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The Effect of Food Price Stabilization on Inflation in West Nusa Tenggara 2019-2023

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ABSTRACT: One of the primary contributors to the inflation rate in West Nusa Tenggara Province is the fluctuation of prices for food commodities. The objective of this study is to examine the extent to which fluctuations in food commodity prices, including those of rice,red chili, and shallots, contribute to inflationary trends in West Nusa Tenggara. The data used is monthly data on inflation and food commodity prices from 2019-2023 obtained from BPS (Central Bureau of Statistics), DKP (Food Security Agency), and the Agriculture Office of West Nusa Tenggara Province. The analysis method used is vector autoregression (VAR), which includes stationarity test, VAR stability test, optimal lag test, cointegration test, VAR estimation, impulse response function (IRF), and variance decomposition. The results of this study indicate that in the short term premium rice prices, curly red chili prices, and shallots do not affect inflation. Conversely, in the long run, the variable price of shallots does not affect inflation, while the variable price of premium rice and curly red chili prices exert an influence on inflationary pressures in West Nusa Tenggara Province. The Variance Decomposition Test indicates that the price of curly red chili contributes 37.24 percent to inflation in the fifth period, while premium rice has an effect of 8.66 percent on inflation in the second period and shallots have an effect of 7.93 percent on inflation in the fifth period.

KEYWORDS: inflation, Food, Food Commodity Prices, VAR/VECM

I. INTRODUCTION

In accordance with the stipulations set forth in Food Law No. 18/2012, the term food is defined as encompassing all substances derived from biological resources, agricultural products, plantations, forestry, fisheries, livestock, waters, and water, whether processed or unprocessed, utilized as raw materials for the production of foodstuffs, and other materials employed in the storage, processing, and/or preparation of food and beverages. In the economic aspect, food commodity prices often fluctuate. The occurrence of adverse weather conditions, which often result in crop failures, gives rise to fluctuations in food commodity prices. Consequently, these price fluctuations exert an influence on the inflation rate.

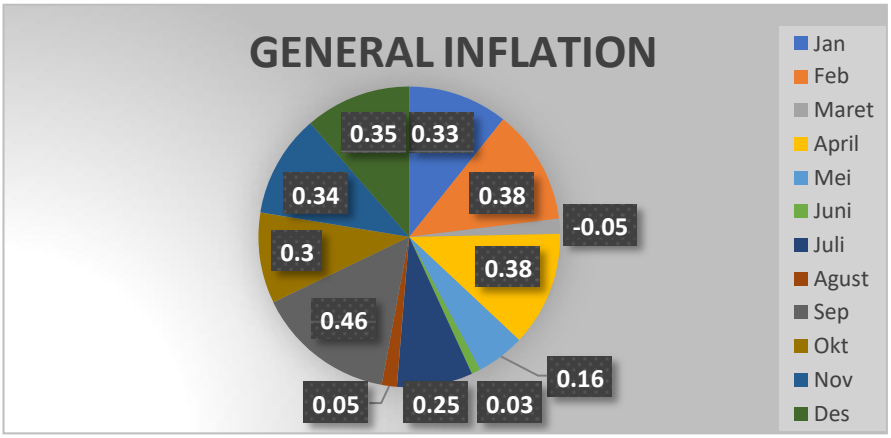
The phenomenon of food insecurity is reflected in the prices of food commodities. An increase in food prices results in price fluctuations and inflation. Similarly, a crop failure in a particular commodity leads to price fluctuations in the market. Conversely, an abundant harvest of a commodity also affects the stabilization of market prices. The term "volatile food inflation" is used to describe the phenomenon of fluctuating food commodity prices. These price movements are classified as non-core inflation, which is subject to a rangeof external factors, including natural disasters affecting food production, domestic food policy changes, and global shifts in food commodityprices. The fluctuation of food prices is a necessary consequence of the market economy. If the price of a particular foodstuff is to be increased, for example rice, chili, shallots, and others, the rise in price must be within reasonable limits.

Consequently, the efficacy of price stabilization is contingent upon the extent to which the inflation rate is managed. The inflation rate is a factor that must be considered in economic policy. High inflation will cause a decline in real income, which will in turn result in a decrease in purchasing power. Furthermore, unstable inflation will create uncertainty for economic actors in decision-making (Riyadh,2009).

