

ROLE OF HUMAN CAPITAL AND EDUCATION IN ECONOMIC GROWTH

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ABSTRACT

The purpose of this paper is to explore the association between general education and economic growth of the human beings. The associations were investigated through content analysis of different researches published in a wide range of journals, proceedings and books. Findings suggest strong evidence supporting the relationship between levels of general education and several pecuniary success measures. The findings linking level of education to the well beings of human in all aspects of life are found strong. Given the significant investments by both private organizations and governments aimed at increasing rates of economic growth success through education, it is important to understand that while the evidence supporting the links between education and economic outcomes is promising it is not yet definitive. This very much relation is also become stronger, while locating the reasons of brain drain. In addition to endow with a review of existing research this paper suggests an integrative framework for future research.

Key words: Education, Economic growth, Human capital, Brain drain.

1. INTRODUCTION

There is a robust relationship between education and earnings. Human capital is an individual's productive capacity. Human capital may be increased by investments in education, training and health care. Individuals with more human capital receive higher pay since they are more productive. Optimal investment of the time is in education and the investment in additional education is appropriate only if benefits are at least as large as costs. Costs of college education are direct costs like tuition, books and supplies and the forgone earnings are opportunity cost of time and psychic costs. Benefits of college education are higher expected earnings, more pleasant jobs, lower expected unemployment rates and psychic benefits Currie & Moretti (2003). The factors influencing human capital investment are interest rates, the age of the individual, the costs of education and the wage differential between high school and college graduates. Age earnings profiles are concave as the rate of increase in earnings decreases as individuals' age. This is caused by a decline in human capital investment as individuals' age. Sometimes partially due to declines in physical strength as individuals become older. Gender and age-earnings profiles historically have been observed that women have had shorter expected work-lives. Lower incentives for investment in education, increases in female educational attainment that is caused by increased expected work lives for women. College education is a good investment that has been estimated at the rate of return 5-12% Cling et al (2007). Some evidence of an increase in recent years. Possible biases in estimates of the rate of return to education are ability bias that is an upward bias, no pecuniary benefits called downward bias and Selectivity bias. There is also a socially optimal level of investment in college education like externalities, subsidies and signaling mockup Borland (2000).

Theoretical Background: Education and economic growth are interrelated

To seek that income and educational disparity matter for growth and up to what extent both are associated with growth at a regional or individual level. We take a visit towards history. Summative microeconomic changes in income and in human capital endowments are measured by average and inequality levels. As the study (Rodriguez-Pose & Tselios, 2008), contributes to two different strands within the field of economic growth, income per capita, educational attainment and growth, on the one hand, and inequality and growth, on the other, it also tries to determine which of these factors prevails in shaping growth. On this ground, it discriminates between endowments and inequality in wealth and education. Income disparity may also affect growth through investments in physical and human capital. Classical economists (Keynes 1920; Kaldor 1956), support the notion that greater income inequality fosters physical capital accumulation, as rich agents have a higher marginal propensity to save compared to the poor. This increases aggregate savings which, in turn, increases growth rates. During the early stages of economic development, physical capital accumulation is the prime engine of economic growth. At later stages of economic development, human capital accumulation replaces the accumulation of physical capital as the prime engine of growth, due to capital-skill complementarities. During the economic process, the increased availability of physical capital raises the return on investment in human capital (Perotti 1996; Easterly 2001) & Galor and Moav (2004).

Investment in human capital

Schultz (1972) argues that Capital goods are always treated as produced means of production. But in general the concept of capital goods is restricted to material factors, thus excluding the skills and other capabilities of man that are augmented by investment in human capital. The acquired abilities of people that are useful in their

economic endeavor are obviously produced means of production and these respect forms of capital, the supply of which can be augmented.

