

## PROCEEDING

Call for Paper – 4th International Seminar on Accounting Society  
“The Evolving of SDG's in Advancing Business Longevity from Accounting  
International View”

### Relevance Between GDP and Unemployment on Inflation in Indonesia: VECM Approach

Farid Fadulloh<sup>a,1</sup>, Dede Suharna<sup>b,2</sup>, Furniawan<sup>c,3</sup>

<sup>abc</sup>La Tansa Mashiro University

\*Email: [ffadulloh@gmail.com](mailto:ffadulloh@gmail.com)

#### ABSTRACT

*A country can be deemed prosperous if every citizen can work and sustain themselves well; to live well, a healthy and controlled economic system is necessary to safeguard economic activities from potential losses in the future. In this study, the author will examine the analysis of macroeconomic variables GDP and Unemployment on inflation. The indicators used are Inflation, Unemployment, and GDP of Indonesia, from the year 1989-2023. employing the estimation method of VECM (Vector Error Correction Model), which is a derivative of VAR (Vector Autoregression) method used to project a system with time variables to analyze dynamic impacts. The sustainability of businesses is influenced by the business climate of a country; if a country has a stable economy, there is a high likelihood of having a healthy business climate as well. Based on the estimation results, it is known that GDP and Unemployment have an influence on inflation in the short and long term; hence, policies related to increasing GDP or controlling unemployment rates will affect the inflation rate.*

*Keywords: VECM, Inflation, Unemployment, GDP, Indonesia*

#### 1. INTRODUCTION

A country can be considered prosperous if all its citizens can work and sustain themselves well. To achieve a good standard of living, a healthy and controlled economic system is necessary to ensure that every economic activity is better safeguarded from potential losses in the future. When associated with the Sustainable Development Goals (SDGs), a focus on unemployment is explicitly stated in Goal 8, which is Decent Work and Economic Growth. Meanwhile, attention to inflation, implicitly encompassed within Goal 8, is also a priority in Indonesia's Action Plan for 2025-2030 documented in the Roadmap of SDGs Indonesia (Badan Perencanaan Pembangunan Nasional, 2019) This further strengthens the urgency for policymakers to discuss and control matters related to inflation and unemployment. Economic growth measures the progress of an economy. This can be seen from the Gross Domestic Product (GDP) of all countries (Stievany & Jalunggono, 2022). In Figure 1, it can be observed that GDP in Indonesia has experienced fluctuating growth and reached its lowest point during the monetary crisis in 1998. Sustainable economic growth should lead to a tangible improvement in living standards and better job opportunities.(Mulia & Saputra, 2020). According to (Andriansyah et al., 2023) and (Azaluddin & Hanifa, 2021) GDP has a negative relationship with inflation in Indonesia but has a positive relationship with unemployment, consistent with research findings (Afriandi et al., 2019) that GDP has a positive relationship with inflation and unemployment in Indonesia, as indicated by the research.

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society

#### “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

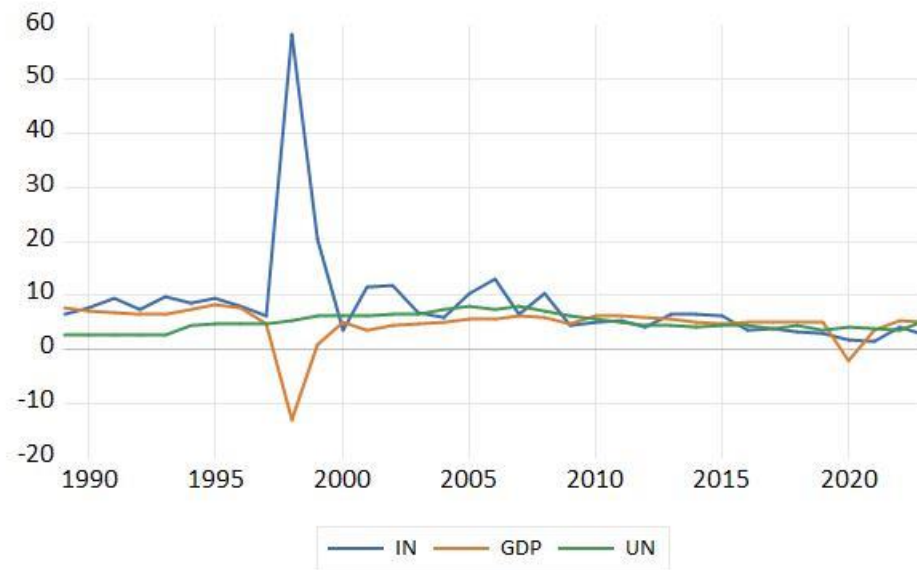


Figure 1 : Inflation, GDP, and Unemployment rate in Indonesia for the year 1989-2023

