



RETURNS OF SOCIAL AND PRIVATE INVESTMENT IN VOCATIONAL EDUCATION IN NIGERIA

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ABSTRACT

Globally, the world of work has shifted its focus from just education obtained through theoretical courses to vocational education and training because of the recorded returns in social and private investment. Thus, the sector has been at the heart of recent economic reforms worldwide. However, despite the upsurge in the supply of academic university graduates in Nigeria, employers of labor still face a supply shortage of skilled labor and this has been linked to the theory-oriented curricula of academic universities which do not prepare students for skill-intensive jobs. According to the Nigerian Bureau of Statistics report (2024), statistics the overall unemployment rate in Nigeria for the Q2 of 2023 was 4.2%, while among youth aged 15-24 years, the unemployment rate in Q2 of 2023 was 7.2%, up from 6.9% in Q1 2023. Meanwhile, in urban areas, the unemployment rate reached 5.9% in 2022, compared to 5.4% in Q1 2023. Within vocational training, the economic returns to practical or in-plant training seem to be slightly higher than those in school training. It is clear that tremendous resources, both human and material, are required to redress the situation. As Nigeria is lagging in preparing its workforce for the challenges of the rapidly changing global economy, the government must invest captiously and pay particular attention to vocational and technical education. Also, there is the need to improve the earnings of vocational school graduates through an increase in salary and attractive remuneration which will induce individuals to take vocational education and skills acquisition more seriously.

KEYWORDS: *Vocational Education, Education, Returns, Social and Private Investment and Nigeria.*

INTRODUCTION

Lately, the workplace has changed its emphasis from merely using education from academic courses to emphasizing practical knowledge and abilities acquired via vocational education and training. This is a result of the shown benefits and returns linked to hiring people with vocational education and training. Therefore, the core of recent global economic changes has been the vocational education and training sector (Chappell 2003; Tran 2021). Still, some countries find it difficult to improve their labor force to keep up with these shifts. Since education continues to be a key factor in the economic development and advancement of nations worldwide, it has been offered as a way to enhance people's knowledge and whole personalities. Additionally, as education can be seen as both a consumer good and a capital good, many countries want to continuously enhance their educational and training programs since doing so will increase their human capital and provide them with a workforce fit for the twenty-first century. A nation's educational system must adapt to better prepare upcoming graduates for the labor market (Chen & Pastore, 2024). Thus, vocational education is essential to a nation's educational system. More and better education and training are frequently considered as all that is required for some traditional nations, like Nigeria, where skill shortages are occasionally the most evident, to significantly improve their economy and their standing in the international community.

According to a website (<http://Japanese education jhtm>), Japan's education system played a significant role in the country's ability to meet the challenges posed by the necessity of swiftly assimilating Western ideas, science, and technology during the Meiji period (1868–1912), as well as in the country's subsequent rapid economic growth and recovery in the decades that followed World War II. The experiences of developing nations over the past few decades have demonstrated that a lack of the abilities and skills necessary for development can significantly impede economic advancement (World Bank, 1995). Nigeria cannot, therefore, afford to let personal preferences and whims dictate how its citizens are educated. Given the extremely limited resources available for development, governmental strategies in the field of education must fully include the needs of the country in terms of the development of manpower and skills (Okuwa, 2004).



Nigeria's educational system has been plagued by a persistent crisis in recent times, which has resulted in a reduction in the quality of education at all levels of the country. This crisis stems from several factors, including the declining state of education institutions, issues with classrooms and other infrastructure, the welfare of teachers, the rising expense of education, and the resulting persistent mismatch between labor supply and demand. The theory-oriented curricula of academic institutions, which do not prepare students for the skill-intensive profession, have been connected to employers' shortage of skilled labor, despite the increase in the number of academic university graduates in Nigeria. In addition, university graduates only prefer white-collar jobs and are reluctant to do blue-collar jobs.

