Testing of the Phillips Curve in Indonesia

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Article Info	Abstract
	This study aims to determine how the results of Phillips theory testing in 34 provinces in Indonesia based on the main sectors contributing to the GRDP. The analytical method used in this study is Product Moment correlation analysis to determine the relationship between the inflation rate variable and the unemployment rate variable. The data used in this study are data on open unemployment and inflation rates taken in 34 provinces in Indonesia from 2014-2018. The results of this study indicate there is no Phillips curve pattern in 34 provinces in Indonesia. The inflation rate variable and the unemployment rate variable in 34 provinces in Indonesia based on the main sectors contributing to the GRDP have a positive but very weak relationship with a correlation value of 0.1089. The problem of price volatility (inflation) contributes, although not significantly to the emergence of the unemployment problem. Government policies are needed to control inflation and reduce unemployment rates such as fuel subsidies, corporate tax reductions, export tax reductions, and control of raw material prices considering that the results of this study indicate that rising inflation will be followed by an increase in unemployment.

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INTRODUCTION

Unemployment and inflation are two of the three main problems in macroeconomic indicators. Both of these problems are also diseases that certainly exist and are experienced by every country, especially developing countries. So it is not surprising that these two problems are often used as political commodities of government. because the two problems actually become an indicator of the success of a government. Furthermore Rahardja and Manurung (2008: 165) explain the category of government that is considered a failure if the government fails to overcome the problem of unemployment and inflation. Therefore, each government will always control inflation and unemployment.

Based on data from Global Economic Data, Indicators, Charts and Forecasts (CEIC) Indonesia's unemployment rate in 2018 is still the second highest when compared to eight other countries in the Southeast Asian region. Based on Figure 1 it can

be seen that the State of Indonesia is still inferior to seven other countries in Southeast Asia in an effort to reduce the unemployment rate. While the first position is occupied by the State of Brunei Darussalam as the country with the highest unemployment rate in Southeast Asia in 2018.High levels of unemployment have several adverse effects on economic activity as well as on individuals or society in general.

The impact of unemployment on economic activities, among others; unemployment causes the maximum level of prosperity that may not be achieved, unemployment causes reduced government tax revenue, unemployment does not promote economic growth. As for the individual or society itself, unemployment has several impacts including; unemployment causes people to lose their livelihoods and income, unemployment can cause loss of skills, and unemployment can cause social and political instability (Sukirno,2000: 514).
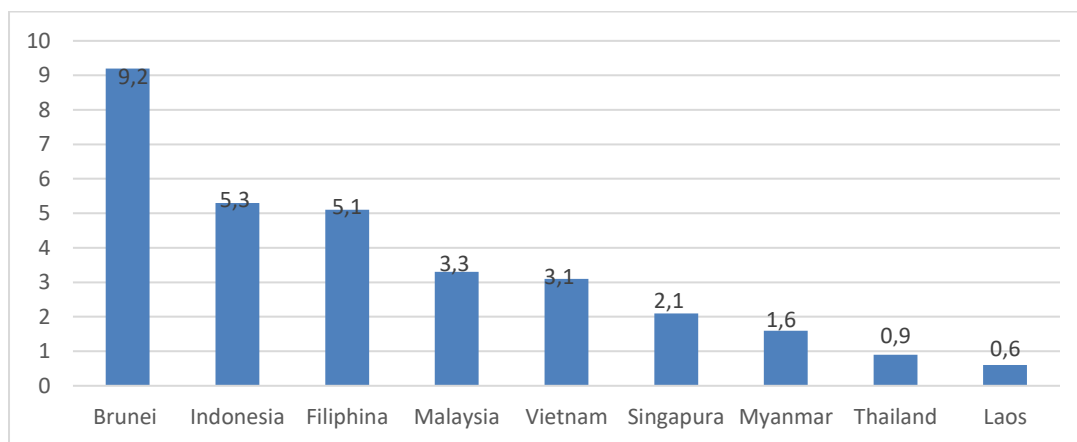

Figure 1. ASEAN countries unemployment rate data, 2018 (%)
Source: Global Economic Data, Indicators, Charts and Forecasts (CEIC)

Same thing with the unemployment data above, the high inflation rate in Indonesia also ranks second with an inflation rate of 3.3% in the July 2019 period. This figure is below Myanmar which ranks first with an inflation rate of 10.9%. Although the inflation rate in Indonesia is relatively mild, the figure is still above the inflation rates in other countries in Southeast Asia such as; Laos, Vietnam, the Philippines, Cambodia, Malayasia, Thailand,

Singapore and Brunei Darussalam. Even so, the relatively low inflation rate means that people's purchasing power can still be maintained well.

