## Market Environment For: <br> Japanese Yen

## Summary

The JPY is in a bearish consolidation with support at 119.25. A move lower projects to 121.20 followed by 121.90.
However, indicators are neutral on balance for the JPY:

- Expected short-term interest rate differentials favor the USD;
- Relative asset prices are neutral for the JPY;
- Volatility indications are weakly bullish for the JPY


## Interest Rate Indications

Both the USD and JPY swap rate yield curves have changed little in the money-market horizon over the past month. The nominal absolute rap gap favors the USD.



The combination of expected interest rate movements favors the JPY modestly. This can be measured by the difference in forward rate ratios between six and nine months $\left(\mathrm{FRR}_{6,9}\right)$ for the two currencies. These are the rates at which borrowing can be locked in for three months starting six months from now divided by the nine-month rate itself. The steeper the yield curve, the more the $\mathrm{FRR}_{6,9}$ exceeds 1.00 . An inverted yield curve has an $\mathrm{FRR}_{6,9}$ less than 1.00.

The USD FRR ${ }_{6,9}$ remains steep vis-à-vis the JPY $\mathrm{FRR}_{6,9}$, but this relationship has been increasingly erratic over the past month. While the USD $\mathrm{FRR}_{6,9}$ is positively sloped, the JPY $\mathrm{FRR}_{6,9}$ is inverted. This means USD rates will "roll down" the money-market yield curve while JPY rates will "roll up" the money-market yield curve over the next three months. However, these dual effects will not be sufficient to offset the absolute rate gap.


## Equity Indications

Capital inflows into Japanese equities necessitate the purchase of JPY. The total return of Japanese stocks relative to their U.S. counterparts has been in a trading range since the August selloff. The chart below depicts this relative performance leading the dollar's carry into the JPY by five days.


## Volatility Indications

The volatility of JPY forwards for USD holders tends to rise when traders fear a weaker JPY. At-the-money volatilities past one week are declining slowly. However, the risk reversals or differences between 25 -delta call and put option volatilities on JPY forwards are rising. The net effect is neutral for the JPY.


The excess volatility of the JPY for a USD holder, or the ratio of its implied volatility to its realized volatility, minus 1.00 , is declining from negative levels (inverse scale). USD-domiciled investors are adding to bullish positions on the JPY.


