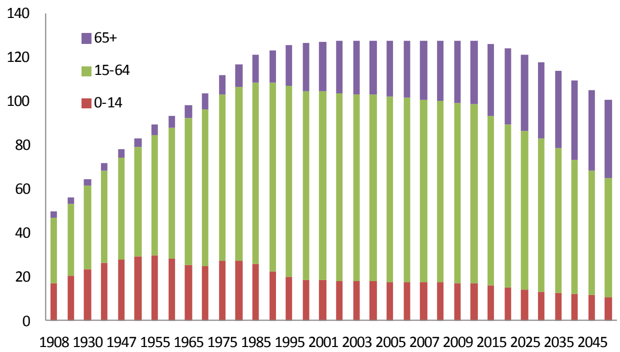
The Momentum of the National Balance Sheet and Japan's Demographics

Japan's national balance sheet is both a boon and a bane to its economy. On the one hand, a high propensity to save by households has generated an enormous stock of savings, which fund almost the entire deficit of the public sector and the remainder of the private sector (corporates). The excess savings that have not been invested domestically fuel a sizeable external surplus, which in turn generates investment income (Figure 5).

But the rapid aging of Japan's population will ultimately transform this position. Over-65-year-olds (generally an economically inactive group) represented less than 5% of the population in 1950 but over 17% in 2000 and are projected to account for 36% by 2050. What is more, the total population is to shrink, reducing the potential for domestic absorption as well as the economy's capacity to generate exports (Figure 7).

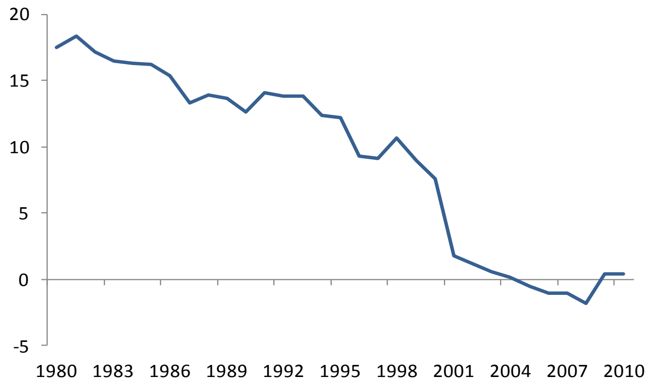
This also implies a drop in the savings rate. The life-cycle theory of consumption postulates that households choose a consumption path based on permanent, not current income. This implies that they "dis-save" (borrow) during the early part of their lives, when their income does not yet match the desired consumption level, and then save during their economically active time to 1) finance current consumption, 2) repay loans and 3) save for retirement—another period of dis-saving. The aging of Japan's society and other demographic factors explain the precipitous drop in the savings rate, which has declined from close to 20% of disposable income in the 1980s to 0% currently (Figure 8).

Figure 7: Age Structure of Population (mn)



Source: National Institute of Population and Social Security Research; Ministry of Health, Labour and Welfare; Author

Figure 8: Savings Rate, % of Disposable Income



Source: Cabinet Office of Japan, Author

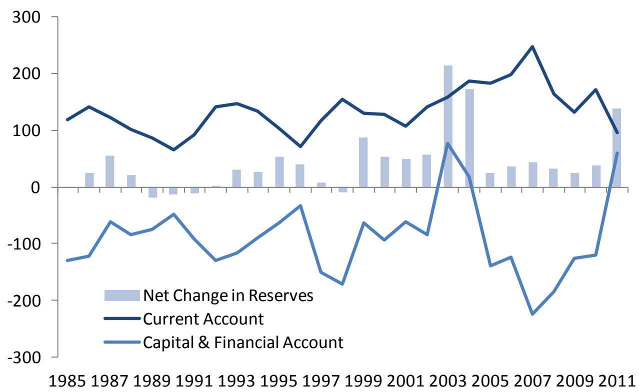
The result is that the stock of household savings (Figure 5) is growing much more slowly as incremental savings decline (Figure 6): Such flows (green line) have fallen from a high of JPY52.3 trillion in 1997 to a mere JPY9.7 trillion in 2011. Eventually, this will erode Japan's current account surplus and drive the yen weaker. But given the sizeable stock of savings—which continues to grow, albeit at a diminished pace—this is not a near-term driver for the currency.

