**Analysis Of Human Resources Investment In Economic Education Study Program FE UNY To Develop Up To Dated Graduation Data Base**

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**ABSTRACT**

This research aims to understand: how the waiting time of graduates, kinds of first work graduates, how much first income graduates, feasibility human resources investment done by graduates in economic education study program FE UNY. The research is descriptive with the quantitative approach. Population in this research is graduates of economic education study program 2000 - 2009. The sample collection done to technique snowball sampling. Sample are 146 respondents. The data collection was done with the questionnaire methods and documentation. Technique analysis the data used was descriptive analysis. The research results show that: the average of waiting time graduates is 2.9 months; first types of work graduates 50,00 % graduates work as educators, 36,30 % work as civil servant and professional workers; the average first income graduates is IDR 2.503.334 per month; measured with some investment metodhs in human resources found feasible, seem from: the payback period investment education is seven years and 7 months, does not exceed the age of economical from investment; based on a net present value obtained a positive value IDR 5.259.082; the results of the internal rate of return of 13,09 % more than its cost of capital 12 % and the net benefit cost ratio is greater than 1. So human resources investment in Economic Education Study Program is feasible.

*Key Words*: human resources investment, waiting time, first work, first income, payback period, net present value, internal rate of return, benefit cost ratio

**Introduction**

Education is the most important part of human development, in the concept of operational known as human investment. With human investment, a person or institution can improve market value from educated workers. A person or fund education institutions invest for workers hoping that workers are more productive, relative to the cost to cost of education. People whow trained is productive economic players in real and potential able to spur productivity industry. Hence, more educated people, the more productive workers, and moreproductive national economic performance.

From economic terms, education is productive investment, that is a decision of someone, organization, or government to invest in education through its with a view to benefit greater at a later date. Education as human resources investment should be worn of princips and criterias as other in the business. Investment analysis criterias such as net worth, the rate of internal return, and the period of investment returns, usually applied in investments the business world, but it can be applied to human resources investment in education sector. The cost of education was issued for follow education and the income after graduated from analyzed using investment certain criteria. From the analysis can be seen whether the human resources investment in education is feasible or not.

The big investment in education sector should be evaluated with a accurate analysis, whether these investments feasible or not. By judging input which takes place or input issued and assess ouput resulting in education, will be compared are output produced commensurate with expenditure happened. To find out, we need for analysis and difficult to be implemented especially on a developing country, like Indonesia. Data and information concerning variables analyzed available very limited as waiting time, first job salary, length of study and others. Education is a human investment, so it was given investment equal treatment like investment in the business world. When investment will return to how the investment rate of return the has done. It was need to be the answer quantitatively. Expectations of society, universities should have walked based on market-oriented or enlisting had to be ready for society-oriented step on stage, considering the climate warms up in the future. On the second stage that college must focus on managerial organization customer satisfaction, consisting users, the intellectual, and the customer students (candidates). Therefore flexibility and privacy of the operating system, culture and structure college should be evaluated and restored.

Human resources investment analysis in higher education can be done by using several models, good static and dynamic, as payback period, the internal rate of return and net present value. In several models investment analysis will human resources investment in higher education seem feasible. With the methods payback period, the sooner or short that period the feasible an investment that is implanted. By using the method net present value, the bigger the difference between total present value of proceed with a total present value of initial investment the feasible investment in education. An investment in education will be more feasibel if the internal rate of return has bigger difference with cost of capital land and when analysis done.

Education investment analysis in theory known as the concept of the cost and benefit (cost/benefit analysis) as two variable basic reckoned. Estimate the cost of human resources investment in higher education is important because the concept of the costs were not only covered the direct cost such as books, learning tools or money to college on, but also the costs of an occasion such as forgone income the opportunity to get income lost because seek the education. For student at the university of, forgone income is the biggest component of the entire cost of education. On the other hand, education benefit may not perceived as directly, but surely felt in next times, because human investment is the effort to make their livelihood decent in the future.

Yogyakarta State University (YSU) having seven faculties, not all implement the tracer study. The faculty of which have been carried out the tracer study, but not all course have been carried out the tracer study. Ironically not even one department has been conducted an investment analysis of education in YSU. Education investment analysis is very important held to measure how big investment education is advantages, for individuals, institutions, as well as the government. If these investments feasible and profitable, the government needs to expand and improve quality and of relevance, then investment resources / education in department was not feasible, the department should be evaluated and restored. This research intend to develop model of human resources investment analysis in higher education mainly in YSU, with target output as follow: 1. Develop investment analysis model of resources to understand the extent of investment feasibility of education, and to develop databased graduates more uptodated. 2. Publication in national journal accredited. As for additional output the research is teaching materials to lecture Human Resources Economic. The main question in this research is how investment feasibility of human resources in economic education department FE UNY? With accompanying descriptive data.

