

# Measuring the Returns of Investment in Sri Lankan Higher Education

## Special consideration on Financial Profession

*(Cost Benefit Analysis of Sri Lankan Higher Education in Finance)*

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### ABSTRACT

Individuals earning pattern is strongly related to their level of educational attainment. Empirical research evidence that the positive correlation between investment in education and the individual's future earnings (Pasfield, Taylor & Harris, 2008). Higher education influence economic well-being of a country in several ways. Specially in terms of social returns and individuals returns (Pasfield, Taylor & Harris, 2008). Except of Governments' huge expenditures on higher education programs, individuals self-invest large amount of money to obtain higher studies. This emphasizes importance of developing model / equation for predict and quantify the benefits of this enormous investment. The research study aims to develop a model through cost-benefit analysis of Sri Lankan Higher Education System targeting a specifically finance profession. The model will be used to predict the level of earning potential and it's variance respective to the individuals' level of education attainment from professional studies, undergraduates and graduate levels. There are many advantages from the higher education but there is a lack of previous research studies being conducted to identify the returns on students' investment to pursue higher education in professional studies and graduate and undergraduate levels. Therefore this research is aimed to fill the knowledge gap in literature and develop cost - benefits model to predict the gains on higher education investment of Asian students in Sri Lankan higher education. The model will be useful to predict the potential, earning and variance of earning potential respective to the individuals' level of education attainment of- professional, graduate and undergraduate studies.

**KEYWORDS:** Benefits of Education, Cost of Education, Education Economics, Rate of Returns to Investment

### INTRODUCTION

Higher education is a very top step of the learning ladder. Also it is treated as an investment in any nation because Individual's earning pattern is strongly related to their level of educational attainment. Higher education influence economic well-being of a country in several ways. It provides economic and social (financial and non-financial) benefits to the individual who pursues an advanced education and to the society.

Further universities, higher education institutes are the main sources of research

and development which focused on knowledge creation. It is then beneficial to society and conducive to economic growth.

Higher education provides a variety of private benefits to individuals such as enhancement of knowledge and social skills, career advancement, respect by others, greater responsiveness for technology, and an awareness of cultural diversity. Also it sharpens the skills and competencies of people which are valued by employers and increase the earning potential throughout their lifetime.

In broader, there are many economic and social benefits associated with higher level of education. Increased Tax Revenues, greater productivity, decreased reliance on government's financial support, reduced crime rates, increased charitable giving, and increased community service (Source: IHEP 1998; 2005) could be taken as extreme

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reimbursement of education in economic aspects.

Finance division/department?? is one of the critical sections of any organization. It handles all monetary transactions within and outside the company. Therefore financial profession is more responsible and important position in any business. The study aims to develop a cost-benefit model targeting the financial profession.

Review of literature shows that there is a lack of previous research has been done to identify these returns behind this enormous investment. Therefore this research is aimed to develop a model helping to quantify cost-benefits of Sri Lankan higher education.

### **Research Objectives**

One of the key objectives of this research study is to identify and quantify the costs [individual/institutional] and benefits [private/public – economic/social] of Sri Lankan higher education system in financial studies. So that develops a cost – benefit index along with student's study and their career path ways.

Further, this study aims to identify and assess non monetary benefits of Sri Lankan higher education. Based on the findings, it is planned to formulate set of suggestions/recommendations for benefits of all stakeholders of financial sector in Sri Lankan higher education system.

### **RATIONALE OF PROPOSED RESEARCH STUDY**

Based on the review of literature it is clear that

a). there is only a limited number of research been carried out in determining higher education cost and benefits in few developing and developed countries.

b). its important have a clear idea about education cost and benefits for stakeholders including customers, employees, employers and job seekers.

c). to obtain a high quality higher education, people invest more money, effort and time especially considering the reputation of the institutions where they intended to obtain the education. But, at present, there is no model to quantify potential costs and benefits of higher education.

d). some research studies have highlighted the factors that impact of education on earnings specially in developing countries. (Psacharopoulos, and Patrinos,, 2002). Also they clearly state that “There are more opportunities today for this type of research”

### **Research Questions**

New ways of cost – benefit analysis are already in evidence in many developing countries just as cost – benefit analysis (Hough, 1993). The crucial need in the next decade is to monitor the effects of these changes within a cost-benefit framework (Hough, 1993). Therefore this research aims to fill the knowledge gap by answering to the following questions:

- a). What are the types of cost and cost associated with finance related study programs in Sri Lankan higher education?
- b). What are the private benefits that can be obtain in terms of economic and social through higher education?
- c). How can it be predicted / quantified potential costs and benefits and its ratio?
- e). What are the supportive/useful guidance for prospective students in financial sector to quantify and obtain maximum benefits for their investment?

