Factor Price Differentials: Empirical Evidence from WIOD

Topic:
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Purpose â€“ In both developed and developing countries, there are large sectoral differences in the remuneration of production factors. These factor price differentials may be due to institutional distortions or market failures: in any case, they reflect imperfect sectoral mobility of production factors and, therefore, they are assumed to have negative effects on welfare, efficiency and growth. Furthermore, it is assumed that these effects are greater the lower the income per head of the countries and that, in fact, part of international differences in income levels can be explained by the lower sectoral mobility of production factors in less-developed countries. However, to date, there is little empirical evidence in this regard, given the scarcity of empirical studies that consider a large sample of countries and years. The present study aims to alleviate this gap by resorting to input-output analysis of the WIOD database.

Methods & Data â€“ To this end, a small computable general equilibrium model is developed, which can be easily calibrated from data obtained in conventional IOTs so that it can be applied to a large set of countries and years. In fact, the present study uses the data collected in WIOD for four factors of production â€“ capital, high-skilled, medium-skilled and low-skilled labour â€“ and 40 countries in the period 1995-2009.

Findings â€“ The results of the present study show that: 1) for almost all countries, the imperfect sectoral mobility of production factors has negative effects on real income; 2) a negative correlation is observed between the effects of imperfect factor mobility and income per head; however, the observed correlation is lower than generally assumed because of the low sectoral mobility of capital in developed countries; 3) in almost all countries, sectoral immobility of production factors positively affects the share of the manufacturing industry in domestic product; an additional cause of deindustrialization is thus discovered.

Novelty â€“ The novelty of the present study lies in the fact that it empirically investigates the relationship between economic development and sectoral mobility of production factors, finding results that partly reaffirm and partly contradict the usual theoretical assumptions of the literature.