## Control the spread

The markets measure eurozone break-up risk by analysing European sovereign CDS spreads. Marcello Minenna argues European monetary policy-makers should therefore make spread control their key goal

n Europe, the mood has improved over the past couple of years, but the fundamentals have not: EU treaties do not allow the European Central Bank (ECB) to print money to finance EU budget deficits, and the European public debt stands at roughly €10 trillion, with an average government debt-to-GDP ratio approaching 100%.

The lack of common structural rules for fiscal policies, such as taxation and transfer pricing, forces market participants to measure creditworthiness of EU countries via the infamous spread between German bund yields and the government bond yields of other EU countries.

The spread can also be interpreted as a metric to measure eurozone break-up risk, as an EU country close to default would consider a return to its national currency, along with a forced debt restructuring and a competitive devaluation.

Many eurozone credit default swap (CDS) prices have now shifted from being quoted in euros to US dollars only, reflecting the hypothesis that euro settlement would be impossible if the country exits from the monetary union, since the euro would not be expected to survive such a shock.

For example, Italian CDSs have not been quoted in euros since August 2010, as the market equates an Italian default with its exit from the eurozone and thus the break-up of the monetary union (figure 1).

Where the US dollar quotation of a eurozone sovereign CDS is higher than its euro equivalent, the difference represents the premium – the quanto spread – the market requires to hedge the CDS buyer against the risk that the country's default would precipitate its exit from the monetary union, and this event could cause a eurozone break-up. In other words, each eurozone country's quanto spread can be seen – in terms of market-implied probability – as the marginal contribution of that country to the eurozone break-up event. By the same token, the absence of the euro contract means the US dollar eurozone country CDS premium reflects

the market's expectation of a euro break-up event, and consequently can be used as a rough approximation of this event.

For example, the risk of a eurozone break-up within five years was as high as 70% in mid-2012, according to these metrics (figure 2).

The spread should not be considered a physiological component of the eurozone, but a pathogen that has to be contained to avoid financial instability and improper transfers of wealth between eurozone countries.

Persistent spreads over time between 1% and 5% – as has been the case in Italy and Spain since 2008 – inevitably increases the financial burden for a country's manufacturing industry. This loss of competitiveness is compounded by the negative effects of inflation differentials between the peripheral countries and Germany.

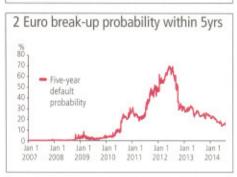
These costs obviously affect the average price of each country's exports. It's well known that goods and services that are perfect substitutes are heavily affected by the average selling price; moreover, they constitute the major part of eurozone GDP. This means a competitive advantage in terms of average selling price emerges for the country without a spread, such as Germany.

For example, say the same product is manufactured in Italy and Germany and its cost for the US consumer in 1999 is \$100. In 2014, due to the cumulative effect of higher inflation and a larger spread, the Italian version of this product costs \$136, while the German one is only \$117. The \$19 difference is due to the different dynamics of inflation and spread, and has nothing to do with the real productivity of the Italian and German industries.

The eurozone has existed for 15 years. The 60% target debt-to-GDP ratio agreed at its creation was simply the average of the European debt-to-GDP ratio in 1992. EU institutions also decided at the time that the main goal of the European Central Bank (ECB) should be price stability; sovereign CDSs were not yet invented, and the credit risk of Organisation for Economic

1 Correlation between Italy risk and euro break-up risk

700
600
500
400
300
200
100
1 Jan 1 Jan



Co-operation and Development countries was not even worth measuring.

In 2014, the average European debt-to-GDP ratio is 92.2%, deflation is a reality and markets are quoting the default risks of European countries together with the risk of a euro break-up. The time may have come to redirect ECB efforts toward spread control and the restoration of a unique interest rate term structure for the entire eurozone. The ECB's recent quantitative easing programme should be used to manage this issue and homogenise eurozone sovereign risk, either directly by buying government debt or synthetically through the purchase of asset-backed securities with eurozone government guarantees. R Marcello Minenna is professor of financial mathematics at Bocconi University and head of the quantitative analysis unit at Italy's markets regulator, Consob. The opinions expressed in the article are those of the author and do not necessarily reflect the views of these institutions. Marcello can be contacted at: marcello@minenna.it