The high level of inflation has several impacts including; a decrease in the level of welfare of the people through a decrease in people's purchasing power, worsening the distribution of income between fixed income groups and owners of fixed assets. In addition, inflation also disrupts economic

stability (Rahardja and Manurung, 2008: 169). Based on the above phenomena, it is felt that a more optimal government effort is needed to maintain the stability of the inflation rate and decrease the unemployment rate in Indonesia. However, efforts to control these two economic problems turn out to be conflicting in nature. This is explained by a phenomenon which states that at times a period of economic growth runs rapidly, thereby reducing the problem of unemployment but must face the problem of inflation (Mankiw, 2006: 375). In other words the government experienced a trade-off in dealing with these two problems. This phenomenon is further known as the "Phillips curve theory".
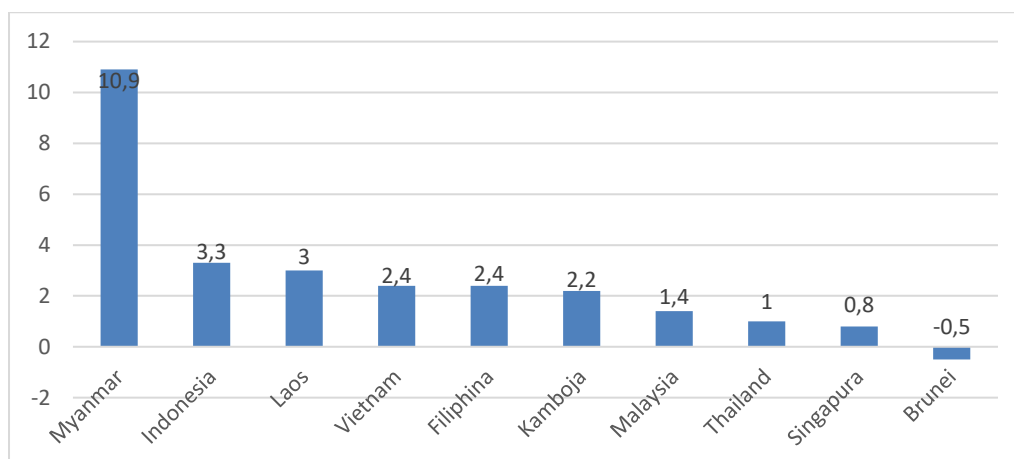

Figure 2. Data on the inflation rate of ASEAN countries for the period July 2019 (%)
Source : Global Economic Data, Indicators, Charts and Forecasts (CEIC)

The Phillips curve is a curve that illustrates the trade-off between inflation and unemployment. According to this theory, efforts to reduce the unemployment rate by the government will be faced with the problem of higher inflation rates. The Phillips curve proves that between price stability and high employment it is not possible to occur simultaneously because there are trade-offs. Trade-offs occur because when the unemployment rate is high the workers (laborers) do not have a high bargaining power resulting in costs (wages) that will paid by entrepreneurs to be low so that it can reduce inflation because there is no increase in product prices made by the company. Conversely, when the unemployment rate is low, it means that the bargaining position of workers (laborers) becomes higher, so employers have to pay higher wage or salary costs, the increase in wages will increase the price of the company's products.

Phillips curve theory is used as a reference for economists in determining economic policies in a country. But the results of previous studies show that it is incompatible with the theory / Phillips curve. The results of research conducted by Putra (2019) showed that in Indonesia, Malaysia, and the Philippines there was no trade-off between inflation and unemployment. Then the results of this study are also supported by research from Hamidah (2010) which also shows that the trade-off between inflation and unemployment in Indonesia proved to be non-existent. Research conducted by Rahmat (2018), Hadiyan (2018), and Maichal (2012) also shows that in Indonesia there is no trade-off between inflation and unemployment.

One of the economic sectors that has a major role in employment and reducing unemployment is the industrial and service sectors. This is as expressed in the theory of economic structural change which states that there is a shift in economic activity of the community from a simple agricultural sector towards a more modern economy and more focused on non-primary sectors (Tambunan, 2001: 59). Furthermore, the process of moving workers from the agricultural sector to industry gradually

and the growth of employment opportunities in the modern sector can lead to an increase in output in the modern sector. This causes the growth rate of the industrial sector will increase (Todaro, 1991: 83). Along with the times, the primary / agricultural sector is now not a major sector in their economy, but has experienced a change with the transition to the secondary / industrial and tertiary / service sectors (Kuznets, in Setiawan 2016).

