# Assessing the Economic Benefits of Higher Education

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## **ABSTRACT**

The Philippines produces more than 1.5 million high school graduates and approximately 500,000 students who proceeded and graduated in college every year. The economic benefits of having a degree may attract students to pursue tertiary education. The researcher wanted to determine the economic benefit of higher education. Secondary data from various government agencies were gathered and utilized in this study. A survey to 90 graduates of secondary education and 98 graduates of higher education was done using purposive sampling. The descriptive measures, chi-square test, and the correlation coefficient were employed for the analyses. Enrolling in higher education is quite difficult for some families who can't afford tertiary education which is influenced by three components; the government budget for education, the proportion of income spent for education, and employability. Findings clearly stated that there is a high income when you are a graduate of higher education. The sex, age, and marital status do not have a significant relationship to the earnings of the graduates; however, the bachelors' degree is significantly related. Finally, the researcher concludes that attaining higher education can be seen directly to the increased earnings. The researcher recommends looking into other factors which affect the household income and its relationship to the attainment of tertiary education.

*Keywords* — Economic benefits, higher education, descriptive measure, Leyte, Philippines

#### INTRODUCTION

The economic benefits of a college degree are considered to be as extra earnings one can work for when you have a college degree. Likewise, the higher level of education one gets, result to a higher earning power (Abel & Deitz, 2014; Greenstone & Looney, 2011). The monetary benefits of higher education thought as lifetime difference of earning power which include the increased tax revenues, faster economic growth, greater innovation and labor market flexibility, lower unemployment, and higher productivity (Greenstone & Looney, 2011: Grove, 2013).

In the Philippines, the economic status of a person is associated with his educational attainment. Some also say that people who obtain higher education are more likely to look for a job with higher salary than those who are not a college graduate. Greenstone and Looney (2011) elucidate that on the average, the benefits of a four-year college degree are equivalent to an investment that returns 15.2% per year. Besides, the lifestyle of an individual is normally associated with one's earning. The Department for Business, Innovation and Skills said that people who attend tertiary education are more likely to vote, volunteer, have a higher level of tolerance, and educate their children better than non-graduates and less likely to commit a crime, smoke and drink heavily.

According to Congressional Budget Office (2012), the bachelor's degree holders are less likely to rely on public assistance program because they were able to finance their needs unlike those who are not college graduate who are paid less. Jack Grove (2013) emphasized that the economic benefits to society include increased tax revenues, faster economic growth, greater innovation and labor market flexibility, lower unemployment, and higher productivity. The National Employers Skills Survey (2007) found out that employers are generally happy with the quality of young people they recruit or those fresh college graduates. The survey showed that 81% of employers recruiting graduates thought that they were well prepared for work compared to 60% of employers recruiting 16-year-old school leavers and 69% of those recruiting 17 or 18-year-old school leavers.

Some researchers stated that the more earnings a person receive, the better his lifestyle or standard of living. In the Philippines, many parents cannot afford to send their children to tertiary education especially in provinces. Many researches show evidence that people who have higher education tend to have higher wages. Likewise, the study looked into the economic benefits of having a baccalaureate degree, and it also studied different factors which affect their

motivation in enrolling to college. It further tests whether demographic profile (sex, age, marital status, degree program) of the respondents was significantly correlated with their income.

### **FRAMEWORK**

The conceptual framework of this study (Figure 1) explains that the higher the level of educational attainment, the higher the earnings. College graduates earned vastly more than graduates from high school (Graham & Paul, 2010; Burnsed, 2011). However, attainment of higher education is affected by the three components: the budgetary allocation of the government to the Philippine educational system, the rate of unemployment in the Philippines, and the number of enrollees and graduates of higher education.

The physical facilities and services of the public schools are affected by the budget allocated by the Philippine government to the educational system. Although the private schools are not directly affected by these issues, still many people cannot afford to send their children to private schools. Thus, the lesser amount allocated by the government to education reduces the quality of education.

