

### Summary

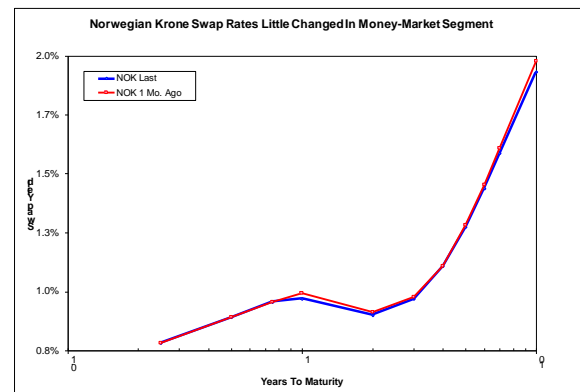
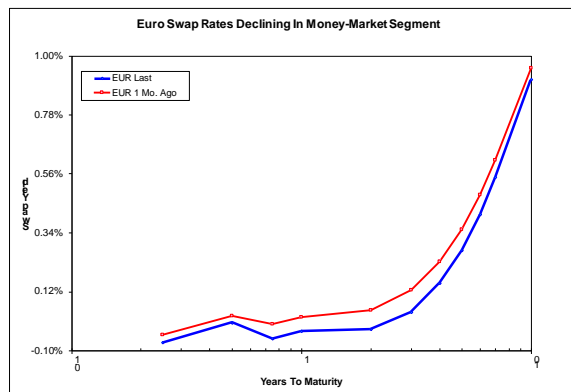
The NOK is in a downtrend on the cross-rate with resistance at 9.1955. The move projects to 9.5520 followed by 9.7185.

The balance of indicators remains mixed for the NOK on the cross-rate:

- Expected short-term interest rate differentials remain in favor of the NOK;
- Relative asset prices are bearish for the NOK;
- Crude oil prices are starting to turn supportive for the NOK on the cross-rate;
- Volatility indications are bearish for the NOK

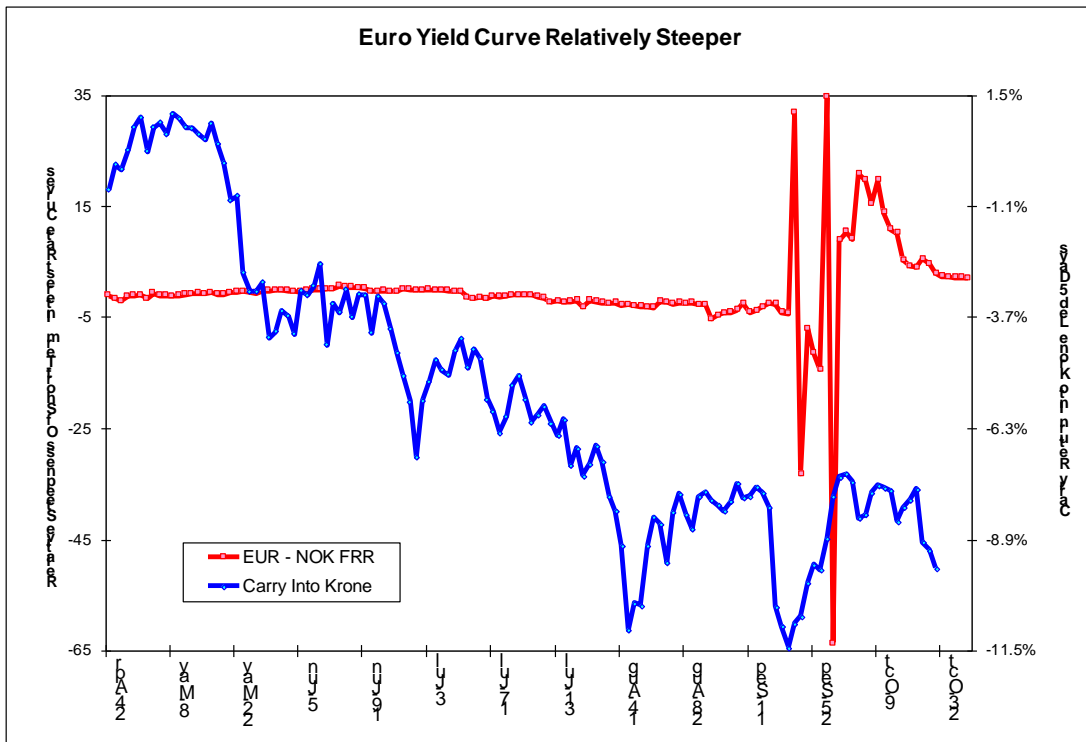
### Interest Rate Indications

While EUR swap rates are moving lower in the money-market horizon, NOK swap rates have changed little but remain at a higher base. The absolute rate gap favors the NOK.