The contribution of the industrial sector to employment is supported by BPS data which shows the percentage of labor in the agricultural sector from 2011 to 2018 experiencing a decline. While the percentage of the workforce of the three other business sectors tends to increase. Specifically the manufacturing sector in the manufacturing industry recorded in 2016 was able to absorb a workforce of 15.97 million people or an increase of 2.8 percent from the previous year which only absorbed a workforce of 15.54 million people. Furthermore, until 2018 the employment rate of the manufacturing sector also continues to increase by 18.25 million people or an increase of 3.9 percent from the previous year which only absorbed 17.56 million people. Through these data it can be seen that the transition of labor from what used to rely solely on the agricultural sector has now shifted to the industrial sector. People prefer to work in the industrial sector one of them for reasons of higher salaries. Not only in terms of employment, the contribution of the industrial sector to the formation of GDP (Gross Domestic Product) also increased even the industrial sector occupies the first position as the largest economic contributor to GDP. Based on BPS data during 2010-2018 there was an increase in the contribution of the industrial sector to GDP by 44,98 percent with an average increase every year is 4,76 percent. Although the increase in the contribution of the industrial sector is still below the increase in the contribution of the wholesale and retail trade sector (by 49,03 percent), but the value is still above the value of the increase in the contribution of other sectors, wherein the increase in the contribution of the agriculture, forestry and fisheries sectors is only 36, 70 percent, and an increase in the contribution of the mining and quarrying sector which only amounted to 10,91 percent.

The industrial sector has now become the main contributor to Gross Regional Domestoc Product (GRDP) in several Provinces. Eleven provinces in Indonesia are recorded as the industrial sector - their services are in the first position as contributors to the province's Gross Regional Domestoc Product (GRDP). In addition, there are also a number of provinces that are recorded as non-industrial sectors - their services (agriculture, forestry and fisheries, as well as the mining and quarrying sector) are still the contributors to the province's Gross Regional Domestic Product (GRDP). Riau Province, Bangka Belitung Islands, Riau Islands, West Java, Central Java, DI Yogyakarta, East Java, Banten, West Papua, DKI Jakarta and Bali are the provinces in which the industrial sector is the largest contributor to the province's Gross Regional Domestic Product (GRDP). While other provinces, the non-industrial sector is still the main sector contributing to the Gross Regional Domestic Product (GRDP).

Based on data on increased employment in the industrial sector which continues to increase every year while employment in the primary sector (non-industrial) which continues to decline then this will have an impact on the differences in the number of unemployed in the two sectors. Then if it is associated with the Phillips curve which explains the negative relationship between inflation and unemployment, it is assumed there will be differences in the shape of the Phillips curve. Industrial sector provinces which are considered to absorb more labor will produce a different form of the Phillips curve when compared to primary sector provinces which are considered to not absorb much labor.The comparison of the Phillips curve in the two categories of provinces can be one of the references and benchmarks for policy makers in the two provinces to formulate an appropriate policy in order to reduce the unemployment rate while maintaining price stability. Therefore this study aims to test the Phillips curve theory in 34 provinces in Indonesia based on the main sectors contributing to the GRDP.

RESEARCH METHOD

This research is a quantitative research with an econometrics approach that is supported by a

regression analysis tool. Data used in this study are secondary data. Secondary data used in this study were sourced from government publications (BPS Indonesia). Data on open unemployment rates, general inflation rates and key sectors contributing to GDP are obtained from BPS Publications (Statistics Indonesia) by taking panels in 34 provinces for five periods from 2014 - 2018. Data analysis techniques in this study use correlation analysis (coefficient test correlation) to determine the degree of relationship between variables in the study (Sugiyono, 2016: 228). Correlation analysis (correlation coefficient test) in this study uses the Product Moment correlation formula as follows (Sugiyono, 2016: 228):

$$r_{xy} = \frac{n \sum XY - (\sum x)\,(\sum Y)}{\sqrt{(n \sum X^2 - (\sum X)^2)\,(n \sum Y^2 - (n \sum Y)^2)}} \quad \ldots\ldots\ldots(1)$$

