Intermediate Goods-Skill Complementarity*

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Abstract

With the growing importance of intermediate goods, recent studies begin to suggest intermediate goods–skill complementarity and its potential effect on inequality. However, this possible complementarity has not been formally tested yet. This paper conducts a formal test on whether intermediate goods are complements for skilled labor. Using the industry-level data that cover 40 countries from 1995 to 2009, we estimate the two-level CES production function. The results indicate that, at the aggregated level, the elasticity of substitution between intermediate goods and unskilled labor is 1.2, which is significantly greater than that between intermediate goods and skilled labor of 1.0. Our results confirm intermediate goods–skill complementarity.

Keywords: Intermediate goods–skill complementarity, Elasticity of substitution, CES, Skill-biased technological change

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