The Might of the Capital Account

More than the current account, it is the outflows through the capital account that traditionally drive JPY. This encompasses both outflows from domestic residents in search of higher yields and foreign residents availing themselves of cheap Japanese funding rates. While the capital account deficit is generally smaller than the current account surplus (thus adding to foreign reserves, Figure 9), gross capital flows dwarf those of the current account by several multiples. These flows have traditionally represented an important source of downward pressure on the yen; yet, prospects for such flows to pick up remain limited. First, rate differentials among the majors have evaporated with the widespread adoption of zero interest-rate policies, and are set to do so with high yielders as well, as further monetary easing remains in the offing. Second, this also means that there is not only a dearth of destination currencies but also competition from other funding currencies. Third, risk sentiment remains vulnerable and could suffer a spike in volatility at any time. Fourth, domestic conditions are languishing, with the Nikkei, an important domestic sentiment driver, only up 35% since March 2009 (while the S&P 500 has racked up a full 100%) and still below the 2011 peaks.

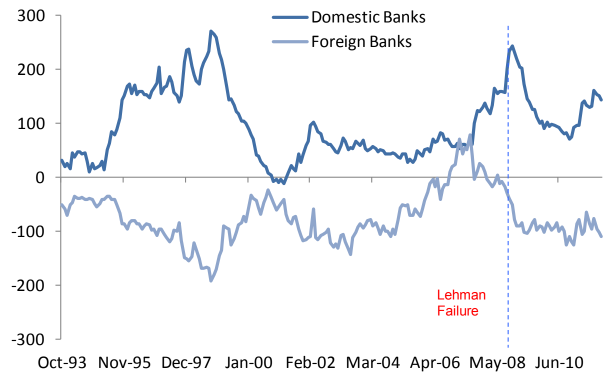
One way of gauging yen-funded carry trade appetite is via yen bank lending offshore. The BoJ's data on so-called "inter-office flows" show that such on-lending remains relatively muted and far off the giddy pre-crisis heights, in particular for foreign banks with operations in Japan (Japanese banks appear to be slightly more aggressive, Figure 10). Indicators of domestic retail investment activity paint an even starker picture: Foreign

Figure 9: Select Balance of Payments Items (JPY100 bn)



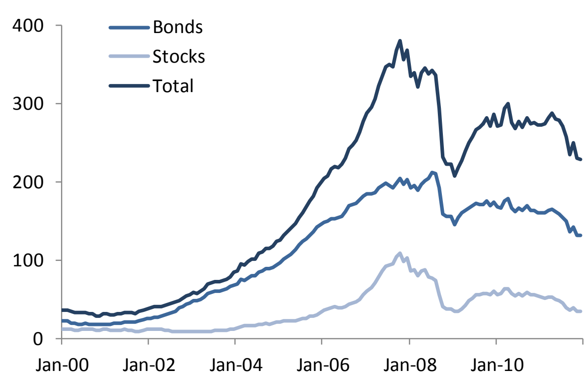
Source: Haver, Author

Figure 10: Net Inter-Office Flows (JPY100 bn)



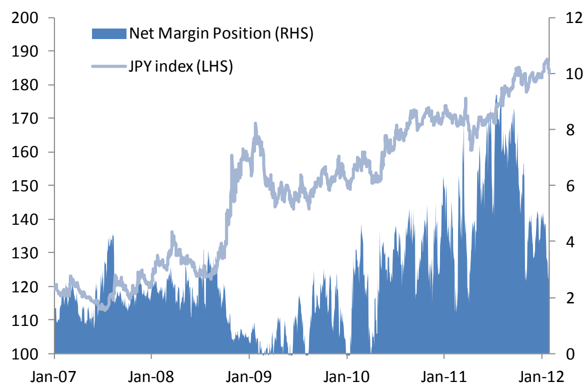
Source: BoJ, Author

Figure 11: Foreign Currency Assets in Investment Trusts (Toushin) (JPY100 bn)



Source: Tokyo Financial Exchange, Author

Figure 12: Net Margin Position, All Currencies (USD bn)



Source: Investment Trusts Association, Author asset holdings in investment trusts (the most popular and largest investment vehicle) remain 40% below their previous peak while net long foreign currency positions on margin accounts are 60% below their peak (Figures 11 and 12).

This is consistent with a development in 2011 that we view as more critical than the slide into a trade deficit: the shift into a capital account surplus. While last year's current account surplus was in line with the results of the 1990s, the sharp shift in the capital account (unlike then, Figure 9) suggests much-reduced prospects for capital outflows in the post-crisis environment. In particular, a breakdown of the capital account suggests that much of the surplus was accumulated during periods of high risk aversion, first in Q3 2010, when Greece's falsified fiscal accounts first came to light, and again in Q3 2011, following the U.S. sovereign rating downgrade and the downward revision of H1 GDP. What is more, the bulk of the flow was accumulated by the UK and concentrated in debt instruments, which suggests that UK financial institutions may have served as a conduit for sellers of eurozone debt seeking safe-haven instruments. As such, the capital account may revert to deficit but remains vulnerable to any adverse shift in risk sentiment.