**Study Literature**

According to Simarmata (2002: 155), investment interpreted as an activity who want to put money safely to improve the capacity of the system of production or increase in asset capital. According to Fattah (2002: 39), investment was a sacrifice a number of value certain time them to obtain the value of (of repayment) future that albeit hope is greater than the value relation to cost ofeducation, schult thought that education is human investment. As an investment, then education impact in productivity of a country.

*Human Capital Investment Definition*

According to Theodore Schultz (in Fitzenz, 2009), improving the welfare of the poor is not dependent on the land, equipment or energy but depends on knowledge. Human capital was a combination of the nature of (intelegent, energy, attitude, reliability and commitment), ability to learn (talent, imagination, creativity and ingenuity and motivation to share information and knowledge). The concept of human capital by becker (1975:41) applying logic economy to review an investment decision individual in the knowledge and work skills, career choices and other characteristics pertaining to work. The assumption is that each individual would choose work to maximize of current value (present value of economic benefits and psychological along his life, Hendrawan , 2012: 33).

Investment can be done not only in other businesses but also in the field of human resources. The principle of its investment in the an economic undertaking was sacrifice consumption when investment is conducted to gather the level of higher consumption later. The same as its investment in the business, so investment sacrificed is a sum of money that issued and the opportunity to get income during the process of investment. Investment obtained its return is the extent of income a higher to able to achieve the level of higher consumption. Investment like this called human capital. According to Becker (1975:41), human capital is that the human not only a resources but is capital that produces that loans are returned and every expenditure done in order to develop the quality and quantity of the capital are the activities of investment. According to Payaman (1998:58), human capital having two definitions, the first containing understanding business work or services that may be given in production process, and the second is related to the man who can work to grant the services of or business work. So, human capital is the value and or quality of a person or workers determine how potential person or power such work can producing in the economy especially produce goods and services.

*Cost of Education*

Definition the cost in general is the size of monetary of goods and services issued or sacrificed to benefit now or the future for organization (Atkinson, Kaplan, and Matsumuro, 2007). In the context of education, what is meant by the cost of education is sacrifice issued of all resources owned a unit of education measured in money or other monetary unit to benefit education consistent with the objectives of a unit of the education.The cost of education is one of components instrumental input that is essential in the education. The cost (cost of having a wide scope, all types of expenditure) with regard to the implementation of education, both in the form of money and goods and effort can valued with money.

**Methodology**

Population research is a whole graduates of economic education department from 2000-2009. As the number for sample respondents is determined by snow ball sampling and adequate level of the data needed in the analysis. Sample to be reached is as many as 146 graduates. A number of techniques data collection used in this research is includes: documentation and questionaire . The data analysis technique used in this research is descriptive analysis. Research to be performed is as follows 1. Looking at the tracer before the study conducted the study and Central Carrier Development of LPPM UNY that may be the data could be used to this report. 2. Discussing the theory related to improve our analysis investment. 3. Obtain data about feasibilitas investment human resources in economic education department and 4. Constructing graduates databased and 6. The final report **Result**

*Respondent Characteristics*

On the description characteristics of respondents described above, respondents elected of various characteristics that can be seen from sex and the years college. Of each characteristic showed the results, that respondents female graduates greater in number than male respondents. It was because how many of them Economics Faculty YSU are more dominant female than male, including in economic education department. Based on the calculation, long study graduates categorized into three categories, namely category three to four years, 5 years and more than five years. Of 146 respondents obtained data that there are as many as 80 graduates with study duration three to four years, forty-eight with 5 years and about 18 graduates with study duration more than five years. Based on this data can be concluded that graduates have the average took three to four years to complete the study an undergraduate degree. While, the grades categorized into three, namely the predicate satisfactory, very satisfied and cumlaude. Of 146 respondents obtained data that there were as many as 5 graduates with the predicate satisfactory, 108 graduates with the predicate very satisfied and 33 graduates with the predicate cumlaude. Based on this data can be concluded that the grade graduates averaging around between 2,76 - 3,50 and there are a few grade under 2.75. The waiting time in this research divided into three of which is 6-0 months, 7 to 12 months and more than 12 months. About the waiting time graduates described above obtained data that the average the wait graduates to get occupation is six months or in this category including those who have hiring before graduation. Seen from the waiting, graduates having high competitiveness.

Investment expenditure during college undergraduate distinguished into two namely expenditure for the purposes of supporting lecture and expenditure for the fulfillment of the necessities of life. Calculations of the results found that the largest expenditure issued in the first year and last, while expenditure smallest issued on year two. Registration costs at the time of the early college high enough to cause the expense high enough in the first year of lectures. For 2 years to four, the cost of PKL and study tour, the cost of a thesis project and cost in order to cause the presence of the graduation of expenditure that quite high in that year. While year to two to three and there are few activities laboratory work that costs not too high so that its expenditures not amounting to the first year and to the four.

