Technology, Employment, and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations ?

Jordi Galí *
New York University

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Abstract

Using data for the G7 countries, I estimate *conditional* correlations of employment and productivity, based on a decomposition of the two series into technology and non-technology components. The picture that emerges is hard to reconcile with the predictions of the standard RBC model. For a majority of countries the following results stand out: (a) *technology shocks* appear to induce a *negative* comovement between productivity and employment, counterbalanced by a *positive* comovement generated by *demand shocks*, (b) the impulse responses show a persistent *decline* of employment in response to a *positive* technology shock, and (c) measured productivity *increases* temporarily in response to a *positive* demand shock. More generally, the pattern of economic fluctuations attributed to technology shocks seems to be largely unrelated to major postwar cyclical episodes. A simple model with monopolistic competition, sticky prices, and variable effort is shown to be able to account for the empirical findings.

JEL Classification : E32, E24.

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