Source : Self Proceed

In *Figure 1*, during the monetary crisis in 1998, inflation in Indonesia reached 58.45%. After the crisis, inflation in Indonesia tended to fluctuate but not at extremely high levels. Low and stable inflation is a prerequisite for sustainable economic growth, which ultimately benefits the improvement of societal well-being. Controlling inflation is crucial because high and unstable inflation can have negative impacts on the socio-economic conditions of society (Bank Indonesia, 2020). The income earned in a specific period will affect the level of human consumption during that period. If income increases, consumption tends to increase, and vice versa (Andriansyah et al., 2023).

Unemployment in Indonesia has exhibited fluctuating figures over the past 35 years. In *Figure 1*, it can be observed that the unemployment rate in Indonesia is relatively volatile and tends to decline after reaching its peak in 2007, one year before the crisis in 2008. Unemployment has been a significant barrier to global economic growth, affecting both developed and developing economies.

The aim of this study is to investigate the relationship between GDP and unemployment on inflation also relevance to business longtivity in Indonesia, although the unemployment rate has relatively decreased in developed countries, developing economies have experienced a rapid increase in unemployment rates, leading to declines in household income and living standards.(Ekpeyong et al., 2023). In the theory proposed by (Phillips, 1958) here is a relationship between inflation and unemployment. This is consistent with the research conducted by (Karimah et al., 2023) and (Murjani, 2021) which also reveal the same findings. However, the study conducted by (Ernita, 2023) shows different results. Business growth in Indonesia is intricately intertwined with governmental regulations, thereby rendering its continuity considerably contingent upon the adept management of the economy and public policies by the government. The evolution and expansion of enterprises are profoundly impacted by the legislative framework, regulatory measures, and policy initiatives set forth by the authorities. Hence, the efficacy and adaptability of governmental economic strategies play a pivotal role in shaping the trajectory of business development across various sectors within the Indonesian landscape.

## **PROCEEDING**

### **Call for Paper – 4th International Seminar on Accounting Society “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”**

## **2. LITERATURE REVIEW**

### **Inflation**

Based on (Kamus Besar Bahasa Indonesia (KBBI), 2016) inflation is a condition where the value of currency (paper money) decreases due to a significant and rapid increase in its circulation, resulting in the rise of prices for goods and services. Inflation can be a positive sign as it indicates the strengthening of the purchasing power of society. However, inflation can also become a problem if the increase in prices for goods and services occurs significantly, leading to a decrease in the purchasing power of society and economic instability. From this definition, it can be understood why inflation becomes the primary focus in macroeconomic analysis (Rahardja & Manurung, 2008). Inflation can be calculated using the Consumer Price Index (CPI) indicator using the following formula:

$$\text{Inflation Rate} = (\text{Current CPI} - \text{Previous CPI}) / \text{Previous CPI} * 100$$

### **Unemployment**

Unemployment refers to the condition where individuals have the ability to work but do not have a job, and are actively seeking employment for at least the past four weeks (Mankiw, 2019). The unemployment rate within a specific workforce is typically expressed as a percentage of the labor force (those actively seeking employment). In theory, the tolerated unemployment rate is around 4–5% annually (Rahardja & Manurung, 2008). Here is a formula to calculate the unemployment rate, which is

$$\text{Unemployment rate} = (\text{People unemployed} / \text{Labor force}) \times 100$$

### **Gross Domestic Product (GDP)**

GDP (Gross Domestic Product) is the market value of all final goods and services produced within a country during a specific period. The use of GDP is often employed to assess the economic health of a nation (Mankiw, 2019). GDP calculates the total income and expenditure on goods and services within an economy. The higher the GDP value, the higher the income and expenditure per individual, thus GDP can serve as a natural indicator of the economic well-being of a country. GDP is defined by the following formula:

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{NX}$$

Explanation:

- Consumption (C) represents personal consumption expenditure by households and nonprofit organizations.
- Investment (I) refers to business expenditures by companies and home purchases by households.
- Government spending (G) denotes expenditures on goods and services by the government.
- Net exports (NX) represent the difference between a country's exports and imports.

