Analysis of the relationship between the increase of fuel with prices of basic needs in DKI Jakarta

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ABSTRACT
The policy of increasing fuel prices has occurred several times from time to time during the leadership at that time. The reciprocal relationship between rising production costs and declining people's purchasing power has weakened the overall economic cycle in Indonesia. In carrying out life, people in their daily lives certainly cannot be separated from basic necessities and can be said to depend on the fulfillment of these basic needs. This is indeed natural because in life, people need to consume food that comes from basic needs to meet nutritional intake. Based on the Pearson correlation value in the correlation test, it is known that the correlation value is 0.844, so the level of relationship between the increase in fuel prices and the price of basic necessities is in a very strong position.

Keywords: Fuel Increase, Price Basic Need, Jakarta

1. INTRODUCTION
Social life will not be avoided from various problems of life, especially in the scope of the economy. In fact, every year, the hope of changes that lead to economic improvement is highly anticipated. The Indonesian economy during this lifetime experienced ups and downs, especially in terms of the economy. The intended economy includes the price of fuel oil or abbreviated as fuel.

If there is an increase in fuel prices, then the community will experience economic turmoil. The occurrence of turmoil in the increase in fuel prices in the world can be seen since 2000. There are a number of contributing factors, one of which is the perception of the low reserve capacity of the current oil price, the second is the increase in demand and on the other hand there is concern over the inability of producing countries to increase production, while the problem of refinery utilization rates in several countries and the declining supply of gasoline in the United States also contributed to the continued rising oil price position. (Republika Online, Tuesday, June 28, 2005). In fact, this has resulted in the government reducing subsidies for domestic fuel oil.

In Indonesia itself, the policy of increasing fuel prices has occurred several times from time to time during the leadership at that time. The reciprocal relationship between rising production costs and declining people's purchasing power has weakened the overall economic cycle in Indonesia. There are data showing the increase in fuel prices from time to time, as follows:
<table>
<thead>
<tr>
<th>Leadership Period</th>
<th>Rise In World Oil Prices</th>
<th>Premium Gasoline Price Increase</th>
<th>Price Reduction</th>
<th>Price Increases</th>
<th>Increase Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soeharto (term of office 31 years 2 months)</td>
<td>45%</td>
<td>199%</td>
<td>-</td>
<td>32 kali</td>
<td>Every 12 Months</td>
</tr>
<tr>
<td>Megawati (term of office 3 years 3 months)</td>
<td>108%</td>
<td>25%</td>
<td>-</td>
<td>4 kali</td>
<td>Every 9 Months</td>
</tr>
<tr>
<td>Gus Dur (term of office 1 year 7 months)</td>
<td>9%</td>
<td>45%</td>
<td>2 kali</td>
<td>1 kali</td>
<td>Every 9 Months</td>
</tr>
<tr>
<td>Susilo Bambang Yudhoyono (term in office 10 years)</td>
<td>54%</td>
<td>370%</td>
<td>7 kali</td>
<td>3 kali</td>
<td>Every 17 Months</td>
</tr>
<tr>
<td>Joko Widodo (term of office 4 years starting from 2015-2020)</td>
<td>8%</td>
<td>1%</td>
<td>3 kali</td>
<td>4 kali</td>
<td>Every 16 Months</td>
</tr>
</tbody>
</table>

Source: CNBC Indonesia.

Seen in the table above, each presidential term in Indonesia has different declines and increases. Even during Suharto's government for 31 years and 2 months there was no decline at all. Then, during the Jokowi administration, at the beginning of his term of office, as an initial step he raised fuel prices 1 month after his inauguration. This is one of the reasons for the emergence of negative assessments among the public which also led to actions such as demonstrations and demonstrations that occurred in all regions in Indonesia. In addition, the increase in fuel prices is also related to small people where they will find it difficult to meet their basic needs.

