# WHAT DETERMINES JOB OPPORTUNITIES FOR UNIVERSITY GRADUATES IN INDONESIA? A LITERATURE REVIEW

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# ABSTRACT

**Purpose** - This study aims to determine job opportunities for university graduates, due to the increasing number of educated unemployed graduates of college and diploma by 6.17% in February 2022. An increase of 3.33% from February 2020. There are 2.6 million jobs.

**Design/methodology/approach** - This research is a literature study to examine the phenomenon of job opportunities for university graduates. On the one hand, education is positively correlated with economic growth; on the other hand, high unemployment rates, especially educated unemployment.

**Findings** - Education is not always positively correlated with work quality, where people with low education have the same work productivity as people with high education. This can be done by increasing knowledge and skills through training. The increasing number of educated unemployed because they are not equipped with skills and competencies, namely management skills (in the form of decision-making, problem-solving, leadership, management skills, and teamwork); competence related to communication (oral and written expression); general academic competence (critical thinking, documentation skills); instrumental skills (language, computational skills); and theoretical and practical competencies (theory learning and practical learning). Employment opportunities for university graduates depend on regional conditions. When the curriculum is prepared, it must be adapted to the needs of a region.

**Originality/value** – Previous research has only examined the level of high school education because it is considered and some studies have also examined only the factors for college graduates to be accepted in the job market. The originality of this research is to analyze job opportunities for university graduates that have never been studied before so that a university can prepare its graduates according to the needs of the job market. In addition, the curriculum presented by the university should adapt to the needs of the job market because many curricula presented by universities only meet the quota of lecturers in the university environment.

Keywords: Job Opportunities, College Graduates, Economic Growth.

## **INTRODUCTION**

After becoming a scholar, what will be done? looking for a job? or entrepreneurial? it is not uncommon for college graduates to be unemployed because they are unable to compete with other job seekers. Then who is wrong? College? Or the graduates themselves who have no expertise? Or is the employment itself getting narrower? Well, what is the solution? What are the job opportunities for university graduates in Indonesia? What determines job opportunities for college graduates? All these questions often arise and it is not uncommon for graduates from high school to prefer to work rather than continue their education, this is very reasonable because after continuing education to a higher level, it is not uncommon for it to be difficult to find a job

and the cost of education incurred is not small. In fact, according to the theory of human capital, it is stated that a person can increase their income through increasing education because the addition of a year to take education will be able to increase a person's workability and income. Therefore, efforts to increase income, one of which is by studying up to the university level.

Several universities in Indonesia with various study programs are considered to be following the needs of the job market, but in fact, this is not all true because the debate related to the suitability between higher education and work has been widely discussed through a dependency model that assumes while the relative autonomy model is more discussed in labor supply and the production sector that adapts to the available labor force. From this perspective, it is assumed that qualifications and skills cannot be assimilated only from formal undergraduate studies but through work experience and can combine between the level of innovation and competitiveness to be able to enter the job mark (Salas-Velasco, 2007). The results of research conducted by the National Association of Colleges and Employers USA show that many considerations are of concern to a company in recruiting employees, one of which is the well-trained soft skills that an employee has, meaning that a company does not only focus on employee selection based on the big name of the college or GPA obtained by undergraduates who will apply to the company.

Since 2012 Indonesia has had an academic path that is oriented toward research and a vocational or professional path that is applied. For the higher education level, an independent campus has been implemented with the aim that the resulting graduates have competence in terms of soft skills and hard skills so that the graduates produced are following the needs of the job market.

With the independent campus program, students are expected to be able to build and expand relationships outside of their campus so far and can add knowledge directly from competent partners who are rich in experience so that when they finish their studies, it is hoped that students can explore the knowledge and abilities gained in industries of interest. But on average, after students finish their education, what is imagined in the mind of an undergraduate is to find a job with the GPA they pocketed. With such a high GPA capital, it hopes that it will easily get a job. Indeed, this does not hurt also in China (Li & Zhang, 2010) with its findings mentioning that graduates with a better college GPA are more likely to be employed (particularly by highly paid foreign companies) where GPA can be seen as a strong productive characteristic that many female college students can invest in to gain a competitive advantage over their peers. From this research, it was found that the role of universities is believed to be inefficient and contributes to the unemployment of graduates.