Exchange Rate Valuation Not Definitive

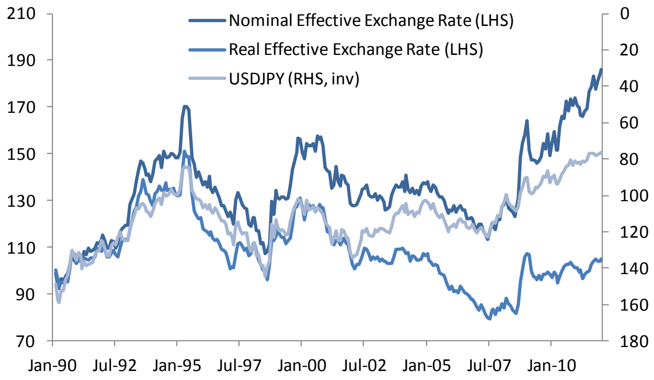
Assessment of the exchange rate cannot be complete without a discussion of its fundamental valuation. Clearly, USDJPY had reached a record low at the end of January. In broader terms (trade-weighted), yen strength was even more evident given the weakness of other important trade-partner currencies such as the euro (Figure 13). However, years of deflation have weighed on Japan's real exchange rate, making it more competitive. As a result, Japan's trade-weighted inflation-adjusted exchange rate still stands at a mere 70% of the 1995 peak. In other words, USDJPY would have to fall to 53 for the real exchange rate to reach the 1995 level (all else equal). Taking an even broader view, our fundamental equilibrium suggests that JPY is only 15% overvalued against USD and just 10% dear in effective terms. Currency valuation alone thus suggests only limited scope for downward pressure on the yen.

What of the threat of official intervention to push the currency weaker yet? When the Japanese Ministry of Finance intervened in the market in March and August 2011, the move was surprising given its apparent large scale. It is certainly true that on a daily basis these interventions were as much as 10 times bigger than the 2003-04 operations. However, this appeared to merely represent a change in tactic: Whereas the 2003-04 interventions were smaller and spread over the month, the 2010-11 interventions were concentrated on single days (Figure 14). In fact, on a monthly basis, the latest interventions were in line with previous operations and equally ineffective after a few days. What is more, given the rough doubling in market size between 2004 and 2010 (average daily turnover as per the BIS triennial FX survey), one would expect interventions to have been much larger, even though the share of USDJPY trading fell from 17% to 14% of the total over the period. Given the poor track record of past interventions, we expect such moves to pose little threat to the market.

The Bottom Line

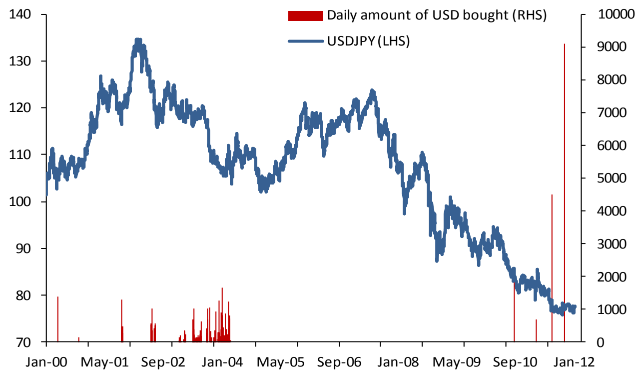
Of all the factors considered, the shift into a capital account surplus appears at least as significant as the turn into a trade deficit. And given the large stock of domestic savings, investment income will keep the current account in surplus for a while, even as the savings rate declines. The true new marginal information is the significant loosening of the BoJ's monetary stance. But while this is radical by its own standards, it fails to impress against the backdrop of Japan's long history of deflation and the more aggressive actions taken by other central banks. As a result, we modify our JPY forecasts, though not dramatically so: We expect USDJPY at 82 at end-Q1 (compared with 77 previously) and in the mid-80 range for the remainder of the year (compared with the mid-70s previously).

Figure 13: JPY Exchange Rate (index)



Source: Haver, Author

Figure 14: Official JPY Interventions (JPY bn)



Source: MoF, Author