



Original Article

Investigating the Effect of Property Investment and Inflation on Economic Growth in Indonesia

M. Fadhil Nasir ^a, Apridar Apridar ^a and Sartiyah Sartiyah ^{a,*}

^a Department of Economics, Faculty of Economics and Business, Universitas Syiah Kuala, Kopelma Darussalam, Syiah Kuala, 23111 Banda Aceh, Aceh, Indonesia; fadhil.nasir32@gmail.com (M.F.N.), apridar@usk.ac.id (A.A.)

* Correspondence: sartysabang@usk.ac.id (S.S.)

Citations: Nasir, M.F., Apridar, A., & Sartiyah, S., (2024). Investigating the Effect of Property Investment and Inflation on Economic Growth in Indonesia. *International Journal of Advances in Social Sciences and Humanities*, 3(2), 123-132.

Received: 2 February 2024

Revised: 18 April 2024

Accepted: 7 May 2024

Published: 31 May 2024

Abstract: Sustained economic growth is essential to sustainable development and overall societal prosperity. This phenomenon denotes the continuous enhancement of a nation's economic conditions over time, characterised by elevated levels of economic activity compared to preceding periods. Economic growth is typically correlated with improved societal welfare, a key indicator of successful economic development. However, it is imperative to consider additional factors, such as income distribution, to comprehensively assess the impact of growth on well-being. Establishing economic growth is fundamental to sustainable economic development and prosperity. The primary objective of this study is to investigate the short- and long-run effects of Property Investment and Inflation on economic growth in Indonesia and examine the equilibrium relationship between Property Investment and Inflation on economic growth from the short-run to the long-run. This study employs the autoregressive distributed lag (ARDL) Panel Model and a cointegration test to establish short- and long-run relationships to achieve this objective. The results indicate a short-run to the long-run equilibrium among the variables. An additional finding is that property investment positively affects economic growth in the long run but has no effect in the short run. The inflation variable demonstrates a positive impact on economic growth in the long run but no impact in the short run.

Keywords: Economic growth; Property investment; Inflation; ARDL Panel Model



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1. Introduction

Steady economic growth is essential for sustainable development and economic prosperity. Economic growth is a process of continuous change in the economic condition of a country towards a better state over a period. An economy is said to grow if the economic activity level is higher than in the previous period. Economic growth is an indicator of successful development. Therefore, the higher the economic growth, the higher the society's welfare, although there are other indicators, such as income distribution. Sukirno (2011) defines economic growth as the development of activities in the economy that cause goods and services produced by the community to increase. Economic growth shows the ability of an economy to produce goods and services more efficiently. Conventionally, economic growth is usually measured by calculating the percentage increase in Gross Domestic Product (GDP). Calculation of GDP by measuring the total expenditure of an economy on various newly produced goods and services at a time or year as well as the total income received from the production of all these goods and services or in more detail, GDP is the market

value of all goods and services produced in a country within a certain period (Suparmoko, 2002) Economic growth is usually calculated in real value to eliminate inflation in prices and services produced so that real GDP reflects changes in the quantity of production.

Figure 1 shows Property investment, inflation and economic growth in 17 provinces in Indonesia in 2020, 2021, and 2022. It can be seen that economic growth in 17 provinces in Indonesia in 2020 experienced negative economic growth except for the province of Central Sulawesi, which is still growing positively. Bali experienced the sharpest economic decline in 2020 but showed a strong recovery in 2022. This illustrates the significant impact of the COVID-19 pandemic on economic growth in various provinces in 2020, followed by a gradual recovery in 2021 and 2022. Property investment in the last three years in 17 provinces in Indonesia is concentrated on the island of Java, with fluctuating investment levels. DKI Jakarta and West Java are listed as the two provinces with the largest investment value in the property sector, where there has been an increase in investment from 2020 to 2021, but both declined in 2022. Meanwhile, in provinces outside Java Island, property investment tends to be stable with a low level of property investment. The inflation rate in each province varies. In general, inflation was relatively low in 2020 in most provinces, with some provinces, such as Bali at 0.55 per cent and West Nusa Tenggara at 0.6 per cent, experiencing very low inflation. The provinces with the highest inflation were West Kalimantan at 2.46 per cent and Riau at 2.42 per cent. In 2021, many provinces experienced low or slightly increased inflation compared to 2020, such as DI Yogyakarta Province at 2.29 per cent and East Java at 2.45 per cent, showing a significant increase in inflation compared to the previous year. Furthermore, in 2022, inflation was significantly increased in all provinces. The provinces with the highest inflation are West Sumatra at 7.43 percent, East Nusa Tenggara at 6.65 percent and East Java at 6.52 percent. The data shows a significant upward trend in inflation in 2022 compared to the previous two years. This may be due to various factors, including global economic conditions, government policies, and regional factors.