But the fact that happens in the field is that the millions of job seekers who continue to flood the job market are not in line with the number of jobs available. Based on data from the Ministry of Education and Culture in 2020, there was a decrease in the number of universities by 0.01% from the previous year with a total of 4,593 universities and 29,413 study programs, and 312,890 lecturers during the 2020 period, the decline occurred due to each year universities having to update data and also improve the quality of universities. Of the 4,593 universities in Indonesia every year, 2020 graduates are produced, totaling 1,535,074 undergraduates from all over Indonesia.

Data released by the Central Statistics Agency in 2022 the number of working-age people in Indonesia is 208.54 million people, and this number has increased by 3.18 million people by 2021. The total labor force was 144.01 million people which increased by 4.20 million people with a non-labor force of 64.53 million people or a decrease of 1.02 million people. Meanwhile,

the working population of 135.61 million people experienced an increase of 4.55 million people (consisting of a total working number of 88.42 million people where this figure increased by 4.28 million people, part-time workers 36.54 million people with an increase of 1.04 million people and underemployed amounted to 10.65 million people where this number fell from the previous year which was 0.77 million people) with the number of unemployed 8.40 million people where this number fell by 0.35 million people.

Based on the education level, the unemployment rate in Indonesia for the period of February 2020 to February 2022 shows that the unemployment rate based on education is still dominated by the vocational education level, which is 8.42% (February 2020) increased to 11.45% (February 2021) down to 10.38% (February 2022), while the unemployment rate for the Diploma education level fell from 6.69% (February 2020) to 6.61% (February 2021) and 6.09% (February 2022). For the D-IV to S3 education level, the unemployment rate shows fluctuations from 5.70% (February 2020) increasing to 6.97% (February 2021) and down to 6.17% (February 2022). For the main employment status, the number of people working in February 2020 in the informal sector was 56.64% and the formal sector was 43.36%, in February 2021, the population working in the informal sector was 59.97% and the formal sector was 40.03%, meaning that there was an increase in the percentage of the population working in the informal sector, which was 3.33% from February 2020 to February 2022.

The number of people working for the Diploma education level until February 2021 university between men and women is quite balanced, 8,491,232 people the number of men working and 8,441,719 people the number of working female residents. Meanwhile, the age group that works is dominated by the age of 20-54 years and the employment status of more who are laborers/employees/employees 48,520,667 people then followed by those who try to be alone 25,647,945 people and those who try to be assisted by non-permanent workers or family workers totaling 21,611,700 people, with the classification of residents working in urban areas in February 2021 71,065,725 people and 59,998,580 people working in rural areas. The data presented above show that there are still many people who have not worked/are unemployed, especially residents with the diploma to university education levels. Then what determines the job opportunities for college graduates in Indonesia?

The increase in educated unemployment is caused by the imbalance between labor demand and labor supply where the demand for labor is smaller than the labor supply and the lack of transparency in labor recruitment so far is also alleged to be the cause of educated unemployment continuing to increase and the role of universities that are not able to prepare ready-to-use graduates as needed by the job market and changes from economic activities and industrial structures that occur in Indonesia today.

## LITERATURE REVIEW

## Education, Employment and Economic Growth

As it is known that education is closely related to job opportunities since education is a determining factor in the career of a graduate. Findings made by (Teichler, 2015) said that people who have higher education will earn twice as much as those who are educated under it so there is a vertical rather than horizontal "fit" between education and employment. Somani, (2021) higher education will almost double the hourly wage with a 90% return rate this happens because the labor market will again prioritize higher education settings, especially in developing

countries. But the reality in the field is very different where the higher the unemployment rate for educated is due to limitations in the identification of job requirements, job dynamics, uncertain work tasks of a highly qualified workforce, planning gaps, diverse curricular concepts, and the increasing importance of lifelong education, where diverse value assessments come into play (Teichler, 2015).

