Exploring the role of GVCs in economic diversity

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Since the beginning of the so-called third globalization wave in the las 90s and first 2000s, countries have been increasingly connected. In that way, economic growth and income generation has not been longer studied without considering the crucial role that the dynamics of international trade plays. The best representation of this globalization and international interdependence networks has been the concept of global values chains (GVCs). Indeed, the expansion of GVCs has changed the interpretation of the economic policies and allows to obtain better answers to questions such as the evolution of the specialization patterns, the analysis of trade policy, or the international transmission of shocks.

In relation to GVCs two concepts stands out, participation and position, as a way to approach the engagement of countries and regions in GVCs and to capture the benefits of this strategy. Different metrics have been proposed in the literature to approach this concept, most of them considering the market share or different types of competitiveness index. In the other hand, position has been conceived as an approximation to the distance of the countries or industries to the final demand. This position is key in explaining the uses of profits derived from trade, as suggested by the smile curve hypothesis.

Besides, economic literature has traditionally focused on the impact of exports variety on economic development. The most extended idea is that exports diversity is positively related with economic growth, although there are some studies that suggest the non-linearity of this relation. Exports diversity and GVCs are two elements derived from the same phenomenon, and, thus, they might be strongly correlated. In this context, the main aim of this work is to analyze the relationship between exports diversity and participation and position of GVCs. Besides, we will also explore the results in function of the level of relatedness of the exports basket of each country. Relatedness could be defined as the technological similarity between the products/sectors exported.

To carry on the analysis, we will work in a multiregional input-output framework, using as a main database the inter-country input-output database provided by OECD (it contains higher level of sectoral disaggregation than other datasets). We will calculate participation using the measure proposed by Bolea et al. (2022), which is a proxy of economics competitiveness. To calculate position, we follow the proposal of AntrÃ s et al., (2012). Exports variety would be calculated using an entropy measure. Estimations will be done through a panel data model in which exports diversity would be the dependent variable and participation and position the independent. Besides, exports relatedness would be calculated following the methodology of Savioti and Frenken, (2008).

First results suggest a non-linear relation between both indicators, exports diversity and participation and position. In particular, those countries that are more upstream (focus on intermediate inputs) and participate more in the chains seem to be more diversify. We expect to get differences in function of the relatedness of exports.