E-ISSN : 2721-303X
P-ISSN : 2721-3021
DINASTI INTERNATIONAL JOURNAL OF ECONOMICS, FINANCE AND ACCOUNTING (DIJEFA)
https://dinastipub.org/DIJEFA dinasti.info@gmail.com +62 811 7404 455

DOI: https://doi.org/10.38035/dijefa.v5i4
Received: 14 August 2024, **Revised:** 27 August 2024, **Publish:** 30 September 2024

The Influence of Rice Production, Rice Prices, Exchange Value on Rice Imports Islamic Perspective Review

Febriyani Natari Manik[1], Isnaini Harahap[2], Noor Ahmadi Bi Rahmani[3]
[1] Universitas Islam Negeri Sumatera Utara, Indonesia, febriyaninatarimanik@gmail.com
[2] Universitas Islam Negeri Sumatera Utara, Indonesia, isnaini@uinsu.ac.id.
[3] Universitas Islam Negeri Sumatera Utara, Indonesia, nurahmadi@uinsu.ac.id

[*]Corresponding Author: febriyaninatarimanik@gmail.com

Abstract: Indonesia is an agricultural country where the source of livelihood for most of its population is in the agricultural sector. Indonesia is called an agricultural country because it has abundant natural resources and extensive agricultural land. However, just having a large area of land and getting the title of an agricultural country does not mean that you can produce your own food. The large population is one of the factors that influences Indonesia to import food commodities to meet basic domestic needs. This research aims to determine the influence of rice production, rice prices, exchange rates on rice imports from an Islamic perspective. The research method uses a quantitative approach with the VAR/VECM method. The data collected is secondary data and analyzed using *software Eviews 13*. The sample for this research is monthly and annual data on rice production, rice prices, exchange rates and rice imports from 2000-2023. The research results show that rice production partially influences rice imports. Rice prices influence rice imports. The exchange rate partially has a significant negative effect on rice imports and rice production, rice prices, the exchange rate partially has a significant negative effect on rice imports.

Keyword: Rice Production, Rice Prices, Exchange Rates, Rice Imports

INTRODUCTION

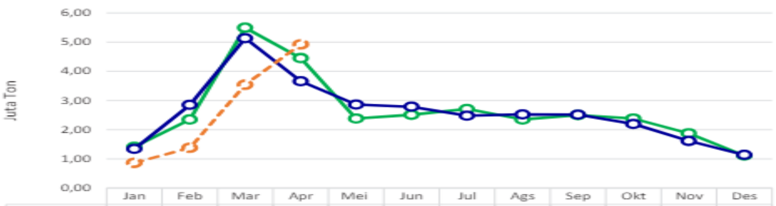
Indonesia is one of the countries in the world that has abundant natural potential for both agriculture and animal husbandry. Indonesia is called an agricultural country because in the agricultural sector it is the main and important food commodity for its people in meeting their daily needs. These agricultural commodities play an important role in the national economy. Where the concept of development in agriculture is expected to increase existing productivity and can be a factor that changes the economic status of people who work as farmers. However, based on known facts, Indonesia is a country with the status of a developing country and is still experiencing problems (*problem*) especially in the food sector (Hasanah, 2022).

Rice Production in Indonesia If rice production is converted into rice for the population's food consumption, then rice production from January to December 2023 is equivalent to 31.10 million tons of rice, or a decrease of 439.24 thousand tons (1.39 percent) compared to 2022 which was amounting to 31.54 million tons. The highest rice production in 2023 will occur in March, namely 5.13 million tons. Meanwhile, the lowest rice production occurred in December, namely 1.14 million tons (Figure 1.1). In January 2024, rice production is estimated at 0.86 million tonnes of rice, and potential rice production from February to April 2024 is 9.85 million tonnes. Thus, potential rice production in the January-April 2024 Subround is estimated to reach 10.71 million tons of rice or a decrease of 2.28 million tons (17.52 percent) compared to rice production in January-April 2023 which was 12.98 million tons of rice.

International trade can be defined as trade activities carried out by two or more countries on the basis of mutual agreement. International trade is carried out with the aim of meeting unmet domestic needs and increasing the country's foreign exchange. In accordance with the explanation of existing objectives, it can be seen that the factors causing international trade are: differences in natural resources, expanding markets, establishing cooperation between countries. International trade activities are divided into exports and imports.

Indonesia is an agricultural country where the source of livelihood for most of its population is in the agricultural sector. Indonesia is called an agricultural country because it has abundant natural resources and extensive agricultural land. However, it has a large area of land and gets it *tittle* Just being an agricultural country doesn't mean it can produce its own food. The large population is one of the factors that influences Indonesia to import food commodities to meet basic domestic needs.

Rice production in Indonesia is one of the factors causing Indonesia to import rice. Almost 97% of the Indonesian population consumes rice as the main staple food, this indicates that dependence on rice is very high (Louhenapessy, et al. 2010). This makes Indonesia one of the countries with the third highest rice production after China and India. Due to high consumption, rice production in Indonesia is high.