Keterangan :
r_{xy} = Correlation coefficient
$\sum X$ = Number of Variables X (unemployment rate)
$\sum Y$ = Number of Variables Y (Inflation rate)
N = Amount of data

To identify the high and low correlation, the interpretation criteria are used as in the table below:

Table 1. Correlation Coefficient Intervals

Coefficient Intervals	Relationship Level
0,000-0,199	Very low
0,200-0,399	Low
0,400-0,599	Is
0,600-0,799	Strong
0,800-1,000	Very strong

Source : (Sugiyono, 2016 : 228)

Next to determine whether the correlation coefficient obtained can be used to generalize or represent the population, then the significance test of the t test is used. Significance test in this study aims to test the level of significance of the correlation between variable X with variable Y after the value of r is obtained, then substituted into the formula as follows (Nana Sudjana, 2001: 377):

$$t_{hitung} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \quad \ldots\ldots\ldots\ldots\ldots\ldots(2)$$

Keterangan :
t_{hitung} = Value of t- hitung
r = correlation coefficient value
n = Amount of data

Test criteria for one-party test with degrees of freedom (dk) = (n-2) at a significance level of 95% with the test criteria if t-count> t-table then the correlation between variables is significant while if t-count <t-table then the correlation between variables is not significant.

RESULTS AND DISCUSSION

Correlation analysis results and significance tests, to find out the direction and level of relationship between variables in this study, correlation analysis (correlation coefficient test) and significance test include correlation test and significance test in 34 provinces combined, correlation test and significance test in the province with the industrial sector as the main sector. pdrb contributor as well as the correlation test and significance test in provinces with non-industrial sectors (primary) as the main sectors contributing to the grdp. the results of the correlation test and significance test are as follows:

Table 2. Correlation Test Results and Significance Tests

Object of Calculation	Correlation coefficient	Significance (t-count)
Indonesian Province	0,1089	1,4198
(Provinces industrial sector the main contributor to GRDP)	0,0846	0,6202
Provinces (primary sector main contributor to GRDP)	0,1203	1,5586

Source: Research data processed, 2020

Based on the results of the correlation test and significance test it is known the correlation value between the open unemployment rate and the inflation rate (a combined case study of 34 provinces in Indonesia) of 0.1089 with a t-test of 1.4198. Furthermore, the correlation value between the open unemployment rate and the inflation rate (case studies in 11 provinces of the industrial sector) is 0.0846 with a count of 0.6202. While the correlation value between the open unemployment rate and the inflation rate (case studies in 23 primary sector provinces) is 0.1203 with a t-test of 1.5586.

Testing of the Phillips Curve in 34 Provinces of Indonesia, based on the calculation of the correlation using the Product Moment correlation formula produced a correlation value between the level of open unemployment with inflation rates in 34 Provinces of Indonesia amounted to 0.1089. The correlation value is in the coefficient interval between 0,000-0,199 which means that the relationship between the open unemployment rate variable and the inflation variable in 34 provinces in Indonesia is very low. Furthermore, the results of the significance of the correlation coefficient test produce a t-test value of 1.4198 less than t-table (1.65397), which means the relationship between these variables is not significant.

The results of this study are in accordance with the results of several previous studies conducted by Hamidah (2010), Hadiyan (2018), Maichal (2012), Rahmat (2018) and Putra (2019) who all revealed the results that there was no Phillips theory phenomenon in Indonesia. The results of this study help to reconfirm that when viewed in a panel across all Indonesian provinces in the 2014-2018 period the theory and phenomena of the Phillips curve also do not exist and apply in Indonesia.

The results of this study indicate that the inflation rate and unemployment rate variables have a positive relationship, although not significant. These results reject the Phillips theory used in this study. This is because Friedman (1958) in Michal (2012) argues that "The trade-off phenomenon shown by the Phillips curve will only occur temporarily (short term) and will never occur permanently (long term), because in the short term it still Sticky prices apply, whereas in the long run flexible prices apply. Likewise, the unemployment rate will somehow return to its natural rate. In other words, the unemployment rate will somehow return to its natural rate, so that the relationship between inflation and unemployment will be positive. This response is also known as Natural Rate Hypothesis or Accelerationist Hypothesis (Samuelson, 2004).

