

Inflation, Invesment, And Economic Growth

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Abstract. Economic growth is one of the key indicators used to analyze a country's economic development. A country with consistently increasing economic growth year after year will enhance its development. The purpose of this study is to examine the impact of investment, inflation, and public consumption on economic growth in Bandung. This study makes use of secondary data, namely time series data from 2012 to 2022. Multiple linear regression analysis with SPSS 25 software was employed as an analytical method in this study. The study's findings suggest that, in Bandung, partially investment has little effect on economic growth, inflation has a negative and large effect on economic growth, and public consumption has a significant positive effect on economic growth.

Keywords: Economic Growth, Economic Development, Investment, Inflation

INTRODUCTION

The evaluation and quantification of a nation's economic progress can be achieved through the analysis of its economic growth. In order to foster progress in a nation, it is imperative for that nation to possess an economy that demonstrates consistent annual growth. According to Soukotta et al., (2023), the concept of economic growth encompasses the enhancement of living standards through a rise in per capita output, as indicated by the development of Gross National Product (GNP). According to Cakranegara et al., (2022), economic growth refers to the fiscal development of services and goods within a country. Fluctuations in economic activity occuring on an annual basis might serve as a metric for assessing economic growth. Consequently, it becomes necessary to conduct a comparative analysis of state income between consecutive years, commonly referred to as the growth rate.

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The Gross Regional Domestic Product (GRDP) growth serves as a metric for assessing economic expansion, specifically in the context of regional macroeconomics. It is employed to quantify the magnitude of economic growth within a certain region. The process of absorption will occur. The government could additionally contemplate providing guidance to investors regarding the allocation of investments towards labor-intensive enterprises as opposed to capital-intensive enterprises, as this approach would yield a greater degree of labour absorption.

Moreover, the fluctuation of the inflation rate in Bandung City is also seen. The year 2019 witnessed the greatest inflation rate, reaching 4.9%. The occurrence of this ailment can be attributed to the rise in many food commodities, including cayenne pepper, rice, and garlic, as well as an upsurge in transportation. The subsequent discourse pertains to the state of inflation rate progression in the urban area of Bandung.

There are various determinants that exert an influence on economic growth, such as investment, inflation, and public consumption. Hence, the researchers selected these three variables in order to investigate their impact on economic growth.

Numerous prior investigations have also examined the scholarly literature pertaining to the impact of investment, inflation, and public consumption on economic growth. For instance, Soukotta et al., (2022) elucidates that investment exhibited no discernible influence on the economic growth of West Java Province during the period of 2017-2020. Similarly, Moridu, (2023) posits that inflation exerted a noteworthy adverse effect on the economic growth of the aforementioned province.

Economic expansion is a crucial factor for societal prosperity and regional development, as evidenced by other previously elucidated phenomena. The promotion of communal welfare is heavily reliant on the attainment of economic growth. The phenomenon of economic growth acceleration necessitates the identification of factors that exert effect on the rate of economic growth. In this study, the researcher examines three sets of data pertaining to investment figures, inflation figures, and people's consumption. The data reveals that investment figures exhibit a tendency to fluctuate, while inflation figures also display fluctuations within acceptable ranges. Furthermore, there is a consistent upward trend in people's consumption. The researcher investigates whether these variables can serve as indicators that influence economic growth.

Investment is undertaken to enhance the capacity for generating and cultivating valuable life outcomes. In order to enhance the calibre of human resources, it is imperative to recognise that investment encompasses not only tangible assets, but also intangible elements.

According to Moridu et al., (2022), investment activities yield several positive outcomes. Firstly, these activities stimulate economic growth within the community, leading to an increase in overall economic activities. Secondly, investment activities contribute to the prosperity of the community. Lastly, investment activities also contribute to the growth of national income through three distinct functions. The primary focal areas of investment include: (1) Aggregate spending is a component derived from investment, such that an augmentation in investment would lead to an upsurge in aggregate demand. Consequently, this can foster employment prospects, augment national income, and ultimately bolster aggregate demand as investment levels rise. The allocation of investment towards the expansion of capital goods will result in a significant rise in production capacity. (3) Subsequently, technological advancements materialise as a consequence of financial investment.

In an economy, inflation refers to the general rise in prices, which is influenced by a number of factors resulting from the operation of market mechanisms—consumption and speculation, which are stimulated by market liquidity; and an upsurge in public consumption, which disrupts the efficient distribution of goods. The inflation rate is the percentage increase in the cost of products relative to a specific period in the prior year (Sutrisno et al., 2022).

In order to satisfy human wants, the utilization of a variety of products and services is sometimes referred to as consuming. Utilization can satisfy the requirements of households for goods or services, as well as the requirements of society or an individual for their occupation (Yudiani et al., 2023).