	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nov	Des
2022	1,42	2,35	5,49	4,45	2,38	2,51	2,71	2,35	2,50	2,38	1,88	1,11
2023	1,34	2,85	5,13	3,66	2,86	2,79	2,48	2,52	2,52	2,19	1,62	1,14
2024	0,86	1,38	3,54	4,92								

Catatan: [1]Produksi beras Januari–April 2024 adalah angka sementara
Perbedaan angka di belakang koma disebabkan oleh pembulatan angka

Gambar 5 Perkembangan Produksi Beras di Indonesia (juta ton-beras), 2022–2024[1]

Figure 1. Development of Rice Production in Indonesia

Paddy/Rice Production Rice production is obtained from multiplying the harvested area (net) by productivity. The harvested area of rice plants in paddy fields must be corrected by the amount of galengan conversion. Meanwhile, for rice harvested areas on non-rice fields, the galengan area is considered non-existent (not corrected for the galengan conversion amount). Rice production is obtained from the conversion of rice production into rice using the grain-to-rice conversion rate and taking into account the proportion of grain/rice that is lost/wasted and for non-food use. Paddy and rice production is calculated at the district/city level.

In Table 1. there is data from the Central Statistics Agency (BPS) regarding Rice Imports by Main Country of Origin from 2017-2023. The largest rice imports are from Vietnam compared to other countries in the table, namely in 2023 with a total of 1,147,705/ton of rice exported to Indonesia.

Some of the largest rice import destination countries are: India, Thailand, Vietnam. Indonesia has imported 3,062,858 million tonnes of rice throughout 2023, according to the

Indonesian Statistics report. Determining the volume of rice imports must be regulated because, if not, there will be a rice surplus which will result in a decrease in the price of rice circulating on the market. Regulating the volume of rice imports also influences the use of the state's foreign exchange budget so that it is allocated better and more precisely. Rice import level. The following is how rice production affects rice imports in Indonesia. Sufficient supply. If domestic rice production is sufficient to meet national consumption needs, then the need for rice imports will decrease. On the other hand, if production is insufficient due to factors such as bad weather, pest attacks, or a decrease in crop yields, rice imports will increase to cover the supply shortage. Rice production tends to experience erratic changes in value that occur in seasonal or annual markets. In years where harvests are abundant, Indonesia may reduce or even stop imports. However, in years with poor harvests, the country may increase imports to maintain price and supply stability. Extreme weather conditions, such as drought or floods, can affect rice yields. When production is negatively affected, the need for rice imports increases to make up for the shortfall. Government policies related to subsidies, support for farmers, or land management also influence rice production levels. Policies that support rice production will reduce dependence on imports, while ineffective policies can lead to supply shortages.

METHOD

The type of approach used in this research is a quantitative approach. Quantitative research methods are called positivistic methods because they are based on the philosophy of positivism (Sugiyono, 2010). Quantitative research is a method that tests theory by examining the relationship between variables using research instruments which usually consist of numbers that can be analyzed based on statistical procedures (Amruddin et al., 2022). According to Tarigan et al., (2011) quantitative research is systematic scientific research that examines phenomena and their relationships using mathematical models. It can be said that quantitative research is a systematic research method based on positivism which aims to examine a certain population or sample and uses instruments and can be analyzed statistically so that it can test predetermined hypotheses.

The type of data used in this research is time series data (*time series*). A time series is a set of observations obtained at different points in time with the same time interval and the data series are assumed to be interconnected with each other (Box et al., 1994). The variables used in this research are rice production, rice prices, exchange rates and rice imports. The time range used is the period 2000-2023.

RESULTS AND DISCUSSION

Try Stationer

To fulfill one of the assumptions in the causality and VAR tests, it is necessary to first carry out a stationarity test. The stationarity test used in this research is the unit roots test (*unit root test*) by method *Augmented Dickey Fuller Test* (ADF). The final analysis related to the VAR model is to look for causal relationships or causality tests between endogenous variables (*dependent*/bound) in the VAR model. This causal relationship can be tested using the Granger causality test (Hidayatullah, 2011: 26).

In the stationarity test, hypothesis testing is carried out by comparing the ADF value (*Augmented Dickey-Fuller*) calculate with Table ADF values. If at a certain level of confidence the calculated value of DF and ADF is greater than the table value of DF and ADF, then reject H0 and accept Ha.

The hypothesis based on the probability value is:

a. H0 = $\delta = 0$ (there are unit roots, the variables in the model are not stationary)

b. Ha = $\delta \neq 0$ (there are no unit roots, variables in the stationary model)

Hypothesis based on ADF:

a. The ADF t-statistic value < MacKinnon critical value at the 5% level means the data is stationary, Ha is accepted.
b. The ADF t-statistic value > MacKinnon critical value at the 5% level means the data is not stationary, H0 is accepted.

Stationary test results on the data *First Difference* Rice Production, Rice Prices, Exchange Rates and Rice Imports can be seen in table 1 below:

Table 1. Rice Production Stationary Test Results

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PRODUKSI_BERAS,2)
Method: Least Squares
Date: 07/19/24 Time: 17:19
Sample (adjusted): 3 24
Included observations: 22 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RICE_PRODUCTION(-1))	-0.913390	0.222744	-4.100628	0.0006
C	-21413.48	2554214.	-0.008384	0.9934

R-squared	0.456745	Mean dependent var	20769.77
Adjusted R-squared	0.429583	S.D. dependent var	15862392
S.E. of regression	11980227	Akaike info criterion	35.52192
Sum squared resid	2.87E+15	Schwarz criterion	35.62111
Log likelihood	-388.7411	Hannan-Quinn criterion.	35.54529
F-statistic	16.81515	Durbin-Watson stat	1.987505
Prob(F-statistic)	0.000556		

Based on the table, all variables have an ADF value > MacKinnon critical value of 5% and Prob. < 0.05 so accept H0. In rice production the probability value is 0.0006 < 0.05. In level *twost difference* This variable rice production has been stationary.

