NOLEGEIN Journal of
Performance Management & Retention Strategies

ISSN: 2581-5067
Volume 6, Issue21, 2023
DOI (Journal): 10.37591/NJPMRS

http://mbajournals.in/index.php/JoPMRS/index

Case Study NJPMRS

The Interplay of Education and Economic Development: A Comparative Analysis of Global Evidence

Garima[1], Bhumika Samal[2], Manju[3]

Abstract

The main goal of the work is to determine the link between economic growth and education. The study provides an extensive examination of the connection between education and economic advancement supported by data obtained from numerous studies. No country can achieve long-term economic growth without significant investments in human resources. Education can be seen as both an essential component of development and a precondition for the more general idea of expanded human capabilities, which is at the centre of the importance of development. It helps people understand who they are and the world around them. It raises their standard of living and provides several societal benefits to both people and the neighborhood. It is essential for raising people's productivity and innovation levels as well as encouraging entrepreneurship.

Keywords: Human Resources, Education, Productivity and Economic Advancement, Poverty.

INTRODUCTION

The cornerstone of the majority of our economical and societal welfare, education lays the foundation for growth. Enhancing economic effectiveness and social peace depend on it. By increasing the worth and efficiency of their labor, it helps to rescue the disadvantaged from poverty. It increases employee efficiency and cognitive adaptability overall, improves worker productivity and income, and contributes to the reduction of inequality and poverty. In today's fast changing global marketplaces, which are characterized by quickly expanding technologies and manufacturing methods, education helps to ensure a nation's competitiveness. Through encouraging children's early integration with various social or ethnic groups, entrepreneurship, and innovations in technology, education promotes national growth and builds interpersonal tolerance.[1] The endogenous growth concept of development, which sees education as a way to guarantee economic progress, is responsible for popularizing the idea of human capital. The construction of human capital relies primarily on education, which transforms a nation's underutilized the workforce into one that is extremely productive.[2]

***Author for Correspondence**
Garima
E-mail: garima.mgmt@gangainstitute.com

[1]Assistant Professor, Department of Management, Ganga Institute of Technology & Management, Kablana, Jhajjar, India
[2]Assistant Professor, Department of Management, Ganga Institute of Technology & Management, Kablana, Jhajjar, India.
[3]Assistant Professor, Department of Management, Ganga Institute of Technology & Management, Kablana, Jhajjar,India
.

Received Date: July 03, 2023
Accepted Date: August 13, 2023
Published Date: September 20, 2023

Citation: Garima, Bhumika Samal, Manju. The Interplay of Education and Economic Development: A Comparative Analysis of Global Evidence. NOLEGEIN Journal of Performance Management & Retention Strategies. 2023; 6(2): 1–7p.

OBJECTIVE

Examining the relationship of education and economic advancement is the primary goal of the paper. This study presents an extensive analysis of the relationship between education and economic development, including evidence drawn from a number of researches. The comparison of industrialized and developing countries' investments in education as well as the formulation of policy recommendations are additional objectives.

METHODOLOGY

Using secondary data and information, this study follows a descriptive methodology. From a variety of books, journals, papers, and online sources, necessary secondary information and data have been collected.

ANALYSIS

Economic Advancement and Education

Any country, developed or developing, depends heavily on education for economical growth. The development and expansion of a nation's economy depend on a variety of resources, among which the workforce, or human capital, is of utmost significance. An economy can grow and develop with the help of a skilled and productive workforce that makes efficient use of other resources.[3] The development of this important resource, namely human capital, is largely influenced by education. As a result, one of the main forces behind a nation's ongoing economic success is education. As a result, education has been integrated into all government policies as a necessary component. In many underdeveloped countries, significant works have been made to improve education. Government spending on both elementary and higher education should be balanced in order to solve the issue of inequality.[4] Modern economists agree that the key to economic success is to invest in human capital, also known as education. High-skilled employees are more efficient and make more money, according to numerous studies that offer convincing and consistent data. A favorable link exists between the ratio of elementary school enrollment to the labor force and the total expansion of Economy and per capita income. [5] In light of this, it may be said that basic education is a crucial foundation of economic growth. The government needs to make all possible efforts to guarantee that everyone has access to a primary education, ensuring economic development. [6]

Research on Performance and Entrepreneurship

The impact of education in LDCs on entrepreneurial selection is examined analytically in a 2004 Meta analysis of the subject (by Van Der Sluis, Mirjam Van Praag, and Wim Vijverber). The study also confirms that the enterprise income rises by 5.5% for every extra year of education. Whether a person lives in an urban or rural region affects the returns.[7]

According to a study by the Organization for Economic Cooperation and Development and Education department of US, women in industrialized countries gain more years of schooling than those living in rural areas. [8]

