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セッション：賃金・雇用の動学分析

Endogenous Skill Premium and Heterogeneous Labor

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Abstract

There are the most important facts about the evolution of wage inequality as follows. The first is that although the ratio of skilled workers to unskilled workers increased during the past decades, wage differentials by skill did not behave monotonically. That is to say, while many countries (North America and Europe except Germany) experienced a decrease in the skill premium which is the ratio of wage the skilled workers earn to wage the unskilled workers earn in the 1970s, the skill premium has been steadily increasing since 1980s. The second fact is that empirical studies find increasing inequality within the group of skilled workers.

We try to show that both wage inequality and skilled labor increases gradually after Technological Revolution happens. This paper analyzes the relationship between wage inequality and heterogeneous individuals in order to investigate a skill premium puzzle. We develop an overlapping generations model where heterogeneous agents have different innate abilities. In our model, after Technological Revolution happens, high-skilled worker and low-skilled worker are determined endogenously at each period, so does the average skill premium. We depict numerically the dynamics before and after Technological Revolution. As a result, we understand the transition dynamics from an old steady-state before Revolution to a new steady-state after Revolution. The Numerical analysis in our model shows an gradual increase in both the average skill premium and the ratio of skilled labor to unskilled labor after Technological Revolution, which can explain the skill premium puzzle since 1980s. Furthermore, we examine the effect of several parameters (technology level, educational cost, ability distribution, and the tax rate of labor income/consumption) on the new steady state value (wage inequality, the ratio of skilled labor to unskilled labor, capital, interest, GDP, and welfare) after Technological Revolution.

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