Capital accumulation and the employment growth in the N-capital economic growth model

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The aim of this paper is to theoretically analyze the relationship between the process of capital accumulation, product growth, employment growth and (implicit) changes in unemployment. Authors use the N-capital economic growth. The model of economic growth (which is an extension of the neo-classical models of economic growth of Solow (1956), Mankiw, Romer and Weil (1992) and Nonneman and Vanhoudt (1996) has an assumption that the production process is described by N+1 elements Cobb-Douglass production function. In this function we assume that the explanatory variables consist of N different stocks of capital and the effective units of labour. The increase of each stock of capital is a difference between investment in this capital element and its depreciation. The labour demand (like in the neo-classical models of the labour markets) is calculated by equalling the marginal product of labour with the real wages, and the real wages change according to the mechanism, which is described in the efficiency wages models by Solow (1979) and Summers (1988).