The term inflation is used to describe an increase in the money supply or an increase in liquidity in an economy. This definition refers to the general symptom caused by rising prices. In subsequent discourse, the term inflation can be defined as a tendency for the prices of goods and services to increase in a general and continuous manner over an extended period of time (Suseno and Aisayah, 2009).

The Effect of Food Price Stabilization on Inflation in West Nusa Tenggara 2019-2023

According to the BPS, the inflation rate in West Nusa Tenggara in 2023 is still considered to be within an acceptable range, despite the NTB govern ment's target of 2.50 percent. The actual inflation rate in NTB in 2023 is 2.66 percent, indicating that the inflation conditions in the region are being effectively managed. As illustrated in Picture 1, the highest inflation rate in 2023 was observed in September at 0.46 percent. This was largely driven by a surge in food commodity prices, particularly rice, which experienced a 0.38 percent increase in February and April of the same year. This was accompanied by a rise in transportation and basic commodity prices. In March,the NTB province experienced a deflationary trend of -0.05 percent, reflecting a decline in purchasing power in line with the reduction inthe money supply. This was driven by an increase in bank interest rates, which contributed to a deflationary environment.



Picture 1. Inflation development in West Nusa Tenggara 2023Source: BPS NTB

As illustrated in the picture above, the development of inflation in NTB is statistically stable. However, it can be stated thatinflation occurs with greater frequency than deflation. This implies that, on a monthly basis, the prices of products consumed by the public continue to increase, albeit at a gradual rate. As indicated by data from the Central Bureau of Statistics, food commodities represent a significant contributor to inflation in West Nusa Tenggara. In 2023, inflation in the foodstuff group reached 5.11 percent, largely due to the impact of uncontrolled progressive commodity prices. One illustrative example is the phenomenon of excessive consumption during religious holidays. Commodities such as red chili, rice, garlic, and shallots, which are frequently utilized in daily life, contribute to high inflationary pressures due to their prevalence in consumer demand. The fluctuations in the cost of food commodities did not result in a reduction in purchasing power.

On May 3, 2017, the government introduced a new policy instrument, the Law Enforcement Instrument, which took the form of theSatgas Pangan. The stated aim of this instrument is to stabilize food prices. The tasks of the Task Force are to monitor food prices, ensure stock availability, facilitate the smooth distribution of food, supervise the supply chains that underpin the food sector, ensure that consumersare able to access food at fair prices, and to conduct law enforcement in the food sector. The task force comprises representatives from the National Police, Ministry of Home Affairs, Perum Bulog, Ministry of Agriculture, and the Business Competition Supervisory Commission (KPPU) (Khudori, 2019). Additionally, the government has implemented a market operation policy with the objective of stabilizing food prices. The market operation policy is designated as the Cheap Food Movement (GPM). The objective of the GPM is to reduce food prices when they reach excessive levels due to an imbalance in market demand. The GPM is typically implemented by agencies with a mandate related to food security, such as the Food Security Office of West Nusa Tenggara Province.

The inflation rate is primarily influenced by price fluctuations in food commodities. As the global population continues to grow, so does the demand for food. However, the supply of food is unable to keep pace with this increasing demand, leading to a rise in food prices and, subsequently, an inflationary pressure on the economy (Santoso, 2011). In light of the aforementioned description, researchers are interested in examining the impact of food price stabilization on inflation in West Nusa Tenggara between the years 2019 and 2023. This is influenced by the commodities that make the most significant contribution to the development of inflation in West Nusa Tenggara province.

The objective of this study is to ascertain the extent to which fluctuations in the prices of food commodities, including rice, red chili, and shallots, exert an influence on inflationary trends in West Nusa Tenggara.

II. RESEARCH HYPOTHESIS

A. Food

In accordance with Indonesian Law Number 18 of 2012, the term "food" encompasses all products derived from biological sources, including agricultural products, plantations, forestry, fisheries, livestock, waters, and water, both processed and unprocessed. These productsare intended for human consumption and include food additives, food raw materials, and other materials utilized in the preparation, processing, and/or manufacturing of food and beverages.

