The Effect of Barriers to Capital Accumulation and Barriers to Labor Migration on International Income Differences

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Abstract

Huge differences in per capita income exist across countries. To explain these income differences, Restuccia (2004) builds a dual economy model in which the traditional and modern sectors coexist, and finds that the size of "barriers to capital accumulation" affects the level of per capita income. When the barriers exist, not all investment leads to capital accumulation. Then, factor allocation between the two sectors will be inefficient, and hence, per capita income does not increase despite investment.

Later, Landon-Lane and Robertson (2009) develop a dual economy model that considers "barriers to labor migration," which corresponds to the wage gap between sectors, and show the barrier much affects the level of per capita income. Comparing the case with low barriers and the one with high barriers, they find that an increase in the saving rate has a larger effect on per capita income in the high barriers case than in the low barriers case.

The above-mentioned studies deal with the dual economy, but they assume that the two sectors produce the same good and do not consider a change in the relative price. However, to be realistic, it is natural that both sectors produce different goods. Based on this observation, we build a dual-economy model in which different goods are produced in the two sectors, explicitly consider a change in the relative price, and investigate how those barriers affect per capita income.

The analysis reveals that according to whether the two sectors produce different goods or the same good, the effects of these two barriers on per capita income differ. To be specific, those effects are larger in the two-good model than in the one-good model. This is because the effect of a change in relative price strengthens the resource allocation effect of these two barriers. This suggests that under more plausible setting, these two barriers cannot be ignored as factors explaining income differences across countries.