

People of Java Island in the Midst of Deflation: Community Response and Adaptation

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ABSTRACT

The purpose of this study is to examine how income and price changes affect consumers' desire to buy on Java Island. A total of 106 randomly selected Javanese residents between the ages of 18 and 60 participated in the quantitative survey-based study. An online survey using a Likert scale was used to gather data, which was then validated and reliability tested. The impact of independent variables on the dependent variable was examined through data analysis utilizing multiple linear regression. The results show that income has no substantial impact on purchase interest, while price decrease does. In conclusion, price reduction is the primary factor affecting the purchasing power of the community in Java Island, especially in deflationary situations. This research provides implications for economic policy, particularly in efforts to maintain the stability of the community's purchasing power.

Keywords: Deflation, price reduction, income, purchasing interest, community of Java Island.

INTRODUCTION

Deflation hit Indonesia for five months in a row beginning in May 2024 and ending in September of the same year. A prolonged period of significantly falling prices for goods and services is known as deflation. While falling prices may seem like a good thing for shoppers, macroeconomic theory says that if deflation lasts too long, prices will eventually stop going up (Abdul rahman Suleman, et al., 2020). Economic activity falls as a result of this phenomena since producers are less motivated to boost production and investment. Consumers cut back on spending and boosted their savings in times of economic hardship, according to the theory of precautionary saving, which only serves to worsen the already precipitous drop in demand for goods and services. A decline in pricing for products and services is known as deflation. This happens when supply outstrips demand, which forces companies to cut prices to entice buyers again. The Central Bureau of Statistics (BPS) reports that in September 2024, Indonesia saw deflation of 0.12%. Economic crises are more likely to occur amid prolonged periods of deflation. Key sectors in Java have been affected differently by deflation, which is characterized as a broad fall in prices of goods and services. The trade sector is particularly affected due to weakening domestic demand, resulting in a decline in the income of small to large businesses. The manufacturing sector, which is the backbone of Java's economy, faces constraints in the form of high production costs that are not matched by market demand. Meanwhile, the agriculture sector is also under pressure due to the declining prices of key commodities, such as rice and vegetables, which impact on the income of smallholder farmers.

In addition to the impact on these sectors, deflation also increases social inequality. BPS data shows that in 2019 there were 57.33 million individuals in the middle class category,

equivalent to 21.45% of the total population. However, this number dropped to 47.85 million or 17.13% of the current population. The middle class has decreased in number to 9.48 million people. Meanwhile, the poor vulnerable class showed an increase (the number increased from 54.97 million to 67.69 million, or as a percentage from 20.56% to 24.23%). CORE Indonesia economist Muhammad Faisal revealed that the real income per capita monitored every month in February 2024 only recorded a growth of 0.7 percent, which is an unusual figure when compared to the national economic growth of five percent. Data from the Deposit Insurance Corporation (LPS) shows that the growth of savings accounts with balances above Rp100 million will only reach three percent by the end of 2023, while 99 percent of Indonesian savings have balances below Rp100 million. This then makes people aware of their limited income with increasingly diverse expenses, so they tend to be more selective in spending and apply frugal behavior.

Deflation is causing serious problems in Java, which is the economic hub of Indonesia. Deflation rates in Central Java reached 0.22% in May and 0.07% in August of 2024, according to data from the Central Bureau of Statistics (BPS). This trend persisted from May to September of that year. In East Java, deflation was also recorded at 0.12% in September 2024. Purwadi, an economic observer from Mulawarman University, said that the decline in purchasing power that led to deflation in Java basically began with the phenomenon of layoffs, as reflected in the data released by the Ministry of Manpower, the number of layoffs in Java reached thousands to tens of thousands, with Central Java reaching 14 thousand layoffs in August. This has prompted people to minimize their spending. This decline in purchasing power not only affects people's consumption patterns, but also affects economic stability.

Java was chosen as the focus of the study due to its position as the center of the national economy. Java contributes more than 50% to Indonesia's total national gross domestic product (GDP), with sectors such as trade, manufacturing and agriculture. The dependence of the national economy on Java makes analyzing the region important for understanding the overall impact of deflation.

The deflationary phenomenon in Java has had a significant impact on consumption patterns and purchasing power. Although deflation is often considered beneficial for consumers, it can threaten people's welfare and worsen economic conditions. Therefore, this study focuses on examining how people in Java island respond and adapt to the decline in price stability of goods and services over a long period of time, and to find out whether deflation changes their consumption patterns.

Macroeconomic Theory

Macroeconomic theory is a subset of economics that focuses on the study of economic events on an aggregate scale. It describes how changes in the economy affect society at large, firms, and markets in general. spending, income, and price levels in the economy (Tambunan, 2011). When aggregate demand drops, prices for goods and services tend to fall across the board, a phenomenon known as deflation.

Keynesian Theory

According to Keynes, a country's macroeconomic situation is strongly influenced by the dynamics of aggregate demand. If aggregate demand exceeds aggregate supply (or production produced) in a period, there will be a 'production shortage'. In response, output or prices, or even both, will increase in the following period (John Maynard Keynes (5, 1936). Conversely, if aggregate demand

is lower than aggregate supply, there will be a situation of surplus production. As a result, output or prices, or even both, will decline in the next period.

