Employment analysis of North Kalimantan Province 2018-2020

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Abstract. Employment is one of the important factors in national development. This study aims to analyze the employment conditions of North Kalimantan Province, from the workforce to the unemployment rate. The average LFPR (Labour Force Participation Rate) in North Kalimantan Province in 2020 is 66.51. Especially in the district which has many coal and mineral industries, the initial LFPR was 75.04% in Malinau Regency. Kalimantan Province's EPR based on the age group shows that in 2018, 2019, and 2020 there are not too many differences in EPR (Employment to Population Ratio) levels. The lowest EPR is always in the 15-19 age group with an EPR of 22.94%; 17.95%; and 24.73%. Tarakan City has a higher TPT (Open Unemployment Rate) value than other districts, even compared to North Kalimantan Province with 5.89%, 5.3%, 5.86%, and 4.14%. North Kalimantan experienced a decrease in the underemployment rate of 0.37% in 2018—2019. Then in 2020, all districts/cities in North Kalimantan experienced an increase in the underemployment rate.

Keywords: employment, unemployment, underemployment, labor force, North Kalimantan

1 Introduction

National development with an emphasis on high growth is a top priority. This is done to accelerate the transformation of the economy for the better. Economic growth is also closely related to the increase in the production of goods and services, which is measured among others through the Gross Domestic Product (GDP) at the national level and the Gross Regional Domestic Product (GDP) at the regional level. is an integral part of the unitary state of Indonesia.

According to Soeparmoko (2002) regional economic development is a process where local governments and communities manage existing resources, by establishing a partnership pattern between local governments and the private sector for job creation and can stimulate economic growth in the area concerned. The success of regional economic development is largely determined by development policies that are based on efforts to increase economic growth that can create jobs optimally in terms of quantity, productivity, and efficiency. In determining policies, both internal conditions and external developments must be considered. The difference between internal and external conditions is only in area coverage, where internal conditions cover regions/regions, while external conditions cover national areas. Regional economic development involves multi-sector and development actors, so cooperation and coordination between all interested parties are needed.

In addition to the above, the availability of manpower is also very much needed to support development, with the availability of sufficient manpower, the development plan can be implemented more quickly. Manpower is the most important resource in this development process, because of the abundance of labor production factors, economic activity will be faster and able to compete so as to have an impact on better economic growth. Vice versa, without sufficient manpower, economic activity will hamper economic growth.

Labor factor is important in economic development. Assuming the growth of labor is determined exogenously in economic growth, Solow said that when the capital stock grows at a growth rate that is faster than the growth of labor, the amount of additional capital created by each workforce will increase. Because this increase in capital is used by every worker, the marginal product of capital will decrease (Solow, 1956). This study aims to analyze labor conditions in North Kalimantan Province in 2018-2020. Furthermore, the results of this analysis can be used as a reference in determining policies to overcome problems that arise in terms of employment. Some indicators of employment conditions are LFPR (Labor Force Participation Rate), EPR (Employment to Population Ratio), TPT (Open Unemployment Rate), and Underemployment Rate. LFPR is the percentage of the population aged 15 years and over who are in the workforce (Sirusa BPS, 2020). The EPR or the ratio of the labor force to the population measures the ratio of employment opportunities to the working age population (BPS 2020). The open unemployment rate is the percentage of the number of unemployed to the total labor force. (Sirusa BPS, 2020). Underemployed workers are those who work under normal working hours (less than 35 hours a week) and are still looking for work or are still willing to accept work (Sirusa BPS, 2020).

North Kalimantan Province only has four regencies and one city, namely Malinau Regency, Bulungan Regency, Regency, Tana Tidung, Nunukan Regency, and Tarakan City. North Kalimantan has an area of 71,827 km² with a population of 713,622 people (BPS, 2022). North Kalimantan Province has various corporate sectors that utilize existing natural resources. Therefore, it is not surprising that North Kalimantan has a large number of job opportunities. Labor force participation in regencies tend higher than in cities. Besides being influenced by a smaller...
population, the location of these natural resources is also found in regencies compared to cities. City is filled with employee status because there are many agencies and also Tarakan City is the capital city of North Kalimantan Province.

