

# The Impact of Education Cost and Government Spending the Interest Rate of Bank Indonesia

## Subtitle

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**Abstract**—The purpose of this research is to determine the effect of education costs and government issuance in education based on the interest rate of Bank Indonesia. The research used the quantitative method in this research. The Data is obtained with the literature data and the secondary data. The Data were analysed by using multiple linear Regression. The result of this research and the F the costs of the education and government issuance in education influently significant amount 41,63 percent based of the interest rate with the value amount 0,000 0r under 0,005.

**Keywords**— the education costs, the government spending , the interest rate

### I. INTRODUCTION

Education is one of the most important aspects in the development of the nation. History shows that the key to the successful development of the developed countries is the availability of an educated population of the number, type, and level are adequate. Therefore, nearly all nations put the development of education as a top priority to their national development programs. Human resources quality, which is a product of education, is the key to the success of a country.

When it was conceived of 1994, compulsory Basic education of nine years are expected be finished in 2003/2004. But the economics crisis that hit Indonesia since year 1997 led to the target is not reached. Supriadi (2001) State that the cost of education is one of the components of a very important input in education. The cost of education is needed to facilitate implementation of the policies and programs of the school, the implementation of the activities of the school (intra and extra), and can develop the school as a quality education provider.

The Government's budget allocation to education and health is a most important part in budget policy (Rosen in Brata : 2005). This policy is attributed the role of Government as a provider of public goods. The impact on externalities (positive externalities) of the policy of allocating the budget for both the field certainly expected effect on the

increase in the level of education when the budget is used as expected

**Table 1.**  
National public expenditure (central + province + kab / kota) for education sector

(Rp/triliun)	2001	2002	2003	2004	2005	2006*	2007**
Nominal pengeluaran nasional untuk sektor pendidikan	405	482	648	631	797	1202	1378
Pengeluaran nasional untuk sektor pendidikan (harga untuk 2001)	405	431	543	498	569	762	822
Pertumbuhan riil pengeluaran nasional untuk sektor pendidikan		403	64	262	-84	144	338
Pengeluaran pendidikan (%Total pengeluaran nasional)	114	143	160	142	149	172	175
Pengeluaran nasional untuk pendidikan (% PDB)	2,4	2,6	3,2	2,8	2,9	3,6	3,9
<b>Total nominal pengeluaran di tingkat nasional</b>	<b>3536</b>	<b>3376</b>	<b>4054</b>	<b>4453</b>	<b>5358</b>	<b>6982</b>	<b>7854</b>
<b>Total riil pengeluaran di tingkat nasional</b>	<b>3536</b>	<b>3018</b>	<b>3399</b>	<b>3516</b>	<b>3829</b>	<b>4424</b>	<b>4683</b>
Ukuran pemerintah (Total pengeluaran, % dari PDB)	21,0	18,1	19,8	19,6	19,6	21,1	22,2

Source: World Bank staff Calculations based on the Monetary Department and Data SIKD. Note: \* = the initial Realization of the STATE BUDGET and estimates for expenditure areas, \*\* = NATIONAL BUDGET and estimates for local governments.

Syamsudin research (2009) titled "the effect of tuition fees towards the quality of learning outcomes of quality teaching and learning in junior high school in the District of Asahan". The results showed that the costs of education have an effect on the quality of the results of the study. While the costs of education against the quality of the results the results of the study indicate a negative value. But a positive effect towards the costs of education quality learning outcomes through the intervening.

Research Fadli (2011) entitled "an analysis of the influence of the money supply (M1), the SBI interest rate, exchange rate of deposit rates against inflation rate". Results of the study concluded that the amount of money in circulation is not significant effect against inflation while the SBI rate positive effect against inflation.

Research Masniari (2008) entitled "analysis of influence of government spending on education and health sectors against the number of poor population in Northern Sumatra". The results of this research indicate that all independent variables significantly to the number of poor population.

The overall test results show that the free variables in the model the third influential significantly to the number of poor population. Based on the data, it can be seen that Government spending in the education sector every year increase. As a result of increased spending lately, spending for education sectors in Indonesia is almost equal to that possessed by other developing countries. Indonesia has

## V. METHOD

The methods used in this research are multiple linear regression models and studies library to see the influence of education costs and Government spending towards interest rates in Indonesia. Types of data used in this quantitative data dipenelitian data source i.e. secondary data obtained from bank Indonesia (BI) and the Central Bureau of statistics (BPS) in the form of periodic data span of 15 years (2002-2016).

Based on observation data and simulation results of regression model equation then used, namely:

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Description:

- Y = interest rate (BI rate)
- X 1 = the cost of education
- X 2 = Government expenditure
- A = constant
- B1 b2 = regression Coefficient
- e = Factor bullic

## VI. RESULTS AND DISCUSSION

### A. The influence of educational expenses againts interest rate (BI Rate)

The results of calculation of multiple regression analysis showed that the cost of education has no effect on the level of interest rates. This result is inconsistent with previous research that became the comerstone of the theory about this research. According to Keynes's theory of the relationship between investment and income increase is called the multiplier multiplier Digger k. shows the exact relationship, thanks to the presence of the consumption trend, between aggregate and aggregate income employment with this level of investment.

So that means that the cost of education has no effect on the level of interest rates because the revenue generated will meet basic necessities such as education Finally, Because the cost of education is one of the input an activity that his resources are very important in education and making future investments.

