Offshoring and the Skill Structure of Labour Demand in Belgium

Topic: Modelling jobs and data issues

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The traditional concern regarding the impact of offshoring on developed countries is about the worsening of the labour market position of low-skilled workers. Indeed, just like technological change, offshoring is generally believed to be skill-biased, shifting labour demand from low-skilled to high-skilled workers. This paper addresses this concern for Belgium by estimating the impact of both materials and business services offshoring on the demand for labour by skill category. In the case of Belgium, this is of particular interest given its great openness and the fact that previous research (Michel and Rycx, 2009) has found no significant impact of offshoring on total industry-level employment.

Following the standard measurement of offshoring in the literature, offshoring intensity by industry is computed as the share of imported intermediates (both materials and business services) in total non-energy intermediates. This is done by drawing on a time-series of constant price supply and use tables (SUT) for Belgium, which are consistent with the latest national accounts. The offshoring intensities are also split by region of origin of the imports using detailed trade data. This allows to specifically identify offshoring to low-wage countries. The data on employment and wages by skill category for the labour demand estimations come from social accounting matrices (SAM) for Belgium.

Estimating a system of factor demand equations, we want to determine whether offshoring is a threat for low-skilled workers, whether there is a difference in this respect between materials and business services offshoring, between offshoring to low-wage countries and offshoring to high-wage countries and between manufacturing and service industries. Moreover, we will also be looking at whether the impact on labour demand by skill category is linked to the age-structure of the workers in each skill category and whether it is influenced by the industry-level use of ICT-capital.