![Map of North Kalimantan Province](image.png)

Fig. 1. Map of Study Area.
Source: Data processing

North Kalimantan province has not yet fully experienced urbanization, even though it still has inland tribes. In addition, the natural resources in North Kalimantan are still maintained and have the abundant potential for forestry, marine products, mineral resources, agriculture, and plantations. So that it will have an impact on the opening of industrial employment opportunities for the local community which will greatly help the income and level of welfare of the area. However, welfare of course depends on the level of education and age. This is because the position in a position is influenced by it. Workers who have a high level of education will certainly get more welfare than workers who only graduate from junior high school or high school. This of course will have an impact on the unemployment rate in the area as well. Therefore, the influence and internal and external factors of the workforce will affect the welfare of the workforce.

2 Method

The data used in the analysis of employment indicators of North Kalimantan Province is derived from employment data from the provincial BPS and the BPS of each district. In addition, the data used is taken from the National Labor Force Survey (Sakernas) and the State of the North Kalimantan Labor Force in 2018-2020. The reason for selecting the time point between 2018-2020 is the availability of complete data at that point of the year and data with the latest updates.

Data collection was carried out by studying literature such as reading and recording data obtained from various related agencies and related to research problems. Supporting literature is also used to strengthen the interpretation of data and the results of data analysis such as government articles, journals, books, or research reports that have relevant topics.

2.1 Labour Force Participation Rate Analysis (LFPR)

Analysis of the Labour Force Participation Rate (LFPR) was carried out based on age, place of residence, gender, education level, and district/city in North Kalimantan using the formula:

\[
LFPR = \frac{a}{b} \times 100\%
\]

where:
- \( a \) = number of labour force
- \( b \) = population aged 15 years and over

2.2 Employment to population ratio analysis (EPR)

Employment to Population Ratio analysis was carried out based on age, place of residence, gender, education level, and district/city in North Kalimantan using the formula:

\[
EPR(%) = \frac{a}{b} \times 100
\]

where:
- \( a \) = total number of employed people
- \( b \) = total working-age population

2.3 Open unemployment rate analysis (TPT)

The analysis of the open unemployment rate was carried out based on age, place of residence, gender, education level, and district/city in North Kalimantan using the formula:

\[
TPT = \frac{PP}{PAK} \times 100\%
\]

where:
- \( PP \) = total unemployment
- \( PAK \) = labor force population

2.4 Underemployment rate analysis

The Underemployment Rate analysis was conducted based on age, place of residence, gender, education level and district/city in North Kalimantan using the formula:

\[
TSP = \frac{PBJK<35}{PB} \times 100\%
\]

where:
- \( TSP \): The Underemployment Rate
- \( PBJK<35 \): Amount of the Underemployment
- \( PB \): number of working population
3 Result and discussion

3.1 Labor force participation rate in North Kalimantan Province 2018-2020

The labor force is the number of workers in the economy at a certain time (Sukirno, 2005). The labor force itself has groups in the form of working and unemployed. However, in this analysis, we will discuss more about the working group. One way to see the percentage of the workforce is from the Labor Force Participation Rate (LFPR). LFPR is the percentage of the workforce to the number of working age population (BPS, 2020). LFPR is one of the determining factors for the amount of economic output, the greater the output, the greater the income generated in an area (Al Badry, 2019). The LFPR can be classified into characteristics according to age groups which include gender groups and characteristics according to education level.

