

Nordic Currency Confusion

Currency markets sometimes can be described in terms of a planetary system. You have a central mass such as the sun or the U.S. dollar around which everything more or less revolves; we like the sun's long-term protections against bad policies far more than we like the dollar's protections against the same. Then you have a major planet, such as Jupiter, which weighs more than the other planets combined; the euro occupies this role. Other major currencies such as the yen, the British pound and the Canadian dollar can slot in for Saturn, Uranus and Neptune in an order of your choosing. And then, in both cases, there is everything else.

Just as major planets have moons, major currencies anchor currency blocs. The dollar bloc, for example, includes the Canadian dollar, the East Asian currencies such as the Taiwan dollar and Korean won. The euro's bloc includes the currencies of Eastern Europe and the Nordic currencies, our subject below.

There used to be five of these currencies, but the Finnish markka became part of the euro in 1999. The Danish krone trades tightly to the euro; we hope no one finds something rotten in its omission below. This leaves three Nordic currencies, the Swedish krona, Norwegian krone and Icelandic krona, which began a managed float in March 2001. These three currencies will be viewed in relation to the euro and its principal "moon," the British pound. Please bear in mind the cross-rate between the GBP and the EUR moved massively in favor of the EUR after the onset of the credit crunch in the summer of 2007. This will make the cross-rates between the Nordics on one hand and the GBP and EUR on the other look quite different.

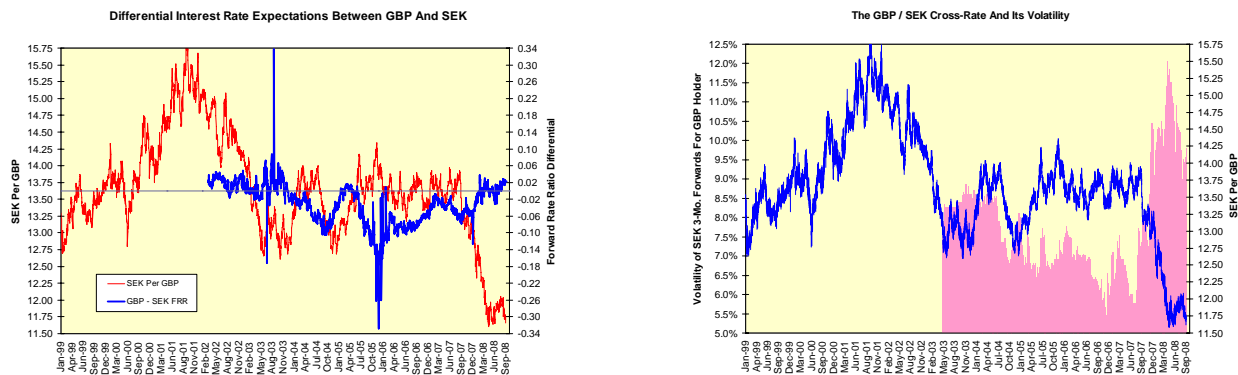
Each of these cross-rates will be addressed from two reference points, the difference in its forward rate ratio between six and nine months and that of its partner and the implied volatility of its three month forward on the cross-rate. A forward rate ratio from 6 to 9 months ($FRR_{6,9}$) is the rate at which we can borrow for three months starting six months from now divided by the nine-month rate itself. If this number is greater than 1.00, the yield curve is positively sloped across this segment, and if it is less than 1.00, the yield curve is inverted.

An expanding $FRR_{6,9}$ differential between two currencies, say the NOK and the EUR, indicates the market is expecting rising Norwegian rates relative to Eurozone rates. This is positive for the NOK, all else held equal. Rising volatility for a currency's forward indicates traders who have borrowed it are worried about the currency rising rapidly when the currency needs to be repurchased.

As there is no published cross-rate volatility between the ISK and GBP, it will be absent from the analysis below.