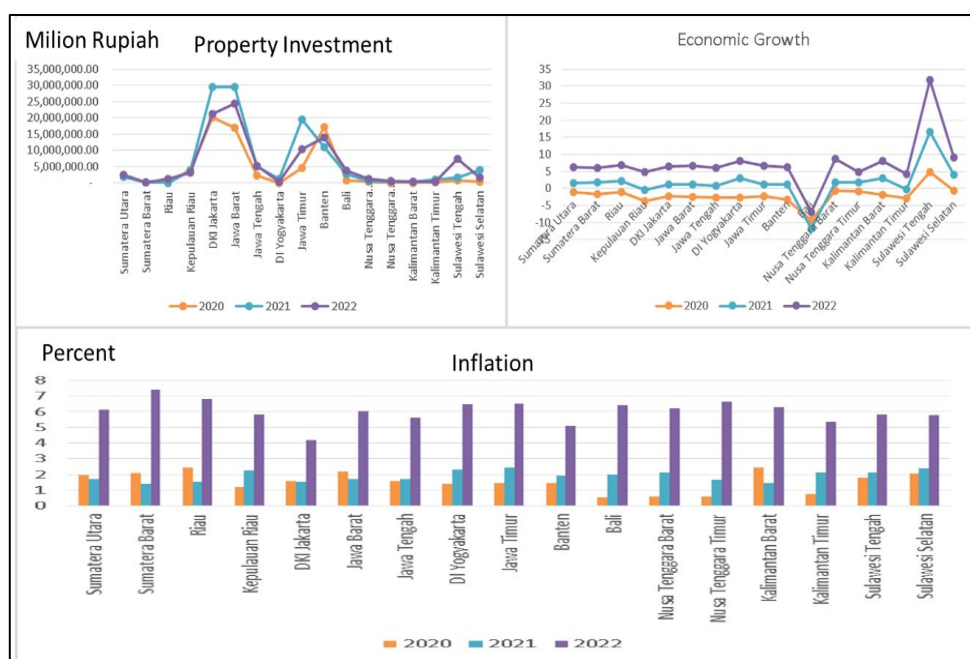


Figure 1. Economic Growth of 17 Provinces in Indonesia for 2020-2022

Various efforts from the Government of Indonesia to increase economic growth include tax reductions for certain sectors, encouraging economic activity and increasing consumption and purchasing power for domestic spending, strengthening the real sector, greater government spending on infrastructure projects and improving Indonesia's investment climate and economic competitiveness. Investment is the first stage in implementing development. In addition to the private sector spending, the government has a role. For example, improving infrastructure is referred to as capital expenditure, and adding assets is one example. The provision of facilities and infrastructure needed to promote economic growth will result from capital investment. Investment in foreign and domestic investment is crucial and influential to a country's economic growth (Rizky et al., 2016). One such investment that can contribute to GDP is investment in the property or real estate sector. This is reinforced by research that finds that real estate investment has a significantly positive contemporaneous effect on economic growth at both the national and regional levels (Kong et al., 2016) as well as research (Fazaalloh, 2024).