The term "food" encompasses both plant-based and animal-based sources. Animal-based foods include all products derived fromanimals, such as beef, chicken meat, ungag meat, fish meat, and other similar items. Vegetables are defined as all forms of food derived from plants, including rice, corn, vegetables, and so forth. There are three categories of food based on the method of acquisition:

a) In accordance with Indonesian Law No. 18 of 2012, fresh food is defined as food that has not undergone any form of processing for direct consumption and/or which can be utilized as raw material for further food processing.
b) The term processed food is used to describe food or beverages that have undergone a specific processing method or technique, resulting in a product that contains no additional ingredients. Examples of processed foods include rice, sweet tea, fried bananas,and other similar items. (Source: Indonesian Law No. 18 of 2012).
c) Certain processed foods are designed for specific groups with the objective of maintaining and enhancing the quality of health. One example is the use of stevia plant extract for individuals with diabetes, and low-fat milk for those following a low-fat diet.

B. Price Stabilization

From a variety of perspectives within the field of food economics, the price of food is one of the key factors that must be taken into account. The significance of food prices, particularly at the level of farmers and producers (while safeguarding consumers), is addressed by governments in different countries through the implementation of intervention policies. A number of food price policies are commonly implemented by governments in order to protect the interests of producers in the agricultural sector. These include the following:

1) Setting the highest and lowest price and/or government purchase price.
2) Timing and volume of imports
3) Regulation of the volume of government food stocks and the release of stocks to the market.
4) Determination of export ban.

The price of a food commodity is defined as the value assigned to a specific food commodity item. Some food products include, among others, red chili rice, red cayenne pepper, shallots, garlic, beef, eggs, chicken meat, and a plethora of other commodities that are included in the category of food. In accordance with the provisions set forth in the Minister of Agriculture's Regulation Number 65/permentan/Ot.140/12/2010,dated the aforementioned regulation, enacted on December 22, 2010, pertains to the establishment of minimum service standards for food distribution and accessibility. Its operationalization is facilitated through the implementation of indicators pertaining to the stabilization of food prices and supplies. In accordance with the aforementioned regulation, prices may be deemed stable if fluctuations in food priceswithin a given area do not exceed 25 percent of the average price in normal conditions. Price stabilization is defined as a condition of stable and low inflation. The efficacy of price stabilization is contingent upon the implementation of effective and efficient distribution management strategies. When distribution management is executed in a manner that is both effective and efficient, it can serve to ensure price stabilization.

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C. Inflation

The term "inflation" is used to describe a general and continuous increase in the prices of goods and services. The effects of inflation are manifold and deleterious, affecting individuals, communities, and the economy as a whole. The phenomenon of high inflationhas a detrimental impact on the economy, leading to a decline in economic activity and continued price inflation. This, in turn, gives rise tounfavorable conditions for trade activities, particularly those related to exportation, which are unable to compete effectively in the international market. In addition, the result of inflation is to reduce the welfare of individuals and society, namely:

1) A reduction in real income for individuals with fixed sources of income.
2) A decline in the value of wealth in the form of currency.
3) An exacerbation of the wealth gap or an increase in the disparity in income distribution between socioeconomic groups.

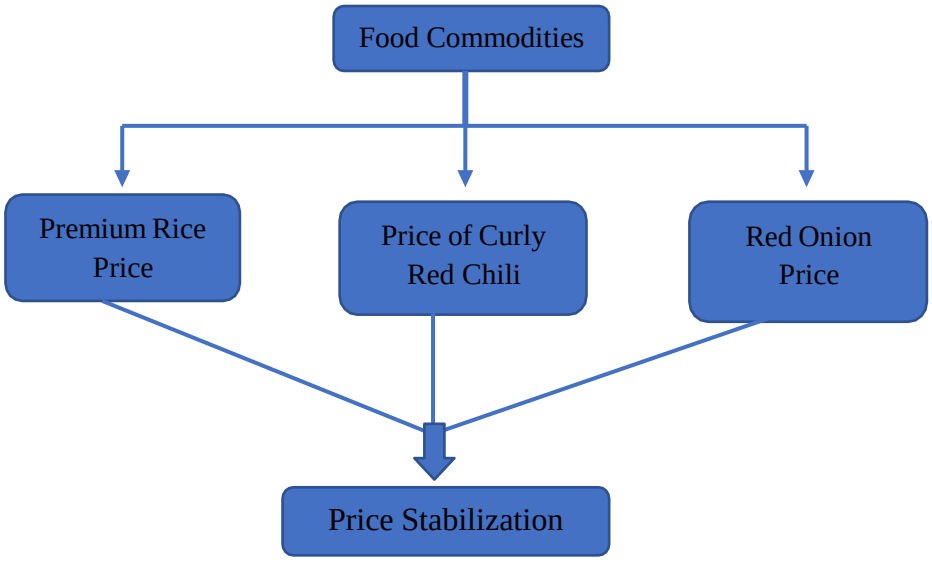
Menurut (Riyono dkk, 2022) inflasi memiliki penggolongan dalam tingkatannya. Penggolongan inflasi menggunakan kriteria diantaranya yaitu sebagai berikut:

