

Conference Paper

The Influence of Diploma 3 Graduates on Unemployment in Indonesia

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Abstract

This study aims to see the development of the number of d3 graduates, the percentage of d3 graduate work and unemployment in Indonesia. The development of these three variables in Indonesia is still fluctuating. The purpose of this research is to measure the influence of the d3 graduates the issue of unemployment in Indonesia. It can be concluded that the d3 graduates who work significantly reduce unemployment in Indonesia. Any 1% increase in working d3 graduates on an average can reduce the number of 191,986 unemployed people.

Keywords: d3 graduate, unemployment, regression

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1. Introduction

The need for skilled workers in the business and industry is very high. Skilled workers are obtained through formal and non-formal schools. Skills are thoroughly accompanied by sufficient knowledge. Knowledge and skill form a person's character to be ready to compete in the global era.

Vocational colleges in Indonesia continue to grow and continue to be improved. This can be seen from the number of graduates and the percentage of graduates who work continues to increase. The number of graduates who are ready to work is expected to meet the needs of the industry. Thus, the vocational program's curriculum prioritizes industry needs.

Graduates of vocational colleges have an important role in reducing unemployment in Indonesia. Progress of a nation can be seen through the college graduates who are able to manage resources well. This is in line with the Masterplan Program of Expansion and Acceleration of Economic Development of Indonesia (MP3EI) which proclaimed the government. MP3EI is the future reference of Indonesia's development based on the diversity of natural resources and human resources.

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Based on this background the author would like to see the history of d3 graduates from year to year. Based on the graduation history that works the researchers will calculate the percentage of d3 graduates who work. In addition, researchers also want to measure the influence of graduates who work on unemployment d3 in Indonesia.

2. Literature Review

Definition of unemployment to include three more groups of the unemployed on top of the traditionally measured-unemployed, which is defined as part of the labor force who are not working and actively looking for work. The three additional groups of unemployed people are: (i) those who are not working and are not actively looking for work because they do not believe work is available (discouraged workers); (ii) those who already have jobs but have not started working, and (iii) those who are preparing a business [9].

Observers of open unemployment data in Indonesia before the crisis, and other similarly rapidly growing developing countries. The issue is at the school level, the open unemployment rate of general school leavers has been higher than that of vocational school leavers. More fundamentally, unemployment in a rapidly growing developing country, such as Indonesia before the crisis, is different than in developed countries because most of it is transitional, search unemployment rather than structural unemployment. This is in turn due to their young and rapidly growing working age population, and the resulting large number of young, first-time job seekers entering the labor market each year [1].

In the business and public service sectors of employment identified three broad categories of skills combinations required by associate professionals. These were characterized as traditional: where high-level technical skills, above-average generic skills and well-developed personal attributes were required; transitional: where high-level generic skills, well-developed personal attributes and average-level technical skills were required; and generic, where high-level generic and personal attributes but lower-than-average technical skills were required [6]. The Standard Occupational Classification (2000) notes that associate professional and higher technician occupations normally require an associated high-level vocational qualification covering a body of knowledge acquired through a period of post-compulsory education but not at degree level [3].

The structural model underlying a linear regression analysis is that the explanatory and outcome variables are linearly related such that the population mean of the

outcome for any x value is $\beta_0 + \beta_1 x$. The error model underlying a linear regression analysis includes the assumptions of fixed- x , Normality, equal spread, and independent errors. For simple linear regression, the chief null hypothesis is $H_0: \beta_1 = 0$, and the corresponding alternative hypothesis is $H_1: \beta_1 \neq 0$. If this null hypothesis is true, then, from $E(Y) = \beta_0 + \beta_1 X$ we can see that the population mean of Y is β_0 for every x value, which tells us that x has no effect on Y . The alternative is that changes in x are associated with changes in Y (or changes in x cause changes in Y in a randomized experiment) [2].

3. Research Methodology

The data used in this research is semi-annually time series data. In 2008 the Central Bureau of Statistics (BPS) has conducted a survey of manpower in a year twice in February and August. Data is taken from the BPS annual report. The variables used are the number of d3 graduates, the percentage of d3 graduates working and the number of unemployed in Indonesia

This research begins by conducting literature study and time series data collection from 2008–2016. Study literature serves to collect information about d3 and unemployment in Indonesia. The next step is to analyze the descriptive data history. To see the movement and the pattern of a data, the researcher conducted a descriptive analysis by creating a graph.