Table 2. Rice Price Stationary Test Results

Null Hypothesis: D(HARGA_BERAS) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.976791	0.0063
Test critical values:	1% level	-3.769597	
	5% level	-3.004861	
	10% level	-2.642242	

*MacKinnon (1996) one-sided p-values.

Source: Data processed by Eviews 13 (2024)

Based on table 2, all variables have an ADF value > MacKinnon critical value of 5% and Prob. < 0.05 so accept H0. For rice prices, the probability value is 0.0063 < 0.05. In level *first difference* This probability variable is stationary.

Table 3. Stationary Test Results for Rice Production, Rice Prices, Rice Import Exchange Rates

Null Hypothesis: Unit root (individual unit root process)
Series: PB, HB, NK, IM
Date: 08/02/24 Time: 13:47
Sample: 2000 2023
Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 3
Total number of observations: 85
Cross-sections included: 4

Method	Statistic	Prob.**
ADF - Fisher Chi-square	45.5103	0.0000
ADF - Choi Z-stat	-5.39567	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Source: Data processed by Eviews 13 (2024)

Based on table 3, all variables have an ADF value > MacKinnon critical value of 5% and Prob. < 0.05 so accept H0. In level *first difference* This variable rice import has been stationary.

Optimal Lag Test

To carry out causality tests and VAR tests, it is necessary to first determine the optimal lag length, because causality tests and VAR tests are very sensitive to the optimal lag length. In this research, researchers determined the optimal lag length by looking at the values *Akaike Information Criteria* (AIC) is the lowest / minimum. The lag length included in this test is from 0 to lag 10 because the data used is monthly and only lasts 4 years. This lag length is felt to be sufficient to describe FDR and ROA over a monthly period.

Table 4. Optimal Lag Testing Test Results

VAR Lag Order Selection Criteria
Endogenous variables: PB HB NK IM
Exogenous variables: C
Date: 07/23/24 Time: 10:42
Sample: 2000 2023
Included observations: 22

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-821.3668	THAT	4.54e+27	75.03335	75.23172	75.08008
1	-755.3868	101.9691*	4.98e+25*	70.48971*	71.48157*	70.72336*
2	-741.7946	16.06361	7.36e+25	70.70860	72.49394	71.12917

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Source: Data processed by Eviews 13 (2024)

Based on the optimal lag test results in table 4, it shows that lag 1 has the most signs (*), it is known that lag 1 was selected as the optimal lag.

Model Stability Test

To test whether the VAR estimate that has been formed is stable or not, the VAR stability condition is checked by calculating the unit roots of the polynomial function. The VAR model is said to be stable if all the roots of the polynomial function have an absolute value < 1.

Table 5 Model Stability Test Results

Roots of Characteristic Polynomial
Endogenous variables: RICE PRODUCTION
RICE PRICE EXCHANGE_VALUE
IMPORT_RICE
Exogenous variables: C
Lag specification: 1 2
Date: 07/19/24 Time: 14:03

Root	Modulus
0.938976 - 0.121731i	0.946834
0.938976 + 0.121731i	0.946834
0.514190 - 0.473508i	0.699000
0.514190 + 0.473508i	0.699000
0.000760 - 0.578726i	0.578726
0.000760 + 0.578726i	0.578726
-0.408765	0.408765
0.231219	0.231219

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

Source: Data processed by Eviews 13 (2024)

VAR capital is said to be stable if the modulus value is at a radius < 1, and unstable if the modulus value is > 1. If the largest modulus value is less than 1 and is at the optimal point, then the composition is already at the optimal position and the VAR model is stable. Based on the stability test results in table 5, it is known that the model is stable and has passed the stability test. This can be seen from the modulus value which is still below one.

Uji Cointegrated Johansen

If the stationarity phenomenon is at the level *fisrt difference* or (1), it is necessary to carry out tests to see the possibility of cointegration. The concept of cointegration is basically to see the long-term balance between observed variables. Sometimes individual data is not stationary, but when connected linearly the data becomes stationary, but when connected linearly the data becomes stationary. This is then called cointegrated data. If a set of variables is truly cointegrated, then VAR implied restrictions or unrestrictions must be detected (Green, 2000: 794).

Table 6 Johansen Cointegration Test Results

Unrestricted
Cointegration

Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.** Critical Value
None *	0.865943	74.58643	47.85613	0.0000
At most 1 *	0.581433	32.38718	29.79707	0.0246
At most 2	0.397892	14.09790	15.49471	0.0803
At most 3	0.151266	3.444201	3.841465	0.0635

Trace test indicates 2 cointegrating equation(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Source: Data processed by Eviews 13 (2024)

Based on the results of the Johansen cointegration test in Table 6, it is known that the probability values in the None row and the At most 1 row are 0.0000 and 0.0246 respectively, namely <0.05, which means there is a cointegration equation, which means it has a term balance. long.

