The wisdom of the herd – What the financial markets can tell about sovereign risk

Fire fighting remains the order of the day in the financial markets. But more than banks or other private institutions, whole countries are in the limelight. Interestingly, their difficulties are no longer identified exclusively as external, reflected in falling currencies or a drop in international reserves. With the Dubai "quasi-default" and the current difficult situation of the Greek economy the domestic situation of economies that are much less exposed externally comes to the forefront. Consequently, market participants have to look for other reliable indicators of sovereign risk. Increasingly they have been using CDS (credit default swaps) spreads to approximate the risk of a default of governments and countries as a whole. However, this approach is as limited as the currency approach. Neither the market for currencies nor the market for CDS provide reliable information to assess the risk of sovereign default.

CDS and the risk of sovereign default

Credit Default Swaps are contracts in which the buyer of the CDS makes a series of payments (known as the "spread") to the seller and, in return, receives a payoff if the credit instrument specified in the contract (typically a bond) fails to pay. In principle, CDS can be seen as an instrument of insurance, since the risk of default is transferred from the holder of the fixed income security to the seller of the swap.

The CDS spread is supposed to represent the riskiness of the asset that is being insured. Recently it has been argued that the widening of the spread indicates an increasing probability of default for countries. This, it is argued, is particularly true for those countries where a national currency does not exist, like in Greece, or where the market for domestic currency is small like in Dubai. In these cases, where the currency market cannot spell out the lack of confidence, the rising spread of CDS is seen as being the only serious indicator.

Meanwhile, in some markets a bigger probability of default is expected for industrialized countries than for companies. Such an outcome is hard to reconcile as countries only very rarely default in the classical sense of the term but normally only get into difficulty to finance their foreign obligations as they run out of reserves of internationally accepted currency. But this is definitively not the case in Greece as a member of the Euro zone. These inconsistencies raise the question of how much useful information about sovereign risk can be obtained from sharp increases in CDS spreads in this case.

Economists have taken different positions on the matter. On one side, it has been argued that, since CDS contracts provide a form of insurance against default, an increase in the price reflects the belief of market participants that the probability of default has increased. On the other side it is argued that movements in CDS spreads just indicate the increased need to buy protection as banks have to comply with credit limits and try to minimize losses by buying CDS as an instrument of risk mitigation. Somewhere in the middle it is suggested that default probabilities can only be loosely estimated from prices in CDS markets, but that they contain useful information about the relative risk of default of a particular firm or country.

Are these arguments viable? A reality check shows that there is a widespread misinterpretation of CDS spread movements. Evidence indicates that the informational dynamic of this market, exactly like the currency market, sheds light only on the "wisdom of the herd", which is moved by fragments of news but not by a comprehensive analysis of the risk of sovereign default.

Key features of the CDS and the currency market

Theoretically, CDS as over-the-counter derivatives (OTC) should be mainly motivated by insurance incentives. However, empirical evidence suggests that hedging, in the particular form of offsetting transactions, has been extensively used for other purposes. Instead of reducing CDS exposure by early termination of the contract (doable only with the agreement of both parties), or by transferring the contract to a third party (with the consent from the counterparty), it became a common practice to enter into offsetting transactions, which are not necessarily negotiated with the same counterparty as the hedged deal.

Offsetting transactions, which became a main driving factor of the increase in total gross notional amounts, clearly signal the operation of speculative hedging in this market. The speculative hedging with sovereign titles is based on the same information as the trade in currency markets. Therefore, the typical holder of CDS will focus on a certain type of news with rating agencies typically playing an outstanding role in the provision of these news. The Bank of International Settlements has published a study confirming that all types of rating announcements – outlooks, reviews and rating changes, whether positive or negative – have a significant impact on CDS prices.

The best way to show the difficulty of the financial markets in general to estimate risk correctly and to find the right price is revealed by the comparison of markets for totally different "products" or "assets". Graph 1 depicts the daily movements of the CDS spread for Italy as well as a commodity price (Brent crude) versus two currency pairs (the Brazilian real and the Australian dollar against the Yen). Over 24 months, the CDS spread, the price of oil and the currencies go exactly in the same direction, and the daily movements are extremely highly correlated.

Delusive correlations

This parallel movement of CDS spreads and currencies demonstrates that the supposedly perfect information generation and processing on financial markets is flawed, and in particular the increasingly fanciful idea that markets are able to correctly

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understand the complex situation of a country in a crisis. Additionally, it is absolutely impossible that the movements of supply and demand for oil exactly mirror the movement of Italy's default risk. The only explanation of the homogeneity, for example since spring 2009, is the homogenous expectation on all financial markets that a recovery has set in and that the train to the casino is leaving the station.