![Graph of Percentage of Population Age 15 Years by Age Group (left) and LFPR by Regional Classification (right) in North Kalimantan Province in 2018-2020. Source: BPS State of the Labor Force in North Kalimantan Province](image)

Fig. 2. Graph of Percentage of Population Age 15 Years by Age Group (left) and LFPR by Regional Classification (right) in North Kalimantan Province in 2018-2020. Source: BPS State of the Labor Force in North Kalimantan Province

The graph (Figure 2) shows that the 25-54 age group is the highest in the percentage of the working population. This is due to the proportion of the population aged 25-54 being higher than other ages. In addition, the high age indicates the high number of people who are working at an adequate age. In LFPR by village and city, the graph (Figure 2) shows that the LFPR rate at the rural level is quite high compared to urban areas. This is because the population in Tarakan City is not comparable to the population in other districts in North Kalimantan Province.

![Graph of Percentage of Population aged 15 years and over who work by Employment Status Year 2018-2020. Source: BPS State of the Labor Force in North Kalimantan Province](image)

Fig. 4. Percentage of population aged 15 years and over who work by Employment Status Year 2018-2020. Source: BPS State of the Labor Force in North Kalimantan Province

There is also the status of work that is undertaken and becomes dominant, namely the status of work in the form of labor/employee/employees. The number of casual workers in the agricultural sector looks quite low compared to workers/employees/employees. Meanwhile, the number of rural employment age groups is higher than that of urban areas. This is due to the good growth of the industrial sector, which is currently massive, especially since the president is currently implementing the Indonesian Green Industrial Estate (KIHI) project. Apart from these projects, there are also very large mineral and coal mining companies in the province. Thus, employment absorption will be much needed in the industrial sector. Therefore, the agricultural sector has a low
percentage compared to workers/employees/employees.

**Fig. 5.** Labor Force Participation Rate (LFPR) By Education Level 2018-2020 North Kalimantan Province. Source: BPS State of the Labor Force in North Kalimantan Province

The highest LFPR in North Kalimantan Province is in universities. Then, the education level is SMA/SMK, then SD and below, and the lowest is SMP. This means that the highest education completed by the highest working age population is university. Thus, the existing human resources in the province are of good quality. In addition, it is also influenced by the number of industries that further educate their employees to serve the industry. This is evidenced by the high number of jobs as laborers/employees/employees.

**Fig. 6.** Labor Force Participation Rate (LFPR) By District/City Years 2018-2020 North Kalimantan Province. Source: BPS State of the Labor Force in North Kalimantan Province

In 2018-2020 the cities of Tarakan and Tana Tidung experienced an increase in LFPR. Meanwhile, the districts of Malinau, Nunukan, and Bulungan experienced a decline from 2018-2020. The district that experienced a decline seems to have quite a lot of mineral and coal mining companies, especially in Bulungan Regency. This decline could be due to the smaller number of the labor force compared to the working age population. In addition, the decline occurred because the number of working age population continued to pursue higher education. Especially for men to get a more strategic position in the world of work. Meanwhile, in Tana Tidung Regency and Tarakan City, there was an increase due to the higher number of labor force compared to the working age population. Moreover, the district is adjacent to Tarakan City as the capital of North Kalimantan Province. The city of Tarakan has a lower LFPR because the employment industry is mostly located in the district than in the city. One of the reasons for the increase in LFPR in Tarakan City is the establishment of Tarakan City Regional Regulation No. 9 of 2019 concerning Regional Public Companies in Tarakan Various Businesses. Thus, the existence of these regulations can facilitate the management of packaging houses, import exports, and transportation services.

However, the average LFPR in North Kalimantan Province in 2020 is 66.51. Especially in the district which has a large number of coal and mineral industries, the initial LFPR was at 75.04 in Malinau Regency. This drastic decrease was due to the COVID-19 pandemic that entered Indonesia on February 14, 2020. The crisis due to the COVID-19 pandemic has the potential to further suppress the level of work participation, especially for men who have a high LFPR rate in the male sex who mostly work in the industrial sector. The industry has the status of a worker/employee/employee. Most of these workers were immediately laid off and some were for staff reduction because the income did not cover the operations of the industry. In addition, female workers will be lower in the labor force participation rate. This can happen because the proportion of women who work in other service sectors and providers of accommodation, and food and beverages are greater than men, so the opportunity for women to be laid off or laid off is also quite large (Cameron, 2018).

