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Relationship between earnings and education: A case of secondary school dropout and university graduates at Gazaland Complex, Harare, Zimbabwe

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Abstract
The research sought to assess the relationship between education and earning among graduates and secondary school dropouts at Gazaland Complex in Harare, Zimbabwe. A case study research design was used in this study. Questionnaires and interviews were used as methods of data collection. A sample size of 40 secondary school dropouts and university graduates was used. The researcher used both purposive and stratified random sampling technique to draw information from respondents. Both primary and secondary methods of data collection were used. After analyzing the collected data, it was found that large number of university graduates have difficulties in finding jobs and the few graduates who do find jobs tend to work at tasks that do not require the kind or amount of education they have, leading to frustration and dissatisfaction an indication that education does not always pay off in terms of income and upward mobility. The researcher recommended that university graduates must turn scientific knowledge learnt at college into entrepreneurship as this may increase their average earnings.

Keywords: earnings, education, graduates and dropouts

Introduction
It has long been understood that education can lead to long-term financial success and higher overall earnings over the life of a career (Taylor, 2016). Generally speaking, the more specialized the education, the higher the earnings go. Zimbabwe has an educational history alongside its political path with policies implemented by various political regimes to boost educational attainment (Munyanyi, 2012) [24]. Zimbabwe has immense potential human resource capital because of the high level of literacy, estimated at more than 90% (World Bank, 2009) [29]. Education has often been seen as the main policy instrument in the fight against poverty, an intrinsic component of development (Johnson, 2009) [13]. Since the seminal works by Becker (1962, 1964) and Mincer (1974) it has been accepted that human capital is vital for firm productivity and is accumulated through experience and education. Therefore educated and experienced workers should earn more as compared to non-educated workers. Thus returns to education are observable from higher earnings (Blundell, Dearden and Sianesi, 2016) [6]. Munyanyi (2012) [24] argues that education is a crucial tool in increasing earnings, while other scholars think otherwise. Taking into consideration the rate of unemployment in Zimbabwe earnings depends on the ability of the economy to provide attractive jobs and better remunerations which commensurate with individuals' level of education.

Background of the study
It is worth pointing out that the harsh economic environment in Zimbabwe is crowding out ambitions of career development, nation building and entrepreneurship development (Kapungu, 2007) [14]. In this context pupils are forced by the economy to drop out from schooling and look for other minimal jobs to work. In the 1980s and 1990s, parents encouraged their children to be educated so that they become doctors and lawyers and so forth because of the perception then, that these professions were profitable (Kapungu, 2007) [14]. More recently, however, the objective of many parents is to find ways and means to send their children overseas to work as soon as they finish secondary school. Perceived rates of return to education have drastically reduced as parents and the students themselves either feel that it does not pay off (Kapungu, 2007) [14]. This has had an adverse effect on the economy, as there is a huge loss of much of the productive age groups to countries like the United Kingdom, South Africa and Botswana. Blundel *et al*., (2016) [6] noted that earlier empirical studies on Ghana also point to the possibility of convexity in the education and earnings curve. For this reason, in most cases, particularly at Gazaland complex in Harare university graduates are not employed where they are best utilized. It is very common to find individuals educated in a particular field working in a completely different one because of the limited availability of jobs within their area (Kapungu, 2007) [14]. In most cases students find themselves in totally new environment and doing new things different to what they learned at school. It is however, common to find university graduates accepting whatever job rather than not having a job at all. In this case, university graduates at Gazaland complex are doing minimal jobs that are not equivalent to their level of education hence have a compromising effect on earnings. Johnson (2009) [13] posits that education is an investment in human capital, because it delivers specialized skills and boosts worker productivity. As a result, higher levels of education generally lead to increased earning power. Economists refer to this higher earning power as the return on education. An individual seeking to maximize future earnings will choose to remain in school only if the long-term payout for an additional year of education exceeds the opportunity cost. However, the above sentiments cannot be applied in Zimbabwe. Munyanyi (2012) [24] highlighted that the decrease in value of education (as