According to a study by the Education Department of US and the Organization for Economic Cooperation and Development (OECD), women in industrialized countries gain more of the additional years of educational attainment than those living in rural areas do. This suggests that low-income industries like textiles and food are primarily occupied by illiterate women. Contrarily, education gives women the chance to acquire better-paying jobs. Our educational policy places a larger priority on funding higher education than elementary education. The government should give special consideration towards availability of education and training because there is a rising requirement for highly trained labor.[9]

Education in Development of Economy

Growth and development in the economy have traditionally been viewed by economists as being primarily influenced by physical capital, with a focus on the need to enhance the pace of physical capital creation in emerging nations to accelerate the process and raise living standards. However, economic research has recently revealed the vital role of education as a catalyst for advancement in the economy. Enhancing a person's or the labor force's knowledge and capacities shall be a part of the process of education.[10]

The path to economic progress is in increasing educational possibilities in both quantitative and qualitative terms, as well as improving the level of education imparted to the labor force. The cost of educating people is considered as a decision to invest in humanity or human capital, and education is frequently referred to as "human capital."[11]

Humans are active participants who build wealth, use resources to their full potential, create political, economic, and social institutions, and promote the process of national development. A nation will be able to grow in a variety of ways if it puts an emphasis on the educational attainment and developing skills of its citizens and uses them to their fullest potential in the economy.

Studies on the sources of improvement or growth, including labor, physical capital, and education, executed empirically in developed nations, particularly the USA, have shown that the advancement of human resources is a vital component in economic development.

Professor Solow, who is one of the pioneering economists who measured the vital role of human resources to economic growth and development, calculated the fact 1909 to the year 1949, 57.5 percent of the increase in outcome per employee hour in the USA could be contributed to the residual element, which represents the effects of improvements in technology and increases in labor quality primarily brought on by education.

Prior to the nineteenth century, consistent investment in talent was generally not seen as being very important. Education, on-the-job training, and other associated types of investment were only marginally significant. This attitude, however, drastically altered throughout the 20th century as a result of the utilization of science to the creation of advanced technologies and more effective production practices, starting in the UK and eventually extending to other countries. In the 20th century, education, skill development, and information accumulation all became significant contributors to a person's and a nation's performance.

The twentieth century could even be referred to as a "Age of Intellectual Capital" by regard to how the level of living of a nation is largely determined by its capacity to acquire and use knowledge, enhance the health, and educate the majority of its people.

In recent decades, the Middle East has seen a major increase in the availability of basic education. While making significant improvements to the standard of education at all levels, many nations in the area are taking steps to increase opportunities for secondary and higher education.

The caliber of human capital that Middle Eastern nations have, will determine how well they are able to maintain a competitive edge in these markets as well as in the rapidly globalised service sectors. It will take new curricula, improved teaching programmes, and academic methodologies that promote higher-order thinking skills to ensure that every citizen is educated, numerate, have problem-solving abilities that go higher than the basic level, and that a couple have world-class professional capabilities.

Without considerable investments in human capital, no nation has ever had sustained economic success. Numerous modes of human capital development, including research, education and training, experiential education, and aptitude development, have been shown in earlier studies to produce qualitative results. The distribution of educational opportunities is essential because inequalities in access to education have a detrimental influence on per capita income in the majority of nations.

The impact of mean education on the per capita income varies by location and is influenced by the type and mode of instruction. An investigation of the effect of human capital investments on productivity is possible by regulating the human distributions of human capital and using functional form specifications that are acceptable for the allocation of resources model. However, if people are able to use their knowledge effectively in open, competitive marketplaces, investing in human capital will have a significant impact on growth. Opportunities to use education and skills are significantly impacted by the size and level of competition in these marketplaces.

Education's Contribution to Economic Development

i. ***Productivity and Education:*** Every country's educational system plays a significant role in determining its composition and expansion of its output and exports, as well as how

successfully a system may integrate foreign technologies. For instance, each rural and urban workforce is more productive when they are in good health, eat well, and have a good basic and secondary education. Secondary education includes managerial abilities, skill development, and practical training. A nation's development also depends significantly on tertiary education, which includes universities, colleges, and vocational programmes. Micro-level research suggests that more years of education improve incomes, with a rate of return varied depending on a student's level of education.