## **3. DATA AND RESEARCH TECHNIQUE ANALYSIS**

The research aims to analyze the relevance between macroeconomic variables such as GDP and unemployment rate to the inflation rate, both in the long and short term, covering the period from 1989 to 2023. This study relies on secondary data obtained from

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

previous research, journals, books, and relevant internet sources related to the research topic. These secondary data have been processed by others as a result of previous research (Noor, 2015) In this case, the data were obtained from <https://data.worldbank.org/> (*Open World Data Bank*, 2024) and then processed using Eviews 12.

#### Research Method

This paper employs the VECM (Vector Error Correction Model) estimation method, which is derived from VAR (Vector Autoregressive) and descriptive method. VAR is utilized to model the relationships among variables in a system with time series variables, while VECM, in particular, is used to analyze dynamic impacts as well as long and short-term relationships in time series data.

The steps to estimate a VECM (Vector Error Correction Model) are as follow:

a) Stationarity Test

The first step is to examine the stationarity of each variable in the model. Empirical studies using time series data assume that the underlying time series is stationary (Gujarati & Porter, 2009). This can be tested using statistics such as Augmented Dickey-Fuller (ADF) or Phillips-Perron. If the variable is non-stationary, the next step is to perform differencing to make it stationary.

b) Determining Optimal Lag

Determining the optimal lag for the VECM model is done using information criteria such as the Akaike Information Criterion (AIC). Determining the optimal lag is important as it indicates how long a variable reacts to other variables. Additionally, determining the optimal lag is useful for addressing autocorrelation issues in the VAR system (Cristanto & Bowo, 2021).

c) VAR Stability Test

After determining the optimal lag length, conducting a VAR test is necessary before using VECM to ensure VAR stability. This ensures that the model to be estimated is more stable and accurate, and also helps prevent bias in the data when used for forecasting. Stability testing aims to assess whether the model used is stable. A model is considered to have high stability if the inverse characteristic root has a modulus not greater than one and all are located within the unit circle (Hadiyan, 2018).

d) Uji Kointegrasi

Once the lag length is determined, the next step is to test for cointegration among the variables. The concept of cointegration essentially examines the long-run equilibrium among the observed variables. Sometimes, data that are non-stationary individually become stationary when linearly combined, indicating the presence of cointegration. This phenomenon suggests that there exists a long-term relationship among the variables, which can be further explored through cointegration tests such as the Johansen test or the Engle-Granger test (Priatna, 2020).

e) VECM (Vector Error Correction Model)

Through VECM analysis, we can gain an understanding of the existence of long-term or short-term relationships among variables. The specification of VECM is achieved by constraining the long-term behavioral relationships between existing variables so that they converge into a cointegration relationship. However, it still allows for dynamic changes in the short term to provide accurate and reliable results. This characteristic makes the Vector Error Correction Model (VECM) method known as a reliable model in econometric analysis. (Damayanti & Jalunggono, 2022).

f) Analisis Impuls Response Function

The Impulse Response Function (IRF) analysis is conducted to understand the impact of changes in independent variables on dependent variables over a certain period. IRF

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society

#### “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

aids in analyzing the system's response to external disturbances. Impulse Response Function tests are useful for tracking the current and future responses of each variable to changes or shocks in a variable by utilizing all past information of that variable (Priatna, 2020).

g) Variance Decomposition

Variance Decomposition (VD) is utilized to comprehend the extent to which the variability of dependent variables can be explained by independent variables over a specific period. Variance decomposition provides values that depict the significance or magnitude of the contribution of each variable in the VECM system resulting from shocks (Damayanti & Jalunggono, 2022)

## 4. RESULT AND DISCUSSION

Analysis of the results of this research will be in the form of outlines in table 1 to table 9 and figure 2 to figure 4 :

### Stationarity Test

Table 1 : Stationary test

UNIT ROOT TEST TABLE (PP)				
<u>At Level</u>				
		IN	UN	GDP
With Constant	t-Statistic	-4.4393	-1.7201	-4.1890
	<b>Prob.</b>	<b>0.0012</b> ***	<b>0.4124</b> n0	<b>0.0024</b> ***
With Constant & Trend	t-Statistic	-4.9775	-1.6032	-4.1204
	<b>Prob.</b>	<b>0.0016</b> ***	<b>0.7706</b> n0	<b>0.0137</b> **
Without Constant & Trend	t-Statistic	-2.9159	0.0263	-2.1620
	<b>Prob.</b>	<b>0.0048</b> ***	<b>0.6843</b> n0	<b>0.0313</b> **
<u>At First Difference</u>				
		d(IN)	d(UN)	d(GDP)
With Constant	t-Statistic	-22.3545	-5.0080	-18.1806
	<b>Prob.</b>	<b>0.0001</b> ***	<b>0.0003</b> ***	<b>0.0001</b> ***
With Constant & Trend	t-Statistic	-24.2283	-5.0310	-19.3610
	<b>Prob.</b>	<b>0.0000</b> ***	<b>0.0015</b> ***	<b>0.0000</b> ***
Without Constant & Trend	t-Statistic	-21.1655	-5.0350	-17.8685
	<b>Prob.</b>	<b>0.0000</b> ***	<b>0.0000</b> ***	<b>0.0000</b> ***

