

# Time-Varying Volatility in Emerging Market Business Cycles\*

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## Abstract

This paper focuses on the time-varying volatility of aggregate fluctuations in emerging markets. Both Latin American and Asian emerging economies experience volatility spikes during financial crises; however, only the latter group exhibits a long-run decline in volatility. Using business cycle data from South Korea, we estimate a small open economy real business cycle model with Markov-switching shock variances. We compare the model fit across alternative specifications of shock volatility structures and investigate the underlying drivers of volatility changes. The results indicate that the data favor the model in which all shock variances switch regimes synchronously. The estimated model captures both the declining trend in volatility over time and temporary volatility spikes during episodes of financial turmoil. It suggests that the long-run decline in volatility is not primarily driven by a reduction in the variance of the interest rate premium shock, though this shock contributes to temporary volatility spikes during crises. The model replicates key business cycle features of emerging markets and highlights that the drivers of aggregate fluctuations depend on the volatility regime.

JEL classification: E32, F41, C13

Keywords: Small open economy; real business cycles; regime switching.

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