The benefits of basic education are typically greater than those of secondary and university education. Several pieces of evidence indicate that having more educated workers is productive because they are better able to innovate, which raises total production. Education has been demonstrated to increase production in agriculture among farmers using contemporary technologies, but its influence is less noticeable among farmers using traditional ways. Increased education not only increases an individual's productivity, but also that of those they contact with.

ii. ***Education and Earnings****:* Greater income equality is another outcome of improved education, which promotes faster rates of growth. The contribution of education to economic growth should include its effects on distribution of income and poverty as well as its effects on production growth. Giving low-income people more educational options gives them more resources to look for employment. For example, a study on the connections between education, income inequality, & poverty in Eighteen Latin American countries undertaken in the 1980s discovered that education was the factor that had the greatest influence on income equality.

iii. ***Education and Industry:*** Investments in education and learning boost a nation's export sector's competitiveness, which impacts its ability to conduct trade successfully. The performance and competitiveness of a nation's trade sector are influenced by knowledge accumulation, and trade itself advances knowledge buildup, particularly through imports. A World Bank study found that from 1965 to 1987, among a sampling of 60 developing countries, those with a high degree of education and openness had particularly high rates of economic growth.

In a market economy, the impact of education on national income: Earnings for educated employees are directly impacted by human capital, and other workers' and physical capital's productivity are indirectly impacted. Increased education improves a country's human capital, which impacts other elements' productivity indirectly as well as directly through effects on national income. it also demonstrates a beneficial feedback cycle in which increasing income stimulates society's desire for education, which then increases investment on physical wealth and its productivity and has a direct effect on national income while also indirectly impacting the efficiency of human resources or labor. Gross domestic product and national income rise in lock step with these effects' spread throughout the economy.

Table 1. An examination of education spending and literacy rates (in %).

S. N.	Name of country	Literacy rate(2020)	Expenditure on education(% of gdp) (2020)	Gdp per capita(2020)	Life expectancy at birth (2020)	Hdi(2020)
1	SWITZERLAND	99%	5.2	$93,525	84.38	0.962
2	NORWAY	100%	5.9	$89,242	83.55	0.961
3	AUSTRALIA	99%	6.1	$66,916	83.73	0.951
4	DENMARK	99%	6.4	$68,037	82.03	0.948
5	CANADA	99%	5.2	$52,112	83.02	0.936
6	INDIA	72.23%%	4.5	$2,274	72.03	0.633
7	PAKISTAN	56.44%	2.4	$1,480	67.34	0.544
8	BHUTAN	63.91%	7.0	$3,063	72.49	0.666
9	AFGHANISTAN	38.17%	2.9	$373	64.23	0.478

Despite the nations mentioned earlier (1-5) attaining an exceedingly high degree of literacy, they persistently allocate a substantial share of their GDP towards educational endeavors. This phenomenon is not an instantaneous outcome of massive investments, as it typically necessitates a protracted span to attain such a literacy rate. A populace endowed with advanced education and expertise constitutes a more productive labor force that contributes to the advancement and progress of these nations. Table. 1

While less-developed nations (6-9) exhibit a low literacy rate, indicating the presence of a less proficient and poorly educated labor pool within their borders. Consequently, the productivity levels of these countries are inferior in comparison to their developed counterparts, which possess a highly skilled and knowledgeable workforce.

It is also observed that the countries having very high literacy rate; have high HDI ranking, high life expectancy and high GDP per capita in comparison of countries having moderate or low literacy rate.

Indian Student Enrollment Trends

The system of education (apart from distance education) has grown significantly, going from 0.17 million students in 1950–51 to 10.48 millions in 2004–05. While higher education enrollment as a whole had an average yearly increase of 8.04 percent from 1950–1951 to 2004–2005, the increase rate in the overall number of teachers was just 5.78 percent throughout that time. In higher education, 87% of students are enrolled in affiliated colleges. Notably, these affiliated colleges enroll more than 90% of undergraduates and 65% of graduate students. The fact that only 0.65% of students in higher education institutions conduct research is remarkable. India's education market was expected to be worth around US$ 117 bn in FY 20 & is anticipated to grow to US$ 225 bn by FY 25.

With more than 250 million children enrolled, India has the most students attending school worldwide. 38.5 million People, 19.6 million men and 18.9 million women, were pursuing degrees in higher education for the academic year 2019–20.

According to the UNESCO report, the student to ratio of educators in senior secondary schools in India was 47:1, as opposed to 26:1 for the entire educational system.

In FY21, there were 43,796 colleges in India. The nation had 1,072 universities as of the 25th of November, 2022. It has been recognized by AICTE that 8,902 institutions for the academic year 2022–2023. 3 577 of these offer undergraduate degrees, 4 786 give graduate degrees, and 3 957 provide diplomas.

The Indian edtech market is likely to expand dramatically from its anticipated value of US$ 700–800 millions in 2021 to reach a projected worth of US$ 30 billion by 2031. India has overtaken the United States to become the second-largest E-learning market in the world, according to KPMG.

During the years 2021 to 2025, the Indian online education market is anticipated to increase by US$ 2.28 billion, representing an annual compound growth rate (CAGR) of almost 20%. India's market expanded at a 19.02% annual rate in 2021.