In carrying out life, people in their daily lives certainly cannot be separated from basic necessities and can be said to depend on the fulfillment of these basic needs. This is indeed natural because in life, people need to consume food that comes from basic needs to meet nutritional intake. According to the International Labor Organization (ILO), basic needs are a minimum physical need of the community, which relates to the level of adequacy of the basic needs of every individual in society, both those who are and from the lower classes. For example, primary needs include adequate food and nutrition, clothing, housing, education, health services, and other supporting facilities such as transportation, drinking water supply, security and others. The term community basic needs is usually known as nine basic commodities (SEMBAKO), but in its development it continues to grow not only nine, so that with the issuance of Presidential Regulation of the Republic of Indonesia Number 71 of 2015 concerning the Determination and Storage of Basic Needs and Important Goods, it is explained again that the types of basic needs are seen from the types of basic necessities which consist of: 1). Agricultural staple goods: rice, soybeans, raw materials for tofu and tempeh, chilies, and shallots; 2). Basic industrial goods: sugar, cooking oil, and wheat flour; and 3). Basic goods from livestock and fishery products: beef, purebred chicken, broiler eggs, and fresh fish such as badger, mackerel, and tuna/tuna/skippers.

In addition, there are also basic needs in terms of the type of goods consisting of: 1). Seeds, such as rice, corn, and soybean seeds; 2). Fertilizer; 3) 3 (three) kilograms of LPG; 4) plywood; 5). Cement; 6). Steel construction; and 7). Light steel.

Efforts to meet these basic needs are influenced by the availability as well as from the price factor so that it is related to the purchasing power of each individual community. When the price of basic needs rises quite high, most people will complain, because it becomes an additional burden on the daily household budget. In responding to the increase or spike in the price of basic daily necessities, people are often forced to take breakthrough steps to still be able to meet these needs.
For example, the increase in the price of basic necessities during the Jokowi administration. This is also a relationship because of the increase in fuel prices during the Jokowi era. The relationship between the increase in fuel prices and basic needs is evidenced by the results of a study from Kulsum (2016) where the conclusion from the results he put forward is "...don't forget, the soaring prices of basic necessities are also due to bad infrastructure. Distribution channels are disrupted because many roads have holes and are not maintained as well as rising fuel prices so that production costs rise. Who bears the increase in costs? Of course, consumers whose bargaining position is weak..." Then the proof of the increase in the price of basic commodities is explained in the picture of the price of basic commodities in 2020:

**Figure 1. The spike in the price of basic commodities in 2020**
*Source: kendariapos.co.id*

It can be concluded that the spike in the price of basic needs cannot be separated from the increase in the price of fuel itself. Therefore, looking at some of the phenomena in the background above, the researchers are interested in conducting research on "Analysis of the Relationship Between Fuel Increases and Prices of Basic Needs in DKI Jakarta," which will then be explained in detail in subsequent discussions in the writing of this study, to find out what the connection is.

### 2. LITERATURE REVIEW

Materials used for the combustion of daily life are fuels, where this fuel is intended for daily needs. Although this fuel has become a necessity, in Indonesia its supply is running low. Whereas in the combustion process there are main requirements, namely the availability of well-mixed fuel and the achievement of the target combustion temperature. The fuels used can be classified into three groups, namely liquid, gas and solid fuels. The gas fuel used in places that produce a lot of gas, namely natural gas, coking kitchen gas, high kitchen gas, and gas from gas factories. Liquid fuels are obtained from petroleum which in this group are gasoline and fuel oil, then kerosene and solid fuels.

**Basic Needs**

Needs are something that is needed by each individual for his life as well as to obtain prosperity and comfort in life. According to Andryan and Alamsyah (2000), needs are human desires for objects or services that can provide provide physical satisfaction and spiritual needs. The needs of each individual are not limited to real needs, but also intangible needs. For example, feeling safe, wanting to be appreciated, or respected, then human needs are unlimited.

According to Murray (1938: 123-125), needs are constructions that show an impulse in the brain where it regulates various processes called perceptions, thoughts, and actions with the intention of changing existing and unsatisfactory conditions. Needs can result from more than ten internal processes stimulated by environmental factors. In general, the need is accompanied by a fever of a certain feeling or emotion and has a special way of expressing itself in reaching a resolution.