METHODS

The researchers employed quantitative methods to examine the impact of three independent variables—Community Consumption, Investment, and Inflation—on Economic Growth in the City of Bandung from 2012 to 2022. For this study, secondary data was gathered from relevant agencies, specifically the Bandung City Investment Service and the Bandung City Central Statistics Agency, via their respective websites.

The researcher employed linear regression analysis in this study to determine whether a dependent variable is not influenced by other dependent factors, namely the independent variable, so that known variables can be used to predict the values of their populations given specific values. This study employs an inferential analysis framework, specifically utilizing multiple linear regression analysis. The purpose of this analysis is to ascertain whether or not there are multiple independent variables. The objective is to ascertain the impact of public consumption, investment, inflation, and unemployment on Bandung's economic growth. The approach described above is employed to ascertain whether the dependent variable is influenced by the independent variables (X1, X2, X3) (Y). The formula representing a model of multiple linear regression is:

Y = a + 1X1 + 2X2 + 3X3 + e

- Y : Economic Growth
- a : Constant
- : Independent variable regression coefficient
- X1 : Investment
- X2 : Inflation
- X3 : Public Consumption
- e : Remainder (error)

RESULT

By employing the data processing capabilities of IBM SPSS version 25, the subsequent equation for multiple linear regression was derived:

$$Y = (-1,106) + (-0,038) X_1 + (-1,780) X_2 + 1,725 X_3$$

Based on the outcomes of the aforementioned equation, the derived interpretation is as follows:

- Assuming Investment (X₁), Inflation (X₂), and Public Consumption (X₃) remain constant, the constant value of (-1.106) signifies that the value of Economic Growth in the City of Bandung (Y) will decline by 1.106 percent.
- For every one million rupiah invested, economic growth (Y) diminishes by 0.038 percent (X₁). The investment regression coefficient (-0.038) signifies that there is a negative relationship between investment (X₁) and Y. Considering the fixed values of X₂ and X₃.
- The regression coefficient for inflation (X₂) is -1.780, signifying a negative impact of inflation (X₂). This implies that a one percent reduction in inflation will result in a 1.780 percent decline in economic growth (Y). Assuming constant values of X₁ and X₃.
- The positive effect of public consumption (X₃) is indicated by its regression coefficient of 1.725; hence, an increase of 1 million Rupiah in public consumption will result in a 1.725 percent increase in economic growth (Y). Assuming constant values of X₁ and X₂.

a. Classic Assumption Test Results (BLUE / Best Linier Unbiased Estimator) Multicollinearity Test

The presence of multicollinearity symptoms can be determined through the

examination of the tolerance value and VIF value. The lack of symptoms associated with multicollinearity serves as a compelling example of good research. In the table below, the tolerance levels and VIF values applied in this multiple linear regression analysis are specified in detail.

Variable	Tolerance	Condition	VIF	Condition	Remark
X1	0,272	≥0,10	3,677	≤10	Multicollinearity does not occur
X2	0,512	≥0,10	1,954	≤10	Multicollinearity does not occur
X3	0,277	≥0,10	3,614	≤10	Multicollinearity does not occur

Table 1. TOL and VIF values

Source: data is processed, 2023

This study employs the Durbin Watsons test within the Autocorrelation test to ascertain the presence of correlation symptoms in individual residuals.

By examining the numerical values in the DW table, it is possible to ascertain whether the research model exhibits indications of autocorrelation. The number of data points per year utilized is eleven, and the number of known independent variables is three (k=3); hence, the DW table values are dL = 0.5948 and dU = 1.9280.

The resulting DW test value of 1.9532 for this regression model, which falls within the interval of dU to 4-dU, indicates that autocorrelation has a negligible effect on the regression outcomes in this investigation.

Coefficient of Determination Test (R²)

 Table 2. Model Summary (Confounding Variables)

	R Square	
	0,997	
Source	: data is processed	. 2023

Based on the data presented in the table above, the R-squared value of 0.997 indicates that 99.7 percent of the observations demonstrate that the independent variables Investment (X1), Inflation (X2), and Public Consumption (X3) can account for the variability observed in the dependent variable Economic Growth (Y). The remaining 0.3 percent (calculated from 100 percent to 99.7 percent) is attributable to other influential factors.

	Table 3. F-Test			
-	F-Table			
	0,997			
Source	: data is processed	1, 2023		

In the calculation table above, it can be seen that the calculated F value is 866. On the other hand, the F table value is obtained:

= 0.05 with numerator df = 3

denominator df = 7

- F-Table (= 0,05) = 4,347

These results can be explained that the value of F-count $866 \ge$ F-table 4.347 where Ho is rejected and Hi is accepted, which means that overall the independent variables namely Investment (X1), Inflation (X2), and Public Consumption (X3) have a simultaneous and real effect on Growth. Economy (Y).