2. Literature Review

According to classical economists, four factors influence economic growth: population, capital stock, land area and natural resources, and the level of technology used. Although economic growth depends on many factors, classical economists devote their attention to the influence of population growth (Sukirno, 2011). According to Smith, available natural resources are the most basic container of a society's production activities. The number of natural resources available is the "maximum limit" for the growth of an economy. If these resources have not been fully utilised, then the population and the existing capital stock play a role in output growth. Human resources play a passive role in the process of output growth. That is, the population will adjust to the labour needs of a society. According to Smith, capital stock is an element of production that actively determines the output level. Its role is very central in the process of output growth. The amount and growth rate of output depend on the growth rate of capital stock (up to the "maximum limit" of natural resources) (Lincoln, 2010). Investment is an activity of investing capital, either directly or indirectly, with the hope that, in time, the owner of the capital will get some profit from the investment. There are several other definitions of investment. According to Boediono (2018), investment is spending by the producer sector (private) for the purchase of goods or services to change warehouse stocks or expand factories.

According to Sukirno (2011), investment can be defined as spending or spending on investment or companies to buy capital goods and production equipment to replace and add to capital goods that will be used to produce goods and services available in the economy in the future, while the function of investment is to increase production, improve the structure of production, equalise income, utilise human resources and natural resources and encourage exports. According to Salim & Budi (2012), investment is an investment made by foreign and domestic investors in various business fields open to investment, aiming to make a profit. Meanwhile, according to Sukirno (2011), investment is defined as spending or spending on investment or companies to buy capital goods and production equipment to increase the ability to produce goods and services available in the economy. This increase in capital goods allows the economy to produce more goods and services in the future. Investment is a keyword determining the rate of economic growth because, in addition to encouraging a significant increase in output, it will also automatically increase input demand, which in turn will increase employment opportunities and community welfare as a consequence of the increased income received by the community (Suindyah D, 2018).

In contrast to consumers (households) who spend most of their income to buy the goods and services they need; investors invest not to fulfil their needs but to make a profit. Several factors determine the level of investment made in the economy. The main factors determining investment are (Sukirno, 2011); a) The level of investment profit that is predicted to be obtained; b) The interest rate; c) Forecasts regarding future economic conditions; d) Technological changes and developments; e) The level of national income and its changes; f) The profits earned by companies. This study uses data on the realisation of property sector investment in 17 provinces in Indonesia in 2017-2022 which consistently has both domestic and foreign direct investment property sector investment.

3. Materials and Methods

The data used in this study is secondary data in the form of quantitative data. The type of data used in this study is panel data, a combination of time series and cross-section data. The time series data from 2017 to 2022 was obtained from the Ministry of Finance, the Central Bureau of Statistics and the Ministry of Investment or the Investment Coordinating Board. The regions used as the focus of analysis in this study are 17 provinces in Indonesia that consistently have domestic and foreign investment in the property sector. 1. Economic Growth is seen from the economic growth rate of each province obtained by comparing its GRDP and the unit is percent. 2. Property Investment is seen from the amount of domestic investment in the property sector and is summed up with foreign investment in the property sector with the unit Rupiah. 3. Inflation is seen from the price increase of goods at a certain time measured in percentage units. The model used in this study is the ARDL (Auto Regressive Distributed Lag) model, using panel data proposed by Pesaran & Smith (1995) to analyse the short-term and long-term effects of Property sector Investment and Inflation on Economic Growth. This model is used because there are different levels of data stationarity in the variables tested, where this study uses time series that are partly stationary at the level and partly stationary at the first difference level. Therefore, the ARDL model is the right model to use in this study, as previously done by Sari et al. (2019) and Abidin et al. (2022). The analysis methods include the unit root test, determination of the lag length included in the estimation model, cointegration test, ARDL estimation model, and model stability test. The ARDL estimation model is used to answer the purpose of this study, which is to determine the short-term and long-term effects of Property sector investment and Inflation on Economic Growth in Indonesia.

