Investment-Specific Technology Shocks and Business Cycle: Evidence from an Agnostic Identification Procedure

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Abstract

Business cycle literature documents an increasing role of investment-specific technological shocks in the macroeconomic fluctuations of advanced and emerging economies. This paper explores the importance of the investment-specific technology (IST) shocks originating in the "Rest of the World (ROW)" in business cycle fluctuations of three South Asian countries: Bangladesh, India, and Pakistan. This study uses annual data from three countries to estimate a Bayesian Structural Vector Autoregression (BSVAR) model with sign restrictions. The study reveals that IST shock generates statistically significant impulse responses of output, consumption, investment, and the relative price of investment goods. The results also indicate that the IST shock cannot contribute much to output and consumption fluctuations in the three countries. However, the shock accounts for about 27% of investment dynamics in Bangladesh and India. In contrast, neutral technological shock is the most important source of aggregate fluctuations in all three countries.

Key Words: Investment-specific Technology, Neutral Technology, Business Cycle, Structural Vector Autoregression, Sign Restrictions

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