

The Effects of Inflation and Joblessness on Regional GDP in Seven West Javan Cities from 2014 to 2021

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Abstract

This study examines the impact of inflation and unemployment on gross regional domestic product in seven cities in West Java Province during the period 2014-2021. Using quantitative methods and associative research approaches, secondary data were obtained from the West Java Central Bureau of Statistics. The variables examined include inflation, unemployment, and economic growth measured by GRDP at constant prices. The analysis was conducted using panel data regression using a common effect model. The results show that inflation has a negative effect on GRDP, while unemployment has a positive effect on GRDP in seven cities.

Keywords: Inflation, Unemployment, Gross Regional Domestic Product (GRDP)

Abstrak

Penelitian ini menguji dampak inflasi dan pengangguran terhadap produk domestik regional bruto (PDRB) di tujuh kota di Provinsi Jawa Barat selama periode 2014-2021. Dengan menggunakan metode kuantitatif dan pendekatan penelitian asosiatif, data sekunder diperoleh dari Badan Pusat Statistik Jawa Barat. Variabel yang diteliti meliputi inflasi, pengangguran, dan pertumbuhan ekonomi yang diukur dengan

PDRB atas dasar harga konstan. Analisis dilakukan dengan menggunakan regresi data panel dengan uji Chow, uji Lagrange Multiplier, dan uji hipotesis (uji t, uji f, uji R^2), serta model estimasi regresi data panel common effect model, dan pengolahan data menggunakan Eviews 12. Hasil penelitian menunjukkan bahwa inflasi berpengaruh negatif terhadap PDRB, sedangkan pengangguran berpengaruh positif terhadap PDRB di ketujuh kota tersebut.

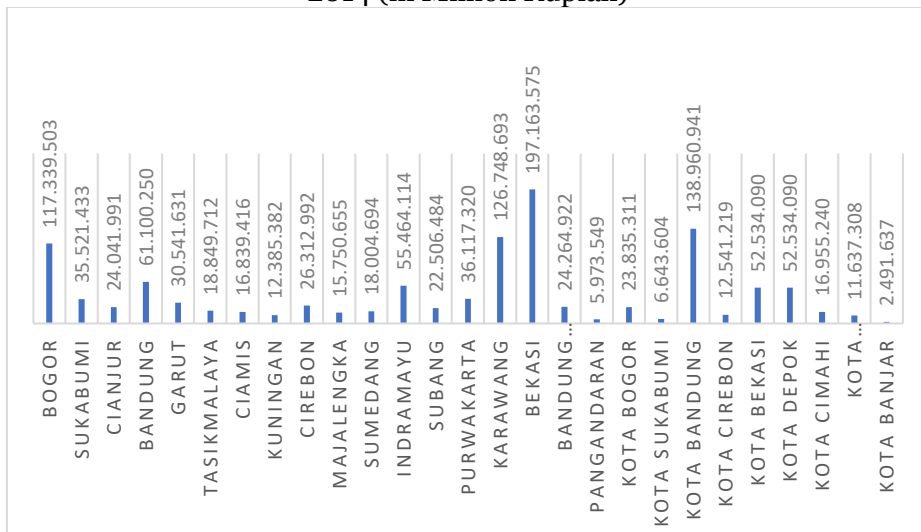
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Introduction

Economic development aims to improve the welfare of the community by achieving good economic growth and a more equitable distribution of income throughout the region. To measure the economic growth of a region, the value of Gross Regional Domestic Product (GRDP), which is the total value of goods and services produced in the region, is calculated at constant values.

According to Sukirno (2013), regional economic growth is an increase or rise in the Gross Regional Domestic Product (GRDP) in a particular region without considering the population growth rate in the area. From this definition, it can be concluded that Gross Regional Domestic Product (GRDP) serves as one of the main indicators to measure the level of economic growth in a region. Economic growth can be positive or negative. Positive economic growth indicates an increase in economic activity in a given period, while negative economic growth indicates a decrease in economic activity in that period. In other words, economic growth reflects the economic conditions in a region, and a good and high level of GRDP can be a measure of a region's success in increasing economic growth.

Figure 1. GRDP Data of Regency/City of West Java Province in 2014 (in Million Rupiah)



Source: bps.go.id (processed data)

The graph shows significant differences in gross regional domestic product (GRDP) in West Java Province in 2014, based on constant prices. Bekasi City recorded the highest performance with a value of Rp 197,748,693 million, while Banjar City recorded the lowest performance with a value of Rp 2,491,637 million.

