DYNAMICS OF UNEMPLOYMENT IN THE DISTRICT JOMBANG: ANALYSIS ON POPULATION, EDUCATION, AND GROWTH ECONOMY (2018-2020)

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Abstract
Study This aims to determine the effect of population, education level and economic growth on the unemployment rate in Jombang Regency in 2018-2020, based on the type of relationship between variables, this research is included in the causal relationship of the variables that cause unemployment, while seen from the unit of analysis used, carried out, this research uses a group analysis unit with multiple regression analysis. This research aims to determine the effect of the resulting population, the level of education and economic growth have a simultaneous influence on unemployment in Jombang Regency. This means that the higher or lower the population, level of education and economic growth in Jombang Regency will simultaneously influence unemployment in Jombang Regency in 2018-2020.

Keywords: Unemployment, education, economic growth

Introduction
Unemployment is a macroeconomic problem that directly affects human survival. For most people, losing a job is a decline in the standard of living. So it is not surprising that unemployment is a topic that is often discussed in political debates by politicians, who often assume that the policies they offer will help create jobs (Mankiw, 2014). The number of unemployed people in Indonesia was 9.1 million as of August 2021. Total: This is down around 670,000 people from the position as of August 2020, which reached 9.77 million people. East Java's workforce in August 2019 was 21.50 million people, an increase of 199 thousand people compared to August 2018. Correspondingly, the Labour Force Participation Rate (TPAK) also increased by 0.07 points (BPS Jombang, 2022).
In the last year of 2020, unemployment decreased by 6.72 thousand people, while TPT fell to 3.92 percent in August 2019. Judging from the level of education, TPT for Vocational High Schools (SMK) still dominates among other levels of education, namely 8.65 percent. The working population is 20.66 million people, an increase of around 206 thousand people from August 2018. Employment opportunities have increased in the percentage of the working population, especially in providing accommodation and food and drink 0.58 percentage points, corporate services 0.24 percentage points, health services and social activities 0.22 percentage points, and transportation and warehousing 0.20 percentage points. On the other hand, employment experienced a decline mainly in Agriculture, Forestry, and Fisheries 1.28 percentage points, Mining and Quarrying 0.24 percentage points, Information and Communication (0.06 percentage points), and Wholesale and Retail Trade; Car and Motorcycle Repair and Maintenance 0.06 percentage points.

A total of 12.51 million people, or 60.59 percent, work in informal activities. Over the past year August 2018–August 2019, informal workers in East Java fell by 1.33 percentage points. The highest percentage in August 2019 were full-time workers minimum working hours of 35 hours per week at 69.83 percent. Meanwhile, non-full-time workers are divided into two groups: part-time workers 24.89 percent and semi-unemployed workers 5.28 percent.

In Jombang district, there was a decrease in unemployment from 62,870 (4.64%) people in 2018 to 55,490 (4.39%) people in 2019, when COVID occurred, and in 2020, when COVID occurred, it rose to 98,591 (7.48%).

<table>
<thead>
<tr>
<th>Year</th>
<th>Man</th>
<th>Woman</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>2018</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>52</td>
<td>8.08</td>
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<tr>
<td>Number of unemployed</td>
<td>34,456</td>
<td>35,674</td>
<td>53,862</td>
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<td>2020</td>
<td>29,352</td>
<td>21,897</td>
<td>63,457</td>
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<tr>
<td></td>
<td>4.64</td>
<td>4.39</td>
<td>7.48</td>
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<tr>
<td>Number of Population</td>
<td>703,181</td>
<td>683,401</td>
<td>666,605</td>
</tr>
<tr>
<td>2018</td>
<td>690,328</td>
<td>692,940</td>
<td>1,354,958</td>
</tr>
<tr>
<td>2019</td>
<td>653,457</td>
<td>1,264,062</td>
<td>38,500</td>
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Source processed from (BPS Jombang, 2022)

Apart from increasing the unemployment rate in Jombang Regency, the COVID-19 pandemic also caused a decrease in the economic impact. This research provides a continuation of the research by showing that only the unemployment rate and the Human Development Index have a significant effect on the poverty rate (Irawan, 2022). That inflation has a positive impact on economic growth. Meanwhile, unemployment and population growth show a negative impact on economic growth, while the level of open unemployment and education on the number of poor people in Nganjuk Regency does not have a significant effect (Lubbock, 2022), (Emilia Khristina Kiha, Sirilus Seran, 2021). The aim of this research is to analyse the influence of population, education level, and economic growth on the unemployment rate in Jombang Regency in 2018–2020.