3.1. Unit Root Test

The purpose of this test is to see that there is no process of change over time that can lead to skewed estimation results. This unit root test is used to see whether the observed data is stationary or not. Variables that contain unit roots or are not stationary will produce no meaningful conclusions. A high R square and t-statistics appear significant, which

will ultimately provide the wrong direction and the use of inappropriate policies. There are various methods to conduct unit root tests, including Dickey-Fuller, ADF (Augmented Dickey-Fuller Test), PP (Philip-Perron), and KPSS (Kwiatkowski Philips Schmidt Shin). This study's unit root testing model uses the PP (Phillips Perron) testing model. If the data is not stationary at the add level, the first and second differences can be used. If the absolute value of the PP statistic is greater than its critical value, then the test data shows stationary. If on the contrary, the absolute value of the PP statistic is smaller than its critical value, the data is not stationary (Pesaran & Smith, 1995).

3.2. Cointegration test

The cointegration test in the ARDL method is carried out to determine whether there is a long-term relationship between variables. It is said that there is a long-term relationship if the regression model is cointegrated. The Bound Test Cointegration, which compares the F-statistic value with the F-table prepared by Pesaran (1997), can be used to test for cointegration. If the F-statistic value is below the lower bound value, it can be concluded that there is no cointegration. If the F-statistic value is above the upper bound value of I (1), it can be concluded that cointegration occurs. However, if the F-statistic is between the lower bound I(0) and upper bound I(1), then the result is inconclusive. The hypothesis in this F-test is as follows: $H_0 = \theta_1 = \theta_2 = \theta_n = 0$; there is no long-run relationship (not cointegrated) $H_1 \neq \theta_1 \neq \theta_2 \neq \theta_n \neq 0$; there is a long-run relationship (cointegrated) If the F-statistic value is below the lower bound value then we cannot reject H_0 which means there is no cointegration. Conversely, if the F-statistic value exceeds the upper limit value, then reject H_0 so that cointegration occurs. However, it is inconclusive if the F-statistic lies between the lower and upper bound values.

3.3. Optimal Lag Determination

This test is used to test the hypothesis regarding the appropriate number of lags for the research model, which aims to provide a representative picture of the relationship between research variables. In the ARDL model, it is necessary to determine at what lag the variable will produce the best estimate. Choosing the optimum lag in the Auto Regressive Distributed Lag Model uses the Schwarz Criterion (SC) and Akaike Information Criterion (AIC). If the amount of a lag provides the smallest SC and AIC values for the model, then the number of lags is selected.

3.4. ARDL Panel Model

Referring to the research results (Pesaran & Smith, 1995), confirmed by (Hazmi et al., 2024), the empirical formula for the ARDL (Auto Regressive Distributed Lag) panel model in this study can be written as follows:

$$\Delta EG_{i,t} = \alpha_0 + \sum_{j=1}^n \alpha_j \Delta EG_{i,t-j} + \sum_{j=1}^n \alpha_{1j} \Delta LPI_{i,t-j} + \sum_{j=1}^n \alpha_{3j} \Delta INF_{i,t-j} + \beta_2 + \beta_0 EG_{i,t-1} + \beta_1 LPI_{i,t-1} + \beta_3 INF_{i,t-1} + u_{i,t} \tag{1}$$

Where EG is Economic Growth (percent), L is Log, LPI is Property Investment (Indonesian Rupiah), INF is inflation (percent), α is Short-term coefficient, β is Long-term coefficient, t is Time series data, i is Cross section (province), j is lag order, Δ is first difference operator and u is Error term.

4. Results

4.1. Descriptive Statistics Analysis

Table 1. Result of Descriptive Statistics

| Variable(s) | Mean | Median | Maximum | Minimum | Std. Dev. |
|-------------|----------|----------|---------|---------|-----------|
| EG | 3.474897 | 4.05125 | 15.1700 | -9.3400 | 3.2168 |
| LPI | 27.75915 | 27.74432 | 31.2224 | 23.0801 | 1.9059 |
| INF | 2.831353 | 2.5425 | 7.4300 | 0.5500 | 1.3011 |