Researchers want to see the percentage of d3 graduates working on unemployment in Indonesia. The initial hypothesis is that d3 graduates are able to significantly reduce unemployment in Indonesia. But how many unemployment that can be reduced by d3 graduate work, not yet known for certain. Therefore, to answer these problems researchers use regression analysis.

4. The Results Explanation

One of the main problems facing Indonesia is the problem of unemployment. High unemployment has a direct and indirect impact on poverty, crime and sociopolitical issues that are also increasing. Unemployment occurs because the number of available employment is smaller than the number of job seekers. In addition, the competence of job seekers is not in accordance with the job market. Unemployment in Indonesia from year to year can be seen in Figure 1.

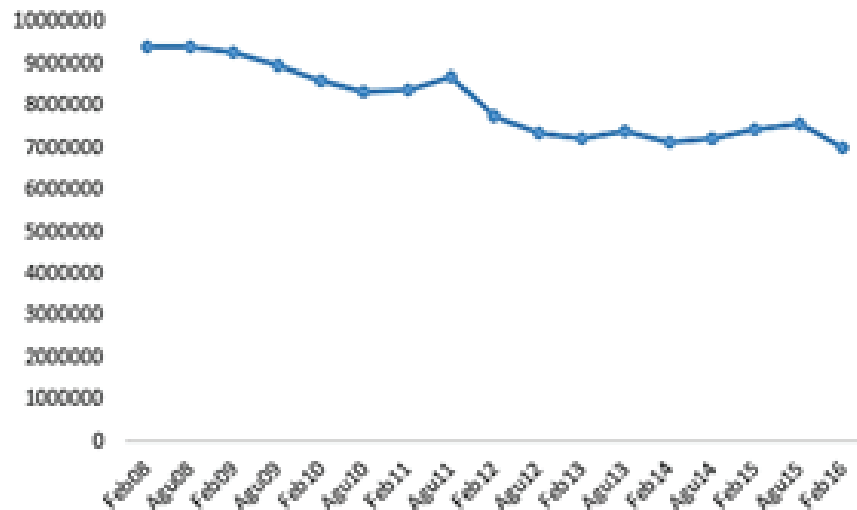


Figure 1: Graph of unemployment in Indonesia.

Figure 1 shows the average number of unemployed in Indonesia continues to decline. The decline in the number of unemployed in Indonesia declined slowly. But in August 2011 there was a significant increase in unemployment. In 2013 until 2015 the number of unemployed increases. The number of unemployment in Indonesia has not shown a stable graph. The number of unemployment charts is still fluctuating.

The number of d3 graduates and the percentage of d3 graduates who work can be seen in Figures 2 and 3. the number of d3 graduates in Indonesia continues to increase. So also with the percentage of d3 graduates who work. A significant increase in the percentage d3 that worked occurred in August 2011 to February 2012. Revitalization of vocational higher education development was developed by the government on a continuous basis.

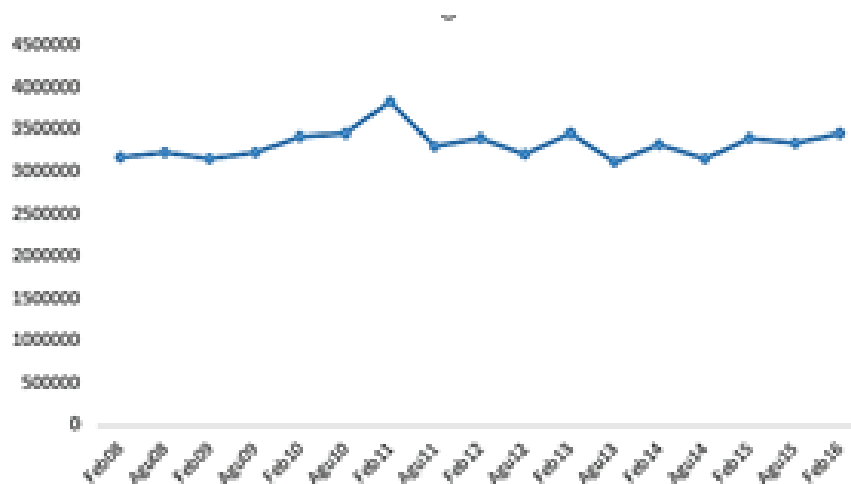


Figure 2: The number of d3 graduates.

