

Physica A: Statistical Mechanics and its Applications

Time-varying causality between equity and currency returns in the United Kingdom:
Evidence from over two centuries of data

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Abstract:

We analyse the dynamics of the causal interaction between the stock and foreign exchange markets for the United Kingdom using monthly data going as far back as 1791. First, we consider static causality tests, yielding mixed results. Given the evidence of structural breaks in the relationship between equity and currency returns, we use next the Dynamic Conditional Correlation-Multivariate Generalised Autoregressive Conditional Heteroskedasticity time-varying tests for Granger causality. The time-varying testing strategy we implement allows us to detect whether any causal relationship exists at each point in time between stock price and exchange rates returns. We find overwhelming evidence of time-varying information spillovers between the equity and currency returns. We check the robustness of our findings by running the entire battery of tests for two emerging market economies, namely, India and South Africa starting in 1920 and 1910 respectively. On the whole, the United Kingdom results are comparable to those in India and South Africa. As such, our results encompass the fragmented findings from our static tests as well as those in the extant literature.