**Research methods**

The goals of this study put it in the category of quantitative hypothesis testing research. This is
because hypothesis testing designs help explain relationships or differences between groups or the independence of two or more factors in a single situation (Hermawan, 2006). Meanwhile, based on the type of relationship between variables, this research is included in the causal relationship between the variables in question, causes unemployment, while judging from the unit of analysis carried out, this research uses a group analysis unit (Hermawan, 2006).

Several limitations are used to clarify the scope of this research. Some of these limitations include: Unemployment in this research is limited to a macroeconomic perspective, so the research focus ignores microassumptions. The scope of the data studied is between data from 2018 and 2020, using annual data as the basis for analysis. The data analysed is at the Jombang Regency regional level. The tests used are the classic assumption test and hypothesis test, the T-test (partial test), and the F-test (simultaneous test) (Arikunto, 1998).

**Results and Discussion**

In this research, the author used a multiple linear regression model, or mode one stage, with the help of SPSS software to show the relationship between the independent variable (X) and the dependent variable (Y). Unemployment Empirical descriptive statistical test results of unemployment data on unemployment for the Jombang Community in the span of 3 years (2018, 2019, and 2020) For unemployment at the school graduate level, unemployment at the elementary school level is in the range of 5397 to 12468, unemployment at the junior high school level is in the range of 5197.00 to 13597.00, unemployment at the high school level is in the range of 8369.00 to 23962.00, and unemployment at the tertiary level is in the range of 1125.00 to 4178.00.

The results of empirical descriptive statistical tests on population data on the population of the Jombang Community in a span of 3 years (2018, 2019, and 2020) in terms of gender are: The male population is in the range between 653457.00 and 703181.00, the female population is in the range between 664605.00 and 690632.00. The results of descriptive statistical tests on education levels in the 3-year range (2018, 2019 and 2020) with education graduates at the elementary school level are in the range between 242595.00 and 689086.00, junior high school levels are in the range between 168546.00 and 172970.00, high school levels are in the range between 192549.00 and 240564.00, and tertiary education levels are in the range between 58626.00 and 66039.00. The results of descriptive statistical tests on the economic growth rate of the people of Jombang Regency based on the GDP of DHK and the GDP of DHB are empirical data on the growth rate of the people of Jombang Regency in the 3-year period (2018, 2019, and 2020), with the economic growth rate as follows: Based on the GDP of DHK, it is in the range of Rp. 38,050,000,000.00 to Rp. 40,450,000,000.00. Based on GDP, DHBs are in the range of Rp. 26,880,000,000.00 to Rp. 28,220,000,000.00.

From the results of the multiple regression test, it was found that \( Y = 379.86 + 0.303X1 + 0.532X2 - 0.229X3 \) with a correlation coefficient of 0.574, or 57.4%, is located in the correlation coefficient interval of 0.40–0.59, which means the level of relationship between population,
education, and economic growth relative to unemployment is moderate. This is based on the correlation coefficient interpretation guidelines. Based on the calculation output, it is known that the significance value for population number, education level, and economic growth has an influence on unemployment. The sig value is 0.010, which means that the value is smaller than the significance level of 0.05 (5%), namely 0.010 < 0.05. Apart from that, the calculated F value was 4.595, and when compared with the F table, namely 1.61, the calculated F value was greater than the F table value, namely F calculated 4.595 > F table 1.61. So it can be concluded that the hypothesis is accepted, which means population size, education level, and economic growth simultaneously influence unemployment.

The t statistical test on population number has a calculated t value of 1.477 > t table 1.048 with a significance value of 0.151 > 0.05. This shows that the population number variable (X1) has no significant effect on unemployment, so it can be concluded that hypothesis 1 is not accepted. The level of education on unemployment is carried out using statistical testing. In Table 4.16, it can be seen that education (P) has a calculated t value of 0.137 < t table 1.048 and a significance value of 0.892 > 0.05. This shows that the education level variable (X2) has a significant effect on the open unemployment rate (TPT), so it can be concluded that hypothesis 2 is accepted. In the t test, the effect of economic growth on unemployment is carried out using statistical testing. Table 4.156 shows that economic growth has a calculated t value of -0.020 < t table 1.048 and a significance value of 0.9840 > 0.05. This shows that the economic growth variable (X3) has a significant negative effect on unemployment, so it can be concluded that hypothesis 3 is accepted.

In calculating the population above, researchers used population growth rate data to determine the development of the population each year. The results of this research explain that the population does not have a significant influence on unemployment in Jombang Regency. This could be due to the population growth rate in Jombang Regency, which is decreasing every year, so that it can inhibit unemployment in Jombang Regency from 2018 to 2020.