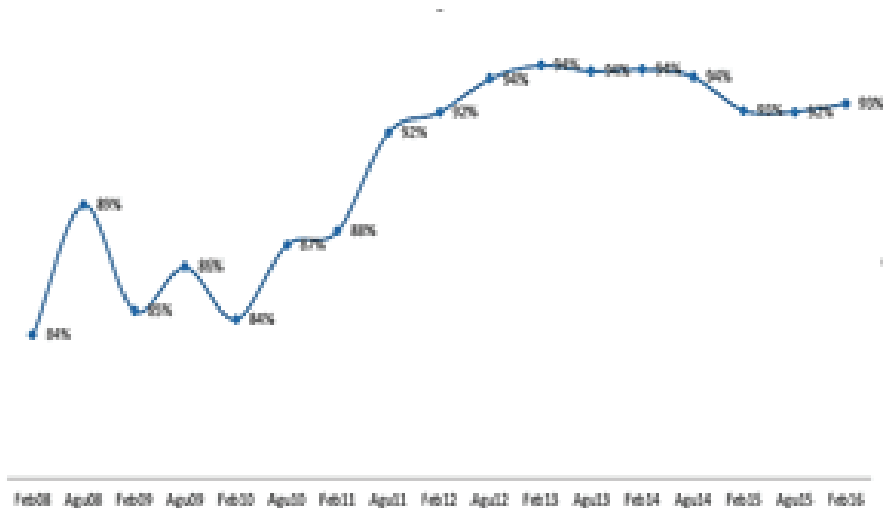


Figure 3: The percentage of working d3 graduates.

Regression analysis is used to test the effect of percentage of d3 graduates who work on the number of unemployed in Indonesia. The unemployment variable as the dependent variable (y) and the percentage of d3 graduates working as independent variables (x). Processing of regression analysis using excel (Figure 4).

Testing simultaneously can be seen through the test statistic F. The hypothesis used is

$$H_0: \beta_0 = \beta_1 = 0$$

$$H_1: \beta_i \neq 0, i = 0,1$$

Based on testing with ANOVA, test statistic $F = 46.03$ and p value = 0.00. The rejection rule H_0 if the value of $p < \alpha$ (5%). The test is obtained using T -test statistic. The result is T -test statistic (-6.78) and p value (0.00). It can be concluded that H_0 is rejected, there is a significant influence between graduate of d3 work with unemployment.

The relationship between the percentage of working graduates and the number of unemployed can be seen in Figure 3. The equation obtained is $y = 3 + E 07-191986X$. Any increase of 1% d3 graduates who work will reduce the number of unemployed as much as 191986 people. R Square shows how much the percentage of d3 graduates work affect the number of unemployed. It can be concluded that 75.42% of the diversity of unemployment is influenced by d3 graduates work.

5. Conclusion

It can be concluded that unemployment in Indonesia can be reduced with d3 graduates who are ready to work. Higher education vocational specialize d3 able to compete to

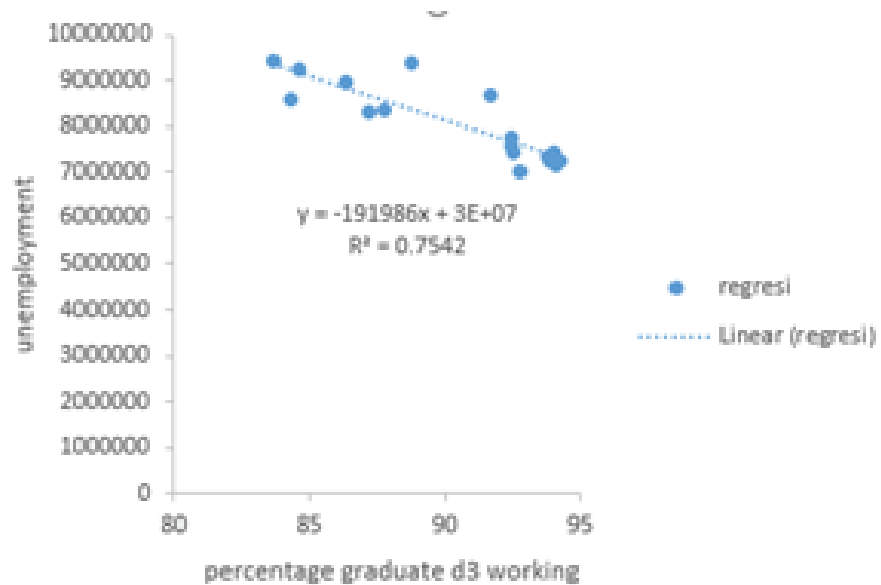


Figure 4: Regression analysis.

get a job. The hope is that vocational higher education provides graduates ready to work and able to be absorbed by the market. So that unemployment in Indonesia can be reduced as well as the impact of reducing poverty.

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