Granger Causality Test

To see whether a variable has a two-way or one-way relationship, a causality test is carried out. This research uses the method *Grangrer's Causality*. To see whether there is a causal relationship between variables, it can be done by comparing the prob values. with a critical value of 5%. If prob. is smaller than 5% then there is a causal relationship, but if the prob value. greater than 5% then there is no causal relationship between variables.

Table 7. Granger Causality Test Results

Pairwise Granger Causality Tests
Date: 07/25/24 Time: 19:47
Sample: 2000 2023
Lags: 7

Null Hypothesis:	Obs	F-Statistic	Prob.
PB does not Granger Cause HB	17	3.10927	0.2649
HB does not Granger Cause PB		8.21254	0.1128
NK does not Granger Cause HB	17	0.77897	0.6650
HB does not Granger Cause NK		55.9195	0.0177
IM does not Granger Cause HB	17	2.01065	0.3719
HB does not Granger Cause IM		0.89313	0.6215
NK does not Granger Cause PB	17	1.24720	0.5142
PB does not Granger Cause NK		1.83157	0.3979
IM does not Granger Cause PB	17	169.441	0.0059
PB does not Granger Cause IM		0.40987	0.8430

IM does not Granger Cause NK	17	3.65970	0.2313
NK does not Granger Cause IM		0.03337	0.9996

Source: Data processed by Eviews 13 (2024)

Based on the results of the Granger Causality test in table 7:

a. It is known that rice imports significantly influence rice production, with a probability value of 0.0059 > 0.05.

b. It is known that rice imports do not significantly affect rice prices, with a probability value of 0.3719 < 0.05

c. It is known that rice imports significantly influence the exchange rate, with a probability value of 0.2313 < 0.05.

d. It is known that the price of rice has a significant influence on the exchange rate, with a probability value of 0.0177 > 0.05.

When/When

Vector Error Correction Model (VECM) is an econometric analysis model that aims to determine the short-term behavior of a long-term variable. To find out whether there is a short-term and long-term relationship between variables, the steps that need to be taken are by comparing the t-statistic value with the t-table, where if the t-statistic value is greater than the t-table value, then there is an influence between the variables.

Table 8. VAR / VECM test results of rice production on imports

Vector Autoregression Estimates
Date: 08/03/24 Time: 16:59
Sample (adjusted): 2002 2023
Included observations: 22 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	PB	IN THE
PB(-1)	1.029446	0.005528
	(0.23434)	(0.02309)
	[-4.39293]	[0.23941]
PB(-2)	-0.264995	-0.004235
	(0.23927)	(0.02357)
	[-1.90751]	[-0.17965]
IM(-1)	2.096339	0.007795
	(2.92831)	(0.28851)
	[-1.71589]	[0.02702]
IM(-2)	-3.051603	-0.172507
	(2.69585)	(0.26561)
	[-1.13196]	[-0.64948]
C	12899628	781724.0
	(7872157)	(775605.)
	[1.63864]	[1.00789]

Source: Data processed by Eviews 13 (2024)

In the short term, changes in rice production significantly influence current rice imports, with a statistical value of t [-1.90751| > critical value t |-1.71714|.

table 9. Var / Vecm test results of rice prices on imports

Vector Autoregression Estimates
Date: 08/03/24 Time: 17:09
Sample (adjusted): 2002 2023
Included observations: 22 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	HB	IN THE
HB(-1)	1.188108	-397166.6
	(0.26102)	(580533.)
	[-4.55183]	[-0.68414]
HB(-2)	-0.214573	377221.6
	(0.25773)	(573211.)
	[-1.83257]	[0.65809]
IM(-1)	-2.48E-07	0.057414
	(1.3E-07)	(0.29752)
	[-1.85504]	[0.19297]
IM(-2)	-4.22E-08	-0.264510
	(1.3E-07)	(0.29325)
	[-0.31980]	[-0.90201]
C	0.812382	1221363.
	(0.35870)	(797794.)
	[2.26478]	[1.53093]

Source: Data processed by Eviews 13 (2024)

In the short term, changes in rice prices significantly influence current rice imports, with a statistical value of t [-1.83257| > critical value t |-1.71714|.

Table 10. VAR / VECM test results for exchange value on imports

Vector Autoregression Estimates
Date: 08/03/24 Time: 17:17
Sample (adjusted): 2002 2023
Included observations: 22 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	etc	IN THE
NK(-1)	0.918870	-212336.4
	(0.24547)	(262011.)
	[-4.74324]	[-0.81041]
NK(-2)	0.094778	232765.3
	(0.26598)	(283903.)
	[0.35633]	[0.81988]
IM(-1)	1.56E-07	-0.035215
	(2.7E-07)	(0.28315)

	[0.58942]	[-0.12437]
IM(-2)	1.10E-07	-0.115084
	(2.6E-07)	(0.27396)
	[0.42805]	[-0.42007]
C	-0.081564	663160.7
	(1.36085)	(1452523)
	[-0.05994]	[0.45656]

Source: Data processed by Eviews 13 (2024)

In the short term, changes in exchange rates do not significantly affect current rice imports, with a statistical value of t [-4.74324| < critical value t |-1.71714|.