Source: Self Proceed

From the data above, it can be observed that all three variables are stationary at the first difference level, as indicated by p-values below the alpha level of 0.05. If the ADF value is greater than the critical value at the significance level of  $\alpha = 5\%$ , it can be concluded that the data is non-stationary (Ristianti & Purwadi, 2019). Therefore, the research can proceed to the next stage, which is determining the optimal lag.

**PROCEEDING**

**Call for Paper – 4th International Seminar on Accounting Society**

**“The Evolving of SDG's in Advancing Business Longevity from Accounting International View”**

**Lag Optimum Test**

*Table 2 : Lag Optimum Test*

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-226.8736	NA	348.4614	14.36710	14.50451*	14.41265*
1	-218.0291	15.47779	353.2342	14.37682	14.92647	14.55901
2	-206.9942	17.24210*	316.5755*	14.24964*	15.21152	14.56847

Source : Self Proceed

Determining the optimal lag is a necessary indicator for estimating the VAR model. Optimal lag determination helps to understand how long the reaction between variables occurs. From *Table 2* above, it can be concluded that the optimal lag is at lag 2, indicating that the reaction between variables occurs up to the second period. After identifying the optimal lag, the next step is to check the stability of the VAR.

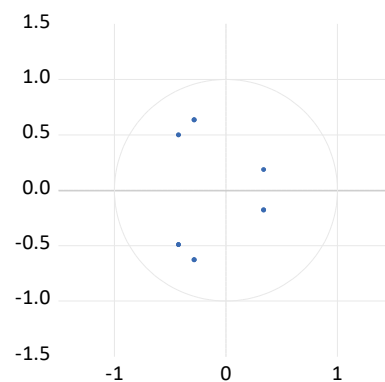
**VAR Stability Condition**

*Table 3 & Figure 2: VAR Stability Test*

Root	Modulus
-0.280969 - 0.632226i	0.691848
-0.280969 + 0.632226i	0.691848
-0.421216 - 0.494506i	0.649584
-0.421216 + 0.494506i	0.649584
0.342459 - 0.181865i	0.387754
0.342459 + 0.181865i	0.387754

No root lies outside the unit circle.  
VAR satisfies the stability condition.

Inverse Roots of AR Characteristic Polynomial



*Table 3* provides a clear indication of the stability of the VAR model, as evidenced by the absence of moduli exceeding one. Furthermore, additional evidence can be gleaned from the graphical representation in *Figure 2*, which depicts no points lying outside the unit circle, signifying the stability of all VAR values. This stability allows for the progression to the next phase, which involves conducting cointegration tests.

**Cointegration test**

*Table 4 : Cointegration Johansen System Test*

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.550831	47.21535	29.79707	0.0002
At most 1 *	0.451028	22.40433	15.49471	0.0039
At most 2	0.115748	3.813402	3.841465	0.0508

Source : Self Proceed

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society

#### “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

Table 4 presents the results of the cointegration test, which is instrumental in determining the existence of long-term relationships among variables. This is indicated by the Trace statistic exceeding the critical value, typically greater than 0.05, and the p-value being less than 0.05. The findings from the test indicate the presence of long-term relationships or cointegration among the variables under investigation. Therefore, the research proceeds to the next phase.