The unemployment rate in the Philippines is quite high when it compares to the other ASEAN (Association of South East Asian Nation) countries. According to Reid (2015), under the administration of President Benigno Aquino, the unemployment rate has fallen, but the progress has been slow and unstable with the Philippines still having the highest employment rate in the ASEAN region. As the implementation of the ASEAN integration approaches, possibilities would be an increase in unemployment or lessen the rate of employment in the Philippines because of the agreement made between ASEAN countries.

The budget allocated for education and the rate of unemployment greatly affect the enrollment rate and the number of graduates in college. If there is a high school fee in public colleges and universities, then expect a lesser number of enrollees, also, if it continues to rise and no government subsidy will be given to the public school, then, it is anticipated to have minimal graduates. Hechinger (2014) said even with colleges pledging to help low-income students, access to higher education and financial help for many disadvantaged students remains limited and fewer than half of those that do make it to college still fail to earn a bachelor's after six years. Completion rates for community colleges in America are even worse. Therefore, an opportunity to have better employment is limited to undergraduates of higher education.

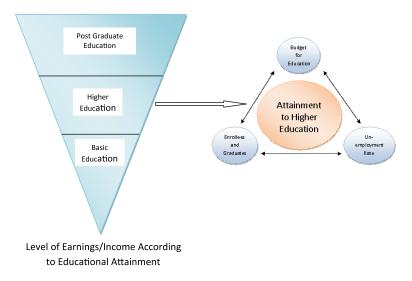


Figure 1. Conceptual Framework

# OBJECTIVES OF THE STUDY

This study determined the economic benefits of having a college degree than a high school diploma. It also looked into the earnings of high school graduates and graduate of higher education. Specifically, the study determined various factors which possibly related to the earnings of the graduates. It explored the different components that influenced the high school graduates to pursue higher education and indirectly affects their attendance in higher education. Also, it tested the relationship between the demographic profiles (sex, gender, marital status, degree program) of the respondents to the monetary benefit of having a higher education. It examined whether the profile is correlated with the monetary benefits of being a college graduate.

#### METHODOLOGY

The study utilized descriptive research design, and it made use of quantitative data. The purposive sampling was employed to 90 high school graduates and 98 graduate students of higher education. Research procedures started by organizing the interview guide and the demographic profile to be gathered and used in the

analysis. Secondary data were gathered from various government agencies in the Philippines. The data were utilized to describe the identified components that impede a person not to pursue higher education, and, therefore, cannot come across the benefits of being a graduate of higher education in terms of its economic benefits.

Subsequently, the process used in this study follows the key informant interview process and document analysis. Descriptive measures were employed for the descriptive analyses. Further, statistics were chi-square test for independence used to describe the significant relationship between the economic status of the respondents to sex, degree program, and marital status. Spearman correlation was used to test the relationship between the economic status and age of respondents. Then, this study expects to determine the economic benefits of having higher education.

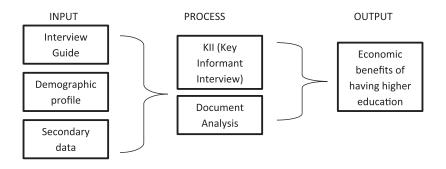


Figure 2. Research Methodology

The researcher has its definition of the following keywords: economic, economic benefits, higher education, and standard of living. Economic is something related to the management of income, expenses, money, or wealth. Economic benefits are benefits that can be expressed numerically as an amount of money that will be saved or generated as the result of an action. Higher education refers to education beyond secondary level or education provided by a college or universities. It is an institution that awards a bachelor's degree. The standard of living refers to the wealth, comfort, material goods, and necessities available to a certain geographic area.

#### **RESULTS AND DISCUSSION**

The Philippine government allotted P3, 604,497,000 (72, 089 USD) to higher education which is only 2% of the total budget for the educational system (Fig. 1). The lion share was given to the basic education because the basic education can be finished within 10 years of education while the higher education can be achieved merely within 4 years and technical/vocational education in the Philippines can be completed in less than a year. A person who cannot pursue higher education due to lack of financial capability proceeds to TESDA since they provide certificates to provide evidence that he has a particular skill for certain employment.

