

# **Economic versus social effects of GVC participation**

**– evidence from merged Structure of Earnings Survey and WIOD data**

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## **Abstract**

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The paper is motivated by the observation that while many works study the way in which production fragmentation affects the demand for skills, the task composition of the labour force, or labour market polarisation; much less attention has been paid to social effects of GVC participation, in particular how inclusion in globally integrated value chains affects working conditions. Importantly, the webs of social relationships within global supply chains should be analysed deeper not only in economic but also in social terms, as all economic transactions are socially embedded. Thus, there is a need to shift the perspective from economic to social to make the GVCs analysis more balanced. This article seeks to fill this gap by providing more complex view on the working conditions along globally intertwined production structures.

This paper focuses on GVCs as one potential determinant of working standards in a European sample of workers. The question is how the inclusion of a domestic industry in a GVC, or its position within the chain, affects the working conditions of its employees. At the same time, account is taken of other factors that help determine employment and wages, such as workers' individual characteristics and the degree of job routinisation. With almost 9 million observations based on detailed SES

employee-employer data on 24 European countries in 2014, combined with WIOD sector-level data on the cross-border flows of intermediate inputs, we can quantify the magnitude of GVC involvement quite precisely. We gauge it by the global import intensity of production (*GII*), while also capturing the relative position of domestic industries within global production chains. Controlling for individual, sectoral, firm and occupational factors, we pay more attention to the sociological implications of global production. In addition, we address some of the methodological issues raised by the complexity of such socio-economic analysis, adopting alternative methods such as weighted regression and zero-inflated beta regression to estimate our various proxies of working conditions (namely wages, overtime work and bonus payments).

The main finding is that in the industries that experienced substantial increases in GVC involvement between 2004 and 2014, wage trends were worse than in those where the intensification was less significant. But when indicators other than pure hourly wage are considered, the relationship turns ambiguous. Workers in sectors with deeper GVC involvement (i.e., those that are more dependent on foreign inputs) are less likely to work overtime, which may benefit their well-being, but they are also more likely to have less stable remuneration. Yet for employees whose earnings already consist in part in bonus components, the share of bonuses in total earnings drops as GVC participation intensifies, which may mean more stable earnings. Remembering that that we are looking at developments in production ties over a decade, our estimates suggest a modest strength of the relationship between GVCs and our measures of working conditions. Additionally, our sensitivity analysis for workers in different groups of European countries confirms that the association between global production chains and workers' well-being is context-dependent.

Keywords: Global Value Chains, social upgrading, well-being of workers, working conditions

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