1) A rate of inflation that may be described as "mild" is one in which the increase in prices of goods is below 10 percent per year.
2) "Moderate" inflation is defined as an increase in prices of goods ranging from 10 percent per year to 30 percent per year.
3) "High" inflation is characterized by an increase in prices of goods ranging from 30 percent per year to 100 percent per year.
4) "Hyperinflation" is defined as an increase in the price of goods exceeding 100 percent per year.

In general, an indicator is employed to elucidate price fluctuations. This indicator is the consumer price index (CPI), which encompasses the goods and services deemed essential for the community and sold at the retail level. As stated by Rivani, Sraguh, and colleagues (2016), in addition to the CPI, there are multiple other indicators utilized in the estimation process of inflation. These include the wholesale trade price index (IHPB) and the gross domestic product (GDP).

D. Framework

Fluctuations in food commodity prices frequently contribute to inflationary pressures. When a population reaches a certain size, thedemand for food rises, yet the supply of food remains inadequate to meet existing demand, leading to price increases. If this occurs repeatedly, it will exert a significant influence on the inflation rate. In West Nusa Tenggara, food commodities represent a substantial component of the inflation rate. This is due to the fact that food commodities are essential items that are frequently utilized in everyday life and also experience the highest demand during holidays. he objective of this study is to examine the impact of food price stabilization on inflation in West Nusa Tenggara. To this end, the following framework is employed:



Description :
X1 : Premium Rice
X2 : Curly Red Chili
X3 : Red Onion
Y : Inflation

III. RESEARCH METHODS

This research employs a quantitative methodology to investigate a given phenomenon. The approach is supported by a review of relevant literature and the findings are derived from the calculation of indicators for the research variables**.** The data utilized in this study aresecondary data obtained in the form of numerical values and data analysis using monthly price data statistics of food commodities, specifically rice prices, curly red chili prices, shallot prices, and monthly inflation variables in West Nusa Tenggara.

The data sources were obtained from the Central Bureau of Statistics (BPS) of NTB Province, the Food Security Agency

(DKP) of NTB Province, and the Department of Agriculture. The study employed a two-pronged approach to examine the relationship between food commodity prices and inflation. Firstly, secondary data was collected, and secondly, vector autoregression (VAR) was used to ascertain the impact of fluctuations in food prices on inflation. As posited by Widarjono (2018), vector autoregression represents a model of the time series variety, offering a means of analysing the interdependent relationship between economic variables. The general vector autoregression (VAR) equation model can be expressed as follows:

$$Inft=\beta0+\beta1Inft-1+\beta2CMt-1\ \beta3BPt-1+\epsilon1t \quad (1)$$

$$BPt=\beta0+\beta1Inft-1+\beta2CMt-1\ \beta3BPt-1+\epsilon2t \quad (2)$$

$$CMt=\beta0+\beta1CMt-1+\beta2Inft-1\ \beta3BPt-1+\epsilon3t \quad (3)$$

$$BMt=\beta0+\beta1BPt-1+\beta2Inft-1\ \beta3CMt-1+\epsilon4t \quad (4)$$

Description :

Inft : inflation in the current year

Inft-1 : inflation in the previous year

BPt : price of premium rice in the current year

BPt-1 : price of premium rice in the previous year

CMt : red chili price in the current year

CMt-1 : red chili price in the previous year

BMt : onion price in current year

BMt-1 : previous year's shallot price

$\beta1, \beta2, \beta3$: constant

ϵt : error term

The process and stages of VAR analysis can be explained as follows:

1. Stationary Test

The data stationary test is conducted using the unit root test (Uni Root Test) and the Augmented Dickey-Fuller (ADF) test, whereby the outcomes may be influenced by the duration of inaction.