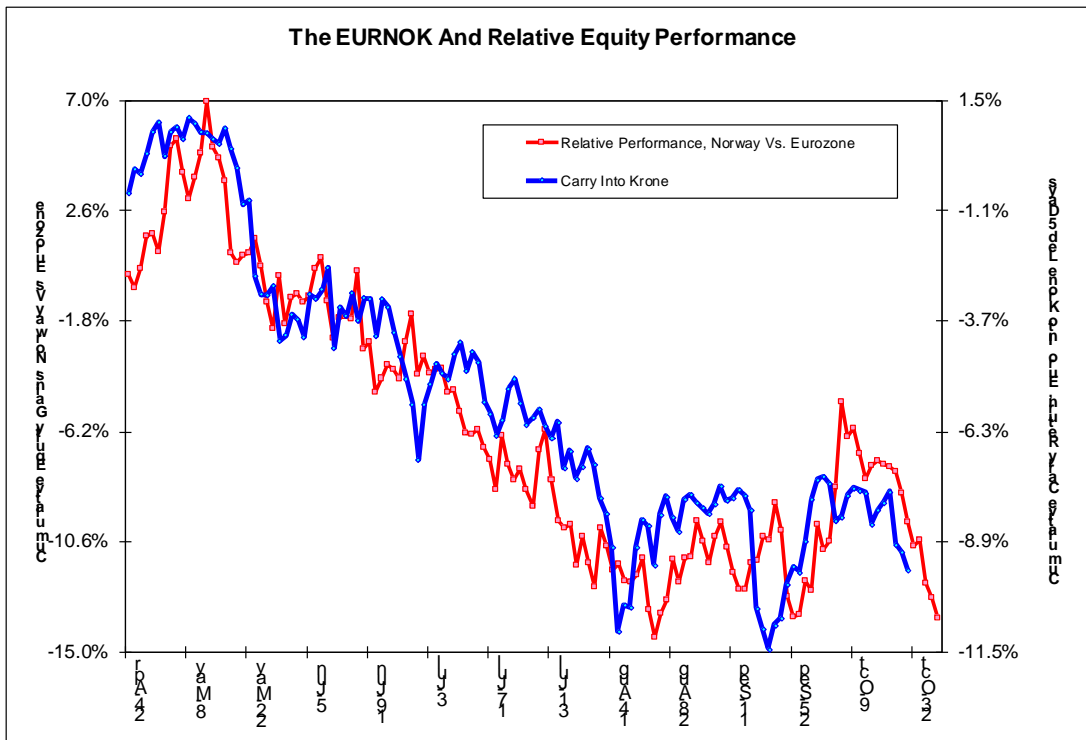
The combination of expected interest rate movements is moving in favor of the NOK. This can be measured by the difference in forward rate ratios between six and nine months ( $FRR_{6,9}$ ) for the two currencies. These are the rates at which borrowing can be locked in for three months starting six months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

The EUR  $FRR_{6,9}$  is steep relative to the NOK  $FRR_{6,9}$ . EUR rates thus will “roll down” the yield curve over the next three months while EUR rates roll up their yield curve. The chart below depicts this expected interest rate differential leading the EUR’s carry into the NOK by five days.