Concerns related to unemployment of university graduates are not only experienced in Indonesia but studies related to this have been conducted in China by (Xing et al., 2017) that the unemployment rate in China has increased significantly in recent years where this is due to the expansion of universities using the strategy of difference in difference (DID) in addition to the heterogeneous effects based on gender, region, and a city which is considered to be the trigger for high unemployment in China. Li et al. (2013) expansion policies have increased the likelihood of college attendance among high school graduates. Using a strategy of difference in differences, it was found that China's expansion policies have sharply increased the unemployment rate among young college graduates and that the unemployment rate for college graduates is increasing more in non-coastal (especially central) areas than in large coastal cities.

According to Wu (2011) The high unemployment rate in Taiwan is due to the need for higher education and the global economic recession that has led to an economic downturn that shapes the choice of classes below graduates, job needs, and future income expectations. Where students whose spending is most affected by the economic recession need more jobs and tend to take practical courses and credentials to demand undergraduates for courses or training that are more likely to improve their employability and the results are indeed very significant. Pompei & Selezneva, (2019) mentions that formal education can avoid young people from unemployment but what often happens is a mismatch of higher education (mismatch) where there is a shortage of skills in the supply of high labor so that job seekers among educated young people prefer to increase their education through pieces of training or vocational schools.

Human capital theory in the theory of allocation or competition states that the level of education does not always have a positive correlation to the quality of work where people who are poorly educated even have the same work productivity as people who are highly educated where which can be done by increasing knowledge and expertise through training. This means that although highly educated people have a higher proportion of national income, this proportion cannot automatically increase economic growth. (Qadrunnanda, 2017). Another argument about the theory of human capital we also find that if more residents in a country have higher education, the higher the productivity will be so it will have an impact on the higher the national economy of a country (Nugroho, 2014). The New Vision theory related to productivity pioneered by Paul Romer emphasizes that human capital has a positive correlation to macro and micro economic growth and has a positive correlation with productivity (Purwanto, 2006).

When viewed from the studies carried out, it has a variety of results related to education, employment, and economic growth of a country. On the one hand, education is considered to be able to contribute to economic growth, but it does not rule out the possibility of a higher unemployment rate, especially unemployment educated at the university level. Then the question arises, what kind of level of education is needed for the economic growth of a country, especially developing countries such as Indonesia?

Dahal, (2017) in developing countries or third world countries, secondary education and basic education are considered to be able to provide an impetus for developing countries or third world countries to get out of poverty. As for the developed countries that can be industrialized, higher education plays a very important role in the country's economic growth (IIASA, 2008).

Woessmann, (2015) based on international policy observers, it is stated that education can change the nation's soul if it collaborates with national and international forces to get out of poverty and towards sustainable development. This means that policymakers are focusing more on educational outcomes than achievement.

To encourage economic growth in developing countries, it is not only focused on education but other things can make progress in developing countries, namely by improving cognitive skills and improving the quality of schools, because in developing countries it will be difficult to improve long-term economic performance if the quality of educational institutions is not improved (Hanushek et al., 2010). So to transform the education system in third-world countries or countries develops to be more relevant to the needs of each society (Mpofu, 2013).

#### **College Graduates and Job Opportunities**

Related to job opportunities such as education levels ranging from basic education levels to universities (Hanushek et al., 2017) concluded that vocational education is considered capable of adapting in the job market even to technological and structural changes in the economy, this is certainly very beneficial because through vocational education it is considered to bring more benefits to job seekers because it can facilitate the workforce to enter the job market, especially at a young age but with the increase in age, the ease of obtaining work begins to decrease. This study is reinforced by (Assaad et al., 2020) that to create jobs that play a role not only in the public sector but also in the private sector because it is evident in Egypt where this study was conducted it was found that job growth mainly follows the paradigm of employment, with job growth not related to productivity and highest for companies with more informal jobs.

Studies related to the level of education that matches the job opportunity (Shimer, 2016) that the model of searching and matching the labor market is determined by the level of wages offered by a company. Ama, (2008) that there are 72% of college graduates who are very confident in their level of education and are relevant to the study programs taken at universities and will be by the job market, especially the public sector, this will certainly lead to a buildup of job seekers in the public sector so that from this research it is recommended the involvement of the private sector in creating jobs. This study of educated unemployment is indeed very worrying for Indonesia as the study conducted by (Maryati, 2015) were with the increasing number of university graduates who are not balanced with employment, therefore efforts are needed to improve the quality of human resources who have expertise and skills so that the educated unemployment that is feared can be resolved.