Table 1 provides an overview of the data used, namely 340 observations from 2018Q1 to 2022Q4 time series data and 17 provinces. Provincial economic growth in Indonesia averages 3.47 percent, a median of 4.05 percent, a minimum of -9.34 percent, a maximum of 15.17 percent, and a standard deviation of 3.21 percent. This means that the standard deviation is smaller than the mean value, so the distribution of the observed values is more even. The average property inflation of provinces in Indonesia is 27.7591, the median is 27.7443, and the minimum is 23.0801, with a maximum score of 31.2224 and a standard deviation of 1.9059 which means that the standard deviation is smaller than the mean so that the distribution of scores is more evenly distributed. Furthermore, the average inflation is 2.83 percent, the

median is 2.54 percent, the minimum is 0.55 percent, the maximum is 7.43 percent, and the standard deviation is 1.301 percent. This means that the standard deviation is smaller than the average value, so the distribution of the observed values is even more.

4.2. Unit Roots Test

This stationary test is carried out to determine whether or not there is a unit root between variables or the presence or absence of data stationarity, where non-stationary data causes regression results to be skewed. Deviant regression is a situation where the results show statistically significant regression coefficients and a high coefficient of determination, but the model's variables are not interconnected. The stationarity test conducted in this study uses the Augmented Dickey-Fuller test (ADF-test) approach.

Table 2. Result of Unit Root Test Using Augmented Dickey-Fuller (ADF)

| Variable(s) | I(0) | | I(1) | | Integration Level |
|-------------|-------------|--------|-------------|--------|-------------------|
| | t-statistic | Prob. | t-statistic | Prob. | |
| EG | 53.707 | 0.0171 | - | - | I(0) |
| LPI | 24.7851 | 0.8760 | 113.747 | 0.0000 | I(1) |
| INF | 63.6584 | 0.0015 | - | - | I(0) |

Table 2 illustrates that each variable has different stationarity at the level (I (0)) or at the first difference level (I (1)). For example, Economic Growth (EG) and inflation (INF) are stationary at level while 1 other variable, namely Property Investment, is stationary at first difference. Because there are differences in stationarity, the ARDL panel model is eligible for use in this study. The ARDL model is one of the appropriate models to use in achieving research objectives, especially related to the effect of independent variables on the dependent variable, both in the short and long term. The unit root test result is shown in Table 2 with a confidence level of 1 to 5 per cent.

4.2.2. Cointegration Test

The cointegration test in this study uses panel cointegration with Pedroni, which aims to see several variables integrated at different orders, I (0) or I (1).

Table 3. Result of Cointegration Test Using Pedroni Residual Cointegration Test

| | Statistic | Prob. | Weighted | |
|------------------------|-------------|--------|-----------|--------|
| | | | Statistic | Prob. |
| Panel v-Statistic | -0.81425 | 0.7922 | -0.959436 | 0.8313 |
| Panel rho-Statistic | 2.060144 | 0.9803 | 1.907914 | 0.9718 |
| Panel PP-Statistic | 2.068643 | 0.9807 | 1.759547 | 0.9608 |
| Panel ADF-Statistic | -2.16696 | 0.0151 | -2.410243 | 0.0080 |
| | Statistic | Prob. | | |
| Group rho-Statistic | 3.356316 | 0.9996 | | |
| Group PP-Statistic | 2.78086 | 0.9973 | | |
| Group ADF-Statistic | -3.507441 | 0.0002 | | |
| KAO Cointegration Test | t-Statistic | Prob. | | |
| ADF | -6.269975 | 0.0000 | | |

Table 3 displays that the within-dimension Panel v-Statistic test results with a probability value of 0.7922 and a Weighted Probability of 0.8313 indicate no evidence to reject the null hypothesis of no cointegration for this test. In the panel test rho-Statistic with a probability value of 0.9803 and at Weighted Probability of 0.9718, the high probability value indicates no evidence to reject the null hypothesis of no cointegration for this test. In the PP-Statistic Panel test with a probability value of 0.9807 and a Weighted Probability of 0.9608, the high probability value indicates no evidence to reject the null hypothesis of no cointegration for this test. Then, in the last test, namely the ADF-statistic panel test with a probability value of 0.0151 and a Weighted Probability of 0.0080, the low probability value indicates evidence to reject the null hypothesis of no cointegration for this test.