Table 11. VAR / VECM test results on rice production, rice prices, exchange value on imports

Vector Error Correction Estimates
Date: 08/24/24 Time: 14:57
Sample (adjusted): 4 24
Included observations: 21 after adjustments
Standard errors in ( ) & t-statistics in [ ]
Lags interval (in first differences): 1 to 2
Endogenous variables: PRODUKSI_BERAS PRICE_BERAS NILAI_KURS IMPORT_BERAS
Deterministic assumptions: Case 3 (Johansen-Hendry-Juselius): Cointegrating relationship includes a constant. Short-run dynamics include a constant.

Cointegrating Eq:	CointEq1
RICE_PRODUCTION(-1)	1.000000
RICE_PRICE(-1)	-228276.5
	(56914.5)
	[-4.01087]
COURSE_VALUE(-1)	50486.93
	(97851.2)
	[0.51596]
IMPORT_RICE(-1)	-927.8764
	(184.047)
	[-5.04151]
C	2.13E+09

Error Correction:	D(RICE_PRODUCTION)	D(RICE_PRICE)	D(COURSE_VALUE)	D(IMPORT_RICE)
COINTEQ1	0.008519	2.79E-07	-8.41E-07	0.000207
	(0.00506)	(2.2E-07)	(1.4E-07)	(0.00051)
	[1.68213]	[1.26698]	[-5.84303]	[0.40195]
D(RICE_PRODUCTION(-1))	0.029842	2.28E-06	4.20E-05	0.019254
	(0.30776)	(1.3E-05)	(8.7E-06)	(0.03124)
	[-1.79696]	[0.17038]	[4.79959]	[0.61626]
D(RICE_PRODUCTION(-2))	-0.362930	2.32E-06	6.29E-06	0.006028
	(0.31858)	(1.4E-05)	(9.1E-06)	(0.03234)

	[-1.13920]	[0.16779]	[0.69464]	[-1.18639]
D(RICE_PRICE(-1))	2567.984	0.259136	1.494374	-311.6844
	(7599.95)	(0.33013)	(0.21598)	(771.528)
	[0.33790]	[-1.78495]	[6.91900]	[-0.40398]
D(RICE_PRICE(-2))	3230.457	-0.595302	-1.167508	-742.4980
	(8726.83)	(0.37908)	(0.24801)	(885.926)
	[0.37018]	[-1.57038]	[-4.70758]	[-0.83810]
D(CURSE_VALUE(-1))	3234.150	0.222332	-0.085247	55.81004
	(4376.34)	(0.19010)	(0.12437)	(444.276)
	[0.73901]	[1.16953]	[-0.68543]	[0.12562]
D(CURSE_VALUE(-2))	3447.125	0.139822	-0.398433	142.5640
	(3406.18)	(0.14796)	(0.09680)	(345.787)
	[1.01202]	[0.94500]	[-4.11607]	[0.41229]
D(IMPORT_RICE(-1))	9.727932	6.36E-05	-0.000993	-0.154925
	(6.15972)	(0.00027)	(0.00018)	(0.62532)
	[1.57928]	[0.23779]	[-5.67056]	[-1.94775]
D(IMPORT_RICE(-2))	2.881618	0.000197	-9.74E-05	0.044003
	(4.67420)	(0.00020)	(0.00013)	(0.47451)
	[0.61649]	[0.97204]	[-0.73287]	[0.09273]
C	-4115404.	604.0291	245.9345	510589.3
	(5387009)	(234.005)	(153.092)	(546876.)
	[-0.76395]	[2.58127]	[1.60645]	[0.93365]

R-squared	0.351394	0.353774	0.910100	0.270038
Adj. R-squared	-0.179284	-0.174956	0.836545	-0.327203
Sum sq. Resids	1.88E+15	3539125.	1514791.	1.93E+13
S.E. equation	13057927	567.2201	371.0906	1325609.
F-statistic	0.662160	0.669102	12.37306	0.452143
Log likelihood	-367.0911	-156.1638	-147.2535	-319.0532
Akaike AIC	35.91344	15.82513	14.97652	31.33840
Black SC	36.41083	16.32252	15.47392	31.83579
Mean dependent	-57363.52	520.9524	308.3810	60596.86
S.D. dependent	12024443	523.2880	917.8682	1150659.

Determinant resid covariance (dof adj.)	3.40E+36
Determinant resid covariance	2.56E+35
Log likelihood	-975.2720
Akaike information criterion	97.07352
Schwarz criterion	99.26205
Number of coefficients	44

Source: Data processed by Eviews 13 (2024)

In the VECM test, rice production, rice prices, exchange rates do not significantly influence current rice imports, with a statistical value of t [-5.04151| < critical value t |-1.71714|.

CONCLUSION

Based on the research results, the conclusions in this research are:

1. Rice Production on Rice Imports has a significant positive (+) influence because it has a value with the VAR/VECM test results, the statistical value t [-1.90751] > the critical value t [-1.71714].
2. Rice Prices on Rice Imports have a significant positive (+) influence because they have a value with the VAR/VECM test results, the t statistical value is |-1.83257| > critical value t [-1.7171].
3. The exchange rate value for rice imports has a negative (-) value which is not significant because it has a statistical value of t |-4.74324| < critical value t |-1.71714|.
4. Rice Production, Rice Prices, Exchange Rates on Rice Imports have a negative value (-) which is not significant because the VAR/VECM test results have a statistical value of t |-5.04151| < critical value t |-1.71714|.

