

# Labor Market Outcomes for Senior Secondary School Graduates in Indonesia

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**Abstract**— The problem of increasing unemployment in current Indonesia arises from high school graduates of both vocational high schools (VHS) and general high schools (Non-VHS). VHS have a greater number of graduates than Non-VHS. Non-VHS graduates have the ability to survive and get better position for a long time. Why are Non-VHS graduates better than VHS graduates? This condition requires an evaluation of the labor market outcomes between the two graduates in order to improve the quality of high school graduates as expected. For this purpose, this paper makes an identification of indicators for measuring the labor market outcomes in Indonesia. Based on the literature review method, there are three key educational indicators: the number of graduates, unemployment, and the employment absorption rate by the criterion of the type of educational institution. Finally, these indicators can be used to improve the economy of Indonesian society in the future.

**Keywords:** *Labor market outcomes, VHS graduates, non-VHS graduates, secondary high education*

## I. INTRODUCTION

The secondary education in Indonesia is divided into junior and senior high schools, each taking three years to complete [1]. In Indonesia are two types of educational institutions, secular and Islamic schools. This paper focuses on senior secondary schools with the secular school system. In the secular school system, students graduated from junior high school are to decide whether to enroll in vocational high schools (VHS) or in general high schools (non-VHS). These two types are distinct, and only a small portion of the curriculum used by these school types overlaps, mostly with regards to subjects such as English and Indonesian languages. In addition, non-VHS do not usually offer vocational subjects, such as carpentry or machinery.

However, some references indicate that VHS and non-VHS graduates have a significantly different condition of labor market outcomes. It is shown by the workforce of non-VHS graduates able to survive better and get long-term employment in the industry. In addition, Indonesians still believe that non-VHS graduates are better than VHS graduates, so parents prefer to choose non-VHS for their children's education. Thus, this indicates that the VHS goal to prepare professional and skilled workforce in the workplace is not achieved yet. In order to evaluate the labor market outcomes of these two senior high school

graduates through a project, this paper shares insight as to how to determine the labor market outcomes from high school graduates and what indicators are needed to measure the labor market outcomes in Indonesia. Hopefully, it will provide information and benefit to educators and the state official who have responsibility for the quality of VHS and non-VHS graduates, in relation to labor market outcomes to improve the economy of Indonesia's society.

## II. METHODS

This study used a literature review method. It was evaluated from more than 100 nationally and internationally accredited journals including Scopus and Web of Science. In addition, this was also supported by such references as books, magazines, and some statistical data. Furthermore, those references helped carry out an analysis to discuss the indicators determining labor market outcomes of secondary school graduates in Indonesia.

## III. DISCUSSION

The main factor to determine labor market outcomes is the educational background [2-3]. This paper just focused on high school graduates' labor market outcomes. Education is the determining factor in the quality of graduates that define labor market outcomes, including the number of graduates, the number of unemployment, and employment absorption rate. Furthermore, indicators of labor market outcomes from VHS and Non-VHS graduates in Indonesia are explained as follows.

### A. The number of graduates

Since 2013, the number of VHS and non-VHS graduates has no significant difference [4-5]. In the period 2013/2014, graduates from VHS numbered 1,270,054, which was less than those from non-VHS (1,343,483); conversely, in period 2015/2016, the number of VHS graduates (1,429,870) exceeded those of non-VHS (1,423,607). This resulted from the Indonesian government's replenishing the number of VHS more adequately than they did in non-VHS (60:40). The number of VHS graduates is expected to meet the needs of industries for skilled labors. Unfortunately, in reality, industries in Indonesian assess qualities of VHS graduates at a low level, especially their soft skills ability. On the other hand, 15% of VHS graduates continue to higher

education, 40% of them work not in their chosen field, 20% of them work in their specialized fields, 9.84% are unemployed, and 13.89% are married and others [4, 6-9]. Percentage above indicated that VHS graduates are not ready to enter the labor market in accordance with their field.

Therefore, non-VHS graduates are expected to pursue an academic career at universities, but in reality only 30% of them go to college, 40% of them choose to work, 8.75% of them are unemployed, and 21.25% married and others [4, 6, 7, 9]. The main reason non-VHS graduates choose to work because of the high cost of college enrolment. The percentage also indicated that non-VHS graduates are interested in working; nevertheless, they do not have specific skills. Consequently, many non-VHS graduates worked as unskilled and semiskilled laborers [10-11]. This stimulates competition in the labor market to be very tight between VHS graduates and non-VHS [12]. The competition happens because VHS graduates also do not have skill enough to meet the industrial needs [13].