#### VECM Estimation

Table 5 : VECM Estimation in Long-term

Cointegrating Eq:	CointEq1
$D(IN(-1))$	1.000000
$D(GDP(-1))$	1.200980 (0.24864) [ 4.83014]
$D(UN(-1))$	-0.884562 (1.11168) [-0.79570]
C	0.248862

Table 6 : VECM Estimation in short-term

Error Correction:	D(IN,2)	D(GDP,2)	D(UN,2)
CointEq1	-4.154558 (0.92104) [-4.51072]	1.214238 (0.38590) [ 3.14650]	0.036193 (0.05684) [ 0.63677]
$D(IN(-1),2)$	1.687183 (0.70709) [ 2.38611]	-0.683127 (0.29626) [-2.30585]	0.001619 (0.04363) [ 0.03710]
$D(IN(-2),2)$	0.659959 (0.43897) [ 1.50341]	-0.359510 (0.18392) [-1.95467]	0.021960 (0.02709) [ 0.81066]
$D(GDP(-1),2)$	2.342623 (1.16039) [ 2.01882]	-1.322682 (0.48619) [-2.72053]	0.004426 (0.07161) [ 0.06181]
$D(GDP(-2),2)$	0.988227 (0.92430) [ 1.06916]	-0.748610 (0.38727) [-1.93306]	0.061511 (0.05704) [ 1.07840]
$D(UN(-1),2)$	-4.039035 (3.37998) [-1.19499]	2.918729 (1.41616) [ 2.06102]	-0.906594 (0.20858) [-4.34647]
$D(UN(-2),2)$	0.984513	-0.502830	-0.506066

**PROCEEDING**

**Call for Paper – 4th International Seminar on Accounting Society**

**“The Evolving of SDG's in Advancing Business Longevity from Accounting International View”**

	(3.85452) [ 0.25542]	(1.61498) [-0.31135]	(0.23787) [-2.12753]
C	-0.419297 (2.05440) [-0.20410]	0.282660 (0.86076) [ 0.32838]	0.029311 (0.12678) [ 0.23120]

*Table 7 : Determination test*

	D(IN)	D(GDP)	D(UN)
R-squared	0.766032	0.677583	0.542212
Adj. R-squared	0.694824	0.579456	0.402885
F-statistic	10.75772	6.905172	3.891655

Table 5 displays the long-term estimation results for Inflation, GDP, and Unemployment, while Table 6 showcases the short-term estimations. Table 7 provides the results of the determination test. Based on the data above, it can be concluded that the estimation results of the Vector Error Correction Model (VECM) equation system are as follows:

$$D(IN,2) = A(1,1)*(B(1,1)*D(IN(-1)) + B(1,2)*D(GDP(-1)) + B(1,3)*D(UN(-1)) + B(1,4)) + C(1,1)*D(IN(-1),2) + C(1,2)*D(IN(-2),2) + C(1,3)*D(GDP(-1),2) + C(1,4)*D(GDP(-2),2) + C(1,5)*D(UN(-1),2) + C(1,6)*D(UN(-2),2) + C(1,7)$$

$$D(GDP,2) = A(2,1)*(B(1,1)*D(IN(-1)) + B(1,2)*D(GDP(-1)) + B(1,3)*D(UN(-1)) + B(1,4)) + C(2,1)*D(IN(-1),2) + C(2,2)*D(IN(-2),2) + C(2,3)*D(GDP(-1),2) + C(2,4)*D(GDP(-2),2) + C(2,5)*D(UN(-1),2) + C(2,6)*D(UN(-2),2) + C(2,7)$$

$$D(UN,2) = A(3,1)*(B(1,1)*D(IN(-1)) + B(1,2)*D(GDP(-1)) + B(1,3)*D(UN(-1)) + B(1,4)) + C(3,1)*D(IN(-1),2) + C(3,2)*D(IN(-2),2) + C(3,3)*D(GDP(-1),2) + C(3,4)*D(GDP(-2),2) + C(3,5)*D(UN(-1),2) + C(3,6)*D(UN(-2),2) + C(3,7)$$

In the VECM data above, it can also be observed that the t-statistic value for GDP and Unemployment is greater than the t-table value of 1.98326, indicating that GDP has a long-term effect on inflation. This is consistent with the research conducted by (Kurniawan et al., 2021). Furthermore, it can be observed that the short-term relationship with the highest R-squared value is held by Inflation at 76%, followed by GDP at 67%, and Unemployment at 54%. This implies that Inflation has a greater impact on GDP and Unemployment.