2. Optimum Lag Test

The optimal lag can be determined through the Lag Length Criteria test, which utilizes the first appearance of an asterisk on several criteria, including the LR (Sequential Modified Likelihood Ratio Test Statistic), FPE (Final Forecast Error), AIC (Akaike Information Criterion), SC (Schwarz Information Criterion), and HQ (Hannan-Quinn Information Criterion), to identifythe optimal lag length.

3. VAR Stability Test

VAR stabilization test with Lag Structure and AR Root where if the modulus value is below one.

4. Cointegration Test

The cointegration test is employed to ascertain the long-run equilibrium between the observed variables. The vector autoregression (VAR) model can be applied in instances where there are a number of variables exhibiting a unit root and lacking cointegration with one another. To test for cointegration, it is possible to employ either the Engle-Granger test or the Johansen test. This test is a unit root test on the residual set obtained from the regression equation between the observation variables.

5. Estimated Vector Error Correction Model

VECM estimation is employed to yield two outputs: long-run and short-run estimation. In this study, the vector error correction model (VECM) is employed to ascertain the impact of food prices on inflation in NTB Province, both in the long run and in the short run.

The general VECM equation is as follows:

$\Delta yt = \alpha\ et\text{-}1 + \beta 1\Delta yt\text{-}1 + \beta 2\Delta yt\text{-}1 + \beta 3\Delta yt\text{-}1 + \beta 4\Delta yt\text{-}1 + \beta 5\Delta yt\text{-}1\ €t$

6. Impulse Response Function (IRF)

The Impulse Response Function is a statistical tool used by analysts to assess the impact of a shock or change in adisturbance variable on the response of endogenous variables in a Vector Autoregression (VAR) system.

7. Variance Decomposition

The variance decomposition provides insight into the relative importance of each variable in the vector autoregression (VAR) system in response to a shock

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IV. RESULTS OF DISCUSSION

A. Stationarity Test

The Augmented Dickey- Fuller Unit Root Test may be employed to ascertain whether a given data set is stationary. This test involves two hypotheses: H0, which states that a unit root exists, and Ha, which states that no unit root exists. The variable can be deemed stationary if the probability value is less than 0.05 (Ariefianto, 2012).

Table 1. Level Stationary Test

Variabel	t-Statistik	Mac Kinnon Critical Value			Prob	Description
		1 %	5%	10%		
Inflation	-7.308818	-3.546099	-2.911730	-2.593551	0.0000	Stasioner
premium rice	-0.080824	-3.552666	-2.914517	-2.595033	0.9462	Non-stationary
Red Curly Chili	-2.333280	-3.552666	-2.915417	-2.595033	0.1654	Non-stationary
Red Onion	-2.396499	-3.557472	-2.916566	-2.596116	0.1475	Non-stationary

Source: *The author's processed results*

The results of the level stationary test indicate that the inflation variable is stationary, whereas the commodities of premium rice, curly red chili, and shallots are not stationary. Therefore, it is necessary to conduct the next test, namely the first differenced stationary test.

Tabel 2. Stationary Test Fist Different

Variables	t-Statistik	Mac Kinnon Critical Value			Prob	Description
		1 %	5%	10%		
Inflation	-8.940048	-3.550396	-2.913549	-2.594521	0.0000	Stasioner
premium rice	-6.943459	-3.557472	-2.916566	-2.596116	0.0000	Stasioner
Red Curly Chili	-7.783150	-3.557472	-2.916566	-2.596116	0.0000	Stasioner
Red Onion	-6.197987	-3.557472	-2.916566	-2.596116	0.0000	Stasioner

Source: *The author's processed results*

As illustrated in Table 2, the variables at the initial distinct level, including Premium Rice, Curly Red Chili, Red Onion, and inflation, are stationary, with a probability value of less than 0.05. This allows for the continuation of the process of determining the optimallag for the model.