Linear equations are compiled for this study had graduated from the classical assumption then the test can be done testing the regression. There is a inependen variable that

is tested to determine how these variables influence jointly against interest rate (BI Rate) in Indonesia with time series data of the year 2002-2016 in the program SPSS 22.0 for Windows which appear on the table the following:

**Table 2. Multiple Linear Regression Analysis**

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2.250	.437		-5.151	.000
Education Cost	.150	.403	.077	.372	.717
Government Issuance Education	3.133	.743	.868	4.217	.001

a. Dependent Variable: BI\_Rate

Based on the above table, the level of significance of variable tuition fees obtained significant of 0.795 (P > 0.05 ) this shows that tuition fees do not affect significantly to interest rates. While government expenditure significant positive effect against interest rates.

### B. The influence of government expenditure of interest rate (BI Rate)

Government expenditure in particular sectors of education annually undergoes fluctuations. If viewed from a mathematical stand point whether the increase in the money supply are affected by government expenditure, foreign exchange reserves and interest rates on SBI. Then based on the data obtained from the results of this research and have been processed that Government expenditure significant positive effect against interest rate of 0.001 (p < 0.05). Where government spending is very influential on interest rates. So if viewed simultan eously explained that the test F of 41.63% both influential significantly to interest rates.

**Table 3. F test**

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.053	2	.026	41.637	.000 <sup>b</sup>
	Residual	.008	12	.001		
	Total	.060	14			

a. Dependent Variable: BI\_Rate

b. Predictors: (Constant), Pengeluaran Pemerintah, Biaya Pendidikan

The conclusion of the table above was obtained significant value test F of 41.63 so it can be stated that the variable costs of education and Government expenditure in education effect significantly to interest rates.

### C. The influence of education costs and Government expenditure towards interest rate

Costs in this study are limited to the types of direct costs (direct cost) and indirectly (indirect cost) towards the teaching and learning process or the fees earned and buy by the institution. The education budget is an operational plan financial education made estimation of expenses in a given period. According to Robert (1995) and Ridden (1989) in Fatah (19989:113) that the budget contains about activities or programs that will be implemented is expressed in monetary

units (unit). Meanwhile, the Jendral Directorate of elementary and secondary education (2002:41) stated that a budget is a plan that is formulated in the form of rupiah for a period of time (period) as well as the allocation of resources to each activity section.

So that means that the cost of education is a requirement that must be fulfilled each individual either formal or non formal. So the cost of education also affects the quality of education but has no effect against interest rates due to the growing number of requests for education costs will add to government spending which is here Government expenditure effect on interest rates. Because government expenditure will affect the amount of money in circulation and investment both in the country as well as overseas investments that affect interest rates.

The analysis of this discussion is meant to know the condition variable i.e. non variable and the variable is bound to prove the truth of the influence of the education costs and Government expenditure towards interest rate (SBI Rate). The need for Governments, including local authorities to further put the attention on the main components of social spending is the spending for education and health in development expenditure. In the format of the budget the Government in Indonesia, the Government expenditure for education covers the sectors of education and culture, youth and sports, religion, and science and technology.

Where interest rates become variable in the study. The more the rise in interest rates will not affect a person's request for costs of education. Due to the increasing costs of education will not influence on the level of interest rates, this is due to the cost of education is an investment a person who has prepared for the future. Because of the existence of a quality education will increase economic development. Which aims to create the conditions of a prosperous society.

In accordance with Act No. 23 of the year 1999 of the Bank Indonesia, Bank Indonesia is the goal of achieving and maintaining the stability of the value of the rupiah in this Bank Indonesia just focus on her accomplishments to boost investment.

According to research Masniari (2008) that Government spending in education is the most vital component in the growth and economic development, because it is a source of input for the total production function (Todaro: 2003). According to their education apart from the purpose of the construction is also a prerequisite for increased productivity. The advantage of the education equity investment Government spending to education immediately, besides also being the assessment of how alternative policies in an attempt to repair or improvement of the education system.

Then it can be taken to mean that both the free variables of one has no effect on interest rates. But if seen together based on time series data from 2002 – 2016 that both non-positive effect variables towards variables bound. This is due to the increasing demand for education costs will not affect the interest rates because the cost of education will not be in terms of bidding for declining interest rates, government expenditure and yet in the very influential because of the

investment that will affect the inflation rate and the amount of money in circulation with input generated.

## VII. CONCLUSION AND RECOMMENDATIONS

Based on the analysis and discussion of the CONCLUSION to be drawn that the tuition fees do not affect interest rates. Due to the cost of education in Indonesia is getting high or low level of interest rates will not be favorable for interest rates because the cost of education will effect on economic development. So that it can improve the well-being of human resources but is not in the interest rates.

Government expenditure affect interest rates in Indonesia. Because if the higher government expenditure annually or fluctuate will affect interest rates, where government expenditure is the Government's investment in the education sector. The results of this study showed that the cost of education significantly negative effect on interest rates while the Government expenditure a positive effect against interest rate of 0.001 ( $p < 0.05$ ).

Based on the conclusions of, then the advice that can be given to Government i.e. either as executors as well as controlling policy in the budget costs of education and Government expenditure to further improve the production especially in the the field of education because it is the objective of economic development.

For the Department of Education does not just focus on formal education non formal education because it can also help economic development. Because of the non formal education no less productive with formal education, a lot of creativity that are owned as well as the expertise that can help increase government revenues. So in this case the Government not only took out the budget alone but more into pemerataannya in the field of education.

More detailed RAPBN again allocate budget funds the cost of education in order to look transparent for the society, further government spending can be seen from the Central Bureau of statistics. More data accumulate BPS should be government spending clearly.

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