### 3.2. Employment to population ratio analysis

EPR, which stands for Employment to Population Ratio, is the proportion of the working age population in an area who is working to the working age population (Agustini, 2017). The higher the EPR value indicates that more and more people work in the area, whereas if the EPR value is low, most of the population in the area does not work because they are unemployed or not included in the workforce. This North Kalimantan Province EPR analysis was carried out based on the time trend between 2018 and 2020, the characteristics of the age group and the highest education completed. Analysis by district or city in North Kalimantan Province was also carried out to determine labor conditions in each Regency/City.
The calculation of the EPR of North Kalimantan Province by district or city shows a graph as shown in Figure 7. The figure shows that the EPR of each district or city in North Kalimantan Province fluctuates every year. Malinau Regency had the highest EPR in 2018 with a value of 72.07% but continues to experience a relatively significant decline yearly. The decrease in EPR was caused by a reduction in the workforce in Malinau Regency. The number of people of working age has increased in Malinau district, but the workforce has decreased, so the number of working people has also decreased (BPS, 2020). The decline in EPR also occurred in Nunukan District, although the fall was not so much. In contrast to Malinau Regency and Nunukan Regency, Tana Tidung Regency and Tarakan City experience an increase in EPR yearly. The rise in EPR, which is not so high when compared to the increase in EPR in other districts, causes the total EPR of North Kalimantan to decrease.

North Kalimantan Province's EPR based on age group shows that in 2018, 2019, and 2020 there is not too much difference in EPR levels. The lowest EPR is always in the 15-19 age group, with an EPR of 22.94%, 17.95%, and 24.73%. This happens because, at that age, the population is still of school age, so many people do not work. EPR experienced the highest increase in the age group 20-24 with a value of 56.85%, 59.13%, and 53.66% because in this age group, the population has graduated from school, and many residents are ready to work and have the awareness to work. In 2018 and 2019, the highest EPR was in the 45-49 age group with a value of 80.56% and 80.65%, while in 2020, the highest EPR level was in the 40-44 age group with a value of 81.47%.

The highest EPR is in the 40-49 age group because, at this age, the population has a physical condition that is still able to work and at this age is a period where they have to work to provide for their family and can no longer depend on others, especially parents. As age increases, the EPR value also decreases because every increase in age after 50 years will reduce a person's physical ability to work. In the time trend between 2018 and 2020, there was a decrease in EPR in the 25-29 and 30-34 age groups. This proves the statement submitted by BPS (2020) regarding the age group most affected by Covid-19. This age group is the most affected because, during the Covid-19 pandemic, this age group has just entered the world of work, is inexperienced, and has not become a permanent worker. Hence, it becomes a target for layoffs or unable to find jobs.

The EPR value of North Kalimantan Province in 2018, 2019, and 2020 based on the last completed education shows that the highest EPR is in the population with the last education graduated from Higher Education, which is 86.77%; 86.92%; and 84.83%. This proves that the education level greatly affects the population's ability to get a job. Higher education will create a quality workforce and can find jobs more efficiently. According to Jayasman (2003), education level is very influential on work motivation, so the higher a person's level of education will increase skills, knowledge, and changes in attitude and work motivation will increase.

The EPR of the population with junior high school graduates became the lowest EPR with a value of less than 50%, namely 48.79%, 44.76%, and 47.81%. The EPR of the population who graduated from Junior
High School was lower than the EPR of those who graduated from Elementary School because most of the junior high school graduates continued their education in high school so that they did not work and reducing the percentage of EPR scores. The low EPR among people who graduated from Jr HI School and Elementary School and below proves that the level of education will affect the opportunity to be accepted for work. Residents with the latest Jr HI School graduates and down tend to have no special skills, making it difficult to find jobs. People with low education tend not to work or work as laborers, fishers or farming with incomes that are not as much as people with higher education. The EPR value of the population graduating from Jr HI School, which is less than 50%, indicates that the rest of the working-age population who graduate from Jr HI School are unemployed or not in the labor force. This is very unfortunate because it will affect the level of the regional economy.