measured by earnings) during the hyperinflationary period (2005-2008) saw many people fleeing for greener pastures. A third of the population or more than three million Zimbabweans are believed to have been living outside the country by end of December 2008 in search for favourable wages and salaries that compensate their investment in education (Makochekanwa, 2009) [19]. It is also observed that 80 percent of staff from government ministries, universities and technical colleges left since 2000 (Adam Smith International, 2007) [3]. It is worth pointing that these past experiences have adversely affected individuals' confidence and trust in investing in education. Most Zimbabwean citizens still think that spending resources and time schooling or achieving higher education is a waste of time because it will never guarantee a reasonable remuneration (Munyanyi, 2012) [24]. Given the above background of Zimbabwe's education and earnings fragility situation, the main thrust of this study is therefore to examine the relationship between education on the individuals' earnings in Zimbabwe.

Theoretical Framework

This research is guided by human capital theory and the sorting theory.

The human capital theory

Human capital theory as well as endogenous growth theory suggests that there are substantial economic effects of education on the micro and the macro level respectively (Michaelowa, 2000) [20]. It involves a commitment of resources today in return for an expected monetary return in the future. According to this theory, education raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their lifetime earnings (Munyanyi, 2012) [24]. It postulates that education's primary function is to augment and expand individuals' stocks of capacities, skills, and personality traits over the duration of the education process. In narrow versions of this model, knowledge and skills are valued instrumentally as they contribute to increased productivity and hence, other things being equal, to higher earnings (Kim and Sakamoto, 2005) [16]. The main contention of the human capital theory is therefore that causality runs from education to productivity to earnings and, subsequently, that the labour market returns to education are a consequence of its productivity-augmenting function.

The sorting theory by Spence (1973) and Stiglitz (1975) [21]

According to this theory, education may act as a signal of the productive capacity of individuals. In essence, according to this theory, higher levels of education are associated with higher earnings not because they raise productivity, but because they certify that the worker is a good bet for smart work (Spence, 1973). Based on these two commonly used theories of earnings determination, it can be inferred that education is a vital tool in effecting changes in individual earnings.

Costs of education

Investing in tertiary education is one of the more significant decisions a person can take. In some countries, such as Australia, Canada, Japan, Korea, and the United States, the direct costs of higher education can be large, often requiring a significant investment of an individual's personal funds, either in up-front payments or loan repayments later on OECD, (2012) [26]. In countries where the direct costs of higher education to an individual are much lower, such as Finland, Norway, and Turkey, the time invested in pursuing a degree and the opportunity cost of foregone earnings while an individual is in school can be a major factor (OECD, 2016) [26].

Direct costs of education

As with all investments, Abel and Dertz (2014) [1] posit that university education requires paying some upfront costs in order to capture the expected benefits that accrue over the lifetime of the investment. The direct cost for education hinges on the private expenditure per year and the length of education (OECD, 2012) [26]. The first is direct costs, which include the out-of-pocket expenses associated with attending college that would not otherwise be incurred (Abel and Dertz, 2014) [1]. Tuition is the clearest example of a direct cost. The costs include the direct costs for education (e.g. tuition fees, books, and related expenses), earnings foregone by the individual while in higher education, and the increased income taxes, transfers, and social welfare contributions that individuals with higher levels of education typically pay to the government(OECD, 2012) [26]. In addition, OECD (2016) revealed that direct costs are a reflection of how much is spent on students per year, but costs also depends on the length of schooling. A general observation is that in countries with low or no tuition fees, individuals typically pay back public subsidies later in life through progressive tax schemes.