B. Optimum Lag Test

Eangle (1994) suggests "to determine the optimal lag, then by looking at the Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criteria (AIC), Schwarz Information Criterion (SC), and Hannan-Quinn Criterion (HQ).

Picture 2. Optimal Lag Test Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-469.3283	NA	947.1386	18.20493	18.35503	18.26248
1	-369.4360	180.5745*	37.68208*	14.97831	15.72879*	15.26602*
2	-354.1993	25.19916	39.26125	15.00767	16.35853	15.52555
3	-336.8192	26.07018	38.33562	14.95459*	16.90583	15.70265

Source: *The author's processed results*

The lag length criteria test indicates that lag 1 represents the optimal lag. The optimal lag length is determined to be lag 1, asindicated by the number of stars that appear. Subsequently, a variance stability test is conducted to ascertain the modulus value.

C. VAR Stability Test

The subsequent test is the VAR model stability test. The VAR stability test is conducted with a lag structure, subsequently followed by an AR roots table. The model is deemed stable if all the roots of the polynomial function lie within the unit circle or if the absolute value is less than one.

Picture 3. ***VAR Stability Test***

Root	Modulus
0.940931 - 0.026587i	0.941307
0.940931 + 0.026587i	0.941307
0.655506	0.655506
-0.084426	0.084426

Source: *The author's processed results*

The results of the VAR stability test show that the optimal lag obtained in the optimal lag determination test at lag 1 has a value <1,thus proving that the VAR estimate is stable. Following the completion of the VAR stability test, the subsequent step is to conduct a cointegration test in order to ascertain the long-term equilibrium between variables.

D. Cointegration Test

The cointegration test is employed to ascertain the long-term relationship between variables. In the event of cointegration, further analysis may be conducted using a vector error correction model (VECM). In the absence of cointegration, it is sufficient to perform a vector autoregression (VAR) estimation. The Johansen cointegration test employs an analytical approach based on a trace statistic,accompanied by a critical value at the 5 percent confidence level. Should the data in the trace statistic exceed the critical value, it can be concluded that cointegration has occurred.

Picture 4. Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.416054	50.70369	40.17493	0.0032
At most 1	0.226521	21.65460	24.27596	0.1033
At most 2	0.115658	7.784318	12.32090	0.2539
At most 3	0.021018	1.147078	4.129906	0.3311

Source: *The author's processed results*

It can be concluded that there is one equation that has reached a state of cointegration at the 5 percent real level. This is evidenced by the trace statistic value (50.70369), which exceeds the critical value (40.17493). The results demonstrate that the equation is cointegrated,indicating that the VECM model can be employed for further analysis.

E. Estimated Vector Error Correction Model

The VECM estimation results in order to know whether the test is significant or not is done by comparing the t-count value withthe t-table value. Where if the t-count value is greater than the t-table value, there is a significant effect and vice versa if the t-countvalue is smaller than the t-table value, the variable does not have a significant effect. Description standard error (), t-count value t-table value = 2.003241.

Table 3. Short-Term VECM Estimation

Error Correction	Coefficient	t-value	T-table	Description
C	0.000420	3.57615	2.003241	Significant
D(RICE(-1))	-0.246590	-1.67997	2.003241	Not Significant
D(CMK(-1))	-0.004006	-0.68778	2.003241	Not Significant
D(BM(-1))	-0.042562	-1.70083	2.003241	Not Significant
D(INF(-1))	-0.106863	-0.72650	2.003241	Not Significant

Source: *The author's processed result*

Table 3 indicates that the short-term VECM estimation of all variables that have been tested has a t-count value that is smaller than the t-table value. This suggests that rice is not a significant determinant of inflation, with a value of [-1.67997]. Similarly, curly red chili, shallots, and inflation have insignificant effects on one another, with values of [-0.68778], [-1.70083], and [0.72650], respectively.Consequently, in the short term, the price of premium rice, the price of curly red chili, and the price of shallots have no discernible impacton inflation in NTB Province.