The absence of the existence of the Phillips curve in Indonesia also occurs because the inflation rate in Indonesia in general is more caused by rising production costs not caused by rising demand as explained in the Phillips curve theory. Rising production costs include rising fuel prices, electricity tariffs or other production costs (cost-push inflation). In addition to the issue of fuel prices and electricity tariffs, the lack of quantity and quality of infrastructure in Indonesia also causes a high cost economy, which is ultimately imposed on the selling price of production, and will cause inflation (Astuti, 2016). Increased production costs (Cost Push Inflation) will indirectly cause the price of materials to meet output will increase, so companies will reduce production costs for company efficiency, namely by reducing labor and replacing them with machines, such conditions mean companies must reduce their labor by laying off. In addition, a long-term positive relationship between inflation and unemployment can occur because of an expansionary government policy that causes production to rise and then cause unemployment to fall because companies recruit more workers. What happens next is that the profits of the company will rise which causes wages and incomes of workers to rise. After that with rising inflation, companies and workers will expect inflation and wages to increase (inflation expectations rise). When inflation is too high the government will carry out contractionary policies that cause production to decline and unemployment to rise. So that in the long run inflation is higher and the unemployment rate rises again.

Testing of the Phillips Curve in Both Different Province Categories, according to Simon Kuznets's theory of structural economic change, in economic development there is a transformation mechanism experienced by developing countries, which was initially subsistence and focused on the agricultural sector towards a more modern economic structure dominated by non-primary sectors. Simon Kuznets

revealed that the primary sector (agriculture) is now not the main sector in their economy, but has changed with the transition to the secondary (industrial) and tertiary (service) sectors. This causes a change in the percentage of the population working in various sectors and the rate of increase in production in the industrial sector is faster than the rate of increase in national production. The existence of the industrial and service sectors will cause the number of workers to be absorbed so that it will have an impact on reducing the unemployment rate.

Based on the calculation of the correlation using the Product Moment correlation formula produced a correlation value between the level of open unemployment with inflation rates in 11 Provinces with the Industrial Sector as the Main Sector Contributor to Indonesia's Gross Regional Domestic Product (GRDP) of 0.0846. The correlation value is in the coefficient interval between 0,000-0,199 which means that the relationship between the open unemployment rate variable and the inflation variable in the 11 Provinces is very low. Furthermore, the results of the significance of the correlation coefficient test produce a t-value of 0.6202 less than t-table (1.65397), which means the relationship between these variables is not significant.

The results of this study reveal that although the 11 provinces are included in the category of provinces with high industrialization, which is expected to have a lower unemployment rate, so based on the Phillips curve theory it will tend to have higher inflation rates, but in reality the existence of Phillips curves in the 11 industrial provinces cannot be proven . The results of this study indicate that the inflation rate and unemployment rate variables have a positive relationship, although not significant.

The absence of the existence of the Phillips curve is due to the level of inflation in Indonesia in general is more due to rising production costs not caused by increased demand as explained in the Phillips curve theory. Rising production costs include rising fuel prices, electricity tariffs or other production costs (cost-push inflation). Increased production costs (Cost Push Inflation) will indirectly cause the price of materials to meet output will increase, so companies whose base of industrial

activity in these 11 provinces will reduce production costs for company efficiency, namely by reducing labor and preferring to use more machine because it returns again that the production base of the company is capital intensive. Similar to the industrial sector provinces, the existence of the Phillips curve in 23 provinces where the main sectors contributing to the Gross Regional Domestic Product (GRDP) are the primary sector also cannot be proven. This can be proven through the calculation of correlation using the Product Moment formula of 0.1203. The correlation value is in the coefficient interval between 0,000-0,199 which means that the relationship between the open unemployment rate variable and the inflation variable in the 23 provinces is also very low. Furthermore, the results of the significance of the correlation coefficient test produce a t-value of 1.5586 less than t-table (1.65397), which means the relationship between these variables is not significant.

Through the results of this study it can be seen that the existence of the Phillips curve in both categories of the province cannot be found. Furthermore, the level of insignificant relationship between the unemployment rate variable and the inflation rate variable reveals that there are many other factors that can affect the unemployment rate more than the inflation rate. These factors include; level of community education, population, Regional Minimum Wage, poverty level, Human Development Index (HDI), level of use of production technology in the province and other variables. high population in the province will affect the high competition of labor in finding work which in turn will affect the unemployment rate in the province. This can be demonstrated through research data which reveals that most provinces with large populations have unemployment rates above the national average unemployment rate. The provinces include; Aceh, North Sumatra, West Sumatra, Riau, DKI Jakarta, West Java and Banten.