Forgone earnings

The second type of cost is an opportunity cost, which represents the value of what someone must give up to attend college (Abel and Dertz, (2014) [1]. For most people, the opportunity cost of a university education is equivalent to the wages that could have been earned by working instead of going to college. Similarly, foregone earnings depend on the level of earnings that one could receive if not in school and the duration of studies (OECD, 2012) [26]. Thus, going for a university education on a fulltime basis often requires delaying entry into the labor market and forgoing wages that would be available to those secondary school drop-outs. Thus, Abel and Dertz (2014) [1] assume that the average wages earned by a secondary school drop-out during his or her first two or four years of employment provide a good proxy for the opportunity cost of college. The individual's foregone earnings are net of taxes, social contributions and social transfers, whereas these elements make up the foregone income for the public side (OECD, 2016) [26]. The likelihood of finding a job is taken into account, and poor labour market prospects, particularly among young lower-educated individuals. OECD (2012) [26] suggested that in some countries, such as Australia, Canada, Japan, Korea, and the United States, the direct costs of higher education can be large, often requiring a significant investment of an individual's personal funds, either in up-front payments or loan repayments later on. Even in countries where the direct costs of higher education to an individual are much lower, such as Finland, Norway, and Turkey, the time invested in pursuing a degree and the opportunity cost of foregone earnings while an individual is in school can be a major factor.

Factors affecting educational choice

There is a plethora of factors which might affect an individual educational choice. It is worth noting that investing in

university and higher (tertiary) education is one of the more significant decisions a person can take. In light of the personal costs associated with pursuing a tertiary degree, how do the benefits compare? OECD analyses based on the most recent year of available data (2007 for most countries), suggest that as far as the long-term economic benefits of higher education are concerned, the return on investment is very good.

Higher Earning Potential

Alstadsæter (2004) [4] posits that higher education can be viewed both as a consumption good for which the individual is willing to pay and as an investment alternative that yields higher wages later in life. The factors determining the individual's educational choice can be divided into three groups, preferences, returns, and costs. The costs of attending higher education are effort, time and money, both direct monetary outlays and forgone labor income. Johnson (2009) [13] argues that education is an investment in human capital, because it delivers specialized skills and boosts worker productivity. As a result, higher levels of education generally lead to increased earning power. Taylor *et al.*, (2010) [27] assert that one of the most important and obvious reason to earn a college degree is to increase your earning potential. Annual statistics provided by the U.S. Census Bureau (2008) [7] show that the relationship between earnings and education is very strong. In 2008 workers with a bachelor's degree earned 65 percent more than workers with only a high school certificate and nearly 130 percent more than workers without a high school diploma (Bureau of Labor Statistics [BLS], 2008) [7]. The income difference between individuals with a college education and those with only a high school education is known as the college premium. That fact of the matter is, if you obtain a college degree, you're more likely to earn more money throughout your career than if only have a high school education.

The economic environment

It is argued that the rate of return to education is particularly high when the supply of educated labor is rather scarce. Demand for educated labor obviously influences private returns to education as well. OECD (2012) [26] argues that as the supply of highly-educated individuals grows, the relative economic benefits of having a tertiary education may go down over time. In order to obtain an unambiguous estimate of the supply effect, Mwabu and Schultz (2000) [25] selected a specific situation where supply of education varies independently of demand. Their model case is South Africa during the apartheid system, where the government rationed the access to the education system for political reasons. Zimbabwean economist, Mr. Erich Bloch (2016) attributed the increased number of unemployed university graduates to incompatibility of employee resources and market needs. It is very common to find individuals educated in a particular field working in a completely different one because of the limited availability of jobs within their area. Experts say although company closures are to blame for the high level of unemployment among graduates, the education system has not helped the situation by producing labourers rather than entrepreneurs.

Opportunity cost

Alstadsæter (2004) [4] argues that the individual acquires education until the present value of the expected marginal wage return equals the marginal return of other investment alternatives. The cost of the investment is the sum of the direct costs, such as tuition fees, books and other expenses, and forgone labor income. Blundell *et al*., (2016) [6] propounds that poverty and economic hardships can either make people fight to attain increased education for a better future, or shy away from advancement in education for making quick money. Johnson (2009) [13] states that a person must factor into account the earnings he or she will forgo and the tuition that he or she will owe should the choice be to attend school rather than work. These factors represent the opportunity cost or true price of education. Blundell *et al*., (2016) [6] indicated that estimates of the rate of return to education are determined by comparing the expected lifetime earnings streams that an individual could receive under alternative levels of educational attainment. Roughly speaking, estimates of this rate of return to a bachelor's degree are derived by comparing the earnings streams of college graduates with the earnings streams of high school graduates who have equivalent observable characteristics. In this vein, instead of dropping out, an individual seeking to maximize future earnings will choose to remain in school only if the long-term payout for an additional year of education exceeds the opportunity cost (Johnson, 2009) [13].