According to Keynesian theory, consumption levels are influenced by income levels and expectations of economic conditions. In a deflationary situation, economic uncertainty can reduce people's consumption as they tend to spend less and save more.

Definition and Concept of Deflation

When prices of products and services fall across the board within a given time frame, we say that there has been deflation. According to Mankiw (2020), deflation occurs when the price level of goods and services experiences a continuous decline. Deflation is often considered a favorable phenomenon for consumers due to cheaper prices, but in the long run, it can adversely affect the economy.

Deflation can occur due to several factors, including a decrease in aggregate demand or an increase in production capacity that exceeds demand. Prolonged deflation can lead to economic stagnation. This phenomenon reduces the incentive for producers to increase production and investment, which triggers a decline in economic activity. In addition, deflation can trigger excessive savings, explained by the concept of precautionary saving behavior, which shows that under economic stress, consumers tend to reduce spending and increase savings as a form of anticipation, further exacerbating the decline in demand for goods and services.

Theory of Community Consumption Patterns

Consumption pattern is a form or structure that a person makes to fulfill their needs. Prasetyo (2009) states in Duesenberry's theory that expenditures made regularly affect household consumption patterns. Meanwhile, Mangkoesubroto (2008) in Hanum (2018) explains that the pattern of population expenditure depends on the pattern of income and consumption expenditure, which is also influenced by time and life cycle factors. In the context of deflation, price changes can affect how consumers make their spending decisions.

According to Keynesian consumption theory (1936), people's consumption is directly related to their income. Under certain conditions, consumption is usually lower than income. A person's additional consumption (marginal propensity to consume) tends to increase as their income increases. In times of deflation, people may postpone consumption in anticipation of economic uncertainty and save their spending.

Purchasing Power Theory

Purchasing power is a person's ability to consume a product, which is influenced by prices and their income. When deflation occurs and the price of goods decreases, people's purchasing power tends to increase if their income remains constant. In the Law of Demand, it is explained that when the price of goods decreases, it will cause an increase in demand because the goods become more affordable for consumers.

Relationship between Deflation and Consumption Pattern and Purchasing Power of the People

The relationship between deflation, consumption patterns, and purchasing power suggests that while purchasing power may increase due to falling prices, consumption tends to decrease due to the economic uncertainty that arises during deflation. In theory, falling prices can increase people's purchasing power because with falling prices, people can buy more goods with the same budget

(Atmaja & Maryani, 2021). However, if people think that deflation will last for a long time, they may postpone spending and prefer to save.

RESEARCH METHOD

Research Subjects

People residing on Java Island, ranging in age from 18 to 60 years, were the subjects of this investigation. This study had a total of 106 participants. A basic random sample procedure was used to choose the respondents. Every person who fits these criteria has an equal chance of participating in this study since simple random selection gives each member of the population an equal probability of being picked as a sample (Arieska & Herdiani, 2018).

Research Tools and Materials

This study utilized a questionnaire as a data collection tool, to measure people's perceptions related to price reductions, income levels, and interest in purchasing power, which was used as the main tool to collect data. The questionnaire consisted of two types of statements, namely favorable (positive) questions and unfavorable (negative) statements, with the following rating scale:

Rating scale for favorable (positive) questions: Rating scale of unfavorable (negative) questions:

1: Strongly Disagree	1: Strongly Agree
2: Disagree	2: Agree
3: Neutral	3: Neutral
4: Agree	4: Disagree
5: Strongly Agree	5: Strongly Disagree

The data collected includes three main variables, namely:

- Price Decrease (X1)
- Income (X2)
- Interest in People's Purchasing Power (Y)

Research Design

Research design refers to a plan that includes procedures and methods used to collect, process, and analyze data in research. Research design is a strategy designed by researchers to systematically integrate research elements so that their implementation becomes more efficient and effective (Putri et al., 2022). The researchers in this study opted for a quantitative methodology based on survey data. We opted for this layout because it allows us to examine the connection between our independent and dependent variables. The steps taken in this study include:

1. Develop questionnaire questions based on predetermined variable indicators
2. Sending out surveys to participants through an online medium
3. Collecting data and categorizing it based on the variables studied.

Data Collection Technique

For each variable, respondents rated items using a Likert scale (1–5) in a questionnaire that was used to gather data. It found its way into people's hands via platforms like Twitter, Instagram, and Whatsapp.

Statistical Analysis and Model

Utilizing descriptive statistical methods and the SPSS program, the gathered data were examined.

The stages of analysis include:

1. Validity and Reliability Test

In this step, we make sure the research equipment can accurately measure the variables that we want to examine. In order to determine validity, we utilize the Pearson correlation method, whereas in reliability we use Cronbach's Alpha coefficient. Pearson correlation scores more than 0.3 and Cronbach's Alpha values larger than 0.7 are used to determine the validity and reliability of instruments, respectively.

2. Descriptive Analysis

In order to characterize the respondents, including their gender, age range, and place of residence. You may also see how the scores from each research variable are distributed using this approach.