Partial T-Test

Table 4. T-Test Analysis Results

Variable	T-Count	T-Table	sig
Invesment (X1)	-0,073	2,365	0,994
Inflation (X2)	-3,042	2,365	0,032
Community Consumption (X3)	26.364	2,365	0.000
a 1 1	1 0000		

Source: data is processed, 2023

The interpretation of the test results T-Table above is:

- The acquired results from the partial calculation of the nvestment variable (X1) indicate that the computed T-value is -0.073, whereas the T-table value of 2.365 is based on the $\alpha/2=0.025$ value with 7 degrees of freedom (df) (n-k-1). Based on the obtained results, the calculated T-value of 0.073 is less than the critical T-value of 2.365 from the T-table (H0 is acceptable). This indicates that investment in Bandung City has a marginally insignificant impact on the economic growth index in Bandung City.
- The partial calculation of the Inflation variable (X2) yielded the following results: the calculated T-value is 3.042, but the t table value for a 7-degree-of-freedom (df) variable (2 = 0.025) yields a T-table value of 2.365. The findings indicate that the computed T-value is -3.042, which is less than the critical T-value from t table 2.365

(H0 is rejected). This suggests that the inflation rate in Bandung City has a tangible and statistically significant negative impact, albeit only partially, on the city's economic growth..

- The partial calculation of the Public Consumption variable (X3) yielded the following results: the calculated T-value was 26.364, but the T-table value ($\alpha/2=0.025$) for a 7-degree-of-freedom (df) (n-k-1) distribution yielded 2.365. The obtained results indicate that the computed T-value of 26.364 is less than the critical t value of 2.365 from the T-table (H0 is rejected). This implies that public consumption in Bandung City has a positive and statistically significant effect, albeit only partially, on the city's economic growth.

DISCUSSION

Effect of Investment (X1) on Economic Growth (Y)

The findings of the conducted analysis indicate that investment in Bandung City has a negligible and insignificant impact on the city's economic growth index. The outcomes of this study align with the research findings of Haribowo et al., (2022). The limited contribution of investment to the Gross Regional Domestic Product (GRDP) in the city of Bandung can be attributed to the lack of confidence among both domestic and foreign investors. Furthermore, the uneven distribution of economic development has led to economic disparities among different regions within the city.

The Effect of Inflation (X2) on Economic Growth (Y)

Based on the findings of the conducted analysis, it can be concluded that the inflation rate in Bandung exerts a genuine and statistically significant negative impact on the city's economic growth. The findings of this study are consistent with and mirror the research outcomes reported by Rusli et al., (2021) and Arta et al., (2023). This study is further corroborated by Fardiansyah's et al., (2023) theory, which posits that there exists a strong correlation between inflation and economic growth. Putong argues that sustained inflation will detrimentally affect economic growth.

Influence of Public Consumption (X3) on Economic Growth (Y)

The findings of the conducted analysis indicate that public consumption in the City of Bandung has a tangible and considerable positive impact, albeit partial, on economic growth within the city. The findings of this study are consistent with and mirror those of Ariani, (2014) research, which concludes that consumption positively impacts economic growth. Sudirjo et al., (2023) posits that an individual's consumption expenditure positively correlates with their income; therefore, a rise in consumption expenditure is expected to stimulate economic growth.

CONCLUSION

The following can be deduced, in agreement with the findings of prior study and data analysis:

- 1. The interplay between investment, inflation, and public consumption exerts a concurrent impact on the economic growth of Bandung.
- 2. The impact and significance of investment on economic growth in the city of Bandung are negligible.
- 3. Bandung's economic expansion is substantially and adversely impacted by inflation.
- Positive and substantial effects of public consumption on economic expansion in Bandung.

As a result of the aforementioned conclusions, researchers are able to provide the government and future researchers with recommendations for future policy directions.

Efforts should be undertaken by the Bandung City government to augment and sustain investment inflows. This can be achieved through the implementation of infrastructure development initiatives that mitigate economic and political volatility, streamline investment licensing procedures, and maintain a favorable investment climate. The government is responsible for overseeing, monitoring, and attempting to incentivize entrepreneurs to increase production and output. Prices must be constantly monitored, and the maximum price for an item must be established so as to maintain inflation and public consumption within reasonable limits, proportional to each unit.

The author expects that this research can be pursued continually by other scholars so that it is possible to identify the actions taken to overcome the challenges of economic growth, investment, inflation, and public consumption and to comprehend the changes that occur from year to year.

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