Education in this study is referred to as the average number of years of schooling. The data used is the average length of schooling according to Jombang Regency. This research shows that the education variable has a negative effect on the unemployment variable, which means that every time there is an increase in the average length of schooling, it will also be followed by a decrease in unemployment in Jombang Regency. A person who is highly educated will make himself look for a job that suits his education. According to human capital theory, a person can increase his income by increasing his education. This is because by increasing his education, he will be able to easily increase his ability to work. In fact, it is not uncommon for highly educated people to tend to look for work outside the area where they live to get suitable work.

Based on the results of the research above, it is known that economic growth has an effect on unemployment in Jombang Regency. Economic growth is an increase in the ability of an economy to
produce goods and services. This means that economic growth refers to quantitative changes, which we can usually measure using data on gross domestic product or per capita income. If we look at the research results above, which state that economic growth has a negative effect on unemployment in Jombang Regency, it can be concluded that higher economic growth in Jombang Regency will have a negative influence on or reduce unemployment in the regency. Jombang. Based on data obtained from the Jombang Regency Central Statistics Agency and through SPSS testing results, the variables of population, education level, and economic growth have a simultaneous influence on unemployment in Jombang Regency. This means that the higher or lower the population, level of education, and economic growth in Jombang Regency, the more it will simultaneously influence unemployment in Jombang Regency (Arrie Benggolo, 2020).

10 Causes of Unemployment in Indonesia according to Widyananda, (2019) and the reasons, namely:

1. Imbalance Between Employment and Number of Workers. The cause of unemployment in Indonesia and the first reason is the imbalance between employment and the number of workers which increases every year. The existence of tight competition between fresh graduates and those with experience has created a new phenomenon that this imbalance has created happen. Students and master's graduates are increasingly having difficulty finding work because the number of jobs available is small and not matched by the abilities of these individuals. The population explosion in Indonesia can also be one of the factors triggering unemployment in Indonesia. This causes many unemployed young graduates to wait for work.

2. Technology advances. The cause of unemployment in Indonesia and the next reason is technological progress. Indeed, technological progress is a matter of pride because human performance will certainly be faster and easier. However, you also have to be careful about this because it can cause an imbalance between workers whose positions have been replaced by robots. Usually the main reason is because the costs are much cheaper with fast and accurate work.

3. Inappropriate Abilities of Job Seekers. The cause of unemployment in Indonesia and the next reason is that there are many criteria for job seekers who do not in accordance at the company's request. Companies will need employees who meet the requirements criteria for the positions to be occupied by prospective employees. This usually becomes an obstacle when companies need employees with high skills. Automatically, there will only be a few applicants who have a chance of being accepted.

4. Lack of Education and Skills. The cause of unemployment in Indonesia and the next reason is problems with the skills and education of applicants. Lack of education level will make it difficult for someone to be employed as a workforce. As a result, most people who do not have a higher educational background usually only work as unskilled laborers. If
manual work is absent and the spirit of an entrepreneur is absent, then a person can become permanently unemployed. Apart from that, skills are also important to train their abilities to enter the world Work.

5. Poverty level. A study reveals that most of the unemployed come from people living under poverty. Even though the level of poverty in Indonesia has always been handled seriously and gradually, there is still a lack of will to get out of the poverty zone. Apart from that, opportunities to get education or hone skills are still very minimal so what happens is the problem of unemployment.

6. There are layoffs. The cause of unemployment in Indonesia and the next reason is layoffs or layoffs. Layoffs will occur after the end of the employment contract or a reduction in workforce. Usually a company will also use this method to stabilize the system Work.

7. Remote Residence. The lack of equal distribution of job vacancies could be the cause of the unemployment rate in Indonesia. Areas that are less developed and domiciles that are far from employment opportunities are obstacles for them to realize their dreams. Limited costs to be able to try their luck outside the region can also be a serious problem related to unemployment rates in Indonesia. Therefore, equal employment opportunities will be very necessary done.

8. Global Market. The cause of unemployment in Indonesia and the next reason is competition in the current global market era. There is likely to be an increase in foreign companies being established but they tend to include some workers from their countries rather than using native labor. Creating a balance between foreign workers and native workers is an issue that must be taken seriously in Indonesia. Appropriate measures and regulations should be enforced so that balance in the workers' environment can be created Good.

9. Difficulty Meeting Job Seekers and Job Vacancies. Available vacancies are sometimes not well announced. Some people who could potentially fill the job vacancy sometimes lose information about the vacancy itself. On the other hand, most job seekers are usually not active enough to dig up information about vacancies available.