Job opportunities for college graduates are influenced by several factors, namely job profile, field of competence, and level of education. However, to be able to be competent, several things must be considered, namely skills in work (Supriati & Handayani, 2018). In the theory of obtaining a job put forward by McMahon, 1987 (Ama, 2008) that several factors influence job seekers to work, namely the duration of the job search, the expected income, the field of study, the level of education, gender, and the linkage between the study program and the job.

Often found in the field many college graduates who work not in the field of science or education they take while at university, from the findings carried out around 50.5% of the education taken is following the job market, and this is only in certain fields such as educators, lecturers or tenors (Muhson et al., 2012).

Education has a positive and significant effect on employment as in studies conducted by (Pramusinto & Daerobi, 2020) where education plays an important role in improving human resources. However, in Indonesia, the average length of schooling is in line with the level of

education. The longer they study in school, the higher the level of education they will have. By referring to these indicators, it can be known the level of education of Indonesian residents aged 15 years and over. Since 2015, the average length of schooling has increased every year. In 2018, it has reached a high of 8.58 years or the equivalent of the second grade of junior high school or equivalent. However, this did not meet the strategic plan target of the Ministry of Education and Culture, which is 8.7 years. The province with the highest average length of schooling is Jakarta. Jakarta has reached 11.02 years. In contrast, the lowest average length of schooling is Papua. It requires hard work and synergy of all parties to meet the target of human resources in Indonesia that can be competitive.

# METHODOLOGY

This study used a literature study by collecting the results of previous studies related to the theme of this study. To be able to answer the formulation of problems in this study by taking notes, read references that are relevant to the theme of this study.

The stages carried out in the research are: (1) looking for relevant literature, (2) choosing specific sources related to the theme of this research, (3) identifying articles (4) creating outlines, (5) compiling literature reviews

## **RESULTS AND DISCUSSION**

#### Analysis of Education, Employment, and Economic Growth

So for education, employment, and economic growth to have strong relevance, from the literature study above, this case, will be analyzed in several parts, namely: first, how the match between the degree achieved and the job is always the second to examine the actual opportunities of the college graduates in what kind of job market. All of them are studied using literature studies from various perceptions of theories and scientific studies. So that the end of this literature study will provide advice regarding what a graduate should prepare for when entering the job market when they study.

From the literature review above, it is stated that education and employment have a significant correlation, but in reality, educated unemployment is increasing. Then what went wrong? Does the education take so far match their work? Usually when an applicant is about to work then the first question is, "What are the requirements for the job position?", there are certainly three possible answers given which are "only a title" or "no title required". The next possibility is that if the job requires a specific degree then is there a specific degree requested for a particular position? This is what is often found in the field, therefore from several studies carried out when an applicant applies for a job, the average job market provides special qualifications and tasks, namely: (1) establish qualifications and job duties are sometimes unrelated: (3) earned degrees and interrelated duties; (4) bachelor's degrees and duties are completely unrelated; (5) no university qualifications are required and the assignments are in no way related to the degree/qualification.

In the job market, the results of studies show that degrees obtained from universities are not so necessary when entering the job market and if there are but with a very low percentage, this is because in the job market there is more need for ready-made labor, especially for social

science graduates. However, for the field of health sciences or architectural engineering, it shows that when entering the job market, the qualifications/degrees are by the job duties.

Seeing this phenomenon, it is necessary to evaluate the higher education system regarding competency-based learning so that the perception of college graduates can be changed if they finish their studies and obtain a diploma, it will be easy for graduates to get a job with a GPA obtained. On the other hand, work that does not have any relationship with undergraduate studies from the results of studies causes bias in the assessment of graduates. Therefore, a scholar must be equipped with competencies, namely management skills (in the form of decision making, problem-solving, leadership, management skills, teamwork); communication-related competencies (oral and written expressions); general academic competencies (critical thinking, documentation skills) are part of the third; the fourth consists of instrumental skills (language, computational skills); and the fifth consists of theoretical and practical competencies (theoretical learning).