**Impulse Response Function**

*Table 8 & Figure 3 : Impulse Response Function*

Response of D(IN): Period	D(IN)	D(GDP)	D(UN)
1	11.35404	0.000000	0.000000
2	-5.844436	-6.336961	-0.240441
3	-1.156732	-1.127679	0.431101
4	3.167469	-0.714774	-0.137897



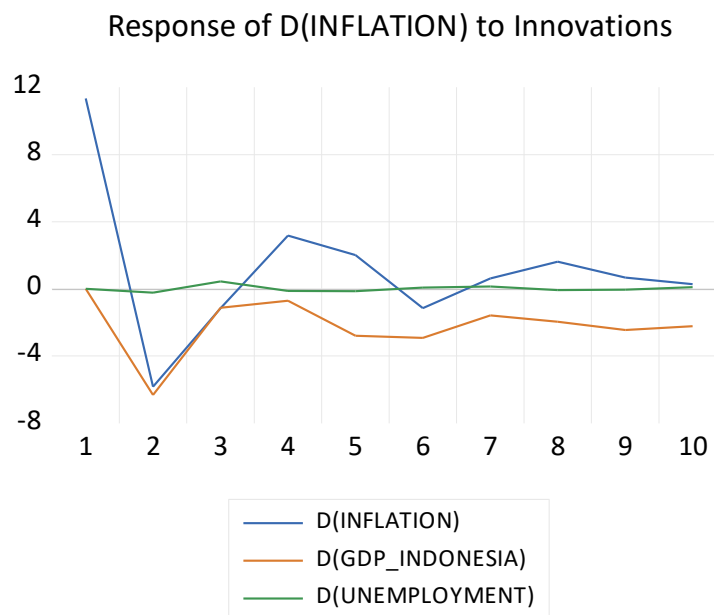
**PROCEEDING**

**Call for Paper – 4th International Seminar on Accounting Society**

**“The Evolving of SDG's in Advancing Business Longevity from Accounting International View”**

5	2.003001	-2.800844	-0.140797
6	-1.154939	-2.931208	0.065443
7	0.618956	-1.588808	0.129727
8	1.619026	-1.965316	-0.081259
9	0.667054	-2.466434	-0.055268
10	0.266828	-2.233247	0.098309

**Response to Cholesky One S.D. (d.f. adjusted) Innovations**



Source : Self Proceed

Table 8 above illustrates the response of GDP and Unemployment to inflation in the event of an increase, decrease, or shock. Starting from the second period, where GDP and Unemployment respond positively to a decrease in inflation. This response is also evident in Figure 3, where GDP and Unemployment have similar graphs, indicating a positive response. GDP responds positively to inflation until the third period, while Unemployment responds positively only until the second period. In the long term, such as the ninth period, GDP responds positively to inflation, but conversely with Unemployment, and in the tenth period, both GDP and Unemployment have a negative response to inflation.

**Variance Decomposition**

Table 9 & Figure 4 : Variance Decomposition

Variance Decomposition of D(IN):

Period	S.E.	D(IN)	D(GDP)	D(UN)
1	11.35404	100.0000	0.000000	0.000000
2	14.25786	80.21764	19.75392	0.028439
3	14.35556	79.77875	20.10302	0.118234
4	14.71886	80.52006	19.35870	0.121247

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society

#### “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

5	15.11693	78.09096	21.78542	0.123620
6	15.44188	75.39831	24.48142	0.120268
7	15.53628	74.64359	25.23063	0.125784
8	15.74377	73.74659	26.12826	0.125154
9	15.94984	72.02815	27.84870	0.123141
10	16.10794	70.64864	29.22690	0.124461

Source : *Self Proceed*

Based on the results from *Table 9* above, inflation is more influenced by GDP than by Unemployment, with a range of 19%–29% for GDP and 0.02%–0.12% for Unemployment. Although GDP has a greater impact than Unemployment, its influence is not always positive, indicating the need for government policy adjustments in managing GDP to make it more stable and measurable. A well-measured GDP contributes to maintaining business continuity. The correlation between inflation and GDP can also be attributed to the structure of Indonesia's GDP, which is dominated by consumption rather than trade (Cristanto & Bowo, 2021).