### 3. METHODOLOGY

The methodology in this study uses a correlation or correlational analysis methodology where correlation analysis is defined by Faenkkel and Wallen, 2008:328 as research aimed at knowing the relationship and degree of relationship between two or more variables without any attempt to influence these variables so that there is no manipulation. The relationship and the level of this variable are very important because by knowing the level of the existing relationship, the researcher will be able to develop it according to the research objectives.

In addition, this type of correlation research involves a measure in statistics or the level of the relationship called correlation, according to McCillan and Schumacher, in Syamsuddin and Vismaia, (2009: 25). Research using correlational methods should use instruments to determine whether, and to what degree, there is a quantifiable relationship between two or more variables.

According to Lind, Marchal, & Wathen (2018), correlation analysis is a set of techniques to measure the relationship between two variables. Then the magnitude of the correlation coefficient ranges from +1 to -1. The correlation coefficient shows the level of strength of the linear relationship and the direction of the relationship between the two randomized variables.

**Population**

The population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2017: 90). Arikunto (2010: 173) suggests that "the population is the entire subject of research. If someone wants to examine all the elements that exist in the research area, then the research is also called a population study or census study.

Based on the two definitions of the population above, it can be concluded that the population is a group of objects/subjects that have an element to be studied and have certain qualities and characteristics determined by the researcher to be studied and concluded. Then, the population used in this study is people who live in the DKI Jakarta area.
Sample

If the population is defined as the whole subject of an object, then there will be a sample that can be interpreted as several parts of the subject. According to Sugiyono (2017: 91) "The sample is part of the total characteristic data possessed by the population".

While Arikunto (2010: 74) says that: “The sample is part or representative of the population being studied. It is called the sample population if we intend to generalize and draw conclusions from the sample study. Generalizing is lifting research conclusions that apply to the population. The sample used in this study is part of the community living in the DKI Jakarta area and was taken using a probability sampling technique where we will distribute a questionnaire in the form of a Google Form to 32 respondents at random.

Data Processing Techniques

After all the data is collected then the data is processed through the following steps:

a) Data check
   Examination of the data in this study is an examination of the google form used for filling out the questionnaire. This is intended to avoid incomplete data.

b) Data download
   The data received after all respondents have filled it in, it needs to be downloaded. In this download, it will be known the results of the answers from all respondents complete with names, positions, and email addresses.

c) Scoring data
   Classifying the symptoms under study by grading the symptoms being measured, the grading uses a Likert scale.

The author provides several alternative answers to answer each statement that the author submits to the respondent. Data analysis was carried out to analyze the results of the questionnaire distribution regarding the indicators of the research variables, so that it could be known whether the data was valid, reliable and could be generalized or not.

Correlation Test

This test is carried out to determine whether there is a relationship between the variable fuel price increase and the variable price of basic needs, it can be done by looking for a correlation coefficient as well as the analysis of the two items, but invalid items are not included in the analysis of the two variables.

4. RESULT AND DISCUSSION

The research method uses IBM Statistics 25 or SPSS output calculations with a significance level of 5% (0.05). The method used is the validity test and reliability test on the two variables, namely the increase in fuel prices and prices of basic necessities. Then the classical assumption test and correlation test were also carried out. Correlation Test is a mathematical model that aims to determine the pattern of existing relationships between two or variables, Correlation analysis is a model development (equation) that explains the relationship between variables.

Instrument Validity Test

Sugiyono (2015: 137) argues that "Valid means that the instrument can be used to measure what should be measured". In other words, validity is a measure that shows the level of stability of a valid measuring instrument that will have high validity. And vice versa, a measuring instrument that is less valid has low validity.

To test the validity of the measuring instrument in the form of a questionnaire, first look for the price of the correlation between parts of the measuring instrument as a whole, by correlating each item of the measuring instrument with the total score which is the sum of each item score, using the product moment correlation formula (Product Moment Person).

Research instrument testing is done by testing the validity of each item. This is done so that the research data is valid and significant data. The research instrument can be said to be valid if the instrument used can measure what is being measured.

The study analyzed the results of the research and the results of the questionnaire analysis that had been distributed as many as 32 copies for 32 respondents (n=32).

