Offshoring and the Functional Structure of Labour Demand in Advanced Economies

Aobo Jiang
University of Groningen, Groningen Growth and Development Centre

Sabastien Miroudot
Organization for Economic Co-Operation and Development

Gaaitzen de Vries
University of Groningen, Groningen Growth and Development Centre

Paper Abstract:
This paper examines empirically the relation between offshoring and the onshore workforce composition in the US, Japan, and fifteen high-income European countries. Building up from detailed occupation information in labour force surveys we provide a novel characterization of the workforce classified by a generic set of functions, such as R&D, production, logistics, sales and marketing. Offshoring is measured using annual world input-output tables for the period from 1995 onwards. Estimating a system of variable demands for business functions, our results suggest that industries in advanced economies with faster growth in offshoring lower their demand for production and back-office activities, while demand for logistics, sales and marketing increases. Offshoring to advanced economies is associated with reduced onshore demand for R&D and engineering activities. The decline in demand for production activities indirectly affects R&D and engineering activities as these are found to be complementary to production.