Another factor that also affects the unemployment rate is the level of use of production technology in a province, where when the level of use of production technology in a province is classified as high will cause a high unemployment rate this is because most of the production activities

in the province rely more on the use of machine technology than human labor. The provinces include Riau Province, Riau Islands Province, DKI Jakarta Province, West Java Province, Banten Province and West Papua Province. As a result, although these provinces are classified as provinces with high industrialization, the provinces have in fact failed to absorb the number of workers (unemployed) as expected.

Differences in the shape of the Phillips Curve, based on table 3 it can be seen that the shape of the Phillips curve in the primary sector province is the same as the shape of the Phillips curve in the industrial sector province, which has a positive direction of relationship. This proves that the existence of the Phillips curve theory in the two types of provinces is equally unproven. As a comparison, it can be seen that the constant value of the Phillips curve in the primary sector province is smaller than the value of the Phillips curve constant in the industrial-service sector province. This shows that the majority of provinces whose primary sectors are the main contributors to the Gross Regional Domestic Product (GRDP) have lower unemployment rates than the provinces whose industrial-service sectors are the main contributors to the Gross Regional Domestic Product (GRDP).
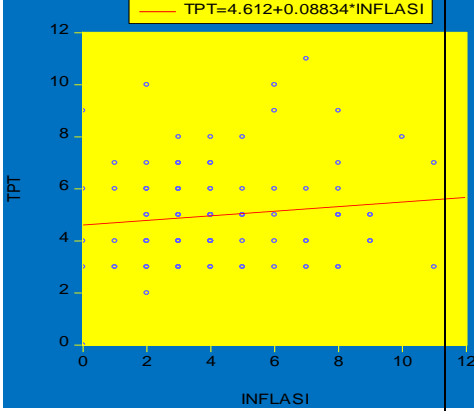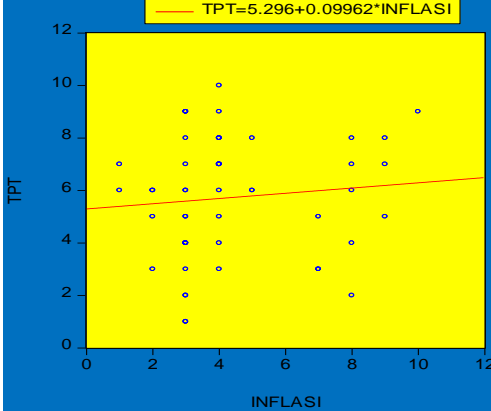
The results of this study are not in accordance with the theory of economic structural change put forward by Simon Kuznets. Simon Kuznet states that the industrial and service sectors will cause a large number of workers to be absorbed so that it will have an impact on reducing the unemployment rate. On the contrary, the results of this study indicate that provinces whose Gross Regional Domestic Product (GRDP) is supported by the industrial sector have a higher unemployment rate than provinces whose Gross Regional Domestic Product (GRDP) is supported by the primary sector.

The results of this study are also not in accordance with the results of research conducted by Ratnaningsih (2013), Purwasih (2017) and Nur (2019) who explained that the growth of the industrial sector would contribute to energy absorption. Instead the results of this study reconfirm that industrial growth may not necessarily help efforts to absorb labor and reduce the unemployment rate.

This is because in the province of the primary sector most of the patterns of work are labor intensive whereas in the provinces of the industrial sector most of the patterns of work are capital intensive so that unemployment cannot be fully absorbed and even human labor has begun to be replaced by mechanical power. Province of Jambi, South Sumatra, Bengkulu, Lampung, West Nusa Tenggara, East Nusa Tenggara, West Kalimantan, Central Kalimantan, South Kalimantan, Central Sulawesi, Southeast Sulawesi, Gorontalo, West Sulawesi and Papua are provinces which although their GRDP is still supported by the sector primary, but these provinces have unemployment rates below the national average unemployment rate. On the other hand, Riau, Riau Islands, DKI Jakarta, West Java, Banten and West Papua provinces are provinces that although their Gross Regional Domestic Product (GRDP) has been supported by the service-industry sector, these provinces actually have unemployment rates above the average national unemployment rate.