REFERENCES

Ajija, Shochrul Rohmatul, dkk. 2011. Cara Cerdas Menguasai Eviews. Jakarta: Salemba Empat Insukindro (1992).

Akhter, M. W., Syed, F., Husnain, M., & Naseer, S. (2022). Person-Organization Fit And Innovative Work Behavior: The Mediating Role Of Perceived Organizational Support, Affective Commitment And Trust. Pakistan Journal of Commerce and Social Sciences (PJCSS), 13(2), 311-333.

Amalia Euis. 2005. Sejarah Pemikiran Ekonomi Islam. Jakarta: Gramata Publishing.

Anita, et all, 2020. Penerapan Metode Full Costing Dalam Penentuan Harga Pokok Produksi Pada PT. MEDAN TROPICAL CHANING & FROZEN INDUSTRIES. Universitas Prima Medan, Vol 02, No. 01, September 2020. ISSN 2714-8661.

Appleyard, Dennis R., dan Alfred J. Field. 2004. International Ekonomics, Third Edition, McGrawHill Companies, USA.

Armaini, D., & Gunawan, E. (2016). Pengaruh produksi beras, harga beras dalam negeri dan produk domestik bruto terhadap impor beras Indonesia. *Jurnal ilmiah mahasiswa ekonomi pembangunan*, *1*(2), 455-466.

Astuti, I. (2019). Pengaruh Ekspor Dan Impor Terhadap Pertumbuhan Ekonomi Di Indonesia. Jurnal Ekonomi & Studi Pembangunan, vol 17 (2), 81–98.

Aulakh, J., Regmi, A., Fulton, J. R., & Alexander, C. E. (2013). *Estimating post-harvest food losses: Developing a consistent global estimation framework.*

Ayu Indrayani, dkk. 2014. Pengaruh Konsumsi, Produksi, Kurs Dollar AS dan PDB Pertanian terhadap Impor Bawang Putih di Indonesia. Jurnal Ekonomi Pembangunan. 3(5)(hal : 209-218).

Badan Pusat Statisitik [BPS Indonesia]. (2024). Berita Resmi Statisitik. Indonesia. Jakarta.

Bambang Supomo dan Nur Indriantoro, 2002, Metodologi Penelitian Bisnis, Cetakan Kedua, Yogyakara; Penerbit BFEE UGM.

Bankoff, A.D.P. 2007. Morfologia e Cinesiologia Aplicada ao Movimento Humano. Editora Guanabara Koogan, Rio de Janeiro-Brasil.

Basuki, A. T. dan Imamuddin Yuliadi. (2015). Ekonometrika Teori & Aplikasi. Yogyakarta: Mitra Pustaka Nurani.

Box, G.E.P., Jenkins, G.M., and Reinsel, G.C. (1994). Time Series Analysis. Englewood Cliffs: Prentice Hall.

Darsono dan Ashari, 2009, Pedoman Praktis Memahami Laporan Keuangan, Yogyakarta: Andi.

E Angraini, R., Amaliah, I., & Haviz, M. (2022, January). Pengaruh Harga Beras, Pendapatan Perkapita, Jumlah Penduduk dan Impor Beras terhadap Permintaan Beras di Indonesia Tahun 2010-2020. In *Bandung Conference Series: Economics Studies* (Vol. 2, No. 1, pp. 68-75).STAMA, I. TAFSIR AYAT TENTANG PRODUKSI DALAM EKONOMI