Since the 1990s, the Chinese government has actively promoted vocational education as a means of mitigating the scarcity of trained workers in industrialized nations such as China (Chen & Pastore, 2024). However, the labor market continues to lack sufficient supply of skilled individuals (Fudan University, Tsinghua University 2016). This ongoing supply deficit is probably the result of two factors. One explanation is the enduring attitude that denigrates vocational graduates, which deters parents from enrolling their kids in vocational schools in the first place. The second factor is that not enough students are drawn to vocational education due to low labor market returns (Chen & Pastore, 2024).

Vocational education, also known as Vocational Education and Training (VET) or Career and Technical Education (CTE), equips students for manual or practical work-based careers that are typically non-academic and associated with particular trades, occupations, or vocations (UNESCO & NCVER, 2020). The term "technical education" is occasionally used to describe it since the learner gains direct proficiency in a certain set of methods or technologies. The focus of education in typically broader scientific domains, such as higher education, on theory and abstract conceptual understanding, can be contrasted with vocational education. Consequently, instruction, training, and skill development for a variety of vocations are included in vocational education and training. It comprises work-based learning, continuing education, and training, and it can occur in secondary schools and postsecondary education. On the other hand, return on investment is a measurement of an investment's value about its cost. Accordingly, the value that people, businesses, and countries receive from investing in vocational education and training is known as the Return on Investment (ROI) in the context of VET (VET Glossary 2017).

To give governments and funders analytical data or concrete proof of the system's performance and to further justify TVET spending, it is crucial to provide information on the Returns on Investment (ROI) from Technical Vocational Education and Training (TVET). This is according to the 2017 Organizations' Global Education Monitoring Report (UNESCO & NCVER, 2020). In addition to being helpful at the corporate and individual levels, ROI data may also be used to assess public TVET-related initiatives. There are also other uses for a ROI analysis. It can assist with funding agreements, investment decisions, and strategic planning. It can also be used to encourage business efficiency and improvement. It can support decision-making, convey impact, draw in investment, and educate public policy. The most significant feature is that it can assess performance at the individual, organizational, and economic/societal levels for all entities: the economy, non-profits, small and large businesses, and workers. It can support decision-making, convey impact, draw in investment, and educate public policy. The most significant feature is that it can assess performance at the individual, organizational, and economic/societal levels for all entities: the economy, non-profits, small and large businesses, and workers.

Vocational education was linked to the lower socioeconomic strata until the end of the 20th century since it concentrated on certain trades like welding and auto repair. It thus attracted a certain amount of stigma because vocational education and training are linked to the conventional apprenticeship educational system. However, as the labor market becomes more specialized and economies demand higher levels of skill, governments and corporations are investing more in the future of vocational education through publicly funded training organizations and subsidizing apprenticeship or traineeship initiatives for businesses. Post-secondary vocational education is often provided by an institute or school of vocational/technology study. Vocational education has grown over the 20th century to encompass a wider range of industries, including retail, tourism, computer technology, cosmetics, funeral services, and traditional crafts. Because a large number of young people lack "employability" skills, which are often obtained from vocational schools, youth unemployment seems to be skyrocketing. According to the Nigerian Bureau of Statistics report (2024), the overall unemployment rate in Nigeria for the Q2 of 2023 was 4.2%, which increased slightly from the previous quarter (Q1 2023) when it was 4.1%. Among youth aged 15-24 years, the unemployment rate in Q2 2023 was 7.2%, up from 6.9% in Q1 2023. While in the urban areas, the unemployment rate reached 5.9% in 2022, compared to 5.4% in Q1 2023.

The Nigerian Bureau of Statistics, the National Social Safety-Nets Coordinating Office (NASSCO), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), and the Oxford Poverty and Human Development Initiative (OPHI) conducted the 2022 Multidimensional Poverty Index survey, which found that 133 million Nigerians, or 63% of the country's



population, are multidimensionally poor. The National MPI of 0.257 shows that slightly more than 25% of all potential deprivations are experienced by the poor in Nigeria. In most states, the prevalence of multidimensional poverty is higher than that of monetary poor. Nigeria's national monetary poverty line for 2018–19 states that 40.1% of the population is impoverished, whereas the National MPI 2022 states that 63% of Nigerians are multidimensionally poor. In rural places, multidimensional poverty is more prevalent in rural areas, where 72% of people are poor, compared to 42% of people in urban areas.