### **SCOPE OF THE STUDY**

Due to the limitation in time, resources and cost, this study is focused only the private returns on higher education focusing only on financial profession.

### **LITERATURE REVIEW**

At present Sri Lanka records 90.7% literacy rate which is the highest in South



Asia and overall, one of the highest literacy rates in Asia. A rapidly expanding population demanding higher educational opportunities led to the wide variety of field of studies. Higher education refers to a level of education that is beyond the secondary level which is provided by universities, vocational universities, community colleges, liberal arts colleges, institutes of technology and other collegiate level institutions, such as vocational schools, trade schools and career colleges, that award academic degrees or professional certifications. (Wikipedia, [www.wikipedia.org](http://www.wikipedia.org))

Individual earnings are directly related to educational attainment. Graduates earn more than those with a high school diploma and who received some postgraduate level qualifications earn substantially more than graduates (Becker, 1964). Many researchers have found that there are definite boost in earnings with the level of education obtained.

The study aims to develop a cost-benefit model for the financial profession in Sri Lankan Higher education system. Education economists are now much interesting on cost-benefit analysis which analyze both what determines or creates education and what impact education has on individuals and the societies and economies in which they live ([web.worldbank.org](http://web.worldbank.org))

#### *Cost benefits analysis*

*"A cost benefit analysis finds, quantifies, and adds all the positive factors. These are the benefits. Then it identifies, quantifies, and subtracts all the negatives, the costs. The difference between the two indicates whether the planned action is advisable"* (Hill, Hoffman, Rex, 2005).

The main purpose of a Cost Benefit Analysis of Higher Education is to make sure the reliable and optimal resource allocation for individuals, institutes and society as a whole. Niklas Hanes (2005) suggests that the important aspect of the analysis is to consider effects, or outcomes,

for different stakeholders (students, universities, policy makers etc). Although an investment may be beneficial for the society as a whole, the outcome, or pay off, for different stakeholders constitutes important incentive structures. This raises the question of how costs (and benefits) should be divided between stakeholders in order to create the correct incentive structure.

On the other hand in education, series of expenses take place from school times. Benefits for that investment can be anticipated in long term and simply throughout the life time. It is very difficult to measure these costs associated with education and the benefits of it because then we need to consider the life time earning of an individual. Moreover, it is hard to measure the income that individual would have received without education (Hanes, 2005).

#### *Identification of cost*

Cost relating to higher education can be categorized in to two groups.

- Individual or private costs
- Institutional or public or social costs.

An individual or private cost of education refers costs incurred by a learner or by his/her parents/guardians or by the family as a whole.

There are two types of Individual costs: direct costs and indirect costs.

**Direct costs:** These are the costs that are directly visible. They include all money expenditure incurred on education fees or incidental expenses the individual incurs during schooling.

**Indirect costs (opportunity costs):** Indirect costs are those costs which are not directly visible. The costs incurred by the individual are his/her foregone earnings while studying. These costs are sometimes called 'opportunity costs or foregone earnings'.



**Identification of benefits**

Generally the benefits on education can be classified as public and private benefits. Enhancement of earning potential, Career development, Improve quality of life and better decision making ability would be taken as private benefits. In addition to that increase tax revenue, greater productivity, reduced crime rates and increase community service can be taken as public benefits. Moreover it can be further divided by economic and social benefits.

*Benefits of Higher Education*

Source: IHEP 1998; 2005

*Cost Benefit analysis of Higher Education (Rate of Returns to Investment)*

The main purpose of a Cost Benefit

Type	Public	Private
Economic	Increased tax revenue Greater productivity Increased consumption Decreased reliance on government financial support	Higher salaries and benefits Increased employment Improved working conditions Personal Mobility
Social	Reduced crime rate Increased charitable giving Increased community service Increased appreciation for diversity	Improved Health Improved Quality of Life for Offspring Better Consumer Decision Making More Hobbies and Leisure Activities

Analysis of Higher Education is to make sure the reliable and optimal resource allocation for individuals, institutes and society as a whole.

