

INTERREGIONAL TRADE ESTIMATION IN THE IBERIAN PENINSULA. A CASE FOR ECONOMIC INTEGRATION

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Keywords: Interregional Trade, Economic Integration, Gravity Model, Iberian Peninsula, Trade Estimation, Transport Statistics

Abstract

Interregional trade and economic integration play a crucial role in shaping regional economic development and cross-border cooperation. This study focuses on estimating trade flows between NUTS II regions in Portugal and Spain, contributing to a deeper understanding of regional trade dynamics and the economic impact of the Iberian border. Despite the growing body of literature on gravity models for trade estimation, a significant data gap persists in interregional trade statistics, particularly for the Iberian Peninsula. The primary challenge lies in the absence of a comprehensive dataset covering regional trade flows resulting in an overview of intraregional economic integration, necessitating an estimation approach based on transport data and economic indicators.

This research employs a double-constrained gravity model, following Ferreira (2008) and Sargento et al. (2012), to allocate total regional trade flows based on GDP, distance, and export-import constraints. The methodology integrates transport flow statistics, GDP data, and a hybrid classification system to ensure compatibility between trade and transport sector classifications. Additionally, a bi-proportional adjusting algorithm (RAS methodology) is applied to refine the initial estimates and maintain consistency with historical data. Data sources include national and international transport datasets, official trade statistics, and sectoral classifications from both Portugal and Spain.

Preliminary findings indicate that interregional trade flows are heavily influenced by border effects, geographical proximity, and economic specialization, with distinct sectoral variations. The study identifies potential challenges in integrating transport-based trade proxies with official trade data, particularly due to missing historical records and inconsistencies across classification systems. The results provide insights into the effectiveness of gravity models for regional trade estimation and highlight the necessity for improved data collection practices. Future research will focus on refining the model calibration, addressing methodological uncertainties in the RAS adjustment, and assessing the long-term implications of Iberian economic integration.

¹ The views and opinions in this text are those of its authors alone, not a formal position of the European Commission