Growth accounting in the age of global-value chains: A demand side perspective applied for Brazil in the period of 2000-2015

Topic: Growth Accounting  
Author: José Bruno Fevereiro  
Co-Authors: Patieene Alves Passoni

Standard practices of demand side growth accounting in Economic Outlook Reports and other practitioner reports usually calculate contributions of demand components to growth based solely on growth rates of each expenditure component. This standard practice disregards the fact that imports are not a demand variable and, so, the individual contributions of the demand components in this method are not in fact contributions to economic growth (GDP), but contributions to growth of total supply and demand.

This issue is becoming increasingly problematic in times of global value chains. In this current context, the bulk of imports consists of intermediate goods that are embodied either in exports or in the supply of final goods demanded as consumption by households (or government) or as investment by firms. However, this observed increase in the import content in all final demand components is a very uneven process. As such, conventional methods of growth accounting may be producing increasingly distorted results and signalling inaccurate messages to the policy discussion.

We utilize I-O Matrices valued at constant prices constructed by the GIC-UFRJ for the period 2000-2015, based on information from the Brazilian SNA and I-O matrix official statistics. Import content coefficients are calculated to all final demand components, in similar fashion as it's done for exports in the trade in value added literature. As so, new estimates of contributions to growth from a demand perspective are calculated. Preliminary results for the 2000-2015 period reveals that contribution to growth of Investment is the most severely overestimated, revealing an average contribution to GDP growth much smaller than the one obtained with the use of conventional methodology. On the other hand, government consumption contribution is the least affected. The analysis developed with this framework is important as it enables a better understand of the demand sources of economic growth for Brazil in a context of internationalization of production.