Here is the important distinction between financial markets and normal markets for goods and services. Atomistic markets for goods and services are able to generate and process a colossal quantity of independent information and data. Each market participant enters the daily bidding process with his or her specific plans to sell or to buy a certain product, which are based on his or her individual needs and preferences. The final price that is fixed by the market maker or auctioneer reflects all the different and independent bits of information and forms it into a fair price. The auctioneer, who is fixing the price every day or in even shorter periods, guides the future plans of the individual actors and helps to overcome bottlenecks and gluts in the supply of certain goods.

Financial markets are totally different. Financial markets are characterized by oligopolistic information sharing. Most of the information that determines the behaviour and the expectations of speculators and hedgers are publicly accessible. Additionally and even more importantly, the interpretation of these data, which means their implications for the market participants' expectations, is rather homogenous. Many market participants do no longer have their own analysts on which they base their opinion but they rely on common software that determines or recommends selling or buying decisions based on a given number of indicators. That is why a certain event, such as bad news from the US labour market, triggers selling of all risky assets at the same time and explains the strong correlation of the daily movements across all these markets.

Only when a shock occurs openly one market may deviate from the others. For example, spreads on Greek CDS were moving above those of the other troubled countries in the Euro zone when a political debate about the Greek government deficit started to unfold in October 2009 (graph 2). But clearly, that came too late to outsmart the "superior" knowledge of the market. In the same vein, in following the public mood and public debates by downgrading the government bonds in the public focus, rating agencies do not live up to their supposedly objective, distinct and monopolistic role in the financial markets. The same is true for the peak of the crisis between autumn 2008 and spring 2009: The parallel movement of all the spreads including Germany show that there was a general move out of assets and into cash but not due to any specific problem in any of the countries.

There has long been a debate in economics concerning the "equilibrium price" in markets and the incompetence of governments in guiding the market to reach it. But that argument misses the point as far as financial markets are concerned: Even if well-informed governments and central banks do not exactly know the equilibrium price, they usually do know when prices are in *disequilibrium*. The movement of prices on many seemingly "independent" markets in the same direction with extremely high correlation of the daily movements places the biggest question mark over the efficient market hypothesis. And in the realm of real-life economic policy, it moreover raises the political risk of a meltdown on all the markets at the same time.

The dangers of herding

The market determination of exchange rates through currency carry trades is the best example of herding and its dangers: exchange rates moving in the opposite of fundamentals, i.e., in the opposite direction of what is needed to restore the international competitiveness of the overall economy. After the biggest financial crisis since a century, such phenomena should make all alarm bells ring and raise the pressure for government action to stop this kind of speculation.

The same is true for housing: if house prices must rise for the next twenty years or so for most mortgage contracts in a country to be serviceable, governments should know that something has gone wrong and will go wrong if they do not act to deflate this speculative bubble. Or take stocks: If the valuation of companies goes far beyond traditional valuation measures like the price/earnings ratio or implies exploding earnings in an environment of a cooling overall economy, governments and central banks should know that by intervening or tightening the rules they do more good than harm.



Graph 1 – Left: AUD/JPY versus Italy CDS Spread in USD. Right: BRL/JPY versus S&P GSCI Brent Crude. Source: UNCTAD Secretariat based on Bloomberg.

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Graph 2 – CDS 5 years spreads in USD of selected countries in the Euro zone, January 2008 – January 2010. Source: UNCTAD Secretariat based on Bloomberg.

Even mergers and acquisitions through private equity funds are part of the same model: as the business of these funds is built on short-termism, namely the leveraging of returns through "equity debt swaps", governments should know that these swaps – if used on a large scale – may dramatically increase the systemic vulnerability of the economy in times of stress and downturn.

The case for coordinated regulation

Interventions in financial markets that are part of the global economy call for cooperation and coordination of national institutions and for specialized institutions with a multilateral mandate to oversee national action. In the midst of the crisis this is even more important than in normal times. The tendency of many governments to entrust to financial markets again the role of judge or jury over the coming process of reform – and indeed over the fate of whole nations – would seem inappropriate. For example, it is indispensable to stabilise exchange rates by direct and coordinated government intervention. This should take the place of the usual government stance of allowing the market to find the bottom line while trying to "convince" financial markets of the government's credibility when depreciating currencies through pro-cyclical policies like public expenditure cuts or interest rate hikes.

The overall lesson is a simple one: when it comes to finance, markets and rating agencies are not able to understand what is really going on in the complex interaction of markets, governments and citizens. They are not able to evaluate the future of societies and to find a reasonable price for the risk of default or any other severe shock. What makes us believe that anonymous herds on the financial markets should be able to generate knowledge that even the best and brightest brains are not able to produce?

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