10. High Expectations of Prospective Workers. The high expectations of most companies in Indonesia are not accompanied by an increase in the abilities and skills of job seekers, causing unemployment rates in Indonesia. Companies always want to hire people who are skilled and have the abilities they need. Training and development for job seekers is a very important factor in creating a balance between the two factors the. Efforts to overcome unemployment in general according to (Hia1, 2019), (Agung Nurrahman, 2020), (Disnakertrans, 2023) namely: Increasing capital mobility and employment opportunities. With method a. Expanding employment opportunities, by opening new jobs, both in the fields of
agriculture, industry, trade, etc service.

b. Improving the quality of education, so that graduates are ready to become skilled workers skilled.
c. Improving the quality of the workforce, by providing skills education through formal education and non-formal.
d. Providing employment opportunities abroad, through the distribution of Employment Agents official

One of the main problems with employment in Indonesia is low labour productivity. Indonesia can no longer rely on traditional sources of comparative advantage, such as cheap labour and natural wealth. Indonesia needs to develop dynamic comparative advantages, namely quality, productive, and professional human resources (HR). Workforce training is an integral part of development planning. The development plan contains various activities that will be implemented in all sectors or sub-sectors. Every activity to be carried out requires an appropriate workforce. Workforce training contains estimates of demand or need and supply or supply of labour, as well as employment policies and programmes needed to support the successful implementation of development. The realisation of workforce development planning can be carried out with the mission of improving the quality of the workforce, including through education and workforce entrepreneurship training, which ultimately creates a workforce that is reliable, professional, and ready to use.

The quality and ability of the workforce are greatly influenced by the level of education, wages, and incentives. Education provides knowledge not only directly related to carrying out tasks but can also function as a reference for developing oneself in terms of utilising all available facilities to carry out tasks smoothly. The higher the level of education, the higher the work productivity by providing training, workers can gain skills and experience in carrying out the production process. In general, the scope of education includes skills, but the skills in question are more likely to involve operational technical issues.

Behind the strategic role of labour in increasing production, on the other hand, there are various problems that need attention in order to increase labour productivity. The quality and ability of the workforce are influenced by the level of education and training, wages, work experience, and physical abilities in this case, the age of the employee concerned. Education provides knowledge not only directly related to the implementation of tasks but also the basis for developing oneself and the ability to utilise all the facilities around them for smooth implementation of tasks.

Employee work productivity will be able to have a huge influence on increasing work productivity. Apart from that, increasing productivity will have an impact on increasing company profits. By increasing company profits, it will have an influence on the company's ability to provide higher wage levels. The ability to provide wages will then have a huge influence on work motivation.

Labour intensive is a development activity that uses more human power than machine power.
The main aim of the labour-intensive programme is to create employment opportunities for people, especially those who have experienced a loss of income or loyment. The Central Statistics Agency (BPS) recorded inflation during April 2020 at 0.08 percent. This figure is lower than the March inflation rate of 0.10 percent. Meanwhile, calendar-year inflation was recorded at 0.84 percent, and year-on-year inflation was 2.67 percent. There were several factors that made inflation in March 2020 low. First, maintain a sufficient supply of food regulated by the government. But on the other hand, there has also been a decline in demand for goods and services from the public. This occurred as a result of the government's policy of large-scale social restrictions (PSBB), which had an impact on social activities. Another thing that needs to be paid attention to is the decline in core inflation, which indicates a weakening in household purchasing power. The ongoing spread of the Corona pandemic has caused demand for goods and services, which should have increased, to actually decrease ahead of the fasting month and Eid al-Fitr.

Household consumption expenditure in the COVID-19 pandemic situation only grew by around 2.84 percent, or almost halved, compared to the first quarter of last year, which recorded growth of 5.02 percent. So far, the main driver of economic growth has come from household consumption, which reached 58.14 percent. Slowing levels of household consumption are the main cause of slowing economic growth. As per the latest data release from BPS, it turns out that economic growth only reached 2.97 percent in the first quarter of 2020, or a contraction of around -2.41 percent compared to the fourth quarter of 2020. We need to be wary of the decline in household consumption growth because it has the effect of slowing purchasing power. Efforts are needed to maintain purchasing power in order to maintain the welfare of the population amidst the current economic dynamics.