Benefits of education

The benefits associated with acquiring a college degree include:

Higher expected earnings

For university graduates, the chance to earn more money is a major incentive. Analysis from the OECD (2012) [26] indicated that when examining the benefits of tertiary education, differences in earnings compared to those secondary school drop-outs is calculated; and when benefits to upper secondary education is in focus, the earnings of those without an upper secondary graduation is used as a benchmark. Baum, Jennifer Ma and Payea, (2013) [5] echoed that education generates substantial gains over the working life and these earnings differences tend to increase over time. Abel and Deitz (2014) [1] note that earnings for higher-educated individuals tend to increase later in life and the reverse is true for lower-educated individuals.

Pleasant jobs

It is important to note that earning a university degree is a smart way to increase career success. Abel and Deitz (2014) [1] argue that higher levels of education correspond to lower levels of unemployment and poverty, so in addition to contributing more to tax revenues than others do, adults with higher levels of education are less likely to depend on social safety-net programs, generating decreased demand on public budgets. Employment opportunities are narrowing for those secondary school drop-outs who only hold an Ordinary level certificate. Conversely, university graduates have skills that qualify them for a wide range of careers with upward mobility. OECD (2016) [26] also account for the probability of finding a job (unemployment rates for different educational categories and age groups to adjust the earnings potentials).

Lower expected unemployment rates

Education generates not only higher earnings but also improves

the prospect of finding an employment. OECD (2012) [26] reiterated that unemployment typically falls with higher levels of education, and the contrast is especially stark between upper secondary and below upper secondary education. According to Borland, Dawkins, Johnson and Williams (2000) [13], acquiring a university degree may increase an individual's probability of employment but may not have same effect on overall employment. However, recent research has shown that college graduates with a bachelor's degree are increasingly finding themselves underemployed that is, working in a job that does not typically require their degree (Abel and Dertz, 2014) [1]. For these graduates, was the pursuit of a bachelor's degree a wise investment? To be sure, Abel and Dertz (2014) [1] contented that university graduates who find themselves underemployed upon graduation are unlikely to remain underemployed for their entire working life.

Psychic benefits

It is assumed that having a university degree might increase psychic benefits to the individual. A psychic cost is a subset of social costs that specifically represent the costs of added stress or losses to quality of life (Wikipedia, 2015). In this case, psychic costs of a university graduate measure the stress of having to think about the better earnings he or she will get in his life. In addition to the economic return to individuals and to society as a whole, higher education improves quality of life in a variety of other ways, only some of which can be easily quantified. In addition to increasing material standards of living, reduced poverty improves the overall well-being of the population, and the psychological implications of unemployment are significant.