Furthermore, the test results with between-dimension show in the rho-Statistic group test with a probability value of 0.9996, a high probability value indicates that there is no evidence to reject the null hypothesis of no cointegration for this test. In the PP-Statistic group test with a probability value of 0.9973, a high probability value indicates no

evidence to reject the null hypothesis of no cointegration for this test. Then, the last test with between-dimension is the ADF-statistic group test with a probability value of 0.0002. The low probability value indicates there is evidence to reject the null hypothesis of no cointegration for this test. The KAO test further strengthens the existence of a cointegration relationship between variables with a probability of 0.0000. The low probability value indicates that there is evidence to reject the null hypothesis of no cointegration for this test.

In general, the results of most statistics show no strong evidence to reject the null hypothesis of no cointegration (panel v-statistic, panel rho-statistic, panel PP-statistic, group rho-statistic, group PP-statistic). However, there is strong enough evidence to reject the null hypothesis of no cointegration in Panel ADF-Statistic and Group ADF-Statistic and further strengthened by KAO test. This suggests a possible cointegrating relationship between the property investment, inflation, and economic growth variables. In other words, while most tests do not show cointegration, some tests show that there is cointegration. This could mean that overall, the variables have a long-run relationship, although it is not always consistent across all tests.

4.2.3. Optimal Lag-Length Selection

The next stage in estimating this research model is determining the optimal lag length. Lag is used to see the time required for the EG response to arise due to an influence from the independent variable. The lag selection used in this study is AIC (Akaike Information Criteria), which has the smallest information criterion value.

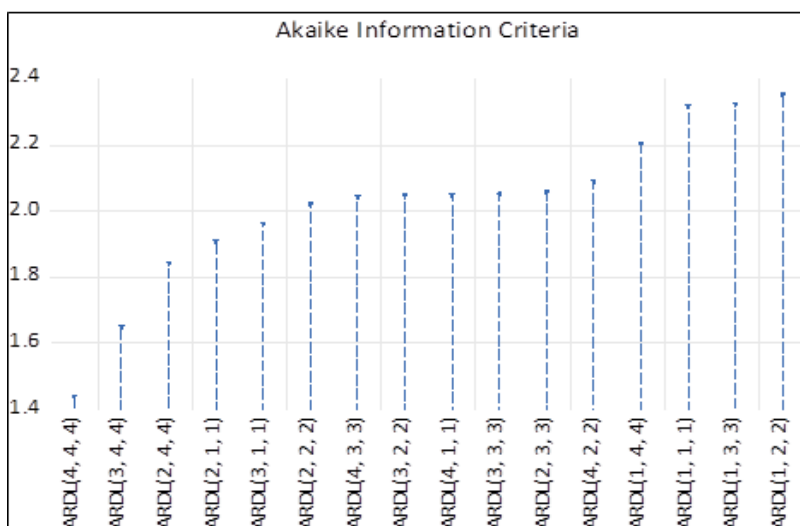


Figure 2. Results of Optimal Lag Length Test

The optimal lag test result shown in Figure 2 shows that the model's variables The optimal lag is selected based on the smallest AIC (Akaike Information Criteria) value. The lag that produces the best model will be selected. In this study, the best model is the ARDL model (4.4.4) because the lag has the smallest AIC value of 1.438.

4.2.4. Estimation of ARDL Panel Model

Table 4. Result of ARDL Panel Estimation in Long Run

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|----------|-------------|------------|-------------|---------|
| LPI | 0.55754 | 0.020923 | 26.64726 | 0.0000* |
| INF | 0.75396 | 0.023522 | 32.05278 | 0.0000* |

Table 3 presents the long-run relationship between the variables of property investment and inflation (PI and INF) on Economic Growth (EG). The test results show that property investment and inflation positively and significantly affect economic growth. The coefficient of each variable is a property investment of 0.5575 and inflation of 0.7539. Based on these results, it is explained that a 1 per cent increase in property investment causes an increase in economic growth of 0.55 percent. Similarly, if there is a 1 per cent increase in inflation, it can increase economic growth by 0.75 per cent. Furthermore, the analysis conducted after analysing the long-term model is a short-term analysis. The output of the ARDL panel data model for the short term can be seen in Table 3.