Furthermore the degree of slope (slope value) of the Phillips curve in the primary sector province is smaller than the degree of slope (value of the slope) of the Phillips curve in the province of the service industry sector. This shows that compared to the industrial sector provinces, the effect of inflation in the primary sector provinces was less influence on the unemployment rate. This is because in the province of the primary sector most of the patterns of work are still labor intensive so that when inflation occurs due to an increase in production costs employers respond to the increase in production costs by reducing the labor used but the amount is less than the reduction in labor done by employers in the province industrial sector. This is because basically the production base of companies in primary provinces is still labor intensive so that labor is still needed and is still the main actor in the production process. Whereas in the industrial sector, most of the work patterns are capital intensive so that when there is inflation due to an increase in production costs employers respond to the increase in production costs by reducing the labor used but the amount is greater than the reduction in labor done by employers in the primary sector provinces.

Table 3. Comparison of the Phillips Curve in the Second Province Category

Phillips Province Primary Sector Curve	Phillips Provincial Curve of Industrial Sector
TPT=4.612+0.08834*INFLASI	TPT=5.296+0.09962*INFLASI
Difference	Difference
Smaller constant value	Larger constants
Slope / sloping value (small)	Slope / slope value is more slanted (large)

Source: Secondary data processed, 2020 (Eviews 9.0)

This is because basically the production base of companies in the industrial provinces is capital-intensive (machinery) so that labor is no longer the main actor in the production process. Policy Implications, the implication of the results of this study is that policies are needed that can include two indicators, namely policies that can reduce unemployment and can reduce inflation, based on the results of this study, the two variables have a positive relationship.

This means that the success of policies carried out in an effort to maintain price stability will contribute to the success of the unemployment rate reduction policy. The government policy can be in the form of fuel subsidies, a reduction in corporate taxes, a reduction in export taxes, and control of raw material prices given that based on the results of this study states that an increase in the inflation rate will be followed by an increase in the unemployment rate. So that with this policy when there is inflation (cost push inflation) can minimize the impact of a reduction in labor by the company because the increase in inflation has been backed up by the existence of these policies. In addition, in formulating policies also take into account the style of the economy and the patterns of the main sectors contributing to the provincial GRDP given that based on the results of this study there are differences in the shape of the Phillips curve in the two categories of provinces.

CONCLUSION

The results of the panel research in 34 provinces in Indonesia showed that the inflation rate variable had a positive but not significant relationship with the unemployment rate variable. If the inflation rate tends to increase will be followed by the unemployment rate which also tends to increase even though the increase is not significant. The results of testing the Phillips curve theory in the province with the industrial sector as the main contributor to the GDP show that the inflation rate variable has a positive but not significant relationship with the unemployment rate variable. Furthermore, the results of testing the Phillips curve theory in the provinces with the primary sector as the main sector contributing to the GRDP also show that the inflation rate variable has a positive but not significant relationship with the unemployment rate variable. The value of the Phillips curve constant in the primary sector province is smaller than the value of the Phillips curve constant in

the industrial sector province. This shows that most of the provinces whose primary sectors are the main contributors to the Gross Regional Domestic Product (GRDP) have lower unemployment rates than the provinces whose industrial sectors are the main contributors to the Gross Regional Domestic Product (GRDP). The degree of slope (slope value) of the Phillips curve in the primary sector province is also smaller than the degree of slope (value of the slope) of the Phillips curve in the industrial sector province. This shows that compared to the industrial sector provinces, the effect of inflation in the primary sector provinces was less influence on the unemployment rate.

The government in formulating policies must include two indicators, namely policies that can reduce unemployment and at the same time reduce inflation, based on the results of this study, both variables have a positive relationship in 34 provinces in Indonesia. The government should focus more on the development of labor-based industries, especially in the provinces where the industrial sector is the main contributor to the Gross Regional Domestoc Product (GRDP) so that it can absorb more labor. In addition, provinces whose industrial sectors are the main sectors of Gross Regional Domestoc Product (GRDP) require a policy of price control efforts because in these provinces rising price levels will also contribute to an increase in the unemployment rate even though its contribution is not significant. Required policy in efforts to develop labor-intensive industries in provinces with primary sectors become the main sector contributors to Gross Regional Domestoc Product (GRDP) so that the unemployment rate in these provinces can be fully absorbed. Price control policy is also needed considering that in the province the price level increase will contribute to an increase in the unemployment rate too even though its contribution is not significant. In formulating policies in a region (province) the government should also consider what sectors are the main sectors contributing to the GRDP given based on the results of research there are differences regarding the amount of unemployment and the contribution of rising

prices to rising unemployment in the two categories of provinces.

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