Many empirical studies have been conducted related to education and economic growth or their relation to human capital Aka dan Dumont (Ogundari & Awokuse, 2018) that an important aspect in supporting economic growth in addition to health and education because it will be able to overcome the problems faced by a nation. The results of studies conducted, one of which examines the effect of education on economic growth shows that the elasticity of education to economic growth has a positive correlation, meaning that with the increasing elasticity of education, economic growth will also increase, this is also true in developing countries and third world countries where the effect of education growth depends on the level of development of a country and that developing countries with low incomes are more benefit from primary and secondary education, while higher-income developed countries benefit more from higher education. The effect of the average length of schooling of the adult population on economic growth is positive and statistically significant and the effect of government education expenditure on economic growth is also positive.

## Analysis of College Graduates and Job Opportunities

Bloom & Freeman, (1986) Mentioning that the economies of developing countries will probably face the biggest challenge of producing enough jobs with reasonable wages to absorb their rapidly growing populations into productive jobs. The magnitude of the main influence of population growth on labor supply and employment in developing countries in the world. On the supply side of the labor market, there is a link between population growth and the labor force. These include a lag between population growth and labor force participation; an independent effect on the labor supply of accelerated population growth due to changes in fertility, mortality, and migration; patterns and trends in labor force participation rates; and gender differences in labor supply behavior. Such as the studies conducted by (Maryati, 2015). On the demand side, the nature of the labor market in developing countries and trying to identify the key factors that condition their employment capacity. Descriptive statistics on the characteristics of the labor market of developing countries and the relationship between population growth, labor supply, job shifts, and growth in output per worker are presented and discussed.

The population in a country will have an impact on employment, but on the one hand with the increasing unemployment of educated not all business sectors can absorb the labor available in the job market this is due to some places some of this business sector is a complex economic sector (Prastyadewi et al., 2013). So the job opportunities for graduates of these universities depend on their respective regions, and what sector is the most dominant in the

region, so the universities in the region should adjust to the needs of the region. As is the case in Bali, the trade sector, hotels, and restaurants there have little influence on the existing educated unemployment because this sector requires an educated, trained workforce and an uneducated workforce. Therefore, the curriculum to be prepared by universities should be adapted to the needs of the region both for the short term and for the long term to reduce unemployment, and the development and economic growth of the region can increase.

For the manufacturing industry sector in Indonesia, job opportunities for job seekers are influenced by wages, the number of industrial companies, Gross Domestic Product, investment value, and technology where the influence has a positive and significant effect. Meanwhile, the value of an investment and educational variables do not affect employment (Pramusinto & Daerobi, 2020). Education is one of the most important things for the world of work because if the number of workers is large but not balanced with the skills, skills, and qualifications as well as the availability of appropriate employment opportunities, it will cause problems. One example is competing with foreign workers who have better education and skills than local workers, so education is very important for the workforce. These findings are in line with research conducted by Imam Buchari who argues that the level of education has a positive and significant effect on the Absorption of Labor in the Manufacturing Industry on the Island of Sumatra (Nugroho & Moonti, 2019; Putri & Sudarsono, 2019).

In Achmad Daengs et al. (2020) employment is the acceptance of labor to carry out its duties as it is or a condition that describes the availability of employment that will be filled by job seekers. Labor absorption can be attributed to the balance of interaction between labor demand and labor supply, in which the labor demand market and the labor supply market simultaneously establish a balanced level of costs and balanced utilization of labor. Meanwhile, Todaro & Smith explains that employment is the acceptance of labor to carry out its duties as it is or a condition that describes the availability of employment that must be filled by job seekers.

#### CONCLUSION

The level of education does not always have a positive correlation to the quality of work where even people who are poorly educated have the same work productivity as highly educated people and this can be done by increasing knowledge and expertise through training.

The increasing unemployment of educated is not equipped with skills and a scholar needs to be equipped with competencies, namely management skills (in the form of decision making, problem-solving, leadership, management skills, teamwork); communication-related competencies (oral and written expressions); general academic competencies (critical thinking, documentation skills) are part of the third; the fourth consists of instrumental skills (language, computational skills); and the fifth consists of theoretical and practical competencies (theoretical learning).

Job opportunities for university graduates depend on the conditions of their respective regions so that when the curriculum is compiled, it should be adjusted to the conditions and needs of the local area, both for the long and short term.

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