

## **Abstract for “Tasks and Occupations in Global Production Networks”**

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Fostered by rapidly falling communication and coordination costs, production processes fragment across borders as the various stages of production need not be performed near to each other anymore. A large literature has documented how this production process has fragmented in and outside Europe (see e.g. Marin, 2006; Baldwin and Lopez-Gonzalez, 2013; Los et al., 2013). In addition, Timmer et al. (2013) document that income increasingly accrues to capital and high-skilled workers within these production networks. So far, researchers have studied jobs by skill type. What is less well understood and analyzed is the changing occupational structure within international production networks.

In this proposal we apply a new metric introduced in Timmer et al. (2013) that allows us to analyze the activities that are added in various stages of production. We identify the emergence of global production networks by tracing the flow of goods and services across industries and countries in world input-output tables for 35 industries and 41 countries for the period from 1995 to 2011. We decompose the production of final manufacturing goods into activities in any country that are directly and indirectly needed for the production of these goods.

We aim to shed new light on the relative performance of countries in global value chains. In contrast to the previous literature that has focused on jobs by skill type (notably Timmer et al., 2013), a major contribution of this paper is the development and use of internationally comparable occupations data by detailed industries. The new International Standard Classification of Occupations 2008 (ISCO-08, see ILO 2012) allows us to obtain much more detailed information on knowledge-based activities as the classification has been updated and extended from the old ISCO-1988 classification to allow for the identification of professional occupations in Information and Communication Technology (ICT) and those related to the provision of information and services to clients. This allows us to address the link between fragmentation and the creation of income and (knowledge-based) occupations.

### **References**

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