Education and earnings

Abel and Deitz (2014) [1] found that there is a correlation between higher levels of education and higher earnings for all racial/ethnic groups and for both men and women. In the same vein, Pricewaterhouse Coopers (2005) found that the findings based on either type of data reiterate that there has been and continues to be significant earnings premium associated with undertaking and completing tertiary level. The relationship between education and earnings can be portrayed in terms of private net present value. The private net present value of higher education, according to OECD (2012) [26] is an estimate of the net economic benefits to an individual who completes higher education, over his or her working life, expressed in the value of money today. Baum, Jennifer Ma and Payea (2013) [5] suggested that the typical college graduate is considerably more likely than the typical secondary school drop-out to have a job, and that job is likely to pay significantly more than the average earnings of secondary school drop-outs. This payoff is calculated by estimating the economic benefits that an individual with higher education receives compared to a person with an ordinary level certificate only, and then subtracting the costs to that individual that are associated with having a tertiary degree (OECD, 2012) [26]. Post-secondary education should pay off well enough for people to pay back their loans and not suffer a diminished standard of living. The earnings benefit to the average college graduate is high enough for graduates to recoup both the cost of full tuition and fees and earnings forgone during the college years in a relatively short period of time (Abel and Deitz, 2014) [1]. However, the law of demand says when the supply of skilled labor increases, wages decreases. In this case the increase in the number of university graduates would reduce the earnings per individual. But the evidence still strongly supports the conclusion that the long-term benefits of investing in post-secondary education exceed the costs, not just for society but also for the individual students who are bearing an increasing portion of the cost of their own education (Baum, Ma and Payea, 2013) [5]. According to Greenstone and Looney (2011) [12], the benefits of a four-year college degree are equivalent to an investment that returns 15.2 percent per year (Baum, Ma and Payea, 2013) [5].

The economic benefits of a college degree can be thought of as the extra wages one can earn with a college degree relative to what one would earn without one. This wage differential can be measured by comparing the average wages earned by college graduates with the average wages earned by high school graduates. The college wage premium as one might expect, average wages for those with a college degree are far greater than average wages for those with only a high school diploma. Indeed, although college enrollment grew steadily during this time, the demand for college-educated workers increased even more (Gonzalo, 2011) [9]. Further, the introduction of new technologies helped college graduates become more productive. These forces combined to push wages up rapidly for college graduates.

Research Methodology

The research adopted a case study research design in which both qualitative and quantitative technique was used. The case study was chosen because the researchers had insufficient funds to carry a census of all secondary school dropouts and university graduates in Harare. Results of the findings will be used to infer to the population of all secondary school dropouts and university graduates in Zimbabwe.

Data collection and sampling methods

The study used a sample of 40 secondary school dropouts and university graduates. The researchers used purposive and stratified random sampling technique. Questionnaires were used as appropriate research tools to reveal sensitive issues which respondents would otherwise feel uncomfortable to talk about in an interview. A pre-test survey was conducted in order to evaluate the validity and reliability of the questionnaire. Questions that proved to be unclear to the respondents were modified, rephrased or discarded. Key informant interviews were also used to obtain in-depth data from the selected few.

Data entry and analysis

The data collected were analyzed using descriptive statistics or frequency distribution expressed in percentages and mean item score (MIS-Using 1,2,3,4 and 5 Likert Scale). Data interpretations were based on the results that emerged from the analysis.

Table 1: Frequency Distribution and Descriptive Response of Participants

No.	Statement	N	SA	A	N	D	SD	MIS
1	There is a positive correlation between education and earning	40	2	2	1	33	2	2.2
2	Higher earning potential is the major factor affecting education advancement	40	29	1	1	1	8	4.0
3	Education increases employability and marketability of graduates	40	10	0	0	30	0	2.5

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree, MIS = Mean Item Score

Findings and discussion

Statement one which focused on the correlation between education and earnings showed affirmative rejection response (MIS=2.2). The findings are consistent with Kapungu (2007) [14] who argues that most people no longer view education as a means to a personal, familial and national development mechanism because it does not seem to pay off. The above findings concurs with findings by Lauer (1996) who states that a large number of university graduates have difficulties in finding jobs and the few graduates who do find jobs tend to work at tasks that do not require the kind or amount of education they have, leading to frustration and dissatisfaction an indication that education does not always pay off in terms of income and upward mobility. This view implies that economic payoff of education is low such that students prefer to drop out. From the interviews conducted, interviewee 1 has this to say;