3.3. Open unemployment rate analysis

![TPT in North Kalimantan Province 2018-2020](image)

**Fig. 10.** Percentage of Open Unemployment Rate (TPT) by District/City in North Kalimantan Province in 2018-2020. Source: BPS National Labor Force Survey, processed.

The open unemployment rate (TPT) is the percentage of the total unemployed in the total labor force. In general, TPT in North Kalimantan Province has decreased from 2018 to 2020. This can be seen in Figure 10, where TPT in North Kalimantan changed from 5.11% to 4.49%, then slightly increased to 4.97%. Changes in TPT trends are quite diverse when viewed by Regency/City. Tarakan City has a higher TPT value than other districts, even compared to North Kalimantan Province with 5.89%, 5.3%, and 5.86%. Nunukan Regency is the area that has the lowest TPT value compared to other regencies/cities, namely 4.77%, 3.76%, and 4.14%. The trend of changing TPT numbers for each Regency/City in North Kalimantan has the exact trend change: a decrease from 2018 to 2019, then an increase from 2019 to 2020. The difference between Regencies/Cities is how significant the rise in TPT is from 2019 to 2020.

A significant increase in TPT from 2019 to 2020 was made possible due to the pandemic disaster. This was acknowledged by the Head of BPS Kaltara, Eko Marsoro, as quoted from Koran Kaltara (2020). The head of BPS Kaltara explained that there was an increase in the number of working-age 15 years and over in line with the overall population growth. Still, the absorption of labor experienced a decline due to several things. The COVID-19 pandemic has caused several economic sectors to experience a decrease in the workforce. According to BPS Kaltara quoted from Koran Kaltara (2020), the workforce affected by the pandemic was, among others, due to the termination of employment of as many as 3,160 people of working age, a shift in the workforce group to a non-work force group of 1,141 people due to being economically inactive, the existence of temporary conditions for not working until the pandemic conditions recover as many as 4,267 people, and 62,887 people being affected by a reduction in working hours because the business field is not fully operational.

Tarakan City has a TPT trend that fluctuates from year to year. The decline in the value of TPT was quite significant from 2018 to 2019, but there was an increase again in 2020, although it was not higher than in 2018. The most significant rise in TPT from 2019 to 2020 was in the City of Tarakan. This is because the highest population in North Kalimantan Province is in Tarakan City (BPS Kaltara, 2021). In addition, Tarakan City has a much higher economic activity than other Regencies/Cities. This is supported by the fact that Tarakan City contributes 43.80% to the economy in North Kalimantan (Bappenas Kaltara, 2015). The high economic activity in Tarakan City is the cause of Tarakan City's vulnerability to having more TPT than other Regencies/Cities. This is because many sectors/business fields are also affected. According to Septianto's research (2016), there is a strong positive relationship between open unemployment and poverty in Tarakan City. This explains that the high increase in TPT in Tarakan City causes a decrease in community prosperity.

Nunukan Regency has the lowest TPT rate compared to other districts/cities in North Kalimantan Province. The increase in open unemployment also did not occur significantly in 2020. According to the Head of BPS Nunukan, Agung Nugroho, as quoted from KabarNunukan.com (2021), there was social assistance by economic activity, which was still high in the mining and oil palm plantation sectors in Nunukan Regency. The mining sector has an economic contribution of 46% and the oil palm plantation sector of 24% (KabarNunukan.com, 2021). The prices of these two commodities are also high and affect the trade balance surplus in Nunukan Regency. Therefore, the pandemic disaster did not significantly
affect the increase in TPT in Nunukan Regency in 2020 because the condition of the workforce in the economic sector was not disturbed. The Central Government and the Nunukan Regency Government can assist and maximize the role of MSMEs so that the economy is maintained and the TPT number does not increase again in the previous year.