Of all the techniques of investment appraisal which in recent years have come to be applied to the public sector, none has attracted more attention than cost-benefit analysis (Blaug, 1970). The cost-benefit analysis can be used by academics, educational policy-makers and planners as a methodological technique in education decision-making (Hough, 1993).

Niklas Hanes year?? suggests that the important aspect of the analysis is to consider effects, or outcomes, for different stakeholders (students, universities, policy makers etc). *Although an investment may be beneficial for the society as a whole, the outcome, or pay off, for different stakeholders constitutes important incentive structures. This raises the question of how costs (and benefits) should be divided between stakeholders in order to create the correct incentive structure.*

The application of cost-benefit analysis (CBA) to education is straightforward and is well-treated in some of the most recent textbooks in development economics (Perkins, Radelet and Lindauer 2006) (Jimenez and Patrinos, 2007)

**IMPORTANCE AND BENEFIT OF PROPOSED RESEARCH STUDY**

Government as a whole spend large sum of money to provide higher education by expecting different set of benefits. In addition individuals self-invest large amount of money to obtain higher education with the aim to have a better future. This research helps prospective students of financial profession to understand and quantify investment and benefits of their education.

The research aims to develop a model to predict cost-benefit in Sri Lankan Higher Education system. The model will helps to quantify the variance of earning potential respective to the individuals' level of education attainment. Model will vary with the type of graduate and the institute they obtained their education.

Further, the outcome of the research will also useful for students to predict their benefits with the years of experience and plan the career and further studies.

More over policy makers can use the outcome of this research to formulate, develop and adopt postsecondary policies and optimal use of resources.



## RESEARCH METHODOLOGY

An extensive review of literature will be carried out using international electronic and printed publications and develop a model for the research. Survey method and personal and telephone interview methods will be used to accomplish this research project. Questionnaire will be drafted based on literature and advice of experts in Financial, Academic & Research sectors. As an Initial stage questioner will be distributed to 10 experts in the related fields and obtain their comments to improve. Based on that questionnaire will be finalized. The survey can be defined as a non - experimental, descriptive research method. Surveys can be useful when a researcher wants to collect data on phenomena that cannot be directly observed (such as recalling previous expenditures on higher education).

Next stage of the study is to select organizations to distribute questioners. Using international industry classification standards (<http://www.abs.gov.au/>) institutes will be selected and Data will be collected from randomly selected organizations to represent all industrial sectors in Sri Lanka. These survey questionnaire and interviews will be analyzed qualitatively to understand the cost and benefits of higher education system relating to financial profession. This information will be used to modify and improve the model.

## BIBLIOGRAPHY

1. Becker, G.S. 1964. Human Capital: A Theoretical and Empirical Analysis. New York: National Bureau of Economic Research.
2. Blaug, M. (1970) An introduction to the Economics of Education. (Penguin)
3. Hanes, N., 2005, Overview Of Cost-Benefit Analysis Of Net Based Higher Education, FERUM, Umeå University, eLene-ee, Director-General for Education and Culture, Grant agreement number: 2005-3871/ /001-001 ELE-ELEB12, pp. 1-13,
4. Hill K, Hoffman D and Rex T, 2005. "The Value Of Higher Education: Individual And Societal Benefits", L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.
5. Hough J. R, 1993, Educational cost-benefit analysis - Education Research Paper No. 02, Loughborough University, 27 p. Serial No. 2 ISBN: 0 902500 62 7
6. Jimenez E. and Patrinos H. A, December 20, 2007, Can Cost-Benefit Analysis Guide Education Policy in Developing Countries?, The World Bank.
7. Perkins, D.R., S. Radelet and D.L. Lindauer. 2006. Economics of Development (6th edition). New York: WW Norton.
8. Psacharopoulos G. 1995, The Profitability of Investment in Education: Concepts and Methods, pp. 1 – 21,
9. Psacharopoulos, G and Patrinos, H. A, September 2002, Returns to Investment in in Education: A Further Update, World Bank Policy Research Working Paper 2881, pp.1-18.
10. Weisbrod, B.A. 1964. "External Benefits of Public Education: An Economic Analysis." Department of Economics, Industrial Relations Section, Princeton University, Princeton, N