According to the Central Bureau of Statistics (BPS), the Consumer Price Index (CPI) is an indicator used to measure the rate of inflation. Changes in the CPI over time illustrate the rate of increase in inflation or the rate of decrease in deflation of goods or services. As a measure of changes in the prices of goods and services most commonly consumed by the public, the CPI provides an accurate picture of the inflation rate in the economy.

In December 2014 from the CPI (Consumer Price Index) cities in the Java Island region a total of 26 cities, based on the number of cities there are seven cities in West Java Province that experienced inflation, namely: Bandung City, Cirebon City, Tasikmalaya City, Bekasi City, Bogor City, Sukabumi City and Depok City experienced an increase in the index, which is in the CPI (Consumer Price Index) monitoring experienced inflation.

In addition to inflation, unemployment is a crucial aspect of economic analysis that is closely related. Both indicators are part of the measurement toolkit used to gauge the economic health and stability of a country or region. The inflation rate reflects the overall increase in

prices over a period of time, while the unemployment rate measures the proportion of people who are looking for work but cannot find it. The relationship between inflation and unemployment is often understood through the Phillips curve, which shows that there is an inverse relationship between the two. When inflation rises, the unemployment rate tends to fall and vice versa.

Good economic development is associated with a high level of economic growth, where one of the benchmarks to see economic growth in the region is the value of Gross Regional Domestic Product (GRDP). Based on the above description, the researchers are interested in analyzing and conducting research titled "The Effect of Inflation and Unemployment on Gross Regional Domestic Product in Seven Cities in West Java Province in 2014-2021".

Theoretical review

Inflation Concept

Inflation is a major problem faced by many developing countries as it causes the price level to rise. A high inflation rate has a negative impact on the purchasing power of a country's currency, causing a significant decline in the exchange rate for society. According to Sukirno (2013) is a process of rising prices that prevail in an economy. Thus, it can be concluded that inflation here is a process of rising prices where the increase affects or applies in an economy.

Boediono (2014) defines inflation as a continuous upward trend in commodity prices. This occurs due to an imbalance between supply and demand in the market, resulting in an increase in the price of goods and services. Regulation of the money supply, interest rates, taxes, and government spending are factors that allow the inflation rate to be controlled.

In general, economists conclude that inflation, which causes a decrease in the purchasing power of the value of money against goods and services, is determined by the elasticity of demand and supply for goods and services. Another factor that also determines fluctuations in the general price level is government policy regarding the price level, namely by implementing price controls, providing subsidies to consumers, and so on.

Unemployment

Unemployment is a condition in which a person who is in the labor force wants to get a job but has not been able to do so. Persons who are not working and not actively seeking work are not considered

unemployed. Therefore, unemployment can include individuals between the ages of 15 and 64 who are included in the labor force, both those who are looking for work and those who previously worked but are currently not working (Sukirno, 2013).

Mankiw (2011) argues that the unemployment rate is a macroeconomic issue that has a direct impact on the lives of individuals. The loss of a job is often perceived as a decline in the standard of living for many people. It is not surprising, therefore, that the issue of unemployment is frequently discussed in the political sphere. Politicians often argue that their proposed policies will help create jobs.

Simanjuntak (2003) states that unemployment consists of people in the labor force who do not work at all or work less than two days a week before the calculation and then manage to get a job. Imbalance in the labor market is the cause of unemployment. In the labor market, there is a labor demand curve that shows the amount of labor offered by households and has a positive slope with respect to wages, as explained by Widiyanti (2016).

Gross Regional Domestic Product Concept

Economic growth is an indicator of the successful development of an economy. The progress of an economy is determined by the amount of growth shown by changes in national output. The existence of output changes in the economy is a short-term economic analysis. In general, theories of economic growth can be divided into two, namely classical economic growth theory and modern economic growth theory. In classical economic growth theory, the analysis is based on the confidence and effectiveness of the free market mechanism. This theory is a theory coined by classical economists including Adam Smith, David Ricardo.

According to Tarigan (2007), Gross Regional Domestic Product (GRDP) includes all the gross value added generated by each economic sector in each region. This definition emphasizes that GRDP represents the total value-added contribution of all economic sectors within the region.

Method

The method used in this study is the associative approach, which refers to a research strategy to investigate the relationship between two or more variables. Sugiyono (2018) explains that the associative approach is a method that formulates research problems with the aim of investigating the relationship between the variables observed in the study.

