The Cost Of Being Europe

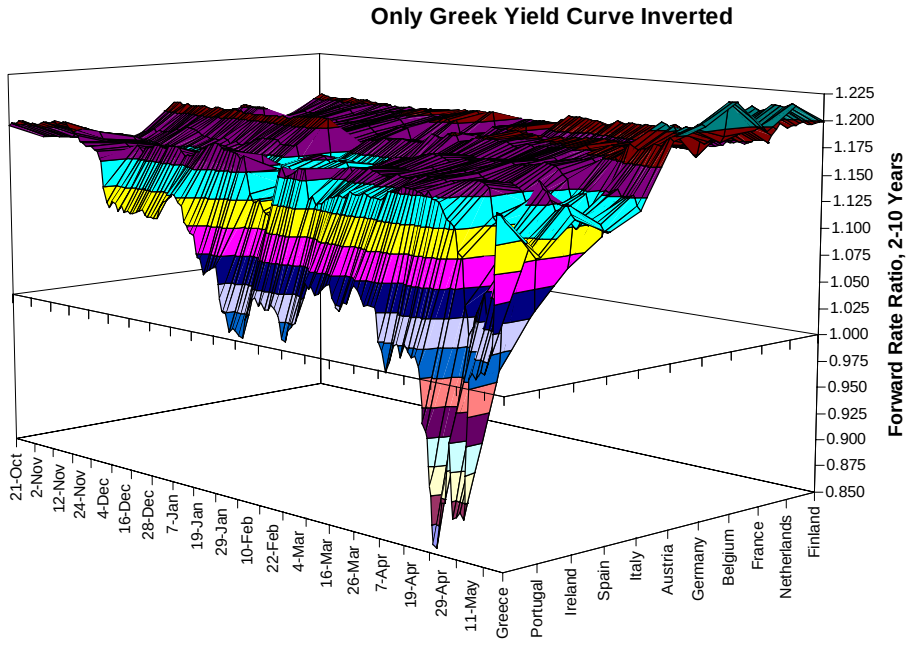
Economists should learn the Iron Law of Forecasting early in their careers: Give them a number or give them a date, but never give them both. This has served me well in recent months with my uncannily accurate predictions for the Chinese yuan and the target federal funds rate.

Governments often forget another law given in the same spirit: They can fix an exchange rate or they can fix a short-term interest rate, but they cannot fix both. As the fundamental equation for currencies has the forward currency level as a function of the spot rate and the short-term interest rates of the two countries involved, you are left with a single equation and three unknowns. This is why currencies can move around so much; there is no one single price that clears the system but rather a large number of spot rate and interest rate combinations.

If a government pegs the exchange rate in a currency board system as Argentina and Bulgaria tried back in the day, they have to raise or lower their short-term interest rates fairly actively to maintain that peg. If a country fixes a short-term interest rate, as the U.S. essentially has done, the currency will have to swing about as external interest rates change.

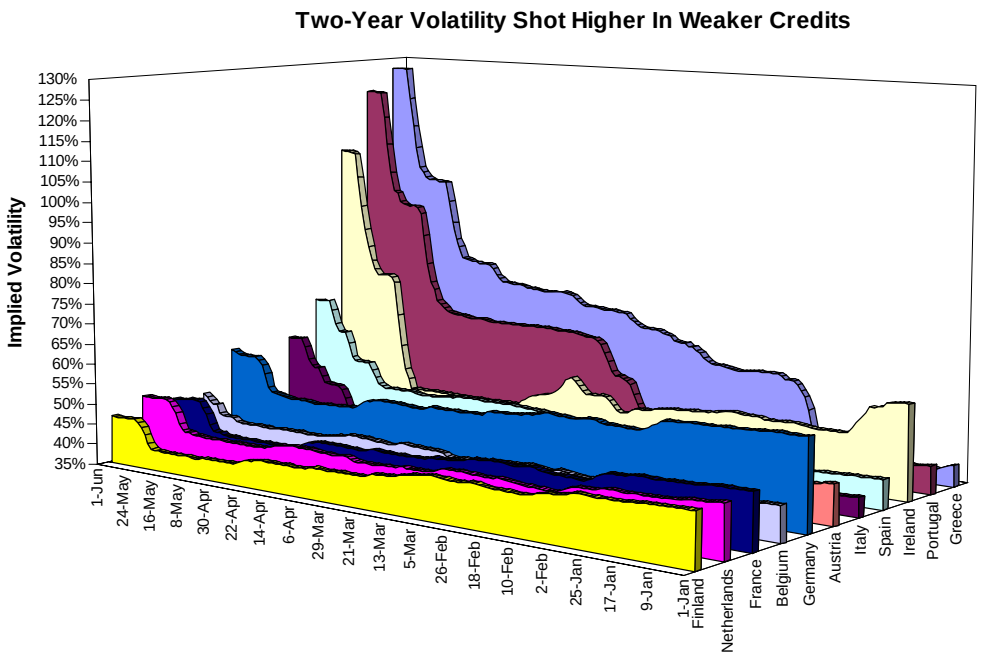
The Eurozone Case

If we think of the euro as a fixed exchange rate amongst the member countries, it stands to reason their short-term interest rates, yield curves and fixed-income volatilities will have to swing about to absorb the stresses resulting from perceived changes in credit quality. That indeed has been the case. If we map the forward rate ratios ($FRR_{2,10}$, the rate at which we can lock in borrowing for eight years starting two years from now, divided by the ten-year rate itself) between 2 and 10 years for eleven Eurozone members going back to the beginnings of the problem last October, we see how a fairly uniform set of yield curve shapes split apart as the situation developed.



At the virtuous side, $FRR_{2,10}$s for Finland, the Netherlands and France actually steepened as money flowed into their short-term notes. At the non-virtuous end, the Greek yield curve inverted and the Portuguese, Irish, Spanish and Italian yield curves flattened as their short-term interest rates had to rise to compensate investors for the increased credit risk.

We can illustrate this in another way through two-year zero-coupon volatility. As the situation unfolded, implied volatility levels shot higher for the lower-quality credits. This was in direct contravention to the normal pattern of fixed-income volatility rising when interest rates fall and yield curves steepen. The normal pattern regards a steep yield curve with low short-term rates as unstable; here the reaction was credit risk made even higher short-term rates unstable.



The implications are clear. First, the Eurozone is going to have to work very hard on the interest rate front to maintain a common currency now that its separate credit risks have been laid bare. Second, higher volatility raises hedging costs and therefore the costs of doing business. That is never bullish for risky assets and the Eurozone will be punished accordingly until the credit problems of its weaker members are resolved.