Fig. 11. Percentage of Open Unemployment Rate (TPT) by Gender (left) and Urban/Rural Areas (right) in North Kalimantan Province in 2018-2020.


North Kalimantan's TPT figures can also be seen by gender, as shown in Figure 11. The number of male and female TPT has a different trend change from 2018 to 2020. Male TPT experienced a drastic decline in 2019 from 5.25% to 3.72%. TPT for women experienced a drastic increase in 2019 from 5.25% to 5.86%, which was higher than TPT for men in that year. The graph on the right in Figure 11 shows the changing trend of TPT in rural and urban areas. In 2018, people living in rural areas had a higher TPT than urban areas. In 2019 and 2020, urban residents have a higher TPT than rural residents.

According to research conducted by Pangesti (2018), the Open Unemployment Rate (TPT) in North Kalimantan Province can be caused by several variables that have a significant influence, namely the average length of schooling, LFPR, percentage of poor people, economic growth rate, and the number of medium to big-sized industries. The Open Unemployment Rate has a straight comparison with poverty which is due to the low level of education of the population in North Kalimantan Province (Pangesti, 2018). The low level of education of the population in North Kalimantan can be seen in the graph in Figure 11 that the female population who dropped out of school or did not go to school any more than the men in 2020. This is in line with the graph of TPT by sex in Figure 11 that the average female slightly higher than men from 2019 to 2020.


Source: BPS National Socio-Economic Survey March, processed.

The population with the highest number of unemployed is found in the population with the highest education in SMA/SMK/MA. This is because people who already have a better education have more and more demands, making it more difficult to find work. The high demands of employment make it difficult for workers from SMA/SMK/MA graduates to be absorbed. In addition, other factors can also be because most of the population who graduated from SD/MI are still able to continue their education. Similarly, the population graduated from SMP/MTS, which is different from the population of SMA/SMK/MA graduates who will continue their education in college. The inhibiting factors for the population to continue their education to higher education are economic factors and socio-cultural factors. The unemployment rate, in general, has increased from 2019 to 2020, although the value is not higher than in 2018.
3.4. Underemployment rate analysis

Underemployment employees are people of productive age who work less than the average regular working time (less than 35 hours a week) and still looking for and accepting other job vacancies (sirusa.bps.go.id). Their existence can describe the economy’s ability to provide jobs based on skills, experiences, and other readiness in labor. Underemployment rate can provide information on quality, productivity, and stage of job vacancies, mainly in countries with low open unemployment rates. Furthermore, underemployed is divided into two, involuntary underemployed and voluntarily underemployed. Involuntary underemployed are people in their productive age who work less than 35 hours in a week, not of their own volition, and still trying to find another job vacancy or working on their own business.

On the other hand, voluntary underemployed are people of productive age who work less than 35 hours in a week of their volition and currently not looking for any job or building their own business. (BPS in Kinanti, 2015). However, the voluntary underemployment rate is not qualified enough anymore to be used as information about the quality and productivity of the employee.

Other than the profit produced, how long the employee has been working can be the index of the employee’s productivity. Productivity is considered having advancement if the employees work longer than the regular time in a week because the longer they work, the more they produce with the assumption of no changes in other factors. The limit of the regular working hours in a week is 35 hours. If the working hours are less than 35 hours a week, they are considered low productivity (BPS, 2020). The underemployment rate can also be classified into other classes: visible underemployment and invisible underemployment.

Visible underemployed are those working part-time or shorter than the regular working hours. While invisible underemployment work meets the regular working hours, their work could not fulfill their needs because the income is too low or the job could not use to develop their skills (Eridiana, 2006). The underemployment rate in North Kalimantan province was analyzed from 2015-2016. The limitation of data publication caused the underemployment rate could not be analyzed in more detail according to the characteristic of the workforce, such as education background level, income level, area of residence, sex, and many more.