3. Statistical Test

- In order to determine how factors like income and price reduction affect the dependent variable of interest (purchasing power), researchers turn to the Multiple Linear Regression Test.
- Model Summary, for the strength of the relationship (R , R^2).
- ANOVA Test, for overall model significance.
- Regression Coefficient, to see the contribution of each independent variable.

4. The statistical models used are:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Where:

Y : Purchasing Power Interest X1 : Price reduction

X2 : Income a : Constant

b1,b2 : Regression coefficient e : Error term

This study uses multiple linear regression as its statistical model. Its stated goals are to:

1. Understanding the relative importance of the independent and dependent variables by looking at their values in relation to one another.
2. Use the test and test to see if the link is significant.
3. Using the regression coefficient value to determine the impact of each independent variable on the dependent variable.

The impact of declining prices and income on people's purchasing power is deduced from the findings of this investigation.

5. Interpretation of Results

- a. R^2 is the coefficient of determination. So that we may calculate the extent to which the independent variable explains the dependent variable.
- b. F Test: To determine whether the entire model is statistically significant. Less than 0.05 for the significance value (p-value) indicates that the model is significant.

- c. The T-test: If the p-value is less than 0.05, it means that the influence of each independent variable on the dependent variable is statistically significant.
- d. The research hypothesis was tested by interpreting the results, which were processed at a 5%
- e. significance level ($\alpha=0.05$ \alpha = 0.05 $\alpha=0.05$).

ANALYSIS AND DISCUSSION

It The following conclusions were drawn from the multiple linear regression analysis that was conducted on the dependent variable (Y: Interest in People's Purchasing Power) and the independent variables (X_1 : Price Decrease and X_2 : Income):

1. Model Summary:

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 ^a	.579	.571	1.744

a. Predictors: (Constant), Pendapatan , Penurunan Harga

The independent factors, price reduction (X_1) and income (X_2), and the dependent variable, people's purchasing power interest (Y), are significantly correlated (R value = 0.761). With a R Squared value of 0.579, we can see that income and price decrease account for 57.9% of the variance in people's purchasing power interest, while other variables account for the remaining 42.1%.

2. ANOVA Test:

Table 2
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	431.118	2	215.559	70.902	<.001 ^b
	Residual	313.146	103	3.040		
	Total	744.264	105			

a. Dependent Variable: Minat Daya Beli

b. Predictors: (Constant), Pendapatan , Penurunan Harga

Overall, the regression model substantially explains the relationship between the independent and dependent variables, as indicated by the considerable F value (70.902) in the ANOVA test results ($p < 0.001$).

3. Regression Coefficient:

Table 3
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.426	.867		3.951	<.001
	Penurunan Harga	.387	.079	.425	4.879	<.001
	Pendapatan	.365	.078	.406	4.655	<.001

a. Dependent Variable: Minat Daya Beli

The coefficient of regression for price reduction is 0.387, which is of statistical significance with a p-value less than 0.001, as shown in the table of coefficients. This finding indicates that customers' interest in purchasing power rises by 0.387 units for each additional unit in lowering prices, assuming all other parameters stay constant. Assuming all other parameters remain constant, there is a substantial relationship between income and people's purchasing power interest; this relationship is 0.365 units for every 1 unit rise in income (p-value less than 0.001, regression coefficient 0.365, significance level less than 0.001).

4. Regression Equation: The investigation yielded the following regression equation:

$$Y = 3.426 + 0.387X_1 + 0.365X_2 \quad Y = 3.426 + 0.387X_{_1} + 0.365X_{_2}$$

- Y: People's purchasing power interest
- X₁: Price reduction
- X₂: Income

Price reduction and income are proven to have a significant positive influence on people's purchasing power. Basic economic principles explain that lower prices can encourage increased consumption, as people feel more able to buy goods when prices become more affordable. Therefore, price reduction policies, such as price discounts or subsidies for basic goods, can be an effective measure to increase people's purchasing power.

Moreover, the higher an individual's income, the greater their ability to purchase goods or services. The results confirm that policies that focus on increasing income, such as through subsidies or incentives, can contribute to increasing domestic consumption. Economic empowerment and fiscal policies that prioritize people's welfare are relevant strategies to strengthen purchasing power.

Overall, the model approach in this study successfully explains about 57.9% of the variation in people's purchasing power interest, although there are still 42.1% of other factors that are not covered in the model. Other factors may include the inflation rate, consumer preferences, or social conditions that may influence consumption behavior, so future research may include additional variables such as education level or cultural factors that are able to present a more thorough understanding of the impact of various factors on people's purchasing power interest..

CONCLUSION

According to the results, people's purchasing power interest is positively affected by a rise in income and a fall in the price of basic items. Policies that focus on lowering prices, such as

discounts or subsidies, and increasing income through economic empowerment programs or fiscal policies can boost domestic consumption. Although the model can explain most of the variation in people's purchasing power interest, there are still other factors that have not been included, such as the inflation rate, consumer preferences, and social conditions. Therefore, further research is needed to explore in more depth the impact of other unidentified factors.

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