This only proved that subsidy of the Philippine government to higher education is not enough to accommodate and serve the fresh graduates of the secondary level. Parents then find it difficult to send their children to college since it is more expensive than high school.

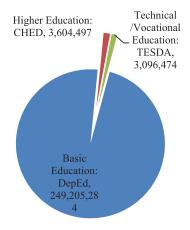


Figure 3. Budgetary Appropriation for Philippine Educational System by Level of Education and by Agency (in '000 pesos) FY 2013

DepEd - Department of Education

CHED - Commission on Higher Education

TESDA - Technical Education Skills and Development Authority

Note: Only selected agencies were covered to represent each level of education.

Source: Department of Budget and Management (2015)

The children's education depends on the income of parents. Figure 3 shows the proportion of income spent by parents on education. The figure illustrates that as the income of parents gets higher, the percentage it allocates to education also arise. The figure only shows that nevertheless, those who earn much can send their children to a better educational institution. With these findings, it complements to the catchphrase conventional in the Philippines that says "the poor become poorer and the rich become richer." The chance to obtain a higher degree is reliant on the family income. Parents normally prioritize the expenses on food which is the basic needs of every family.

# Percent of Income Spent on Education

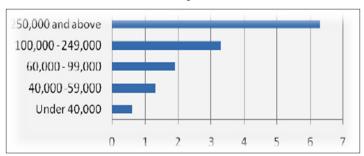


Figure 4. The Proportion of Family Income Spent on Education (by income class, 2006, in percent), Philippines
Source: Family and Income Expenditure Survey (2006)
Note: the latest FIES of PSA is not currently available as of September 2018

4,000,000 3,500,000 3,500,000 50,000 1,000,000 500,000 500,000 School Year

Figure 5. Higher Education Enrollment in Government and Private Schools in AY 2009-2010 to AY 2013-2014, Philippines Source: Commission on Higher Education (2013)

It only shows that every year, the basic education produces an increasing number of graduates. The increase in attendance in higher education should be given importance to avoid a larger number of dropouts.

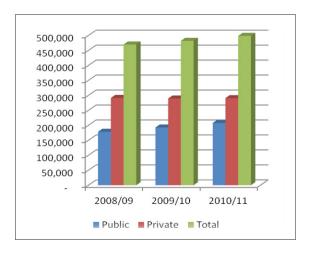


Figure 6. Number of Graduates by Academic Year: AY 2008-2009 to AY 2010-2011, Philippines Source: Commission on Higher Education (2013)

Figure 6 represents the number of graduates produced both by the public and privates state colleges and universities from AY 2008-2009 to AY 2010-2011 in the Philippines. The data on the recent years were not yet available during the data gathering of the researcher. Data in Figure 5 show that there was an increasing number of graduates in the Philippines. This only implies that the opportunities for employment should also rise so that the newly graduates will be given a break for employment.

The Philippine government is organizing various job fairs to the provinces to give opportunities for the newly graduates to be employed. According to Hall and Moss (1998), the organizations which create opportunities for the employment for the new business environment have recognized that the career of the future is a continuous learning process and continuously-learning employees are what the organization needs to be a continuously-improving business.

Table 1. Results from the July 2014 Labor Force Survey (LFS)

Philippines	July 2014 <sup>1/</sup> (Excludes Leyte)	July 2013 <sup>2/</sup> (Excludes Leyte)	July 2013 (Includes Leyte)
Population 15 years and over (in 000)	64,070	63,180	64,470
Labor Force Participation Rate (%)	64.4	63.9	63.9
Employment Rate (%)	93.3	92.7	92.7
Unemployment Rate (%)	6.7	7.3	7.3
Underemployment Rate (%)	18.3	19.2	19.2

Source: Philippine Statistics Authority

Table 1 represents the employment and unemployment rate of the population 15 years and above. This means high school and college graduates were part of the survey. The data excludes the province of Leyte because of the super typhoon hit to the area on November 8, 2013. To give a comparison with the previous year, a computation excluding the province of Leyte was also done. Data in the table shows that, excluding Leyte, there was an increase in the rate of employment and a decrease in the unemployment rate. These only impart that despite the disaster took place in the Philippines still the government able to decrease its employment rate. Hence, it is evident that there was an increase of unemployment rate in the province of Leyte after the disaster. However, right now the province is recovering from the destruction brought by the super typhoon. Many opportunities were given to the victims and even small and medium enterprises already recovered from their loss. Lazear (1990) said that employees are required to pay workers on separation or to give advance notice of termination and incumbents are more likely to retain their jobs, but new workers are less likely to be hired.