Non Economic Benefits of Education

As we have hinted at earlier, schooling is for more than the acquisition of skills for the production of goods and services. Education has both consumer-good and investment-good components. People may be willing to pay for schooling of this kind even when its economic rate of return is zero or negative. Some returns to education cannot be captured by increased individual earnings. Literacy and primary education benefit society as a whole. In this situation where the social returns to education exceed private returns; there is a strong argument for a public subsidy (Jimenez & Patrinos, 2008).

Higher Education and Family Income

There is a new paradigm proposing a different explanation for public funding of higher education. Those who attend university will eventually earn, on average, more income than they would have earned if they had not gone to university. This, in turn, implies that gross total income will increase in the future due to the existence of higher education, and so will the tax base. Moreover, the greater the subsidy to higher education is, the greater the increase in future income will be, as there will be more young people attending university.

Our main argument here is that there is a positive relationship between the perceived degree of redistribution of taxes among a population, measured by the marginal tax rate, and the level of the subsidy that is allocated to higher education. The marginal tax rate determines what proportion of the increase in future income due to education is redistributed and how much remains in private hands. This idea is not entirely new. It dates back, at least, to Nerlove (1972) who indicated that part of the subsidy could be regained through higher taxes that should be levied on the upper income groups i.e. precisely those who have benefited from increased subsidies to higher education.

An Example from Uganda Model

Whether increasing government education expenditure can improve economic growth or otherwise, in general, there is analytical reason to believe that it does. Expenditures on education can be interpreted as investments in human capital. On the empirical front, however, there is disagreement among researchers as to whether education expenditures are productive and therefore associated with higher per capita real GDP growth. Some researchers find evidence that education or education expenditures have direct or indirect positive effect on economic growth. Barro (1991) finds a positive correlation between education expenditures and economic growth. Gemmill (1996) finds both the levels of human capital and their growth rates to be important determinants of economic growth.

Education and Equality

The student who attends school receives high rates of return to what his or her family spends. Yet poor families who might be willing to borrow for more education usually can not. A simple alternative is for government to reduce the direct costs of education by making public schooling, especially basic primary education, available and free. Expanding primary education reduces income inequality and favorably affects equality of opportunity. As primary schooling expands, children in rural areas, the poorest urban children, and girls will all have more chance of going to school. In general, public expenditures on primary education redistribute income toward the poor, who have larger families and almost no access to private schooling. Public spending on secondary and higher education, on the other hand, redistributes income to the rich, since poor children have little opportunity to benefit from it.

Brain Drain

The market for persons with scientific, professional, and technical training is an international one. In 1962, U.S. immigration laws were liberalized to admit persons having certain skills. The result is that almost half a million individuals with professional, scientific, and engineering training migrated to the United States between 1962 and 1980. Altogether other Western countries may have attracted just as many skilled immigrants. Emigration is an "overflow" of high level persons who would otherwise be underutilized and discontented in their home countries. For example, it is argued that someone like European based Pakistani Nobel physicist Abdus Salam would not have had at home the research and library facilities and intellectual stimulation from colleagues needed for his specialized work in chromodynamics.

2. CONCLUSION

As it became apparent that the physical accumulation of capital was not by itself the key to development, many analysts turned to a lack of education and skills among the population as being a crucial factor in underdevelopment. If education and skill are defined as everything that is required to raise the productivity of the people in the developing countries by improving their skills, enterprise, initiative, adaptability, and attitudes, this proposition is true but is an empty tautology. However, the need for skills and training was first formulated in terms of specific skills and educational qualifications that could be supplied by crash programs in formal education. The usual method of manpower planning thus started from a target rate of expansion in output and tried to estimate the numbers of various types of skilled personnel that would be required to sustain this target rate of economic growth on the basis of an assumed fixed relationship between inputs of skill and national output. Approach stated above

was plausible enough in many developing countries immediately after their political independence, when there were obvious gaps in various branches of the administrative and technical services. But most countries passed through this phase rather quickly. In the meantime, as the result of programs in education expansion, their schools and colleges began producing large numbers of fresh graduates at much faster rates than their general rate of economic growth could supply suitable new jobs for. This created a growing problem of educated unemployment.

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