

## Importing from developing countries: quantifying what is in it for them (and us)

Topic: Methodological and Statistical Challenges for Analyses of Integration of Developing Countries in Regional and Global Value Chains - II

Author: Timon I. BOHN

Co-Authors: Nieke Aerts, Tom Notten, Khee Fung Wong

Development aid and trade facilitation often go hand in hand, but not much is known about how much low- and middle-income countries gain in terms of the value added and employment generated from their exports to countries like the Netherlands. Multi-regional input-output tables (MRIOs) provide valuable information on the value chain linkages. However, they generally do not cover all developing countries, and even where they do, there is a lack of product-level detail on what is being traded and more generally on how products exported by developing countries are used by the importer. A value-chain approach to measuring these trade flows can be useful for policymakers in creating development policy goals and may shed light on the fruits of development cooperation efforts.

In this paper we use the "single-country TiVA" concept to analyze trade from different developing countries to the Netherlands. The Netherlands is one of the world's largest donors of official development assistance as a share of its GNI. Dutch development aid might be targeted to promote exports to the Netherlands and/or exports of specific products/industries to the Netherlands. Our method allows to estimate the value added and employment involved, which is relevant for policy monitoring. We focus mostly on the exports of African countries. The region makes for an excellent case study given its importance in Dutch development aid efforts. More insights into the current trade patterns could also be useful in crafting new trade strategies with Africa. This has gained relevancy in light of the new EU-Africa strategy launched by the European Commission.

Our single-country TiVA approach involves linking Dutch micro data at the trader level to the General Business Registrar and then benchmarking to national input-output tables (Aerts et al., 2023). We distinguish between imports going to intermediate use (split by importing industry), imports for re-exports, and imports for final use. This data is available from 2015 to 2021 at industry by product by country level. Compared to a traditional IO-approach, this has the advantage that one has better quality (the Dutch IO-data has more detail, the trade data does not have to be balanced) and more detail (9000 products and about 20 services). It can also be timelier since one is not dependent on the complete MRIO but only on 2 national tables. The disadvantage is that one can only capture direct exports, not exports via the value chain/via other countries, as in the traditional IO-approach based on MRIOs.

The novel application is that we use these import estimates as a proxy of each country's respective exports to the Netherlands. Next, we employ MRIOs and national IO-tables to compute the domestic value-added to gross export ratios at the sectoral level of developing countries that trade with the Netherlands. Then we combine these two sets of data: that is, we match data on import use derived from micro data linked to Dutch input-output tables to value-added (or employment) in export indicators of developing countries. This allows us to gain a comprehensive view into the export earnings - and where possible also employment generation - in developing countries that is embodied in the direct arm's length export to the Netherlands as well as their direct or indirect use by Dutch industries.

In the case of Africa this includes shedding light on how much different countries currently earn due to trade with the Netherlands. Note that while the reverse flows can also be important indicators in policy monitoring, e.g., Dutch exports to recipients of aid and the creation of new direct investment

opportunities abroad, this paper focusses on exports of developing countries and how the corresponding imports are used in the Netherlands. In terms of import use, it could be that the Netherlands receives mainly imports for re-exports from certain countries, which has less of an impact on the Dutch economy and Dutch export earnings. In addition, policymakers are often interested to gain insights into the import of specific products by different industries and from specific countries. This paper provides value-chain based insights into these perspectives and further shows the evolution of value-added trade patterns since 2015 between different developing countries and the Netherlands. This once again shows how microdata can substantially enrich IO-analysis.