

Unemployment in a Balassa-Samuelson Model with Heterogeneous Job Separations

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Abstract: A small open economy model with tradeable and nontradeable sectors is used to examine how unemployment and the real exchange rate are affected by productivity growth. While labour is mobile, unemployment occurs due to search frictions. Sectors have different separation rates, which gives rise to compensating wage differentials. When productivity grows in the tradeables sector, labour moves from the tradeables (nontradeables) sector to the nontradeables (tradeables) sector if the substitutability between tradeables and nontradeables is low (high). Nevertheless, unemployment always falls due to the positive income effect. When the substitutability is close to one, i.e. the Cobb-Douglas case, labour demand in both sectors expands. We also find that the effect of productivity growth in the tradeables sector on the real exchange rate, i.e. the Balassa-Samuelson (B-S) effect, is moderated or amplified by intersectoral differences in separation rates. The B-S effect is offset by almost 38 per cent when the separation rate is higher in the tradeables sector and tradeables and nontradeables are complements in consumption.

Keywords: Unemployment, compensating wage differential, job matching, Balassa-Samuelson

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