Metrics like the ratio of public spending to the GNP and budget are frequently used to evaluate the importance put on education. It is noteworthy that India has a long-standing commitment to devote 6% of its GNP to education. It is crucial to give quality-related issues top priority if higher education is to fully benefit from internationalization. Equity and affordability improvements must be given top priority in a practical strategy.

Public awareness should be raised about the high standards of public as well as private organizations through open disclosure. It is not practical that UGC to regulate all private institutions given the size of

the Indian system. The UGC may create a specific policy and ask that every state create an agency that adheres to UGC ideals.

RESULTS

The study provides confirmation that education has an indirect as well as direct impact on a country's economic growth and productivity. Due to their higher marginal productivity brought on by their education, educated workers help to immediately boost the country's GDP. They increase the marginal productive capacity of human capital and peers, which raises the national revenue. The impact on other workers in highly educated nations is negligible, whereas in less educated nations, it is more significant.

POLICY ACTIONS AND RECOMMENDATIONS

The following policy initiatives and recommendations are suggested based on the study's findings and discussions:

i. **Increased Public Spending:** The government should increase spending on education in order to improve both economic and social conditions.
ii. **Education knowledge:** Raising citizens' knowledge of the significance of education is a necessary condition for a nation's growth and development. A nation's entire human growth is influenced by increased education awareness.
iii. **Global Basic Education:** A nation should work to offer all of its inhabitant’s access to basic educational opportunities, including both the younger generation and adult illiterates. It is possible to implement programmes which offer Education to All and a Right to Education to guarantee wide access to education.
iv. **Mandatory Primary Education:** For comprehensive growth and development, especially in developing and underdeveloped nations, it should be a top priority to make basic education compulsory for everybody. Primary education should be given high importance because it is the building block for all further educational advancements.
v. **Education Incentives:** It's been noted that poor people choose to put their kids to work instead of education in several underdeveloped and emerging nations. Governments should establish incentive programmes like free elementary education, free books, and delivering nourishing meals to entice the impoverished parts of our society towards education given that getting an education comes with direct costs as well as an opportunity cost.

CONCLUSION

In a nutshell it can be determined that nations that are developing must continue to invest more in education in order to build a highly educated and competent workforce, increasing their productivity and ultimately promoting all-around growth and development. Increasing education levels in industrialized countries than in underdeveloped ones are a key factor in increasing productivity and income. As economies develop further, more money can be spent on education by both individuals and governments, which will lead to more growth in the economy. As educated and competent individuals lead social and economic reforms, education is vital for the development of human resources.

Therefore, it is crucial to make sure that everyone has access to high-quality education, especially the poor and marginalized groups in society. An early investment in education pays off with a steady stream of high income in the future. Education plays a crucial role in the creation of human capital, which includes transforming undeveloped human resources and promoting economic growth, which denotes advancement in both society and the economy. Therefore, it may be argued that in order to promote the overall development of people, education should be given top priority in every nation.

REFERENCES

1. Chatterji, M., 2008. Dundee Discussion Papers in Economics 210: Education and economic development in India.
2. Vasudeva Dutta P. Returns to education: New evidence for India, 1983–1999. Education Economics. 2006 Dec 1;14(4):431-51.

3. Romer, Paul M. "Human capital and growth: Theory and evidence." (1989).
4. Wang Y, Liu S. Education, human capital and economic growth: Empirical research on 55 countries and regions (1960-2009). Theoretical Economics Letters. 2016 Mar 31;6(2):347-55.
5. Pavlova, M (2014) TVET as an important factor in country's economic development, Springerplus. 2014; 3(Suppl 1):
6. Pillay, P. (2011) Higher Education and Economic Development Literature Review. (Centre for Higher Education Transformation (CHET).
7. Abdouli, M. & Omri, A. (2021): Exploring the nexus among FDI inflows, environmental quality, human capital, and economic growth in the Mediterranean region. Journal of the Knowledge Economy, 12(2), 788-810.
8. Angrist, N., Djankov, S., Goldberg, P. K. & Patrinos, H. A. (2021): Measuring human capital using global learning data. Nature, 592(7854), 403-408.
9. Ozturk I, Aslan A, Altinoz B. Investigating the nexus between CO2 emissions, economic growth, energy consumption and pilgrimage tourism in Saudi Arabia. Economic Research-Ekonomska Istraživanja. 2022 Dec 31;35(1):3083-98.
10. Marquez-Ramos, Laura and Mourelle, Estefanía, "Education and economic growth: an empirical analysis of nonlinearities", Applied Economic Analysis, Vol. 27 No. 79, 2019 pp. 21-45 Emerald Publishing Limited 2632-7627
11. Gogoi SJ, Dutta R. Role of Education in Economic Development: An Analysis Highlighting the Evidences across Countries. International Journal of Mechanical Engineering. 2022;7.