#### ***Business Sustainability in Indonesia***

The sustainability of businesses in Indonesia is influenced by macroeconomic variables such as inflation, GDP, and unemployment. With a stable and measurable economy, business stability becomes easier to maintain, as the success of businesses heavily relies on the economic climate in the regions where they operate. When aggregate demand is unstable, it can trigger waves of pessimism known as "animal spirits," a term coined by Keynes. In such scenarios, households may reduce their consumption expenditures, and companies tend to decrease their investment spending. Consequently, aggregate demand decreases, leading to a reduction in production and an increase in unemployment. Conversely, when optimism prevails, households and companies tend to increase their spending, leading to an increase in aggregate demand, expanded production, and potential inflationary pressures (Mankiw, 2019). Even in the theory proposed by (Phillips, 1958) here exists a trade-off between inflation and unemployment in the short term, implying that if inflation increases, unemployment will decrease because rising inflation could signify companies boosting their productivity by hiring more workers, thus reducing unemployment. Subsequently, households possess stronger purchasing power, leading to increased inflation. In the context of digital business, according to (Harahap et al., 2018), the development of digital businesses absorbs job opportunities and enhances economic productivity, thereby fostering economic growth. Digital businesses also influence inflation through various approaches. Conventional businesses are also significantly influenced by and influence economic variables. In Keynesian theory, the government plays a role in maintaining economic stability when necessary, and interventions become crucial in the event of market failures. As a country adhering to democratic principles, the goal of economic democracy is to achieve a fair and prosperous Indonesian society (Rahardja & Manurung, 2008). When households or companies generate profits, it leads to an increase in taxes and national income. The greater the profits, the higher the purchasing power, leading to increased inflation due to the expanding money supply. This is reflected in the GDP, which, despite being quite fluctuating, exhibits a relatively positive and significant relationship with inflation in both the short and long term, as indicated in *Table 8*. This implies that macroeconomic variables in Indonesia, particularly GDP and inflation, exhibit more measurable growth in this context.

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

#### 5. CONCLUSION

The findings of this study indicate that GDP has a long-term impact on inflation, whereas in the short term, GDP has a greater influence on inflation compared to unemployment, as it has a higher R-squared value. In the Impulse Response Function, in the long term, it can be observed that GDP and Unemployment respond quite differently to inflation, where GDP responds positively while unemployment responds negatively. GDP responds positively to inflation until the third period, while unemployment responds positively only until the second period, indicating that GDP and unemployment have a positive response in the short term. The sustainability of businesses is influenced by the business climate of a country; if a country has a stable economy, there is a high likelihood of having a healthy business climate as well. GDP and inflation in this study exhibit measurable growth, although not significant, which could serve as an indicator that business development in Indonesia could be more feasible.

Future research could explore the contribution of GDP components, sectoral analysis, and regional comparisons to further understand the relationship between GDP, unemployment, and inflation in Indonesia. External factors such as fluctuations in global commodity prices, macroeconomic variables such as corporate stock growth, and international monetary policies should also be considered. Additionally, research could highlight the role of fiscal and monetary policies in shaping inflation dynamics, as it would be beneficial if public policies and a country's economy were more considered, resulting in more impactful, comprehensive, and accurate research outcomes. With a more detailed approach and involving broader data, this research will provide deeper insights into the complex interaction among key economic variables in Indonesia.

#### REFERENCES

- Afriandi, Y., Triani, M., Ilmu, J., Fakultas, E., Universitas, E., & Padang, N. (2019). *Analisis kurva philips di indonesia*.
- Andriansyah, U., Suryadiva Indira Maharani, R., Az-Zahra, R., Ceisa Herlan, M., & Arbain, N. (2023). Analisis Dampak Kebijakan Ekspor terhadap PDB, Pengangguran, dan Inflasi di Indonesia (Impact Analysis of Export Policies on GDP, Unemployment, and Inflation in Indonesia). *Seminar Nasional Official Statistics*. <https://www.bps.go.id>
- Azaluddin, A., & Hanifa, L. (2021). Effect of Inflation and Economic Growth on The Rate of Unemployment. *Sang Pencerah: Jurnal Ilmiah Universitas Muhammadiyah Buton*, 7(4), 609–617. <https://doi.org/10.35326/pencerah.v7i4.1559>
- Badan Perencanaan Pembangunan Nasional. (2019). Peta Jalan Sustainable Development Goals (SDGs) di Indonesia. *Kementerian PPN/Bappenas*, 35. [https://sdgs.bappenas.go.id/website/wp-content/uploads/2021/02/Roadmap\\_Bahasa-Indonesia\\_File-Upload.pdf](https://sdgs.bappenas.go.id/website/wp-content/uploads/2021/02/Roadmap_Bahasa-Indonesia_File-Upload.pdf)
- Bank Indonesia. (n.d.). *Inflasi*. <https://www.bi.go.id/id/fungsi-utama/moneter/inflasi/default.aspx>
- Cristanto, F. A., & Bowo, P. A. (2021). Determinants of Indonesian Trade Balance: A Vecm Analysis Approach. *Economics Development Analysis Journal*, 10(4), 463–474. <https://doi.org/10.15294/edaj.v10i4.45909>
- Damayanti, S. A., & Jalunggono, G. (2022). Analysis of the Influence of Macroeconomic Variables on Inflation: the Vecm Approach. *Journal of Humanities, Social Sciences and Business (Jhssb)*, 2(1), 199–218. <https://doi.org/10.55047/jhssb.v2i1.402>
- Ekpeyong, P., Gabriel, P., & Graduate, E. (2023). *Econometric Analysis of the impact of inflation, unemployment, and economic growth on poverty reduction: A novel application of Asymmetric technique* **ECONOMETRIC ANALYSIS OF THE IMPACT OF INFLATION, UNEMPLOYMENT, ECONOMIC GROWTH ON POVERTY**

