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Brexit: A Rational Look at Irrationalities

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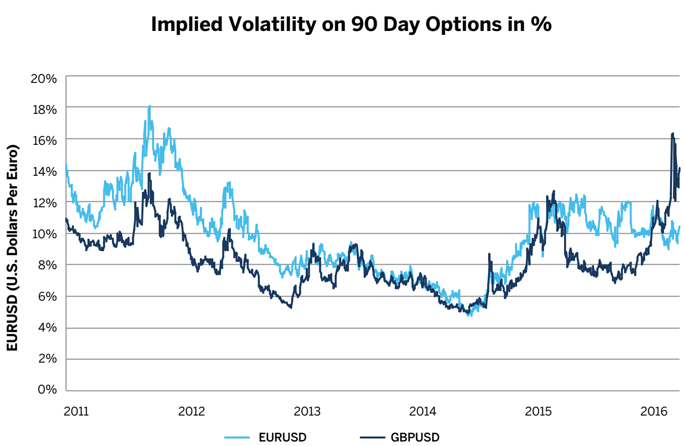
As we mentioned in a previous article on options prices and the 'Brexit' vote, traders of British pounds (GBP) are much more concerned about the possibility that the United Kingdom (U.K.) might leave the European Union (EU) than are euro (EUR) traders. Normally, GBP implied volatility is lower than that for the euro. This relationship has reversed sharply in recent weeks ahead of the June 23 vote (Figure 1).

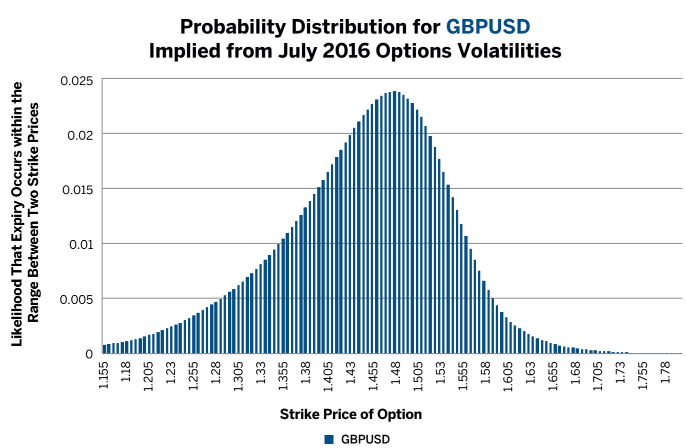
Options prices out of the money reveal a wealth of additional information regarding what investors believe and fear about the referendum. In a nutshell, the probability distribution that one derives from GBP and EUR options of various strike prices shows that insurance on GBP is exceptionally expensive on the downside, and that almost nobody is pricing a risk that GBP could rally against USD (Figures 2 & 3).

Figure 1: GBPUSD Options Significantly Exceed EURUSD Option Implied Volatility At The Money.



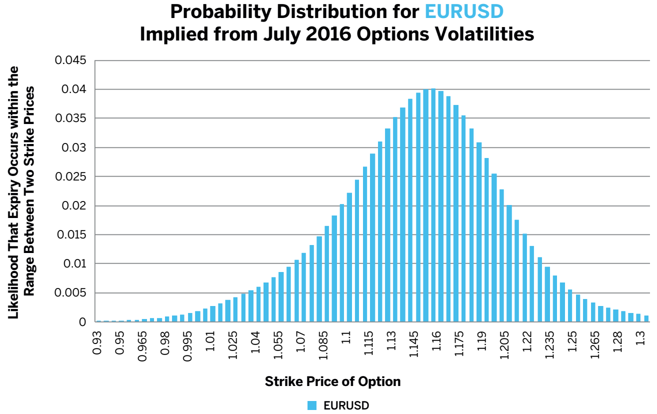
Source: Quikstrike (6E_90 and 6B_90)

Figure 2: GBP Options Price a 10.8% Chance of a 10% Fall And a 3.6% Chance of a 10% Rise by July 31.



Source: Quikstrike (GBP Implied Probability)

Figure 3: EUR Options Price a 3% Chance of a 10% Fall And a 2.3% Chance of a 10% Rise by July 31.



Source: Quikstrike, EUR Implied Probability

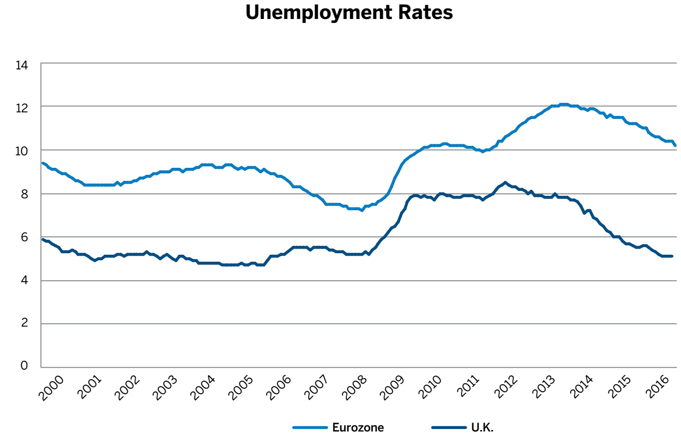
GBP options imply a 10.8% probability of a 10% decline from the current level (1.44 against USD at the time of this writing) to 1.295, and only a 3.6% probability of a 10% rise to 1.585. This essentially reflects three-to-one odds that a 10% fall is more likely than a 10% rise.