Table 5. Result of ARDL Panel Estimation in Short Run

| Variable(s) | Coefficient | Std. Error | t-Statistic | Prob.* |
|-------------|-------------|------------|-------------|---------|
| COINTEQ01 | -0.457602 | 0.152914 | -2.992545 | 0.0034* |
| D(EG(-1)) | 0.349120 | 0.122695 | 2.845432 | 0.0052* |
| D(EG(-2)) | 0.107390 | 0.120135 | 0.893909 | 0.3732 |
| D(EG (-3)) | 0.055987 | 0.128515 | 0.435647 | 0.6639 |
| D(LPI) | 1.481780 | 1.251425 | 1.184074 | 0.2388 |
| D(LPI(-1)) | -0.307898 | 0.768449 | -0.400675 | 0.6894 |
| D(LPI(-2)) | 0.158568 | 0.871783 | 0.181889 | 0.8560 |
| D(LPI(-3)) | 0.355541 | 0.893128 | 0.398086 | 0.6913 |
| D(INF) | 0.306455 | 0.375131 | 0.816927 | 0.4156 |
| D(INF(-1)) | -0.068768 | 0.196980 | -0.349112 | 0.7276 |
| D(INF(-2)) | -0.035456 | 0.156128 | -0.227095 | 0.8207 |
| D(INF(-3)) | -0.021739 | 0.167226 | -0.129997 | 0.8968 |
| C | -6.884765 | 2.282575 | -3.016228 | 0.0031* |

Table 4 presents the ECT-1 coefficient in the ARDL panel regression of -0.4576, which indicates that there is cointegration among the variables with a probability of 0.0034, which means it is highly significant, this result indicating that the relationship between property sector investment, inflation and economic growth in Indonesia is dynamically stable over time as indicated by the negative coefficient on the ECT-1 coefficient and the speed of adjustment of the short-run equilibrium to the long-run is at a speed of 2.18 periods. In the short term, only the lag value of economic growth (D(EG(-1))) is significant and has a positive impact on the dependent variable. Other variables, including property investment and inflation (and their lags), do not show any significant effect in the short run

5. Discussion

The long-run coefficient of property investment is 0.5575, and the t-statistic value of 26.64726 with a low P-value of 0.000 indicates that property investment has a positive and significant effect on economic growth. These findings are in line with the research of Kong et al (2016), who used a dynamic panel data approach to analyse national and provincial level data in China from 2000 to 2012 and found that real estate investment has a significant positive impact on economic growth at both the national and regional levels. Likewise, the findings of Zou (2002), who conducted a study in Hong Kong using data from 1973 to 1999, stated that real estate investment has a long-run equilibrium relationship with GDP, which is highly significant and robust as it is consistent under various time series specifications. Liu et al., (2014) who researched in the city of Shenyang and Xijun (2010) who used China's annual data from 1986 to 2007 and Guo et al., (2018) using data from 35 large and medium-sized cities in China from 2003 to 2014 found that in the long run real estate investment has a positive effect on GDP growth, Shen (2021) who conducted research in Hubei Province, China using data from 17 districts and cities from 2002 to 2018 and Yi (2019) who examined China's Hainan Province using data from 2005 to 2015 found that real estate investment has a significant impact on regional economic growth and there is a long-term equilibrium relationship between the two, this is further strengthened by research conducted by Wen et al., (2021) which conducts empirical analysis and uses data from 31 provinces in China from 2006 to 2016 showing that real estate investment can encourage economic growth, the impact on economic growth is positive, and the effect is significant and Li et al., (2023) which uses provincial panel data in China with data series from 2003 to 2017, and uses the generalized system of moments method which states that the increase in the proportion of real estate investment encourages economic growth. The latest Fazaalloh (2024), who researched the impact of FDI on economic growth using sectoral and provincial data in Indonesia found that one sector, namely real estate or property sector investment, had a positive and significant effect on economic growth.