## PROCEEDING

### Call for Paper – 4th International Seminar on Accounting Society

### “The Evolving of SDG's in Advancing Business Longevity from Accounting International View”

*REDUCTION IN NIG. 117762.*

Ernita, D. (2023). *Analisis Dampak Faktor-Faktor yang Mempengaruhi Pengangguran Terhadap Pertumbuhan Ekonomi di Provinsi Jambi*. 7(1), 173–178.

Gujarati, D., & Porter, D. (2009). Basic Econometrics. In *Introductory Econometrics: A Practical Approach*.

Hadiyan, F. (2018). Analisis Hubungan Inflasi dan Pengangguran di Indonesia periode 1980-2016 dengan Pendekatan Kurva Phillips. *Current Neurology and Neuroscience Reports*, 1(1), iii–vii. <https://doi.org/10.1016/j.jns.2018.09.022><http://dx.doi.org/10.1016/j.ejphar.2009.04.058><http://dx.doi.org/10.1016/j.brainres.2015.10.001><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2854659&tool=pmcentrez&rendertype=abstract><http://w>

Harahap, B. A., Paundralingga, A. Y., Kusuma, A. C. M., Harahap, B. A., & Paundralingga, A. Y. (2018). *IMPLIKASI MAKROEKONOMI DARI INOVASI DIGITAL : STUDI LITERATUR Implikasi Makroekonomi Dari Inovasi Digital : Studi Literatur*.

Kamus Besar Bahasa Indonesia (KBBI). (2016). *Inflasi*. <https://kbbi.kemdikbud.go.id/entri/inflasi>

Karimah, L. N., Al-Fitri Shafwan, V., & Tambunan, N. (2023). Analisis Inflasi Terhadap Pengangguran Di Indonesia. *Community Development Journal*, 4(2), 4572–4577.

Kurniawan, M. L., Pudjihardjo, M., & Prasetyia, F. (2021). Analysis of the Relationship Between Economic Growth, Inflation and Unemployment in Indonesia. *IEDSR Association*, 6(15), 299–312. <https://doi.org/10.46872/pj.367>

Mankiw, N. G. (2019). *Macroeconomics*. Worth Publishers.

Mulia, R. A., & Saputra, N. (2020). Analisis Faktor-Faktor Yang Mempengaruhi Kesejahteraan Masyarakat Kota Padang. *Jurnal EL-RIYASAH*, 11(1), 67. <https://doi.org/10.24014/jel.v11i1.10069>

Murjani, A. (2021). *Apakah Fenomena Kurva Phillips Terjadi di Kalimantan Selatan ? Pemodelan Autoregressive Distributed Lag ( ARDL ) pada Inflasi dan Pengangguran*. 96–109.

Noor, J. (2015). *Metodologi Penelitian*. Prenada Media Group.

*Open World Data Bank*. (2024). <https://data.worldbank.org/>

Phillips, A. W. H. (1958). *The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom , 1861-19571*. Nov.

Priatna, I. A. (2020). ANALISIS VECTOR AUTOREGRESION (VAR) TERHADAP HUBUNGAN PENGANGGURAN DAN INFLASI DALAM PEREKONOMIAN INDONESIA I. *Jurnal Proaksi*, 7(2), 90–98.

Rahardja, P., & Manurung, M. (2008). *Teori Ekonomi Makro: Sebuah Pengantar*. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.

Risianti, D. F., & Purwadi, J. (2019). Implementasi Metode VECM (Vector Error Corection Model) dalam Menganalisis Pengaruh Kurs Mata Uang, Inflasi dan Suku Bunga terhadap Jakarta Islamic Indeks (JII). *Jurnal Ilmiah Matematika*, 6(1), 13. <https://doi.org/10.26555/konvergensi.v6i1.19544>

Stievany, G. M., & Jalunggono, G. (2022). Analysis of the Effect of Inflation, Exports and Imports on Indonesia’S Economic Growth. *Marginal : Journal of Management, Accounting, General Finance and International Economic Issues*, 1(3), 1–14. <https://doi.org/10.55047/marginal.v1i3.140>