

BATModel

better agri-food trade modelling for policy analysis



Trade and the labor market in agriculture and food: Evidence from EU regions

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Economists typically view trade liberalization as a desirable (policy) outcome for national income. This optimistic view about the economic effect of trade liberalization date back to the Ricardo' idea: "Trade allows countries to specialize in the goods in which they are most productive – comparative advantage – so that free trade among raises GDP in all of them".

In the last decade economists start to study more deeply the potential disruptive effects of trade liberalization, feeling that they missed something of important about the downside effects. The idea that free trade is not a free lunch is apparent from recent literature. In fact, trade permanently alters skills demands – e.g. raising the demand for high-skill workers in industrialized countries – and induces reallocation of workers across location, industry or type of occupations. The impact of trade on the labor market depends on whether trade-displaced workers quickly find other good jobs. Thus, understanding "how quickly" the jobs reallocation is, become crucial.

To date, the evidence on the US and Europe labor market are quite instructive of the downside effects of trade liberalization. Rising imports of low-priced Chinese goods create competition for firms that experience declines in sales, profits, and employment. Employees of import-competing firms, struggle to find other good jobs, accumulate lower earnings, and rarely move to other geographic locations. Regions whose industries faced greater import competition have lower employment rates, lower income, higher mortality and crime rate and a political polarization towards right-wing parties.

Overall, consumer gains from lower prices tend to outweigh these labor income costs. Yet, the key issue is that income losses are heavily concentrate on workers in import-exposed industries and regions where such industries cluster. Differently, consumer gains from lower goods prices are geographically uniform, and comparable for low-skill and high-skill workers. This simple but important consideration, trigger a research agenda finalized to understand the *local* labor market effects of trade liberalization.

The Working Package 1 of the BatModel project aims to understand the extent to which these "adjustment costs" to globalization are relevant in agriculture and food, two sectors largely unexplored by the recent literature. The focus will be not only on the labor market issue discussed here, but also on the impact of trade liberalization on the environment and health issues, such as emissions and obesity.

With reference to labor market effects, a recent contribution of the University of Milano investigated the impact of trade shocks on the EU local labor market, focusing on NUTS2 regions and the agri-food sector. The aim is not only to understand the potential negative labor market effect of import competition, but also to study jobs creation, if

any, on the export side of the story. Indeed, the EU in the last decades progressively gained export market share, precisely in processed foods.

Consistently with theoretical predictions, preliminary findings show a negative labor market effect from import competition and a positive one from export competition. Quantitatively, our estimates show a 1.6% decrease in regional employment upon a 1% rise in import competition and, respectively, a 0.33% increase in regional employment with a 1% rise in export competition. However, when studying the heterogeneity across sectors (agriculture vs. food), the effect is significantly relevant only for the food industry. A back-of-the-envelope calculation for the food sector, show that jobs loss due to higher imports of food overstate jobs gain due to increased exports over the 1995-2020 period, resulting in a net loss of about 0.2 million jobs. Results highlight heterogeneity of the trade shocks effect across different origins and destinations, with clear evidence that the food sector experiences a greater reduction in employment upon rising import competition directly from the EU15 internal market and OECD countries, rather than from China, but also an increase in employment due to export expansion towards the same destinations.

Agricultural employment sees modest effects from trade integration both on the import and the export side. This low dynamic in the EU regional labor market in agriculture, may have different explanations. In the next future we aim at investigating if EU agri-food policy – such as the CAP and the EU geographical indication policy – play a role in protecting the EU agricultural jobs from international competitions.

Further readings

Autor, D., D. Dorn, and G. Hanson. 2013. The China syndrome: The impact of import competition on US labor markets. American Economic Review 103(6):2121–68.

BATModel - Deliverable D1.1, Broaden welfare implications of trade policy, January 2022.

Curzi, D., Raimondi V., Piriou, A., Haase, O. and Olper, A. (2023). Regional labor market effects in Europe: The role of trade shocks in the agri-food sector. Discussion Paper, University of Milano.

Dauth, W., S. Findeisen, and J. Suedekum. 2017. Trade and manufacturing jobs in Germany. American Economic Review 107(5):337–42.

Dorn, D., and P. Levell. 2021. Trade and Inequality in Europe and the United States. IZA Discussion Paper No. 14914.