

Bad News Spreads

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When government debt is downgraded, the ill effects can be felt across countries and financial markets

THE recent European sovereign debt crisis was concentrated in a few countries, but its effects were felt in financial markets throughout the euro area. Following downgrades of credit ratings for countries such as Greece, Ireland, Portugal, and Spain, sovereign bond spreads widened, the costs of insuring sovereign debt (as measured by credit default swap—CDS—spreads) rose, and stock markets well beyond the affected countries felt the pressure (see chart).

The resulting debate over the role of credit rating agencies during crises and the interdependence of different financial markets has focused on changes in sovereign debt ratings. These measure the likelihood that a government will fail to meet its financial obligations and whether these changes have spillover effects across countries and markets in a highly integrated environment, such as the euro area, which includes 16 European economies.

The financial intertwining of European economies over the past decade has created unique conditions for the study of the effects of rating news on financial markets, but the issue is not unique to Europe. The current debate surrounding the agencies that assign credit ratings echoes discussions during the Asian financial crisis of 1997–98, when sovereign debt problems hopped from economy to economy.

Unfortunately, there has been little research on the spillover effects of rating news. Gande and Parsley (2005), using data on bond

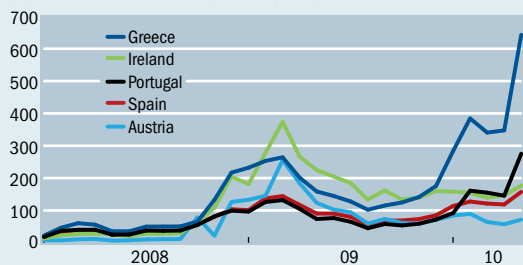
spreads for emerging markets from 1991 to 2000, found that when one country's rating is downgraded it has a significant negative effect on the sovereign bond spreads of other countries. In more integrated financial markets, however, the shock of a rating downgrade is likely to have effects beyond bond markets. Indeed, more recent studies (for example, Ehrmann, Fratzscher, and Rigobon, 2010) analyze the transmission of shocks across markets and countries and find evidence of substantial international spillovers, both within and across asset classes, affecting, for example, money, bond, and equity markets as well as exchange rates.

Kaminsky and Schmukler (2002) provide some evidence that changes in sovereign debt ratings and outlooks affect financial markets in emerging economies. They find that

Fear spreads

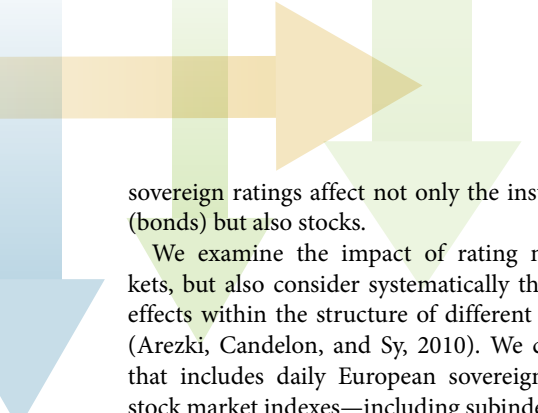
When Greece's credit rating was downgraded in early 2010, not only did the cost of insuring Greek debt soar, so did the cost of insuring debt from other countries that were not downgraded.

(spread on credit default swaps, basis points)



Source: DataStream.

Note: A credit default swap (CDS) is a contract in which the buyer pays what is the equivalent of an insurance premium (called the spread) to the seller, which guarantees a specific debt will be paid in the event the borrower defaults. Although a CDS is often purchased by the holder of the debt, neither party to a CDS transaction need be involved in the underlying transaction. A basis point is 1/100th of a percentage point.



sovereign ratings affect not only the instrument being rated (bonds) but also stocks.

We examine the impact of rating news on CDS markets, but also consider systematically the potential spillover effects within the structure of different asset market classes (Arezki, Candelon, and Sy, 2010). We compiled a database that includes daily European sovereign CDS spreads and stock market indexes—including subindexes for banking and insurance equities—during 2007–10.

Our approach is designed to capture the effects of credit rating agencies' news while taking into account the structural interdependence of financial markets. It allows us to identify which markets and countries are affected by any given sovereign rating downgrade. In addition, we are able to isolate the spillover effect of rating news on different asset classes across countries after controlling for the tendency for large fluctuations to be followed by similar ones.

The main finding is that a sovereign rating downgrade influences financial markets not only in the country affected, but also in other euro area countries. The direction and magnitude of the effect of the rating news depend on where the credit rating news originates. For instance, downgrades of Greek sovereign debt systematically affected all euro area countries, resulting in higher costs for insuring sovereign debt (measured by CDS spreads) and pressure on stock markets, even if the credit rating of the other countries was unchanged. In contrast, downgrades of eastern European economies affected only euro area countries to which they were financially linked.

The nature of the interdependence of stock market performance and the cost of insurance against sovereign default (CDS spreads) varies from country to country. This suggests that sovereign rating news affects economies through a variety of channels, and the point of entry in one may be different than in another. For example, in Spain, an increase in CDS spreads on sovereign debt led to a decline in the stock market index—including the insurance and banking subindexes. But a change in the stock market index did not significantly affect CDS spreads in Spain. In contrast, in the Netherlands, an improvement in the stock market led to a reduction in CDS sovereign spreads. But in Italy, the effect went in both directions: better stock market performance led to a reduction in CDS spreads, and a higher CDS sovereign spread hurt stocks. Differences in market interdependence within countries can be explained by differences in the economy's structure, including differences in public sector involvement in the economy.

The type of rating news also matters. Credit rating agencies typically signal their intention to consider rating changes. For example, the three major credit rating agencies—Fitch, Moody's, and Standard & Poor's (S&P)—all use a negative "outlook" notification to indicate the potential for a downgrade within the next two years (one year in the case of speculative-grade credit ratings). We find that the average effect of downgrades on CDS spreads is larger than the effect of revisions of the outlook (when a rating is not changed but a possible change is signaled).

Financial markets may be myopic because they focus narrowly on downgrades. The downgrade of one country may convey new information about other countries (such as on financial linkages). It could also prompt market participants to reassess the fundamentals of countries with similar characteristics (such as fiscal deficits and indebtedness) or trigger herd behavior. The less-uniform response to outlook revisions could be related to the rating agency itself: either the market does not understand what the agency is trying to communicate when it ventures an opinion on the future, or the market doesn't react because it places little store in the agency's opinion.

Of course, the explanation could be simpler. In rules-based investing, holders of sovereign debt might be forced to sell if there is a downgrade, but not in the event of a revised outlook. Similarly, rating-based regulation constrains the European Central Bank—which must reject downgraded debt as collateral for a loan to a financial institution, but could accept it in the case of an outlook revision.

Moreover, which credit rating agency issues the rating news trumps the news itself. S&P outlook revisions are more likely to spill across countries than those of the other two major agencies. In contrast, rating downgrades that emanate from Moody's and Fitch tend to spill across countries more than S&P downgrades. Financial markets are indeed selective in the way they react to the rating news from different rating agencies, perhaps because of differences in the credibility of credit rating agencies. Other differences related to the communication strategy of rating agencies can also explain the difference in market reactions.

This evidence of spillover effects indicates that bad news does spread, but the transmission process is complex. The news can move rapidly from country to country and market to market, with varying effects both across countries and markets. The complexity of transmission complicates the design of regulation and the conduct of surveillance, so it is important that regulators understand how bad news spreads and what happens when it does. ■

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