Even though inflation is relatively low, the purchasing power of the lower economic population is experiencing pressure. This is reflected in the real wages of construction workers in urban areas and agricultural workers in rural areas in April 2020. In March 2020, the real wages of construction workers were IDR 85,624 and decreased to IDR 85,567 in April 2020. Meanwhile, the real wages of agricultural workers in April 2020 tend not to change compared to March 2020, that is, from Rp 52,212 to IDR 52,214. This decline and stagnation in real wages indicates that there has been a decline in the purchasing power of the lower economic population, namely agricultural workers and construction workers. Although nominal wages for agricultural workers and construction workers have increased, the increase is smaller than the increase in prices of consumer goods in general. What is expected is, of course, an increase in wages and business results that exceeds the inflation rate so that purchasing power is maintained. (Lin, 2021) To achieve this, higher economic growth is needed so that demand for goods and services will increase. If the current economic slowdown continues, it will have the potential to reduce the purchasing power and welfare of the Indonesian population.

The government continues to strive to reduce the negative impact of the spread of the Corona virus on the national economy. One thing that is maintained is people's purchasing power, so that
Business continuity remains. The government provides special social assistance to help people from the lower middle class face the impact of the COVID-19 pandemic so that people's purchasing power remains good (Ulpiano J. Vázquez, 2021). The first is the provision of social assistance (Bansos) in the form of basic food packages for Jabodetabek residents. Basic food and social assistance for DKI Jakarta residents was provided to 2.6 million people, or 1.2 million families. The amount given is IDR 600,000 per month and is given for three months.

Second, social assistance is provided to residents outside the Jabodetabek area. The government is providing cash assistance to residents whose economies are affected by the Corona virus pandemic. This type of assistance is aimed at 9 million families outside the Jabodetabek area. Each family will receive cash social assistance of IDR 600,000 per month for three months, or a total of IDR 1.8 million. Meanwhile, the third social assistance is given to families who cannot afford it and are not yet registered as recipients of other social assistance such as the Family Hope Programme or Basic Food Cards. The government diverted the use of village funds of around IDR 21 trillion to IDR 24 trillion for social assistance. The social assistance will be distributed through a direct cash assistance, or BLT, scheme to village communities. BLT will be distributed to 5.8 million poor families who live in villages and have not received assistance from the central government or regional governments.

Giving BLT has several positive sides. It is believed that distributing BLT through each recipient's account is a step toward reducing crowds and adhering to frequently recommended physical distances from others by the government. BLT also drives the community's economy. This is because the money from BLT will be directly spent on food or other necessities by the community, and the money will go into the real sector, especially micro, small, and medium enterprises (MSMEs) in each region. Because demand increases from the supply side, MSMEs as producers can still move (ppid-desa, 2023). By providing BLT as a whole, the regional economy can move, so it is able to support the regional economy so that it does not experience contraction. Meanwhile, on the negative side, both BLT and non-cash social assistance such as basic food have the same weakness, namely the problem of data accuracy. The data on aid recipients must be completely accurate. Because it is different from basic food aid, which can be returned and monitored directly, cash aid usually will not be returned by the recipient if there is a data error and the recipient is not entitled.

The Pre-Employment Card Programme is a programme designed to overcome the problem of unemployment due to a lack of expertise and skills. This programme is aimed at improving skills, expertise, and human resource development by training participants, where the card holder receives training incentives to be able to improve skills and expertise so that they can be absorbed by appropriate companies or open their own business field. Through the Pre-Employment Card Programme, the government develops workforce competency, increases productivity and competitiveness in the workforce, and develops entrepreneurship. The Pre-Employment Card Programme implemented in Indonesia to overcome the problem of unemployment is reviewed from
the Islamic Business Feasibility Study through related aspects. This programme is suitable to be implemented because it is designed for the benefit of job seekers or the unemployed in order to provide a bridge as a provider of opportunities to develop the potential of job seekers (djpb.kemenkeu, 2019).

Conclusion

This research aims to determine the effect of population, education level, and economic growth on the unemployment rate in Jombang Regency in 2018–2020. Based on the discussion reviewed in the previous chapters, the following conclusions can be drawn: a. That population does not have a significant influence on unemployment in Jombang Regency in 2018–2020; b. that education has a negative effect on the unemployment variable, which means that every time there is an increase in the average length of schooling, it will also be followed by a decrease in unemployment in Jombang Regency in the years 2018–2020; c. that economic growth has an effect on unemployment in Jombang Regency in 2018–2020. Population size, education level, and economic growth have a simultaneous influence on unemployment in Jombang Regency. This means that the higher or lower the population, level of education, and economic growth in Jombang Regency will simultaneously influence unemployment in Jombang Regency in 2018–2020.

References


