Testing the Efficiency of the GIPS Sovereign Debt Markets using an Asymmetrical Volatility Test

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Abstract

The efficient market hypothesis has been around since 1962, the theory is based on a simple rule, namely that the price of any asset must fully reflect all available information. Yet there is empirical evidence financial markets are too volatile to be efficient. The empirical evidence suggests that the reaction to events is the crucial factor, rather than the actual information. Generally, market participants react differently to negative and positive market shocks, hinting at asymmetrical effects. This paper analyses the impact of asymmetrical effects on the efficiency of the financial market during the recent crises.

We test the efficiency of the financial markets using the daily prices of the GIPS sovereign debts between June 2007 and December 2011. This allowed us to test the efficiency during the financial crisis and sovereign debt crisis periods. We used a GJR-GARCH based variance bound test based on the test derived by Fakhry & Richter (2015).

Our tests provide evidence for financial markets being too volatile to be efficient. At the same time, the results are pointing towards bounded rationality rather than irrationality.

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