

# Economic Growth and the Evolution of Financial Market Efficiency in Japan

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**Abstract:** This paper constructs a comprehensive dataset of Japanese stock returns covering approximately the past 100 years to analyze the long-run dynamics of the country's financial markets. We estimate the evolution of financial market efficiency using a time-varying vector autoregression (VAR) framework. In parallel, we develop an endogenous growth model that captures the joint transition dynamics of stock prices and macroeconomic aggregates. Our findings indicate that market efficiency exhibits a long-run tendency to improve as economic growth progresses, while it declines during periods in which structural shocks, such as a relaxation of financial constraints, occur. The simulated data from the theoretical model depict the long-run tendency for market efficiency to improve through convergence in the global dynamics, and the medium-run fluctuations in market efficiency generated by transitional dynamics in response to parameter changes.

**Keywords:** Japan; market efficiency; time-varying VAR; long-run stock returns; economic growth; financial frictions

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