

Mapping Global Value Chain Participation and Positioning in Agriculture and Food: Stylised Facts, Empirical Evidence, and Critical Issues

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HIGHLIGHTS

- Comprehensive review of Global Value Chains (GVCs) in agriculture and food sectors.
- Analysis using trade in value added data for countries and sectors.
- Empirical evidence on the economic impacts of GVCs in agriculture and food.
- Identification of critical issues and speculative thoughts on the future of GVCs.

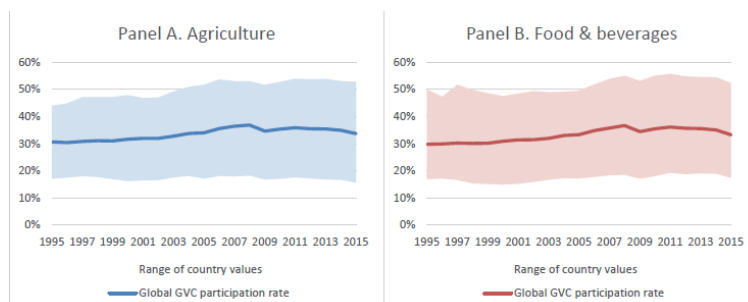
Global Value Chains play a crucial role in enhancing productivity, economic growth, and social outcomes in the agriculture and food sectors. However, to maximize these benefits, supportive trade policies, capacity building, inclusive growth strategies, and robust R&D investments are essential. Addressing critical issues and leveraging the full potential of GVCs can drive sustainable development and innovation in these sectors.

INTRODUCTION

Global Value Chains (GVCs) have become a significant concept in international trade, especially since the early 1990s. They describe the range of activities required to bring a product from conception to end use, spread across different countries. This paper provides an overview of empirical work on GVCs' importance in agriculture and food, offering a map of GVC measures and presenting stylized facts on participation and positioning within these chains.

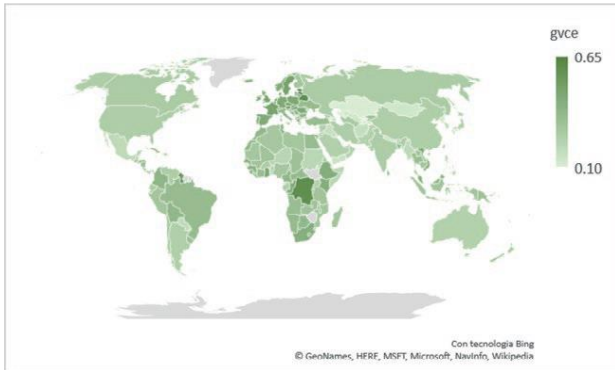
The study provides empirical evidence of the economic impacts of GVCs on these sectors and discusses critical issues for future consideration.

Evolution of global GVC participation rates in Agriculture and Food sectors

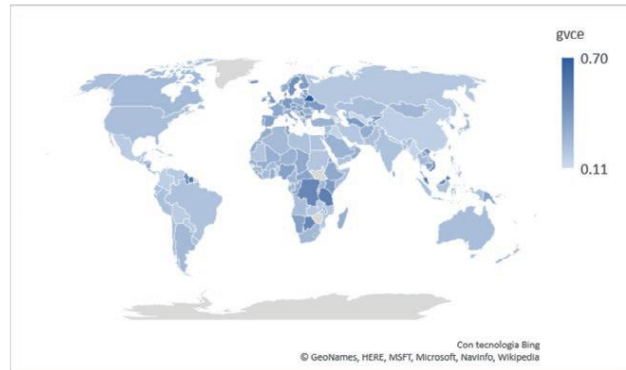


This paper is based on trade in value added data, which helps to assess countries' engagement in GVCs more accurately. The study uses a multidisciplinary approach, combining insights from economic sociology, international economics, and economic geography. Data from multi-region input-output tables combined with international trade statistics, specifically focusing on intermediate goods, is used to illustrate the trends and impacts of GVCs in agriculture and food by measuring participation and positioning indicators.

GVC participation for the Agricultural sector by country



GVC participation for the Food and beverages sector by country



MAIN RESULTS

- The agriculture and food sectors show varying levels of GVC participation and positioning across different countries. Developed countries have higher engagement in GVCs compared to developing countries. There is significant trade, which has grown tenfold in value over the last thirty years.
- GVC participation is **positively correlated with productivity** and economic upgrading in developed and developing countries. The availability of broader input varieties, specialization in core tasks, competition, and technology spillovers are key channels through which GVCs enhance productivity.
- **GVCs contribute to employment growth**, particularly in countries with substantial engagement in the agro-food sector. There are positive effects on wages, gender equity, and environmental outcomes, though these benefits are not uniformly distributed and depend on industry characteristics and value chain segments.
- Trade in intermediate inputs **positively impacts innovation** performance through technology transfer and research and development spillovers.

POLICY RECOMMENDATIONS

1. Implement policies that **reduce trade barriers** and facilitate smoother participation in GVCs, especially for developing countries. Enhance **infrastructure and logistics** to support efficient global trade.
2. Invest in building local firms' **capabilities to engage effectively in GVCs**, emphasizing technology and innovation. **Promote education and training** programs to enhance the skills of the workforce involved in GVCs.
3. Ensure that the benefits of GVC participation are **broadly shared**, focusing on **social upgrading** outcomes like employment quality, gender equity, and environmental sustainability. Implement social protection measures to support workers in GVCs, particularly in developing countries.
4. **Encourage R&D investments** to foster innovation within GVCs, leveraging the spillover benefits from international trade. Support **collaborations between firms**, research institutions, and governments to drive technological advancements.