Table 4. Long-Term VECM Estimation

Error Correction	Coefficient	t-value	T-table	Keterangan
D(RICE(-1))	-1924.330	-5.86014	2.003241	Significant
D(CM(-1))	26.67074	3.44352	2.003241	Significant
D(BM(-1))	-21.53949	-1.95457	2.003241	Not Significant
D(INF(-1))	1.000.000	-	-	Not Significant
C	-63.40932	-	-	-

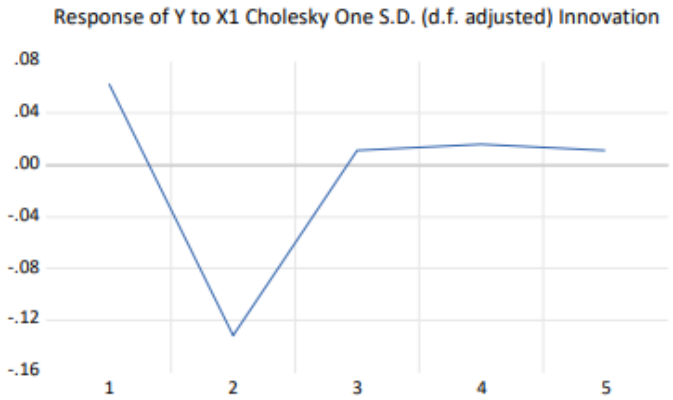
Source: *The author's processed result*

It can be In the long run concluded that the rice commodity and curly red chili have a significant effect on inflation, as evidenced by a t-count value that exceeds the t-table value. Conversely, the shallot commodity has no significant effect on inflation, as indicated by a t-count value that falls below the t-table value. The subsequent test is an impulse response function test, which is conducted to ascertain whether any shocks or changes in the disturbance variable have occurred.

F. Impulse Response Function (IRF)

Analyzing the IRF, a 5-period forward look at the study period will be performed. The objective of IRF analysis is to determine the impact of the standard deviation of current innovations on the present and future values of endogenous variables. The dynamic structure of the VAR model allows shocks to an endogenous variable to propagate to other endogenous variables and also to the original variable. IRF provides details about the degree of association between endogenous variables and the direction of association (Hadiati, 2010).

Picture 5. IRF Inflation on Premium Rice

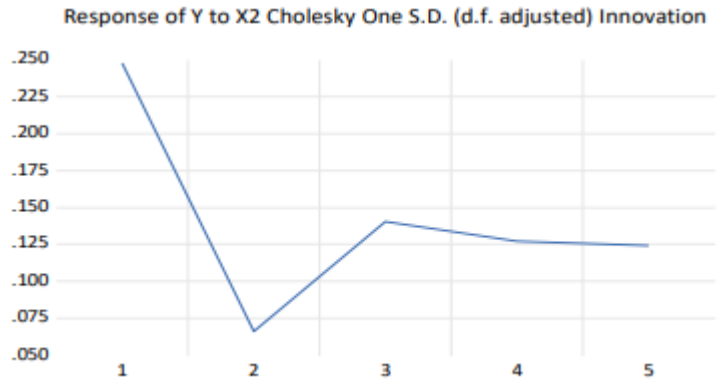


Source: *The author's processed result*

Figure 5 illustrates that in the initial period, the inflation response was still volatile due to the spike in premium rice prices.

However, in the second period, inflationary pressures subsided, and in the third period, there was a slight increase. Moreover, from the third to the fifth period, fluctuations began to stabilize, indicating that inflation is no longer as volatile as it was in the previous period. Therefore, it can be concluded that the graph reflects a state of stability.

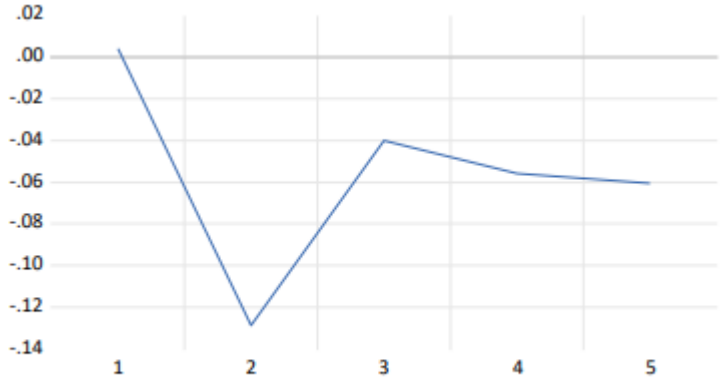
Picture 6. IRF Inflation of Curly Red Chili



