Global patterns and Extreme values in Sovereign Risk Premia

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Abstract

Foreign investment or access to international financing increasingly depends on the sovereign risk premium, as this is an indicator of how each country is viewed by the financial markets. The evolution and analysis of the sovereign risk premium has been the subject of numerous previous research studies, although the literature demands more research in this area as most of the models developed use regression models, which have certain limitations, especially in their levels of accuracy. This paper presents a new model of the determinants of sovereign risk premium in developing and advanced countries, implementing multinomial logistic regression methods, Bayesian probit multinomial additive regression trees and generalised extreme value model, which show excellent accuracy results. Our model offers an excellent contribution to the finance field, as the results achieved have important consequences for the policy-makers' future decisions, allowing them to avoid sovereign debt defaults and being able to achieve macroeconomic and financial stability at the international level.

Keywords: Country Risk; Multinomial Probit Bayesian Additive Regression Trees; Multinomial Logistic Regression; Generalized Extreme Value Model; Financial Crisis