Relationship Between Education And Economic Growth

There are two very basic reasons for expecting to find some relation between education and economic growth. First of all at the most general level it is instinctively reasonable that living standards have raised so much over the last years because of education. Growth of the nature enjoyed in Europe was not observed in the illiterate societies that have gradually merged into the world economy over the last two decades. There is usually a correlation between the scientific advance and the way in which education has aided the development of knowledge as seen by the casual observer. People that usually find it difficult to function in advanced societies is those with only very limited education. To benefit from the scientific advances as well as to contribute to it, education and knowledge are needed. Secondly, being at a more precise level, a broad range of econometric studies point out that the incomes individuals can grasp depends on their level of education. “if people with education earn more than those without, shouldn’t the same be true of countries? If not the rate of change of output per hour worked at least the level of output per hour worked in a country, out to depend on the educational attainment of the population” Philip, Martin, Education and Economic Growth (2003) National Institute of Economic and Social Research. It is reasonable to invest in human capital, as opposing to invest in fixed capital, if spending on education delivers return of some kind, in pretty much the same way as spending on fixed capital.

There are severe date limitation to be able to relate between education and economic performance. However GDP per capita in recent years indicate that high level of GDP per capita is associated with high level of primary and higher level of school enrolment. The determination of economic growth has to have some connection with the microeconomic. Since education conveys economic benefits to individuals, the effects of education should be seen on groupings of individuals which comprise nations. Philip et al.(2003) looked at individual earnings as function of years of education and also other determinants such as age and experience. They found out that for the average male not working on farms, an additional year of education raised the earnings of individual by about 7%. When allowance was made for this, the return to a year’s schooling increased to 10.1%. The quadratic effect in schooling and a cross-product term between education and experience suggested a more complicated pattern of returns but pointed to the early stages of education being more voluble. The percentages of 7% and 10% obviously overstate the return of society from investing in additional education for an individual. It neglects the cost of providing the education and the opportunity cost of earnings that is forgone for pursuing higher education. The benefits of additional education are apparently different from one another. People can be stop pursuing their education at the point of which the expected return of the additional schooling balances or exceed the additional cost of schooling. In other words the average return per year of education up to the point of which the marginal return to education, equals the marginal benefit recognized by the individuals.

Philip et la. (2003) provided an international survey of rates of return to the education that include seventy eight countries. They illustrate returns to primary education ranging from 42% p.a in Botswana to only 3.3% p.a in the former Yugoslavia and 2% p.a. in Yemen. The largest return for secondary education was 47.6% p.a. in Zimbabwe, falling to only 2.3% in the former Yugoslavia. The range for tertiary education was somewhat narrower, between -4.3% p.a in Zimbabwe and 24% p.a. in Yemen. It is not clear that much can be learned from these individual data, but aggregates, either by region or by income level can average out some of the variability in the individual returns.

the effects of education on economic growth can be viewed by a simple frame work such as growth accounting framework. It can be utilized as an indicator of the implications of the economic growth. If a country increases the average number of years of schooling of its workforce by one, and assuming that educated and uneducated workers are perfect substitute for each other. Ultimately it does not matter whether everyone’s education has increased by the same amount. Or whether some people have increased their education even more and others less than one year then the effective labor supply is increased by the same amount. The increase in effective labor multiplied by the share of labor, in the overall product; result in an increase in the output. It is likely that countries with high level of education will also have high capital per worker,

A number of studies have been comparing output per worker, or to be precise output per capita due to data limitations. There are ways in which the change in the total factor productivity can be rendered endogenous. They tend to involve a departure from the production function with its types of labor with different degrees of education. Previously it is assumed that human capital is related positively with the level of education attainment. However shown otherwise, human capital of an individual can increase even without any increase in the level of educational attainment. Even though the human capital may perish over time, the accumulated knowledge can add up. Thus even when the educational attainment has stopped increasing, the human capital can still continue to increase and continue to contribute to economic growth. A high level of education leads to rapid growth rate, as Philip et al. stated whether high growth rate can be expected only if the stock of educated capital is expanded.

The impact of education on economic growth rate is 1.2%p.a. or even more for countries with low income per capita that tend to catch up with those with high incomes. The catch up rate relay positively on the period of education years, reflecting the absorption of technology much easier with high level of education. Philip et al. found a significant positive relation between education and economic growth only for the countries with the lowest level of education. Lower level of education contributes significantly to economic growth even more than at higher level of education, whereas higher level of education tends to suppress the rate of growth. In countries where a worker spends less than 7.5 years in education, the marginal effect of education on economic growth will be positively related. Exceeding this margin will have a negative effect on growth. The fact should remain that educated workers are paid more than uneducated workers. With the sensible assumption that worker’s marginal product is measured by their wage rate, which is the most effective model of measuring.

## **Economic Returns to Investment in Education**

Economic growth per capita in the Middle East and North African (MENA) region has been fairly low, due to high population growth rates and the dependence on oil exports while the oil prices remained low. It is not expected to see a link between the MENA region between investment in human capital and economic growth. The positive relationship between education and economic growth is that individuals are willing to take more years of schooling to be able to earn more and get better jobs. Accordingly, nations are willing to raise the average level of schooling, because they believe that by doing that it will improve productivity, raise the quality of jobs and increase the economic growth. A major argument that link education to economic growth is based on the increase capacity of the labor force to produce due to more years of schooling. Educated worker are easier to train and it is easier for them to learn complex tasks than uneducated works. A lake of educated workers might limit growth but it is unclear if more educated workers will increase growth. It is as well unclear what type and level of education that contributes to economic growth. Education does contribute to growth as see, countries with higher levels of economic growth have labor force with higher level of formal schooling. Beyond such macroeconomic approach to the relation between education and economic growth, the new growth theories stating that developing nations have a better chance to catch up with advanced economics when the stock of labor with the required skills to develop or adopt new technologies. Education in the labor force increase productivity in two ways; education adds skill, increasing the capacity to produce more; and it increases the capacity to innovate to increase the productivity.

The common remark that state earnings is associated with education, the more educated the person the higher the earnings, yet another indication that education contribute to growth. This connection reflects a microeconomic approach to the relation between education and economic growth. Higher earnings means higher productivity thus, an increase in educated labor in the economy is related to the increase to the economic output and higher growth rates. There are compelling reasons to think that education brings about economical attributes that contribute to economic growth. The problem is that the empirical evidence demonstrating the education-economic relationship shows mixed results, and often rejects the hypothesis that investment in human capital promotes economic growth. Ahmed, The Road Not Traveled (2008) Education reforms in the MENA

The macroeconomic growth analyses shows that economic growth rate was positively related to the level of human capital for a given wealth level, whereas the growth rate was negatively related to the initial level of GDP per capita for a given level of human capital. The difference in the growth level among countries can be explained by the initial level of human capital. Does a higher level of investment in education affect the growth? the answer to the this is mainly “no” Ahmed (2008)