Critical Re-evaluation of Sovereign Debt Dynamics in Emerging Markets: A Stochastic Approach to Debt Sustainability

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Abstract. This study rigorously investigates the stochastic properties of sovereign debt dynamics in emerging markets, focusing on debt sustainability amidst global economic uncertainties. By employing advanced econometric models, the research disentangles the impact of exogenous shocks on debt trajectories. The findings underscore the necessity for adaptive fiscal frameworks to mitigate adverse effects, thus ensuring long-term economic stability. The analysis provides deeper insights into the interplay between debt accumulation and policy interventions, offering crucial implications for policymakers.

Keywords: Sovereign Debt Dynamics, Emerging Markets, Debt Sustainability, Stochastic Processes, Fiscal Policy, Econometric Models, Global Economic Uncertainties

Introduction

In the contemporary global economic landscape, the sustainability of sovereign debt in emerging markets represents a critical challenge. With increasing exposure to global financial fluctuations, these economies face heightened risks of fiscal instability. The traditional deterministic models of debt sustainability often fall short in capturing the complexities of these dynamics, necessitating a paradigm shift toward more robust, probabilistic approaches. This paper embarks on a comprehensive reevaluation of sovereign debt dynamics through a stochastic lens, aiming to elucidate the intricate interplay between external shocks and fiscal policies. The relevance of this investigation is underscored by recent economic disruptions, which have amplified the vulnerabilities of emerging markets. As international debt continues to mount, understanding the probabilistic nature of debt sustainability becomes paramount. This study leverages cutting-edge econometric techniques to model the stochastic processes underpinning debt trajectories, offering fresh perspectives on how these economies can navigate future uncertainties. This article is structured as follows: The next section reviews pertinent literature on sovereign debt dynamics, highlighting gaps in current methodologies. Subsequently, the data and methodological framework employed in this analysis are detailed. Following this, empirical results are presented and discussed in the context of existing theoretical constructs. Finally, the paper concludes with policy implications and avenues for future research.

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