SYARIAH.
Ekananda Mahyus. 2014. Ekonomi Internasional. Jakarta: Erlangga.
Febriaty, H. (2016). Analisis perkembangan impor beras di Indonesia. *Jurnal Ekonomikawan*, *16*(2), 77866.
Fitria, H. (2020). Penetapan Harga Beras dalam Pandangan Ekonomi Islam (Studi Kasus di PD Pasar Kertapati Palembang). *ADL Islam Econ J Kaji Ekon Islam*, *1*(2), 113-30.
Fitriani, P. D., & Rijal, M. H. (2018). Penentuan Mekanisme Pasar Ekonom Muslim Klasik. *Jurnal Maps (Manajemen Perbankan Syariah)*, *2*(1), 1-9.
Gudjarati, Damodar. 2003. Ekonometri Dasar. Terjemah: Sumarno Zain. Jakarta : Erlangga.
Gujarati, D, N. (2006). Dasar-dasar Ekonometrika. Jilid 1. Alih Bahasa Julius Mulyadi. Erlangga Jakarta. Gujarati, D. N. (2007). Dasar-dasar Ekonometrika. Erlangga. Jakarta.
Gujarati, D.N. 2012. Dasar-dasar Ekonometrika. Terjemahan Mangunsong. R.C., Salemba Empat. Buku 2. Edisi 5. Jakarta.
Gujarati, Damodar N, (2004). Basic Econometrics, Fourth edition, Singapore. McGraw-Hill Inc.
Gujarati, Damodar N. (2004). Basic Econometrics, Fourth edition, Singapore. McGraw-Hill Inc.
Gujarati, Damodar N. Dawn C. Porter. (2010). Basic Ekonometrica. Fifth Edition. New York: Mc Graw Hill.
Hakim, M. A. (2016). Peran Pemerintah Dalam Mengawasi Mekanisme Pasar Dalam Perspektif Islam. *Iqtishadia*, *8*(1).
Halkam, H. Perdagangan Internasional & Strategi Pengendalian Impor.
Halwani, Hendra, 2005. Ekonomi Internasional dan Globalisasi Ekonomi. Edisi Kedua. Jakarta; PT. Ghalia Indonesia.
Harahap, S. H., Ridwan, M., & Harahap, R. D. (2024). Analisis Peran Bulog dalam Kebijakan Stabilitas Harga Beras pada Kerangka Maqashid Syariah:(Studi Kasus Perum Bulog Kantor Wilayah Sumut). *Wawasan: Jurnal Ilmu Manajemen, Ekonomi dan Kewirausahaan*, *2*(1), 60-70.
Hasanah, L. A. (2022). Analisis Faktor-Faktor Pengaruh Terjadinya Impor Beras di Indonesia Setelah Swasembada Pangan. *GROWTH Jurnal Ilmiah Ekonomi Pembangunan*, *2*(8), 57-72.
Hidayatullah, Model Vector Autoregressive (VAR) dan Penerapannya Untuk analisis Pengaruh Harga Migas Terhadap Indeks Harga Konsumen (IHK); Studi Kasus Daerah Istimewa Yogyakarta, Periode 1997 – 2009. Yogyakarta: 2011.
Indriantoro, Nur, dan Bambang Supomo, 1999, Metodologi Penelitian dan Bisnis, Yogyakarta: BPFE Yogyakarta.
Insukindro, (1989), Dynamic Spesification Applicable to the Indonesia, Monetary Sector; A Review, Ekonomi dan Keuangan Indonesia, Vol. 37 No. 1.
Jonathan S. Hadi, Analisis Vector Auto Regresi (VAR) Terhadap Korelasi Antara Pendapatan Nasional dan Investasi Pemerintah di Indonesia, 1983/1984-1999/2000, Journal Keuangan dan Moneter, Vol, 6 No. 2, 2003.
Juanda, B. & Junaidi. (2012). Ekonometrika Deret Waktu Teori & Aplikasi. Bogor : IPB Press.
Kartikaningtyas, N., & Suhadak & Hidayat, R. R. (2014). Pengujian Teori Paritas Daya Beli Nilai Tukar Empat Mata Uang Utama Terhadap Rupiah Indonesia. *Jurnal Adminis-trasi Bisnis*, *10*(1).
Krugman, P.R. dan Obstfeld, M. 2005. Ekonomi Internasional : Teori dan Kebijakan. Ed 5, Jakarta: Indeks Kelompok Gramedia.
Krugman, Paul R. dan Obstfeld, (2003), International Economics: Theory and Policy, Sixth Edition, Addison Wesley.
Kurniawan, F. A. A., Ramadhani, I., & Fitrie, R. A. (2024). Analisis Pengambilan Keputusan

Kebijakan Impor Beras dalam Konteks Pemenuhan Pangan Nasional di Indonesia. *Indonesian Journal of Public Administration Review*, *1*(2), 15-15.

Listiawati, L. N., & Paramita, V. S. (2018). Pengaruh tingkat suku bunga, inflasi, Debt to equity ratio, dan ukuran perusahaan terhadap yield obligasi pada perusahaan yang terdaftar di bursa efek Indonesia tahun 2010-2016. *Jurnal Manajemen*, *15*(1), 33-51.

Macgowan, AP, Brown, I, Feeney, R, Lovering, A, McCulloch, SY, Reeves, DS, Cheesman, MG, Shetty, HGM, Wilcox, MH, Cunnliffe, JG, Redpath, C, Trundle, C 1995, 'Clostridium difficile-associated diarrhoea and length of hospital stay' Journal of Hospital Infection, vol.31, no.3, November 1995, hlm.241–244, diakses 8 Juli 2019 https://www.journalofhospitalinfection.com/article/0195-6701(95)90074- 8/pdf.

Malian, A. H., & Muslim, C. (1999). Penerapan Tarif Impor dan Implikasi Ekonominya dalam Perdagangan Beras Di Indonesia. In *Forum Penelitian Agro Ekonomi* (Vol. 17, No. 1, pp. 27-37).

Oktaviana, S., Sandy, M. F. A. Z., & Alamanda, M. S. (2023). Faktor-Faktor Yang Mempengaruhi Tingginya Impor Beras Indonesia Dari Vietnam. *Jurnal Ilmiah Ekonomi dan Manajemen*, *1*(4), 258-264.

Paipan, S., & Abrar, M. (2020). Determinan ketergantungan impor beras di Indonesia [determinants of rice import dependency in Indonesia]. *Jurnal Ekonomi dan Kebijakan Publik*, *11*(1),53-64.

Perlambang, H. (2010). Analisis pengaruh jumlah uang beredar, suku bunga sbi, nilai tukar terhadap tingkat inflasi. *Media Ekonomi*, 49-68.

