# RESEARCH INSIGHTS



# What Is the Role of Market Expectations in Sovereign Debt Crises?



Fluctuations in bond spreads that are simply due to pessimistic market expectations are more prone to happen in countries that face the risk of long periods of economic stagnation.



The quantitative results attribute an important role to pessimistic market expectations in the debt crisis in Argentina in 2001 but not in the debt crisis in Spain in 2012.



Policy interventions such as a lender of last resort can avoid self-fulfilling debt crisis at very low cost. These interventions are necessary (but not sufficient) when countries display bad economic fundamentals, and their benefits are larger if creditors anticipate them.

### CONTEXT

Debt crises impose large costs to citizens, so policies to avoid them can bring large welfare gains. The policies adopted, however, such as those in International Monetary Fund (IMF) agreements, involve large sums of money and their efficacy are often called into question. Not surprisingly, the sources of debt crises and the type of policies that should be adopted to prevent them have long been studied. At the core of this discussion is the question of whether market expectations are important in pushing countries into debt crises because credible policy interventions are known to be beneficial in such cases.

### **PROJECT**

This paper uses standard models of sovereign default to assess whether self-fulfilling debt crises are quantitatively important. The self-fulfilling component emerges from interest rate risk: high probabilities of default imply high interest rates, and high interest rates increase the costs of servicing the debt and make default more likely. We depart from previous studies in two ways: (i) countries may face long periods of either economic stagnation or boom; and (ii) borrowers commit to the amount of money they need to raise in any given period, and markets determine the interest rate on that amount that must be paid in the future. We calibrate these models to cases in Argentina and Spain.

### **RESULTS**

The quantitative results show a strong connection between expectations and economic fundamentals in episodes of sovereign debt crises. When fundamentals are bad (persistent low economic growth), expectations can push countries into default, and policy action is called for at those time. Consequently, a simple connection between bad fundamentals and high interest rate spreads is not sufficient to rule out the need for policy intervention.

In fact, the probability of low economic growth in the future can affect market expectations and cause large fluctuations in interest rates. If the probability is high, interest rates are high, and the feedback loop between interest rates and default incentives is more pronounced. This result implies that the large and persistent swings in economic growth in Latin American countries such as Brazil and Argentina make them more prone to self-fulfilling debt crises.

Our quantitative event studies show that pessimistic market expectations may have played an important role in driving the interest rate spreads during the debt crisis in Argentina in 2001, but not during the debt crisis in Spain in 2012. In this case, the model does predict the fiscal austerity measures imposed by the government of Spain, but only due to the threat of off-equilibrium high interest rate spreads. The quantitative results also show that the spreads on Argentine debt would behave similarly to spreads on Spanish debt if markets had more optimistic expectations.

# POLICY IMPLICATIONS

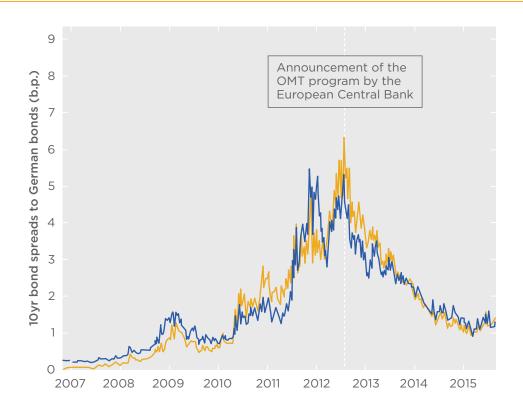
Our quantitative results show the overall relevance of expectation-driven fluctuations in interest rate spreads. Their relevance calls for further research on the design of policies to prevent such fluctuations. The results also put into question the usual claim that if a country's fundamentals are bad, then a debt crisis is not expectation driven. It is exactly when fundamentals are bad that policy intervention is called for, as higher interest rates will indeed push countries into default. Credible policies are in turn needed, as the welfare gains of such interventions are much larger if market participants anticipate them.

The results additionally rationalize the apparent success of the policy interventions adopted in Mexico in 1994 and in the European Debt Crises in 2012. In the case of Mexico, the crises ended after the announcement of a large rescue package by the U.S. Department of the Treasury and the IMF, and in the case of Southern Europe, it ended after the announcement of the Outright Monetary Transactions (OMT) program by the European Central Bank. In both cases, the policy authorities did not actually intervene in the market for bonds, as transactions with private creditors resumed under better terms after the announcements. This is a feature of self-fulfilling debt crises, in which credible policy announcements have the potential to stop a crisis. Our analysis show that such episodes are quantitatively relevant and should be expected without the design of a coherent policy framework to address them.

SOVEREIGN DEFAULT

The event in which a country does not make the payments that are due on its debt.

# Figure 1. Interest Rate Spreads in Southern Europe before and after the Announcement of the OMT Program by the European Central Bank



**Key Concept** 

### **INTEREST RATE SPREAD**

The difference between the interest rate that a country pays on its debt and the interest rate paid by a country that is considered "risk-free."



# **FULL STUDY**

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# DEPARTMENT OF RESEARCH AND CHIEF ECONOMIST

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