Table 2. Summary of Earnings both Graduates of High School and College, Philippines

Level of Education	Monthly Wage (in pesos)		
	All sample		
High School	8, 450.32		
College	14, 512.24		

Source: Author's calculation

<sup>&</sup>lt;sup>1</sup>/<sub>2</sub> Estimates for July 2014 are preliminary and may change.

The province of Leyte was not covered in the July 2014 LFS.

<sup>&</sup>lt;sup>2</sup>/July 2013 estimates are based on data which excludes Leyte to make the July 2013 estimates comparable with July 2014 estimates.

Table 2 presents the earnings of workers both high school graduates and those of college graduates. The findings were based on the calculation of the author in her research study. Evidence shows that college graduates earned much than high school graduates. About Php 6,000.00 (about 150 USD) was the difference in their income. The result is comparable with the findings of De Vera and Tan (2010) using their model which showed that college graduates' earnings are higher than those with a high school diploma alone.

Table 3. Relationship on the Profile of the Respondents to the Monetary Benefits of Higher Education

Profile	Statistics	Computed Value	p-value	Interpretation
Degree Program	Chi-square Test	109.904	0.000**	Significant

<sup>\*\* -</sup> significant at 0.01 level of significance

Source: Author's calculation

The result in table 3 shows that there is no significant relationship on the profile (sex, age, and marital status) of the respondents to the economic benefits of higher education. This explains that the income of the graduates is not related to whether the person is younger, married or male. However, results show that there is a significant relationship between the degree program and the income of the graduates. The course or degree program affects the income of the graduates, and in fact, most of the graduates who earned much were graduates of a certain course. Thus, one should be careful in choosing the degree they wanted to enroll since it has an impact on the resulting economic benefits of being a college graduate. According to Diener, Sandvik, Seidlitz, and Diener (1993), the African-Americans and the poorly educated did not derive greater happiness from specific levels of income.

## **CONCLUSIONS**

The graduates of basic education do not equate to enrollees in tertiary education because many parents especially uneducated parents who have less income cannot afford to send their children to tertiary education. Parents would have always thought that for as long as their children know how to read and write, they would not be ignorant anymore. However, this study has shown that college graduates tend to have higher earnings than high school graduates.

<sup>\* -</sup> significant at 0.05 level of significance

In the Philippines, before the implementation of the K12 program, according to the Philippine Salary Guide, the occupations which have higher income are those with diploma or degree or those who have attained post graduate program which imply that high school graduates do not belong to top earners. These findings are also supported with the article of Clifford (2012) where the top 10 high paying jobs are those graduates of Bachelor's degree. Although, there were jobs belong to the top 10 high paying jobs which do not require a bachelor's degree, but completion of college-level education is a definite advantage coupled with years of experience. Orbeta (2003) highlighted that more professionals or any managerial or executive positions are held by graduates of tertiary education, i.e. graduates in UP, Ateneo, and de La Salle. Finally, the bachelor's degree program significantly affects the earnings of the graduate respondents.

The factors that influence students' decision to enroll in college are the cost, the availability of financial aid (Noel-Levitz, 2012), orphan-hood, transport to higher education institution, and unplanned pregnancies (Matsolo, Susuman, & Ningpuanyeh, 2016).

#### TRANSLATIONAL RESEARCH

The findings of the study describe the Philippine Educational System prior to the implementation of the Republic Act No. 10931 (The Free Tuition Law) where the basic education is only ten years. It is best to have further study in the existing program where the basic education is already 12 years like in other countries. Further, the new curriculum of the basic education (the spiral progression approach) may also affect the skills of the high school graduates compared to the old curriculum of the basic education.

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