Population is all the data that will become our research, in the scope and time we specify, the population can refer to data not only people. (Zuriah, 2007). The population of this study is the province of West Java in the period 2014-2021, which is obtained from the website of the Central Bureau of Statistics. In this study, the samples used were 7 cities in West Java Province, namely Bogor City, Sukabumi City, Bandung City, Cirebon City, Bekasi City, Depok City, Tasikmalaya City. The sampling method used is purposive sampling.

Boediono (2014) defines research variables as elements that have the possibility to change or can be changed in a study. These variables are used to test or examine the relationship between one factor and another in a research context. The variables used are inflation and unemployment as independent variables and gross domestic product as a related (dependent) variable.

This research uses a desk research approach which involves information and data collection techniques through relevant literature records and documentation. This method involves collecting the necessary data from various sources such as books, references, theses, and browsing on internet websites.

To analyze the effect of panel (pooled) data variables such as unemployment, poverty, and economic growth, the researchers used panel data regression method. This method combines time series data with cross-sectional data in its analysis.

Results and Discussion

Badan Pusat Statistik (2022) Administratively, West Java is divided into 18 regencies and 9 cities. The infrastructure in the province is quite good, with a well-connected road network between cities and access to transportation facilities such as airports. International airports, railways and bus terminals. The regencies/cities are as follows: Regencies in West Java: Bandung Regency, West Bandung Regency, Bekasi Regency, Bogor Regency, Ciamis Regency, Cianjur Regency, Cirebon Regency, Garut Regency, Indramayu Regency, Karawang Regency, Kuningan Regency, Majalengka Regency, Pangandaran Regency, Purwakarta Regency, Subang Regency, Sukabumi Regency, Sumedang Regency, Tasikmalaya Regency. Cities in West Java consist of: Bandung (provincial capital), Banjar, Bekasi, Bogor, Cimahi, Cirebon, Depok, Sukabumi, Tasikmalaya.

Each regency and city in West Java have its own government, which is responsible for the administration and development of its

respective region. The West Java provincial government plays a role in coordinating and supporting the development of the entire province.

The Effect of Inflation on Gross Regional Domestic Product 2014-2021

The results showed that the inflation variable is 3873048.04687. The coefficient of X1 shows the change in GRDP (Y) expected due to a one-unit change in the independent variable X1 (inflation), holding other independent variables constant. If inflation (X1) increases by one unit, then GRDP (Y) is expected to increase by 3873048.04687.

The Impact of Unemployment on Gross Regional Domestic Product 2014-2021

The results showed that the unemployment variable was 2298102.89306. The X2 coefficient shows the change in GRDP (Y) that is expected due to a one-unit change in the independent variable X2 (unemployment), holding the other independent variables constant. If the unemployment rate (X2) increases by one unit, then GRDP (Y) is expected to increase by 2298102.89306.

The Impact of Inflation and Unemployment on Gross Regional Domestic Product 2014-2021

The results of this study also show that both inflation and unemployment together have a significant effect on Gross Regional Domestic Product in seven cities in West Java Province in the period 2014-2021, with a F (statistical) probability value of $0.000000 < 0.05$.

Conclusion

The results of partial hypothesis testing show that inflation has a positive impact on gross regional domestic product in seven cities in West Java province in 2014-2021. The regression coefficient value of inflation variable (X1) is 9.87; the coefficient is positive, which means that if inflation increases by 1 unit, gross regional domestic product in seven cities in West Java province will increase by 1 unit. Assuming that the value of unemployment (X2) does not change / remains the same.

The results of partial hypothesis testing show that unemployment (X2) has a positive effect on gross regional domestic product in seven cities in West Java province in 2014-2021. The regression coefficient value of the unemployment variable (X2) is 4.04; the coefficient is positive, which means that if unemployment increases by 1 unit, the gross regional domestic product in the seven cities in West Java province will increase by 1 unit.

The results of simultaneous hypothesis testing show that inflation and unemployment together have a significant effect on gross regional domestic product in seven cities in West Java Province in 2014-2021. The coefficient of determination (R square) is 0.645442. This shows that the percentage contribution of the influence of inflation and unemployment on gross regional domestic product in seven cities in West Java province in 2014-2021 is 64.54%, while the remaining 34.45% is influenced by other variables not included in this study such as human development index, poverty, local revenue and other variables.

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