Ökonomie & Statistik
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On the negative basis trade

On FT Alphaville[1] there was a discussion on the persistence of a gap between the price of CDS on Greek Government Bonds (GGB) and the spotmarket price of GGB: As noted by Barclay Capital, the GGB spreads have widened relative to CDS premiums, allowing an arbitrage trade without default risk from the issuer of the bond.[2] One possible explanation for the persistence of the gap between CDS premia and spotmarket may be the counterparty risk. Taking some basis valuation formula, one has for the probability of default of GGB:

$$\Pr(D_{GGB}) = r_{GGB} - r_{rf}$$

The value of the CDS from the perspective of a buyer is – for some value of recovery rate *r*, assuming no counterparty risk:

$$CDS = (1 - r) \cdot \Pr(D_{GGB}).$$

If we allow for counterparty risk Pr (D_{CP}), this becomes:

$$CDS = (1 - r) \cdot \Pr(D_{GGB}) \cdot (1 - \Pr(D_{CP})).$$

Now, if we allow for the weak form of the efficient market hypothesis, a widening between GGB on the spotmarket and CDS-premia could have two sources: a rise in the expected recovery rate, or a rise in the counterparty risk. Since S&P has set a low expectancy value on the recovery rate (between 30-50%, far below the average recovery rate for sovereign defaults), this persistent, and widening gap is only consistent with a widening in the counterparty risk.

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[1] http://ftalphaville.ft.com/blog/2010/05/06/221576/the-gr%CE%B5%CE%B5k-n%CE%B5g%CE%B1tiv%CE%B5-b%CE%B1sis-tr%CE%B1d%CE%B5/

[2] One could buy the bond and buy default protection – a CDS – and cash in the difference between the bond interest rate and the insurence premium.