Vocational Education and Training for Economic Growth

Nigeria's workforce appears not to speed up on the demands of the quickly evolving global economy. As a result of this, the country needs to make cautious investments in education, paying special attention to vocational and technical education. The economics of education and the New Theory of Endogenous Growth can be quickly used by determining the contributions of vocational education and training to economic growth or by examining the private and social costs of and returns to higher qualification of the (active) population. The new growth theory, in contrast to previous growth theories, clearly takes into account not just actual capital and labor, but also technical advancement and its drivers. The primary determinants of endogenous technological advancement are innovation and research and development, namely the degree of training, credentials, and abilities of the labor force.

The rate of return approach or cost-benefit analysis are other names for the Investment Efficiency approach. It holds that the value that education will give should be taken into consideration when providing it. The economic investment theory of cost-benefit analysis is used to evaluate educational investments. This method entails figuring out how much schooling will cost and comparing that cost to the expected returns. Decisions about the future distribution of resources to and within the education sector are made based on this. This strategy has the benefit of allowing governments and private citizens to keep funding education since they see it as a "profitable investment." Investments made by the government in education are referred to as social investments, whereas individual or parents investments is referred to as private investment.

Table 1: Social and Private Cost of Education

Social Costs	Private Costs
Direct	Direct
1. Teachers' Salaries	a. Tuitions fees less average value of scholarship or bursaries
2. Non - Teachers' Salaries and Allowance	b. Private expenditure on books, stationary, transport, practical Materials, etc.
3. Expenditure on books, stationery and transp	
4. Other educational services and goods	
5. Imputed rent on educational building	
Indirect	Indirect
Income forgone before tax	Income forgone after tax. -

Table 2: The Benefits of Vocational Education and Training by Stakeholder Groups

Individual	Employer	Economy
<i>Job-related</i>	<i>Market</i>	<i>Economic benefits</i>
Employment/higher employability	Productivity	Higher employability
Higher salaries	Sales and profitability	Increased participation in the workforce
Higher savings levels	Customer service and satisfaction	Decrease in unemployment levels
Improved working conditions	Occupational health and safety	Productivity gains
Professional mobility	Quality products and services	Higher skilled workforce
Productivity (highly skilled)	Saving on material and capital costs	
<i>Non-job-related</i>	<i>Non-market</i>	<i>Societal benefits</i>
Higher education pathway	Motivated workforce	Improved Health
Pathway to further study	Improved organizational Climate and culture.	Improved environment
Improved self-esteem	Increased literacy in the workplace	Reduced national crime
Communication skills		Increased social cohesion



Engagement, social inclusion Improved problem solving Improved health and well-being Improved economic standards of living Life satisfaction	Employee skill gains Employee well-being Employee workplace practices	Increased social inclusion Strengthened social capital Active citizenship Technological change adaptation
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Source: Schueler et al. (2017)

For the computation of the cost-benefit or rate of returns analysis, this paper focused on the direct economic benefits. These are benefits that can be measured in monetary terms through the earnings received by a vocational-educated person as a proxy measure. For us to get the correct earnings for our computation, the earnings differential of the vocational trained and other lower levels of vocational education are always considered.

Cost Benefit Analysis: This is one of the approaches to decision-making. It tries to add up and compare the costs and benefits (to the extent that numerical addition and comparison is possible) of doing particular things in particular ways at particular times and places. CBA implies a systematic comparison of the magnitude of the costs and benefits of a form of investment to assess its economic profitability.

The Benefits - Costs Ratio (BCR): This is calculated by dividing the present value of benefits by the present value of costs. This will tell us how large the gains are relative to the size of the investment.

Net Present Value Method: This is calculated by discontinuing the stream of future benefits back to the present (usually defined as the time a person or group finishes a program) and subtracting the accumulated costs from this total, (including interests) calculated at that same point in time. A Programme/project is said to be profitable if the net present value of benefits is greater than zero.

