Structural Effects of Trade Imbalances: an Input-Output Analysis

Topic:
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Purpose - The coincidence in many emerging-market countries of trade surpluses and high growth rates has suggested the hypothesis that positive trade imbalances have effects on the economic structure that have a positive impact on growth. Specifically, it is assumed that trade surpluses positively influence the share of the manufacturing industry in the domestic product, due to the greater tradability of manufactures, and the return of physical and human capital, due to the different factor intensity of the tradable and non-tradable sectors. It is sometimes assumed, additionally, that both effects are greater in developing than in developed countries due to lower tradability of services and greater technological disparity between tradable and non-tradable sectors in less-developed countries. The present study aims to contrast such hypotheses by means of input-output analysis.

Methods & Data - To this end, an input-output model with a Ricardian flavour is developed in which good and factor prices are determined endogenously. The model can be easily calibrated from data contained 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 the WIOD and obtains estimates for 40 countries in the period 1995-2009, in which important trade imbalances are observed.

Fidings - The results of this study show that: 1) in all countries in the sample, a positive trade balance implies an increase in the share of manufacturing industry in GDP; 2) in most countries in the sample, an increase in the trade surplus implies an increase of the profit rate and/or skill premium. 3) the structural effects of trade balances do not seem greater in developing than in developed countries.

Implications - The conclusions of this study have policy implications. Specifically, the results obtained seem to provide evidence in favour of the recommendation of positive trade balances in developing countries because the assumed structural effects are consistent with empirical observations. However, this policy recommendation has the serious flaw that the positive effects of trade surpluses in some countries coincide with the negative effects of trade deficits in other countries, as the structural effects of trade imbalances are similar in countries with different levels of income per head.

Novelty - The novelty of this work is twofold. On the one hand, an input-output model with a Ricardian flavour is proposed that can be solved exactly by conventional numerical methods and that allows the basic Leontieff model to be extended for the case of an open economy. On the other hand, the present study provides evidence in relation to a hypothesis of some importance for growth economics and which, from time to time, reappears in theoretical debates with policy implications.