Export Decision, the Division of Labor, and Skill Intensity

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Abstract

This paper theoretically investigates how trade affects skill intensity at firm level. In order to analyze this, we develop a model in which firms engages in the division of labor within firms by in putting two types of labor. Unskilled labor is inputted into the production line of the production division and skilled labor is inputted into the production division to conduct the production line. Firms can reduce marginal cost by promoting the division of labor in the production division. Both types of labor are also inputted into head office for domestic market and for export market. These head offices are different in skill intensity. Though all firms are ex-ante identical, the division of labor of exporters is stronger than that of non-exporters on the unique equilibrium. That fixed labor input of headquarter division for export market is more skill intensive than that for domestic market is equivalent to the fact that total labor input of exporters is more skilled intensive than that of non-exporters. In trade liberalization, all firms except new exporters reduce the type of labor inputted intensively into head quarter division for the export market while raising the type of labor inputted less intensively into that division. A decrease in variable trade costs raises the ratio of exporters to nonexporters in terms of the degree of the division of labor and output while a decrease in fixed trade cost does not affect these ratio. When fixed labor input of headquarter division for export market is more skill intensive than that for domestic market, a decrease in variable trade costs raises the ratio of exporters to nonexporters in terms of skill intensity.