EUR options, by contrast, are much more evenly balanced. As of Friday, May 6, they price a 3% chance of a 10% fall and a 2.3% chance of a 10% rise in EURUSD.

While the pound would most likely react negatively to a vote to leave the EU, we are not convinced that EUR and GBP options should be priced so differently. As we have pointed out in our article **Brexit: More Pain for EU than Britain?**, the risks of a 'Brexit' are not exclusive to Britain. The vote also holds a great deal of significance to the nations of the eurozone as well. A British exit from the EU could send a signal to other countries, notably Greece, that they too can think about leaving, opening the door to possible debt defaults and other turmoil.

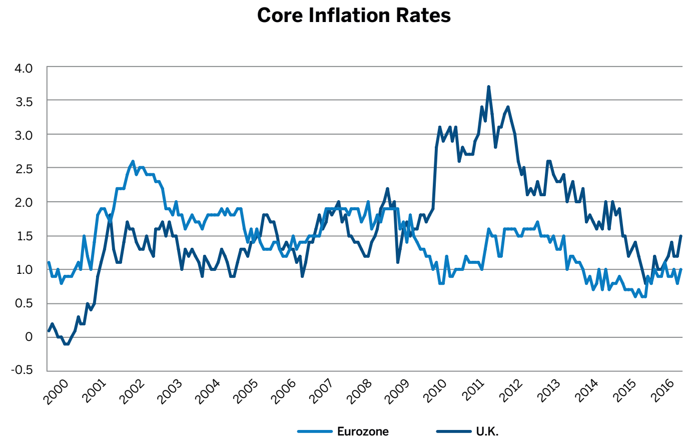
What's more is that the fear of a 'Brexit' appears to have blinded markets to certain economic realities. 'Brexit' or not, the U.K. economy is much healthier than that of the eurozone. It has much lower unemployment (Figure 4) and the U.K.'s core rate of inflation is half a percent higher than the eurozone's (Figure 5). This implies to us that the Bank of England (BoE) is probably much closer to a rate increase than is the European Central Bank (ECB), which is still contemplating further policy easing and will extend quantitative easing well into 2017.

Figure 4: U.K. Unemployment is Half The Eurozone Rate.



Source: Bloomberg Professional (UKUEILOR and UMRTEMU)

Figure 5: U.K. Core Inflation is 1.5x That of The Eurozone.



Source: Bloomberg Professional (UKUEILOR and UMRTEMU)

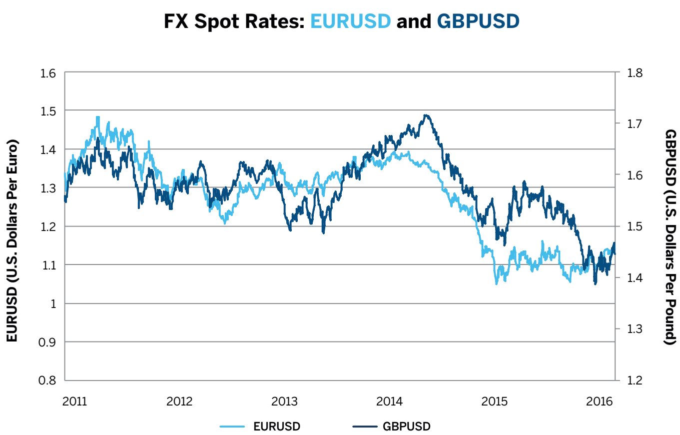
The fact that so few people apparently expect (or fear) that GBPUSD could rally might actually increase the odds of a big rally in 'cable,' a trade slang referring to the GDPUSD exchange rate. Moreover, the economic differences between the U.K. and the eurozone also favor a higher GBP versus EUR.

This doesn't rule out a selloff in the pound should the U.K. vote to leave –a possibility to which participants at Ladbrokes, Paddy Power and Predictit.org assign roughly a 25%-30% probability. Indeed, opinion polls are showing that the "leave" vote is gaining the upper hand.

Nevertheless, market sentiment towards the pound is so negative at the moment that one should consider the possibility of a big rally in the currency should the "stay" vote prevail, and only a modest downside should the "leave" vote rule the day. Viewed from a USD perspective, the pound and the euro often move in tandem (Figure 6) but the 'Brexit' vote will surely put the usual correlation pattern to a severe test.

One factor that has supported EUR versus both GBP and USD is the unexpected reaction of markets to negative deposit rates. After the ECB set the deposit rate at -0.4%, EUR rallied. This may be because negative deposit rates serve as a tax on the banking system and may be contracting monetary policy. If the ECB lowers lending rates into negative territory – a possibility in the near future—that may have the opposite effect and expand the supply of euros, lowering their price in both USD and GBP terms.

Figure 6: Brexit Weighed on The Pound in Late 2015 and Early 2016. Is The Risk Fully Priced?



Source: Bloomberg (EUR and GBP)