### **B. The number of unemployment**

The graduates of VHS and non-VHS also add the number of the unemployed in Indonesia. The annually-increasing number of unemployed non-VHS and VHS graduates provides a clear indication to this fact. In 2012, unemployed non-VHS graduates were 1,867,755, while unemployed VHS graduates were 1,067,009. This number is always increasing by 3.2% every year. The number of unemployed VHS and non-VHS graduates was once on the decline in 2016. The causes of unemployment from VHS and non-VHS graduates are: 1) the competence of VHS and non-VHS graduates unable to satisfy demands of the labor market; 2) the number of graduates higher than available job vacancies, and 3) the educational system in Indonesia not involving industry in the curriculum planning process [14].

In Indonesia, the educators from VHS seem to only focus on preparing graduates for work, but they do not consider the importance of knowing how to cooperate with industry [15]. Hence, their graduates cannot work in their field properly, thereby causing the unemployment rate to keep increasing. In addition, economic conditions in Indonesia make investors choose to invest in other countries. For example, the taxes imposed on industry owners are very high. The taxes include industrial machinery, income tax, etc. [16]. On the other hand, the gap between salaries demanded by workers is not comparable with the competence they have, thus making industry owners rethink to hire graduates from VHS and non-VHS [17].

### **C. Vocational teacher candidates' educational processes**

Generally, the total absorption of manpower from non-VHS graduates is increasing annually compared to that of VHS graduates until 2017 [18]. If evaluated from the VHS goals, VHS graduates should have a higher rate of employment than non-VHS graduates, because in theory, VHS graduates have held job readiness and work experience before they graduate.

The skilled workforce will help improve the economy of Indonesia, it will be important to revisit the provision of VHS to address skill mismatches and increase employment, competitiveness, and growth in labor productivity [14, 19]. VHS has an important role to produce a skilled workforce. Henry and Thompson noted that "VHS is "learning how to work." VHS has been an effort to improve graduates' skills and to raise an individual's position in society through mastering his environment with technology. Additionally, VHS is geared to the needs of the job market and thus is often seen as contribution to national economic strength" [20].

Additionally, Goskov [21] defined VHS as "The mandate of vocational school and training manifold. First, the VHS system should deliver both foundation and specialist skills to private individuals, enabling them to find employment or launch their own business and to work productively and adapt to different technologies, tasks and conditions".

Based on the above understanding, VHS prepared in a professional manner will improve technical skills of students to work productively and their ability to adapt to different technologies, tasks and conditions at the time they graduate.

Meanwhile, qualified VHS graduates are their main asset in the competition for job opportunities available on the labor market [22]. This prepares them to increase job productivity and their job satisfaction in the workplace, which impacts labor market outcomes [23]. Whilst, Non-VHS is general education such as senior secondary schools or general senior high school [24]. This education did not prepare students to get specific skills to work, but it prepares graduates with general knowledge and basic skills [25]. Generally, it is designed to prepare students to continue further education in higher level [26].

However, in reality, sometimes Non-VHS graduates are more resilient to work in the workplace than VHS graduates. This is relevant with statements of Margolis and Simonnet [23], who mentioned that the educational track determines the means of obtaining a job, but conditional on the manner in which the job was obtained, the track has no additional impact on the outcome variables for the first or later jobs. The labor market outcomes are influenced by backgrounds of job experience, training experience, school status, job tenure, size of firm, and gender [3, 23, 27-28].

## **IV. CONCLUSION**

The Indonesian government needs to take the more serious handling indicators from labor market outcomes of VHS graduates. These indicators include the number of graduates, unemployment, and employment absorption in industries. Taking into consideration the fact that VHS graduates have a higher number of unemployment than Non-VHS graduates, such action needs to be performed immediately. In addition, VHS graduates have a low absorption rate to enter the job market. This is an impact of the low quality of education graduates. In order to anticipate this issue, the government should make programs that improve VHS graduates' skills in

accordance with what is needed by the job market, at the regional, national and international levels.

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