The Internal Rate of Returns (IRR): This is the interest rate that is equal to the present value of costs plus the discounted present value of expected benefits. The discount rate that corresponds to the stream of lifetime profits from extra years of school to the entire personal costs of obtaining the additional education is estimated via private rates of return estimates based on the IRR technique. This method's primary advantage is its ability to account for the impact of individual educational expenses, such as tuition and other fees, as well as funding options and lost income when estimating "rates of return" for different educational levels. This is also true for social rates of return on education, which often take into account the impact of lifelong after-tax income benefits from higher education levels as well as individual expenses of schooling like lost wages. The IRR technique assumes that age income profiles at a particular point in time also represent how a person can anticipate earning income throughout the course of their lifespan.

Cost of Vocational Education: The cost of vocational education includes all such expenses a student incurs in the course of his vocational career. They include yearly school fees, Examination Fees, Registration Fees, Library Fees, cost of practical Materials, Transportation, Feeding, Hostel/Accommodation Fees, Etc. The "cost in vocational education represents the value of all resources, in terms of money and sacrifice used to accomplish an education project.

Employment-Related Benefits: It is a fact that a good education is a major tool to success, one can acquire the good things of life with a good and sound education, hence organizations and societies always give their employees the best of available facilities in terms of conditions of service. These good conditions in turn attract the best employable employee to such an organization or society; hence there exists a form of reciprocal relationship between the employer and the employees.

Challenges of Vocational Education and Training in Nigeria

The government of Nigeria has made several attempts to halt the downward trend in the educational system and the high unemployment rate among graduates of tertiary institutions. However, despite these initiatives, the crisis in the country's educational system, particularly at the tertiary level universities, polytechnics, technical schools, colleges of education, and vocational training centers and its underlying causes namely, the egregious underfunding of these institutions and the unfavorable working conditions of their academic staff have persisted unabatedly (Okuwa, 2004). Inadequate adaptation of vocational education curricula to labor market demands may also be the cause of increased vocational education costs and altered skill requirements resulting from structural change. The monetary benefits of in-plant or practical training appear to be marginally higher in the vocational training context than those of classroom instruction. Enormous amounts of material and human resources are needed to correct the situation. Policymakers usually support sharing responsibility for education finance between the government, the private sector, and the beneficiaries, particularly in higher



education, due to the high expense of education in the nation (Chen & Pastore, 2024).

CONCLUSION

In conclusion, education such as vocational has been found to produce highly skilled graduates capable of restoring competitiveness, growth, and equity in nations. For developing countries more basic levels of education and training hold out hopes of modernizing their traditional sectors, facilitating the growth of more modern sectors and stabilizing economic conditions. The higher the level of vocational/skilled education, the higher the level of vocational/technical skilled education, and the higher the rate of return to individuals. Thus this makes vocational education a worthwhile investment for individuals.

In conclusion, it has been discovered that vocational education produces highly trained graduates who can bring back growth, equity, and competitiveness in countries. More fundamental education and training programs offer emerging nations the chance to modernize their historic industries, spur the expansion of more contemporary industries, and stabilize their economies. Thus, the rate of returns to individuals increases with the amount of vocational/skilled education, the level of vocational/technical skilled education, and both. Vocational education is therefore a wise investment for people.

Recommendations

In light of the conclusion above, it is suggested that more attention should be given to vocational education/skills acquisition in the nation's education system. To do this, the following are the actions recommended;

- There is a need to educate the citizenry particularly the youth to appreciate vocational skills. Indeed, people differ widely in interests, abilities and aptitudes, hence not all young people have an aptitude for theoretical subjects that require abstract reasoning to bring out facts and ideas. Such youths may be good at applying specific knowledge to doing something successfully with their hands and maybe well-fitted for a vocational-technical career.
- There is the need to include technical subjects or courses at both the secondary and tertiary levels of the education system in respective of subject bias and course of training;
- The government should improve the earnings of vocational school graduates through an increase in salary and attractive remuneration which will induce people to take vocational education and skills acquisition more seriously.
- Finally, all vocational/technical schools should be properly funded and well equipped with modern technology, especially the laboratory, library, information system and infrastructure.

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