Relative Wages and Endogenous Growth

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(ABSTRACT)

Technological progress, human capital, and tax policies play an important role in growth. Recent models of endogenous growth based on technological progress predict that high technological progress and growth are associated with a high relative supply of skilled workers who earn constant or relatively low wages. Chapter 1 of this dissertation reviews recent models of endogenous growth. The 1980s, however, are associated with high technological progress, high relative supply and increasing relative wages of skilled workers.

Chapter 2 of this dissertation shows that, unlike most recent endogenous growth models, high rates of technological change can be accompanied by a high relative supply and a high relative wage for skilled workers. This chapter looks at the relative wage of educated to uneducated individuals within the same generation in an overlapping generations model. Individuals live for two periods and decide whether to invest in education in the first period of their lives. As more individuals invest in education, the wage of unskilled workers increases, increasing the opportunity cost of education. At the equilibrium, to make the individuals who invest in education indifferent between education and work, the intra generational relative wage of educated individuals must increase

Chapter 3 studies the local stability of the relative wage model. It shows that the unique equilibrium can be a sink, source, or saddle point. The numerical examples study the effects of an increase in the productivity of education on the entire trajectory of investment in education.

Chapter 4 looks at the effects of different types of taxes in an economy in which the allocation of resources is inefficient. It shows that different types of taxes affect the long run growth rate differently. In our setting, taxing income from human capital employed in final good production allocates more human capital to R&D, and increases the growth rate of the economy. However, this is a very selective tax, and the conclusion depends on the production function.

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