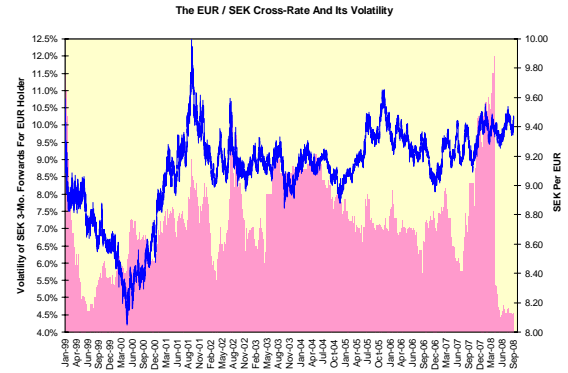
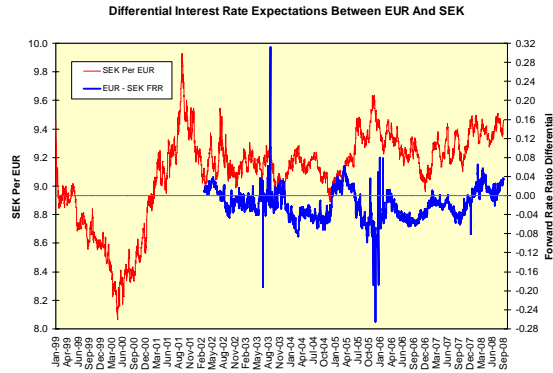
Swedish Krona

Here the SEK moved strongly higher against the GBP even as the $FRR_{6,9}$ differential moved in favor of the GBP. Higher expected short-term interest rates for the GBP were insufficient to firm the currency. This led to an explosion in the volatility for three-month SEK forwards by a GBP holder. The option market was betting this strength would continue and was buying protection against further strength in the SEK.



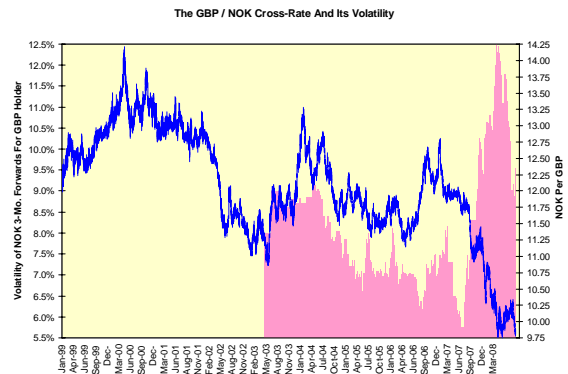
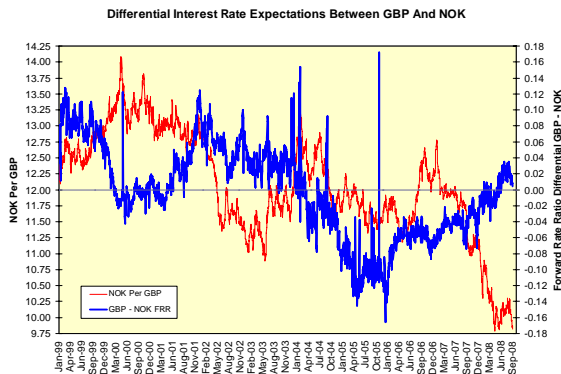
What does a similar analysis for the cross-rate between the SEK and the EUR look like? Here the $FRR_{6,9}$ differential bears the expected direct resemblance to the cross-rate itself. The SEK weakened somewhat on the cross-rate from early 2007 onwards, but a broader perspective has to be this cross-rate has been in a trading range since late 2001. The volatility for three-month SEK forwards for a EUR holder rose sharply during this modest selloff; this indicated substantial unease by holders of the EUR that the common currency's strength would persist.

It might be a little outlandish to think the world was anticipating a SEK rally; the better explanation is anticipation of future EUR weakness. Its subsequent collapse vindicates this view.

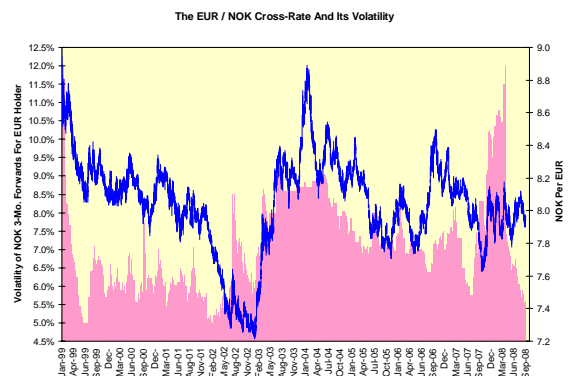
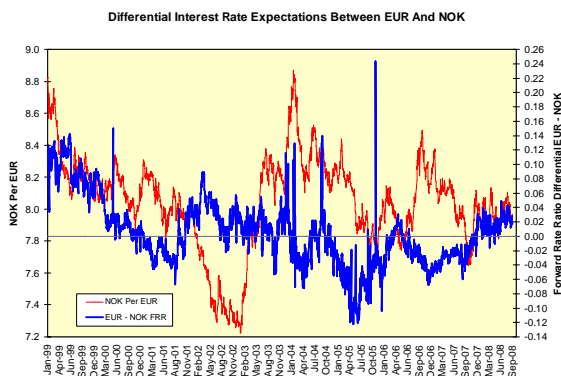


