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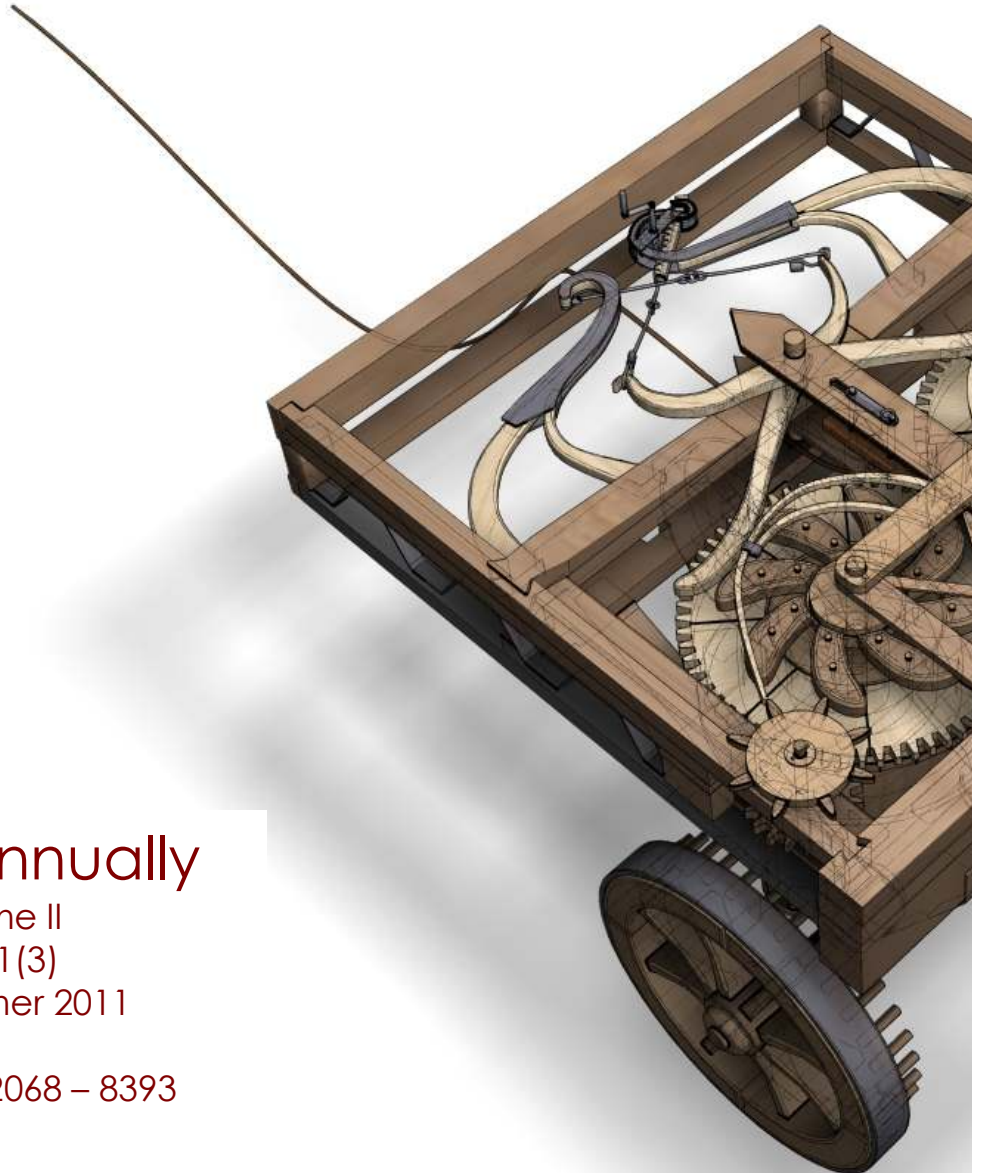
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THE EURO SOVEREIGN DEBT CRISIS, DETERMINANTS OF DEFAULT PROBABILITIES AND IMPLIED RATINGS IN THE CREDIT DEFAULT SWAPS MARKET: AN ECONOMETRIC ANALYSIS

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Abstract:

In this paper, we investigate what has been leading investors to ask for higher yields on sovereign debt from certain Euro countries. We dismiss Granger Causality as a basis to define speculation. Instead, we assume that speculative behavior would only exist if market assessments were unrelated to economic fundamentals. Using a cross section of countries, we improve on the literature on Credit Default Swap Markets on sovereign debt. Firstly, we use an ordered probit to determine whether fundamentals are driving ratings. Then, quantile regression determines which variables matter at different conditional quantiles of the default probability. Finally, Fisher's Z statistic is used to relate bond yields to domestic savings. The different methods support the conclusion that the domestic savings rate is lenders' main concern. Economies with worse saving habits are penalized both in the CDS and in the bonds market. Notwithstanding, for countries on the top quantiles of the default probabilities, public and external debt also increase the insurance premium in the derivatives market. Looking at the Portuguese case, it is clear that policies that don't take savings into account shall fail, as the country had the lowest net savings rate in the EU27 in 2008, followed closely by Greece.

Keywords: sovereign debt; euro area; credit default swaps; quantile regression; ordered probit; savings rate

JEL Classification: C21; C25; E21; G12; H63

Introduction

The sovereign debt crisis in the Euro area has been receiving standard answers in the political arena, albeit reduced attention from the scientific community. Comments from politicians in the EU, in particular in highly indebted Euro zone countries, have been blaming so called "speculative attacks", in debt markets, that would have rise the perception of risk beyond its real levels. The argument would be that the high interest rates that such governments have been paying for new debt placements would have little to do with the fundamentals of these economies, but rather with the rent seeking behavior of financial investors.

In this paper we investigate the determinants of the implied ratings in the Credit Default Swaps' Market for sovereign debt and relate it to economic fundamentals, showing there is a causal link between default probabilities and the countries' weaknesses, thus denying the speculative behavior thesis. Using an ordered probit model, quantile regression and Fisher's Z statistic, we show that there is a strong concern with the countries' capability of facing their commitments. We conclude that economic policies that divert resources from savings, namely through higher taxation, shall worsen perception of the risk such countries entail (Voskova, and Voskova, 2010).

Conclusion

Overall, it is fair to say that government shrinkage alone, allowing for a smaller public debt and for higher disposable income levels for households, which in turn are essential for higher domestic savings, are fundamental for highly indebted countries to reduce their default likelihood risk. Moreover, domestic savings are also being punished in some countries by large public companies deficits which shall turn into the need to borrow more from abroad. Conventional receipts based on higher taxation are therefore incapable of sustaining a financial recovery. Highly indebted economies need to save more across sectors: both by inducing real government shrinkage, and by stimulating savings in the private sector. It seems clear the problems that the IMF/ERF plans are experiencing are directly related to the

inability to induce savings, but rather to transfer debt from the government to the private sector through taxation. This should be something to be taken into account in the near future.

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