Based on figure 14, the underemployment rate in North Kalimantan has a quite fluctuating trend of change. The lowest underemployment rate was in 2016 at 4.32%. The most significant changes occurred from 2016 until 2017, which increased by 2.92%. The graphs continue to rise until 2018 to 7.68%. This growth possibly happened because the employment vacancies that still limited and the wages tend to be low; due to that matter, many workforces look for another side job to add more income. The underemployment rate fell in 2019 by 1.24% and became 6.44%. However, in 2020, the rate rose significantly to 8.33%.

![Graph of North Kalimantan Underemployment Rate 2015-2021](image)

Fig. 14. Underemployment Rate in North Kalimantan 2015—2021. Source: bps.go.id, processed.

The growth of 1.89% in 2020 is one of the damages of the Covid-19 pandemic. Many companies and factories reduced the working hours of their employees to cut off the production costs, and the employees tried to find other jobs. Then, in 2021, the underemployment rate declined by 1.17% and reached 7.16%. The decline that occurred could be made possible by several things, for example, the workforce that chooses to continue their study or build their own business, so they do not have working hours less than 35 hours and do not try to look for another job.

4 Conclusion

Labor Force Participation Rate (LFPR) in North Kalimantan Province is the dominant age group of 25-54 years old. The highest LFPR is at the college level, the employment status as the employee who mostly lives in the rural areas, and male-dominated the LFPR
based on the sex difference. The significant fall of LFPR in areas such as Nunukan, Malinau, and Bulungan districts was caused by people of productive age that continue their studies to a higher level and one of the losses of the Covid-19 pandemic. Therefore, there is a chance of a woman's workforce participation crisis.

Employment to Population Ratio (EPR) in North Kalimantan based on district or city experienced a further decline in each district or city. With the highest decline in Malinau and Nunukan districts. Other districts and cities experienced a few declines, so the total EPR in North Kalimantan tends to remain decreased. Based on age groups, the value of EPR shows that the lowest EPR is in the age of 15-19 years old because those are ages where they tend to still go to school. Then, the highest rise in the following age group is from 20-24 years old because they will finish their higher education and be ready to look for a job at these ages. The highest EPR is between the ages of 40 and 49, then gradually decreases with age. Based on educational background, the highest EPR was achieved by undergraduates compared to others. Education background affects the EPR because the level of education affects the motivation to work and the quality of human resources to be accepted for work. EPR of junior high school is the lowest because they have entered productive age but mostly decided to continue their study to senior high. Consequently, it reduces the EPR value percentage.

Open Unemployment Rate (TPT) in North Kalimantan generally has similar trend changes from 2018 to 2020, decreasing from 2018 to 2019 and then increasing from 2019 to 2020. TPT growth from 2019 to 2020 in each district or city was caused by the Covid-19 pandemic that weakened the economy and resulted in significant unemployment. Tarakan city has the highest TPT score from 2018 to 2020 compared to other districts or cities. In Tarakan City, due to the high economic activity, the competition is high, and the population is higher than in other districts or cities. The central or province-level government can equate the level of economic activity all around the district or city, so the population distribution is even, and Tarakan City does not accommodate most of the unemployment in North Kalimantan Province. There is a connection between the educational background and unemployment. The government could do a fair distribution of the quality of education around the district or city and provide college scholarships for senior high graduates.

The underemployment rate in North Kalimantan Province has a changing trend that fluctuates. The lowest underemployment was in 2016, which was 4.32%. Meanwhile, the highest underemployment was in 2020, which was 8.33%. The rise of underemployment that happened throughout 2020 is one of the actual losses of the Covid-19 pandemic. On the other hand, the drop in underemployment can be caused by many things, such as the underemployment employee deciding to continue their education or build their own business.

References