An undergraduate degree is all receiving within the form of money received by graduates, covering an allowance of parents, scholarship received, revenue from work part time for college an undergraduate degree, and acceptance of other allocated for the purpose of lecture. Revenue from allowance parents, found that is only 1.37 % of the respondents who did not receive money fund of parents, because respondents is not having parents, or because have a desire for financially independent. The findings shows wide parts of economic school graduates still rely on parents as a source of revenue for college an undergraduate degree. 146 respondents who take sample, only there were as many as 28,8 % of respondents who is scholarship recipients, whether it is scholarship PPA, Bidikmisi or other scholarship. From the findings it can be concluded that is still a bit of a graduate who use scholarship opportunities offered from various sources for the various reasons, among other lack of information about procurement scholarship, not conforming to criteria determined by by the best scholarship, not willing to register scholarships and others. Known that the majority of ( 58,9 % ) the respondents worked for college whether it is working on a part time and full time. This shows that most of the time graduates use their spare time to work that earned more money. In table has been served data on income obtained from a sum basic salary, a bonus, position allowance, day allowance, salary to 13, vehicles, insurance and other income.

An undergraduate degree of various types work have outlined in table, known that as much as 54,11 % graduates get jobs first in accordance with their area of expertise that is as teachers and entrepreneurs. Thus can be concluded that economic school graduates having competitiveness lacking in get a job first in accordance with their area of expertise.

Payback Period Analysis

Seen from the results of the calculation payback period, payback period i to produce iv all payback period average is 6,5 year.This shows that investment in economic education department is feasible.

Net Present Value Analysis

Based on the discussion on a calculation net present value it can be seen that value net present value is positive, this shows that investment education in prodi education economic is feasible.

Internal Rate of Return Analysis

Value the internal rate of return described in the calculation on the internal rate of return, where the result more of its cost of capital ( df 12 % and the investment is feasible)

Net Benefit Cost Ratio Analysis

The net benefit cost ratio obtained from scratch valued is more than 1, this shows that the investments done feasible. Based on four methods feasibility on financial aspects used in judging investments from human capital investment can be seen in table below:

**Highlight Feasiblity Investment Analysis Study**

|  |  |  |  |
| --- | --- | --- | --- |
| Metode Penilaian | Nilai | Standar yang ditetapkan | Ket. |
| *Payback Period* (PP) |  | Umur Ekonomis | UE > PP Investasi layak |
| I. 7 tahun 7,7 bulan | I. 10 tahun |
| II. 7 tahun 0,1 bulan | II. 10 tahun |
| III. 6 tahun 11,6 bulan | III. 10 tahun |
| IV. 6 tahun 10,9 bulan | IV. 10 tahun |
| *Net Present Value* (NPV) | I. Rp 5.259.082 | NPV (+) | NPV + Investasi layak |
| II. Rp 30.293.966 |
| III. Rp 32.311.974 |
| IV. Rp 31.006.676 |
| *Internal Rate of Return* (IRR) | I. 13,09% | *Cost of capital*: 12% | IRR + Investasi layak |
| II. 17,81% |
| III. 18,16% |
| IV. 17,93% |
| *B/C Ratio* | I. 1,653 | *B/C Ratio* (+) | *B/C Ratio +* Investasi layak |
| II. 2,03 |
| III. 2,061 |
| IV. 2,041 |

**Conclusion**

Based on the results of research and his discussion, so a conclusion can be drawn as follows: the average the waiting time graduates years the 2000-2009 is 2.9 months. Seen from the types his job, graduates the majority work as educator (50%), private employees (36%), as entrepreneurial (4,11%), while the rest (9,86) work as farmers and other. The average income first graduates is IDR 30.040.003 or IDR 2.503.334,00 per month. Investment education in economic education department FE UNY calculated use of some method of suggesting investment is feasible. With the methods payback the period the results show that investment feasible or could be accounted for. This can be seen from the calculation on payback a period of his seven years 7 months (smaller than an economical investment 10 years of age). Using the method of net present value result shows that the investment feasible or can be accounted for. It can be seen from the results of the calculation of the net present value is positiv IDR 5.259.082. Using the method of internal rate of return the result shows that the investment feasible or can be accounted for. It can be seen from the results of calculation of IRR 13.09% (more than the cost of capital Investment 12%) measured by number of Net Benefit Cost Ratio worth 1.635 (greater than 1), this indicates that the investments made feasible.

Based on the results of research and a conclusion that taken, can be given advice as follows: economic education department should improving the system of a database graduates to ease the search information on to to graduates in the future will be easier to seek information required. It is necessary to have a cooperation with graduates institution whether private or the government to the flow of information about the world work (demands and the needs of the data ) can be exploited easily. To further research will take topics like this, should expand by increasing the number of samples used to her research more representative and to develop with different technique analysis.

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