"how can you increase earnings without being employed, there is no industry in Zimbabwe, we are forced to work here at Gazaland complex because of poverty...how to get a living?" In addition, Interviewee 9 says "*it's better to invest that money in other project that can yield worthwhile returns than to invest in Zimbabwean education, no returns because there is no employment. How do you expect to recover money used for fees?"* These utterances imply that these interviewees are putting less value to education as the determinant of earnings. However, the minorities were of the view that there is a positive correlation between education and earnings. Their sentiments were echoed by Alstadsæter (2004) [4] who argues that higher education can be viewed both as a consumption good for which the individual is willing to pay, and as an investment alternative that yields higher wages later in life. From the interviews interviewee 3 says,

"Education is conventionally thought to bring private benefits through raising earnings in wage employment, with wages expected to be higher for more educated workers." Supported by interviewee 10 who reiterated that, "*university graduates receive not only higher pay, they also receive jobs that are more secure and involve less tedious work, less physical work, more pleasant work environments, better working conditions, higher social status...".*

The second statement revealed that majority of the respondents accepted the statement (MIS=4.0).The findings are in line with Alstadsæter (2004) [4] who posits that higher education can be viewed both as a consumption good for which the individual is willing to pay and as an investment alternative that yields higher wages later in life. In addition, Johnson (2009) [13] argues that education is an investment in human capital, because it delivers specialized skills and boosts worker productivity. As a result, higher levels of education generally lead to increased earning power. Sharing the same sentiments is Taylor *et al*., (2010) [27] who assert that one of the most important and obvious reason to earn a college degree is to increase your earning potential. There was a balance of thoughts on statement 3 (MIS=2.5).The findings are in line with Blundel *et al*., (2016) [6] who support that the skills and knowledge acquired by earning a degree, attending college provides professional networking opportunities. Career networking opportunities typically increase with every level of education attained. Davies (2002) notes that the provision of education plays an important role in fostering innovation and advancing knowledge to an extent that those receiving education will become more productive and thus more valuable to employers. These findings imply higher levels of education enables better employability and marketability to highly reputable organizations hence there is high chances of high earnings. Contrary, interviewee 4, has this to say;

"... Personally, I no longer view education as a means to improve employability and marketability of your skills because it does not seem to pay off. University graduates spend 5 to 6 years unemployed after schooling and you wonder why students are still enrolling for tertiary studies…We dropped out from school in 2008 because it was worthless. Because having a degree does not mean you a going to be employed here in Zimbabwe… resorting to schooling is a fiasco".

Conclusion

The study recognizes that a large number of university graduates have difficulties in finding jobs and the few graduates who do find jobs tend to work at tasks that do not require the kind or amount of education they have, leading to frustration and dissatisfaction an indication that education does not always pay off in terms of income and upward mobility. This view implies that economic payoff of the education cause students to drop out. The mean item score for each statement has been shown on the table in which statement 2 topped (MIS= 4.0) while statement 1 ranked last (MIS= 2.2).

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References

1. Abel JR, Deitz R. Do the Benefits of College Still Outweigh the Costs? Current issues in Fconomics and Finance. 2014; 20:3.
2. Ackah C, Adjasi C, Turkson F, Acquah A. Education, skill, and earnings: Further evidence from Ghana, 2016. content/uploads/2016/07/L2C_WP16_Ackah-et-al-1.pdf
3. Adam Smith International. 100 days: An Agenda for Government and Donors in a New Zimbabwe. A paper from Adam Smith International's Fragile States & Post Conflict Series Available, 2007. http://www.sarpn.org.za/documents/d0002817/index.php
4. Alstadsæter A. Measuring the consumption value of higher education. Statistics Norway NHH Discussion Paper SAM, 2004.

