

# BATModel

better agri-food trade modelling for policy analysis

## Enhancing Export Performance through Intermediate Inputs in the Food Processing Sector

*BATModel Deliverable 3.3 –*

### HIGHLIGHTS

- Examines how imported intermediate inputs affect food firms' product quality and export activities.
- Uses firm-level data from Italy, France, and Hungary to analyse impacts.
- Finds that higher-quality inputs and managerial skills improve product quality and export success.
- Highlights the importance of quality management and strategic input sourcing.

**Access to high-quality intermediate inputs and robust quality management practices significantly enhance the export performance and competitiveness of food processing firms. Firms and policymakers should prioritize these factors to achieve better outcomes in global markets.**

### INTRODUCTION

This study investigates the role of intermediate inputs in enhancing the product quality and export performance of food processing firms.

It explores how imported inputs, including raw materials and managerial skills, influence product quality, diversification, and export outcomes.

Understanding these dynamics is crucial for firms aiming to improve competitiveness and policymakers seeking to foster export growth.

## DATA AND METHODS

The study utilizes firm-level data from Italy, France, and Hungary, covering various aspects of food processing firms' operations from 2012 to 2020. The methodology includes:

- Developing a trade model that links input quality to product quality and firm export performance.
- Empirical analysis using comprehensive trade and firm-level data to assess the impact of imported inputs on export performance.
- Instrumental variables techniques to address endogeneity and ensure robust findings.

---

## MAIN RESULTS

### Trade Model Insights:

- The share of intermediate products in the total costs increases with labor productivity.
- High-productivity firms may produce low-quality product when the quality-adjusted price of high-quality input is relatively high and when the appreciation for vertically differentiated products by consumers is low
- Reduced tariffs on high-quality inputs quality of final products, but decreases the average productivity across firms

### Italian Food Processing Sector:

- Increased imports of intermediate inputs correlate with higher quality of exported products.
- A diverse range of imported inputs leads to greater product diversification and innovation.

### French Food Processing Sector:

- Firms with quality management personnel achieve better market penetration and export more.
- Quality policies affect export performance, especially in markets with stringent standards.

### Central Eastern European Region:

- Firms with foreign parent companies have longer trade durations.
- Factors like partner country income, neighbouring countries, and regional trade agreements positively influence export duration.

## POLICY RECOMMENDATIONS

- 1. Promote Quality Inputs:** Support policies that facilitate access to high-quality intermediate inputs for food processing firms.
- 2. Encourage Quality Management:** Incentivize the adoption of quality management practices to enhance export performance.
- 3. Reduce Tariffs on Inputs:** Lower tariffs on high-quality inputs to benefit less productive firms and improve overall market efficiency.
- 4. Foster Innovation:** Encourage innovation and product diversification through access to a variety of intermediate inputs.
- 5. Support Export Strategies:** Provide targeted support to firms in developing strategic export plans, particularly in underexplored regions.