Source: *The author's processed result*

As evidenced by the IRF test, the initial period exhibits a pronounced inflationary response to price shocks pertaining to curly red chili. However, this response attenuates in the second period, while the third period displays a modest inflationary surge. Moreover, following the fourth and fifth periods, fluctuations began to stabilize, indicating that inflation is no longer as volatile as it was in the previous period. Therefore, it can be concluded that the graph reflects a state of stability.

Picture 7. IRF Inflation on red onion



Source: The author's processed result

The IRF test indicates that the response of inflation to the price of shallots is relatively stable during the first period. However, during the second period, inflation experiences a relatively low decline. During the third period, inflation experiences an increase, though not to a significant extent. After the third period, inflation experiences a decline, but the magnitude of this decline is relatively small.

G. Variance Decomposition

Tujuan dari uji Dekomposisi Varians adalah untuk mengetahui persentase kontribusi setiap komoditas pangan terhadap variabilitas inflasi, sebagai akibat dari guncangan yang disebabkan oleh perubahan harga yang diteliti (Widarjano, 2018).

Picture 8. Variance Decomposition

Variance Decomposition of Y: Period	S.E.	X1	X2	X3	Y
1	0.455534	1.898821	29.58719	0.007193	68.50679
2	0.496866	8.669189	26.62200	6.711174	57.99763
3	0.519666	7.970811	31.65250	6.725149	53.65154
4	0.540555	7.453464	34.76954	7.282321	50.49467
5	0.560641	6.967263	37.24222	7.935737	47.85478

Source: The author's processed result

The results of the variance decomposition analysis of food commodities in NTB Province indicate which are the most prominent in influencing inflation, with the least and greatest influences identified. The order of food commodities from the smallest inflationary influence to the largest is shallots, premium rice, and curly red chili peppers.

As illustrated in Table 5, curly red chilies represent the most diverse inflationary pressures in NTB Province, with a 5th-period contribution of 37.24 percent. The supply of curly red chili peppers is often limited, yet consumer demand is on the rise. The high consumption of curly red chili peppers is not only a matter of everyday sustenance; it is also shaped by the actions of business actors in the realm of raw materials. This results in an increase in the price of the curly red chili commodity, thereby contributing to the diversity of inflation in NTB Province

The subsequent position is that of premium rice, which occupies the second position in terms of diversity of inflation in NTB Province. During the second period, it contributed to the highest inflation rate of 8.66 percent. Rice prices frequently exhibit an increase due to recurrent harvest delays resulting from the influence of uncertain natural conditions. Consequently, rice prices are often volatile, contributing to the diversity of inflation in NTB Province. Lastly, shallots contributed the most to inflation in the 5th period with 7.93 percent. In fact, public demand for shallot commodities is also considerable, yet accompanied by the availability of raw materials capable of meeting market demand, thereby reducing the inflation rate.

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

The research allowed for the following conclusions to be drawn:

1. In the short term, the variables of premium rice price, curly red chili price, and shallots do not exert any influence on inflation in West Nusa Tenggara Province. All variables exhibit a t-count value that is less than that of the t-table value.
2. In the long run, the variable price of shallots does not exert an influence on inflationary trends. Conversely, the variable priceof premium rice and the price of curly red chili do affect inflationary trends in West Nusa Tenggara Province. In consideration of all variables, it can be concluded that the t-count value is greater than the t-table value.
3. The Variance Decomposition Test indicates that the price of curly red chili is responsible for 37.24 percent of inflation in the fifth period, while premium rice has an effect of 8.66 percent on inflation in the second period and shallots have an effect of 7.93 percent on inflation in the fifth period.

B. Suggestions

It is hoped that the government as the one providing the policy will make efforts to suppress the increase in food commodity prices so that commodity prices are stable. The government also needs to monitor food commodity prices every day to obtain accurate information regarding developments in food prices both at the producer and consumer levels. The government must improve the trading system in addition to the production system so that the distribution of food commodity products can be more efficient by implementing supply chain management.

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