5. Sandy Baum S. Jennifer Ma, Payea K. Education Pays. The Benefits of Higher Education for Individuals and Society: College Board, 2013.
6. Blundell R. Dearden L, Sianesi B. Evaluating the Impact of Education on Earnings in the Uk. Models, Thethods and Results from the Ncds, 2016.
7. Bureau of Labor Statistics, Current Population Study, 2008. www.bls.gov/emp/emptab7.htm.
8. Card D. The Causal Effect of Education on Earnings, in: Ashenfelter, Orley and D. Card (eds.): Handbook of Labor Economics, Vol 3A, North-Holland, Amsterdam, 1999.
9. Castex, Gonzalo. College Risk and Return. Central Bank of Chile Working. 2011, 606.
10. Croix de la D. Growth dynamics and educational spending: The role of inherited tastes and abilities. European Economic Review. 2001; 45:1415-38.
11. Govindaraju R. Venkatesan S. A Study on School Drop-outs in Rural Settings. Journal of Psychology. 2010; 1(1):47-53. [Online] Available http://www.krepublishers.com/...Govindaraju-R/JP-01-1-047-10-009-Govi.
12. Greenstone, Michael, Adam Looney. Where Is the Best Place to Invest $102,000—In Stocks, Bonds, or a College Degree? Brookings–The Hamilton Project Paper, 2011.
13. Johnson LB. Education and earnings, 2009. https://files.stlouisfed.org/files/htdocs/pageone-economics/uploads/newsletter/2009/200908.pdf
14. Kapungu sr. The pursuit of higher education in zimbabwe: a futile effort, 2007. http://archive.kubatana.net/docs/chiyou/kapungu_cipe_essay_higher_education_071002.pdf
15. Baum S, Ma J, Payea K. Education Pays The Benefits of Higher Education for Individuals and Society. Collegeboard, 2013.
16. Kim C, Sakamoto A. Estimating the Human Capital and Screening Effects of Schooling on Productivity in U.S. Manufacturing Industries, 1979-1996. [Online] available from, 2005. http://paa2006.princeton.edu/download.aspx?submissionId=60538. [20 July 2008]
17. Lemieux T, Card D. Education, Earnings, and the 'Canadian G.I. Bill. Canadian Journal of Economics. 2001; 34(2):313-44.
18. Lewin K, Little AW. Access to education revisited: Equity, drop out and transitions to secondary school in South Asia and SubSaharan Africa, Editorial. Int. J Educ. Dev. 2011; 31:333-337.
19. Makochekanwa A. State Fragility: Zimbabwe's Horrific Journey in the New Millennium. South Africa: University of Pretoria, 2009.
20. Michaelowa K. Returns to Education in Low Income Countries: Evidence for Africa Paper presented at the annual meeting of the Committee on Developing Countries of the German Economic Association, 2000.
21. Stiglitz JE. The Theory of Screening, Education, and the Distribution of Income. The American Economic Review. 1975; 65(3):283-300.
22. Mawere M. Causes and Effects of Girl Child Dropouts in Zimbabwean Secondary Schools: A Case Study of Chadzamira Secondary School, Gutu District. Int. J Educ. Res. Technol. 2012; 3(2):11-20. www.soeagra.com/ijert/ijert.htm
23. Michaelowa K. Returns to Education in Low Income Countries: Evidence for Africa, 2000. http://www1.aucegypt.edu/src/skillsdevelopment/pdfs/returns%20to%20education%20low%20income%20countries.pdf
24. Munyanyi ME. Education and Earnings nexus in Zimbabwe after the 2005-2008 hyper-inflationary period: An empirical analysis, 2012. https://mpra.ub.uni-muenchen.de/75112/
25. Mwabu Germano, Paul Schultz T. Wage Premia for Education and Location, by Gender and Race in South Africa,in: Economic Development and Cultural Change. 2000; 48(2):307-334.
26. OECD. Education indicators in focus, 2012. Visit: www.oecd.org/edu
27. Taylor N, Mabogoane T, Shindler J, Akoobhai B. Seeds of Their Struggle: The Features of Under- and Overage Enrolment among Grade 4 Learners in South Africa Pathways to Access Monograph 47. Consortium for Research on Educational Access, Transitions and Equity. Witwatersrand Sussex, 2010.
28. Zhou H. Determinants of Youth earnings: The case of Harare. Journal of economics at University of Zimbabwe. 2002, 213-220.
29. World Bank. World Development Indicators 1999, CD-ROM, Washington, 2009.