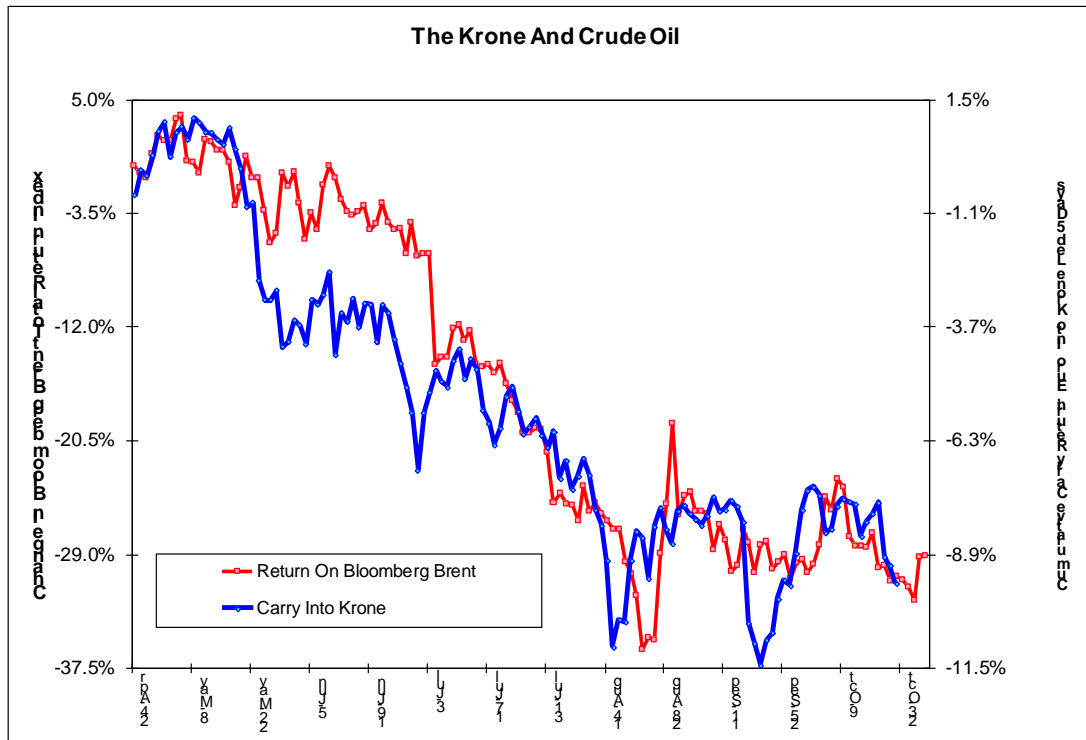
### Equity Indications

Capital inflows into Norwegian equities necessitate the purchase of NOK. The relative total return of Norwegian stocks relative to their Eurozone counterparts is in a downtrend. The chart below depicts this relative performance leading the euro's carry into the krone by five days.



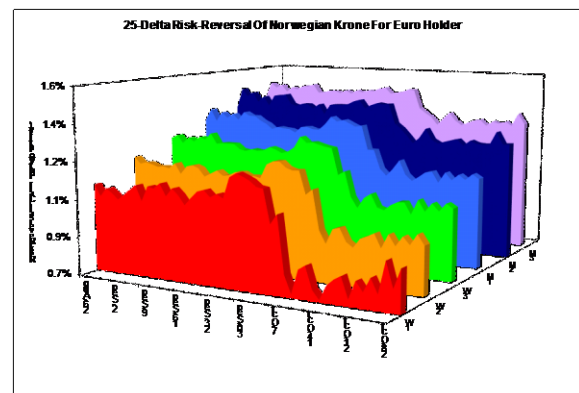
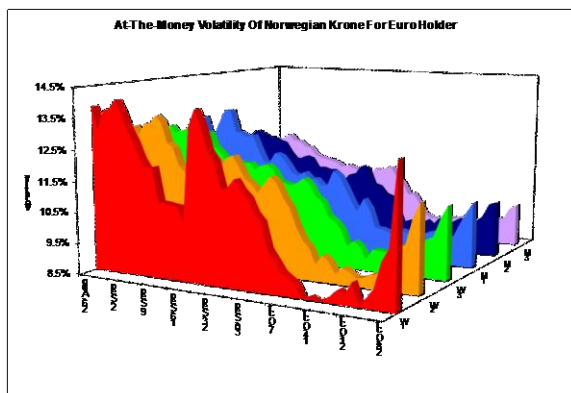
## Crude Oil

Norway is a large exporter of crude oil. The stabilization in total returns for the Bloomberg Brent subindex is supportive for the NOK. The chart below depicts Brent leading the carry into the EURNOK with a five-day lead time.



## Volatility Indications

The volatility of krone forwards tends to rise when traders get nervous about the NOK weakening on the cross-rate. While ATM volatilities are rising, the risk reversals, or differences between 25-delta call and put option volatility on NOK forwards, are stable. The combination is weakly bearish for the NOK.



The excess volatility of the krone for a euro holder, or the ratio of its implied volatility to its realized volatility, less 1.00, is rising from negative levels (inverse scale). EUR-domiciled investors are building bearish hedges against the NOK.

### Excess Volatility And The EURNOK

