

The Effects of Trade on Differences between Male and Female Employment Growth in EU Countries, A GVC Perspective

Topic: Gender issues in Input-Output Analysis: New challenges and new perspectives - II

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In many countries in the European Union, female employment has grown faster than male employment. In the literature, several potential causes of this trend have been put forward. Besides supply-side factors related to waves of emancipation, technological progress (mainly machines reducing demand for workers performing physically demanding jobs) and trade have been put forward as explanations. In this paper, we will focus on quantifying the effects that are due to changes in international trade patterns. The period we consider is 2000-2014, which roughly corresponds with the period in which global trade grew at a much faster pace than the global economy.

Our analysis does not just look at consequences of changes in industry specialization that came with the increased global trade intensity. In the period studied, production processes became increasingly organized as global value chains (GVCs). The GVC revolution is not only characterized by increased industry specialization, but also implied 'functional specialization': whereas industry A in Country 1 is mainly taking care of the headquarter functions (e.g. R&D, marketing, etc.), industry A in Country 2 mainly performs fabrication activities. Like industry specialization, this type of specialization is also driven by comparative advantages of countries. Given our objective to quantify the effects of trade on the relatively rapid growth of female employment and the fact that the differences between male and female workers tend to be larger for some business functions than for others, we should consider this question using data on employment by function. We present results based on an input-output based accounting approach that considers technological change within GVCs rather than within industries, and that considers changes in trade patterns as relocations of economic activity by function within GVCs.

The data we use are the 2016 release of the World Input-Output Database, complemented with new data on employment at industry level split by function and gender. In constructing the data, the functional split was based on the occupations of workers, using population censuses and national labor force surveys. The business functions we consider are fabrication, management, R&D and marketing.