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Uzawa (1961) Meets Uzawa (1961, 1963):

Uzawa Steady State Growth Theorem in a Two-Sector Model

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Abstract

Evidences for advanced economies suggest balanced growth in the long-run. The steady state growth theorem in Uzawa (1961) clarifies that balanced growth requires purely labor-augmenting technological changes in a one-sector model with two factors, capital and labor, unless the elasticities of substitution between the two factors are unity. However, the empirical evidences have shown that the elasticities are smaller than unity. Also, the data indicates that investment-good prices relative to consumption goods are steadily falling, which can be considered as the evidence of capital-augmenting technological progress in the one-sector growth model. Hence, some theoretical attempts have been made to reconcile the empirical facts with the theorem using multi-factor models. In contrast, introducing exogenous technological changes into the two-sector model with capital and labor in Uzawa (1961, 1963), this paper shows that balanced growth does not necessarily require labor-augmenting technological changes at the aggregate level. Also, it is shown that the types of technological changes that satisfy the conditions for balanced growth accompanied by declines in investment-goods prices.