Prayitna, I. W. M., & Widanta, A. B. P. PENGARUH KONSUMSI, PRODUKSI DAN KURS DOLLAR AMERIKA SERIKAT TERHADAP IMPOR BERAS DI INDONESIA.

Prinadi, R., Yulianto, E., & Mawardi, M. K. (2016). Pengaruh Nilai Tukar Rupiah, Harga Beras Internasional dan Produksi Beras Dalam Negeri Terhadap Volume Impor Beras Indonesia (Studi Impor Beras Indonesia Tahun. *Jurnal Administrasi Bisnis (JAB)| Vol*, *34*(1).

Purwaatmoko, S. (2022). The IMF Rice Liberalization Policy in Indonesia: The Case Study of Elite Behaviors in the Era of Gus Dur, Megawati, and SBY Government. *Jurnal Borneo Administrator*, *18*(2), 187-200.

Qoyum, Abdul, 2021, Sejarah Pemikiran Ekonomi Islam, Jakarta: Departemen Ekonomi dan Keuangan Syariah-Bank Indonesia.

Rahmawati, S., & Rozaini, N. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Impor Beras Di Sumatera Utara. *Journal of Management and Social Sciences*, *2*(2), 84-104.

Ramadanthy, D., Nugraha, A. T., & Senjayani, A. (2022). Analisis Peramalan Impor Beras Indonesia. *ShariaAgribusinessJournal*, *2*(1),51-64.

Retnowati, E., D. Darmawan, R. Mardikaningsih, & E.A. Sinambela. (2021). Pengaruh Pencapaian Kepuasan Konsumen Rumah Makan Berdasarkan Kesan Kualitas Produksi dan Harga, Jurnal Ekonomi & Ekonomi Syariah, 4(2), 1381-1389.

ROHMADONI, B. P. (2016). Pengaruh net interest margin dan inflasi terhadap penyaluran kredit di indonesia pada bank umum di Indonesia. *Jurnal Pendidikan Ekonomi (JUPE)*, *4*(3).

Ruvananda, A. R., & Taufiq, M. (n.d.). Analisis faktor-faktor yang mempengaruhi impor beras di Indonesia.

Sadono, Sukirno. 2006. ekonomi Pembangunan : Proses Masalah dan Dasar Kebijakan. Kencana Prenada Media Group. Jakarta.

Salvatore, Dolminick. 2003. Teori Mikro Ekonomi. Edisi-3. Erlangga. Jakarta.

Salvatore, Dominick, 1997. Ekonomi Internasional. Ahli bahasa Drs. Haris Munandar. Edisi Kelima, Jakarta: PT. Erlangga.

Santosa, A. B. (2012). Fluktuasi nilai tukar rupiah dan neraca transaksi berjalan.

Sarwono, J. 2006. Metode Penelitian Kuantitatif dan Kualitiatif. Graha Ilmu. Yogyakarta.

Sumastuti, E. (2011). Prospek pengembangan agribisnis dalam mewujudkan ketahanan pangan. *JEJAK: Jurnal Ekonomi dan Kebijakan*, *4*(2).

Suprihartini R. 2005. Daya saing ekspor teh Indonesia di pasar teh dunia. J Agro Ekon. 23(1):1-29.

Swastha, B., & Handoko, T. H. (2002). Manajemen pemasaran. *Edisi Kedua. Cetakan Kedelapan. Jakarta: Penerbit Liberty*.

Syamsuri (2018) Ekonomi Pembangunan Islam: Sebuah Prinsip, Konsep dan Asas Falsafahnya. UNIDA GONTOR PRESS (-). Tersedia pada: https://books.google.co.id/books?id=9%5C_A3EAAAQBAJ (Diakses: 1 November 2021).

Turmudi, M. (2017). Produksi dalam perspektif ekonomi Islam. *Islamadina: Jurnal Pemikiran Islam*, 37-56.

Ulfa, S. L. L., & Bendesa, I. K. G. PENGARUH PRODUKSI, KONSUMSI, HARGA, CADANGAN DEVISA, KURS DOLLAR AS TERHADAP MINYAK BUMI INDONESIA.

Wibowo, A. P. (2019). ANALISIS HUBUNGAN IMPOR BERAS DAN FAKTOR MUSIMAN TERHADAP HARGA GABAH DAN BERAS. *Jurnal Budget: Isu dan MasalahKeuanganNegara*, *4*(1),164-177.

Widarjono, Wing Wahyu. 2009. Analisis Ekonometrika dan Statistik dengan Eviews, Edisi Kedua. Yogyakarta: UPP STIM YKPN.

Yekti, G. I., Supatra, S., & Zamahzari, A. (2023). FAKTOR-FAKTOR YANG MEMPENGARUHI IMPOR BERAS DI PROVINSI JAWA TIMUR. *CEMARA*, *20*(1), 11-19.

Zaeroni, R., & Rustariyuni, S. D. (2016). Pengaruh produksi beras, konsumsi beras dan cadangan devisa terhadap impor beras di Indonesia. *E-Jurnal Ekonomi Pembangunan UniversitasUdayana*, *5*(9),993-10.

Zed, Mestika, Metode Penelitian Kepustakaan, Jakarta: Yayasan Obor Indonesia,2004