Norwegian Krone

Just as the SEK rallied against the GBP after the onset of the credit crunch, so did the NOK. Moreover, the FRR_{6,9} differential gives an identical picture as well; on interest rate expectations alone, the GBP should have been holding its own and then some against the NOK. The volatility picture is parallel, too. The option market was betting on the continued rise of the NOK against the GBP.



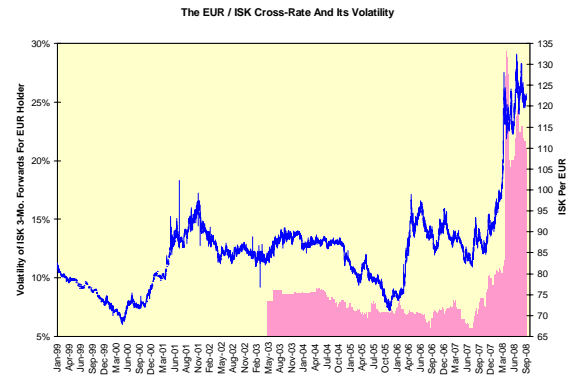
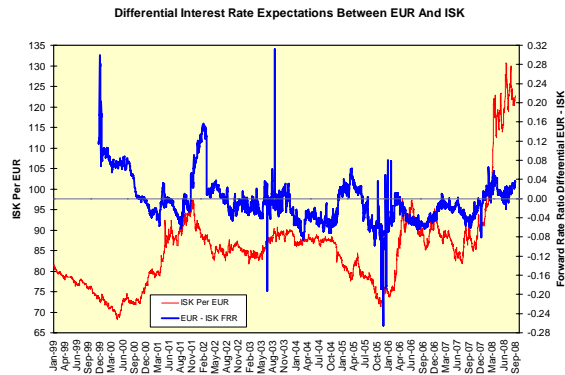
The picture is a little different for the NOK-EUR cross-rate. Here the NOK started to stabilize and firm against the EUR after the Bear Stearns rescue in March 2008; this was indicated earlier and confirmed by the softening in the FRR_{6,9} differential. Interestingly, the volatility for three-month NOK forwards by a EUR holder started turning in the NOK's favor long before March 2008; it began almost immediately after the onset of the credit crunch as the currency market bet the European Central Bank might follow the Federal Reserve down the path of monetary ease. Once again, the options market was prescient.



Icelandic Krona

Now let's finish with the Icelandic krona. This nation became an odd poster child for various global carry trades as it had to fight inflation with high domestic interest rates; these very same high interest rates were also required to attract and retain foreign capital. Iceland may be located in the sub-Arctic, but economically it is oddly similar to Mexico in 1994 and Thailand in 1997.

As the EUR bore the brunt of the global devaluation of the dollar, it was going to appreciate against any "moon" currency with weak fundamentals. Even though the $FRR_{6,9}$ differential never moved strongly in the EUR's favor, there was no level for the poor ISK that could prevent its collapse on the cross-rate. However, this situation was viewed as highly unstable in the options market, and those who were short the ISK bought and retained protection on its three-month forwards.



Conclusion

Just as planetary scientists explain the asteroid belt as debris tugged between the sun and Jupiter, we can explain the disparate movements of the Nordic currencies by the station between the U.K. and the Eurozone. Nothing in the interest rate parity model of currency trading can account for the effects of the credit crunch on the U.K. or the role forced upon the euro as the one currency allowed to appreciate unhindered against the dollar.

This places the Nordics in the uncomfortable role of requiring special explanations for their movements. Perhaps at some point they will be allowed to trade more or less freely on their fundamentals such as interest rates, returns on assets or trade flows, but not now. Perhaps they will at some future point make the political decision of joining the euro just to make their lives comfortably dull.