The long-run coefficient of inflation is 0.7539, and the t-statistic value of 32.05278 with a low P-value of 0.000 indicates that inflation positively and significantly impacts economic growth. These findings are in line with the research of Aydin et al., (2016), who conducted research in Turkey for the period 1992-2013, and Dammak & Helali (2017), who conducted research in Tunisia for the period 1993-01-2012-11 found that inflation has a positive and significant impact on economic growth as long as inflation is below the threshold. Likewise, the findings of Kusumatriana et al., (2022), using provincial data from 1994 to 2019, found that inflation will have a negative impact on economic growth only after exceeding the threshold value of inflation. If the inflation rate is below the threshold, then there is a positive

influence between the inflation rate and economic growth, this confirms previous findings by Winarno (2014) who used data on 26 provinces in Indonesia from 2002 to 2012 and found that below the threshold level of inflation, there is a statistically significant positive relationship between the inflation rate and economic growth and findings. Other findings from Sa'idu & Muhammad (2015) and Palestine by Razia et al. (2023) for the period 1991-2020 found that inflation positively and significantly impacts

Kremer et al. (2013) conducted an empirical analysis based on a large panel dataset covering 124 countries. They found that inflation positively correlates with economic growth in industrialised countries if it is less than a threshold, while the opposite occurs at higher inflation. The absolute size of the inflation coefficient shows that the correlation between inflation and economic growth of industrialised countries is stronger when inflation is low. Munir et al., (2009) used the endogenous threshold autoregressive (TAR) model proposed by Hansen (2000) for estimation and inference. The empirical analysis used annual data from Malaysia for the period 1970-2005 and found a threshold value of inflation rate at which inflation significantly inhibits the rate of economic growth. Moreover, below the threshold level, there is a statistically significant positive relationship between the inflation rate and economic growth. Likewise Attari & Javed (2013) study in Pakistan with time series data 1980-2010 found a long-run relationship between inflation rate and economic growth and a positive relationship between inflation rate and economic growth. Recent research by Ramadhaniyati et al. (2023), who conducted research in Indonesia and used panel data of 34 provinces and time series from 2014-2021, found that inflation in Indonesia had a positive impact on economic growth only when its value was below 2.11 per cent and when inflation exceeded 2.11 per cent, economic growth in Indonesia slowed down and the findings of Bangura & Omojolaibi (2024) who conducted research in Nigeria using data from 1990 to 2021 which revealed that when inflation is below the threshold, it will have a positive impact on economic growth, while if it exceeds the threshold, it will have a negative impact on economic growth.

6. Conclusion

In conclusion, there is a dynamic interplay between the variables across both short-term and long-term perspectives. Notably, property investment stands out as a key driver of economic growth in the long term, indicating that real estate investments can contribute to sustained economic development. However, this positive effect is not evident in the short term, emphasizing the importance of patience and careful planning in property investment strategies. Similarly, the inflation variable shows a significant positive impact on economic growth over the long term, but it does not affect growth in the short term. This highlights the complexities of economic dynamics, where short-term fluctuations may obscure more substantial long-term trends. These findings underscore the necessity of considering both immediate and longer-term timeframes when examining economic variables and their relationships.

Author Contributions: Conceptualisation, M.F.N., A.A. and S.S.; methodology, M.F.N.; software, M.F.N.; validation, A.A. and S.S.; formal analysis, M.F.N.; investigation, M.F.N., A.A. and S.S.; resources, M.F.N.; data curation, A.A. and S.S.; writing—original draft preparation, M.F.N., A.A. and S.S.; writing—review and editing, M.F.N., A.A. and S.S.; visualisation, M.F.N.; supervision, A.A. and S.S.; project administration, A.A. and S.S.; funding acquisition, M.F.N. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like to thank Universitas Syiah Kuala, Banda Aceh, Indonesia for supporting this research and publication. The authors would also like to thank the reviewers for their constructive comments and suggestions.

Conflicts of Interest: The authors declare no conflict of interest

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