In the interpretation of the correlation coefficient, the minimum requirement is used according to Sugiyono (2017: 143) that "...if the correlation price is below 0.30, it can be concluded that the item of the instrument is invalid, so it must be repaired or discarded". Then the formula for the hypothesis is as follows:

1. Ha: $r \text{ arithmetic } r \text{ critical } = \text{ valid}$; and
2. Ho: $r \text{ count } < r \text{ critical } = \text{ invalid}$

The test step used in this study is using the IBM SPSS Statistics 25 application with the acquisition of validity test results on 8 statement items from the fuel increase indicator variable. The results of the collected questionnaires were scored in accordance with the established criteria, so that the data obtained from the validity test results on the independent variable (x), namely the increase in fuel prices as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>$r \text{ statistics}$</th>
<th>$r \text{ table}$</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Item1</td>
<td>0.304</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>2.</td>
<td>Item2</td>
<td>0.563</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>3.</td>
<td>Item3</td>
<td>0.501</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>4.</td>
<td>Item4</td>
<td>0.641</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>5.</td>
<td>Item5</td>
<td>0.662</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>6.</td>
<td>Item6</td>
<td>0.586</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>7.</td>
<td>Item7</td>
<td>0.648</td>
<td>0.300</td>
<td>VALID</td>
</tr>
<tr>
<td>8.</td>
<td>Item8</td>
<td>0.649</td>
<td>0.300</td>
<td>VALID</td>
</tr>
</tbody>
</table>

Source: IBM SPSS Statistic Calculation Results 25
Then for the y variable, the validity test was also carried out on 8 question items from the indicator of the Price of Basic Needs variable. The results of the collected questionnaires were scored in accordance with the established criteria, so that the data obtained from the validity test results on the variable (y) namely the Price of Basic Needs, as follows:

<table>
<thead>
<tr>
<th>No.</th>
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<th>r statistics</th>
<th>r table</th>
<th>Information</th>
</tr>
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<td>8.</td>
<td>Item8</td>
<td>0.649</td>
<td>0.300</td>
<td>VALID</td>
</tr>
</tbody>
</table>

Source: IBM SPSS Statistic Calculation Results 25

### Instrument Reliability Test

The reliability of a measuring instrument indicates the ability of the instrument to measure consistently the phenomena it is designed to measure. Reliability is the validity of measuring instruments in measuring what they measure so that with these measuring instruments it can provide a constant as long as the measured variable does not change. According to Sugiyono (2015: 268) "Reliability is related to the degree of consistency and stability of data or findings". So, it can be said that a reliable instrument is an instrument which, when used several times to measure the same object, will produce the same and reliable data.

Testing the reliability of the measuring instrument in this study uses the Cronbach Alpha formula in the IBM SPSS Statistics 25 application. The decision rule is based on Nugroho's opinion (2015: 72) "The reliability of a variable construct is said to be good if it meets the Cronbach Alpha value > from 0.6." Coefficients vary from 0 to 1 and a value of 0.6 generally indicates an unsatisfactory consistency/reliability interval, so it can be concluded that an instrument is said to be reliable if the alpha value is greater than 0.6 then the item is declared reliable. In this study, reliability testing was carried out on both variables with a sample of 32 data.

### Correlation Test

To find out whether there is a relationship between the variable increase in fuel prices and the price of basic necessities, then the instrument correlation test is carried out using the help of IBM SPSS Statistics Version 25 Software, as follows:

| Source: IBM SPSS Statistic Calculation Results 25 |

Based on the value of the Pearson correlation table above, it is known that the correlation value is 0.844, so the level of relationship between the increase in fuel prices and the price of basic necessities is in a very strong position.

### 5. CONCLUSIONS

From the acquisition data obtained from respondents' answers to 8 question items, then tested using validity tests, reliability tests, data normality tests, and correlation tests, it is obtained information that: Both variables are proven valid with a total of 8 items per variable and each item has r count which is higher than the value of r table that is 0.300. After the reliability test, it turns out that the data has a reliability value of 0.950 for the x variable and the y variable for 0.912. It means that the two variables have a reliability value higher than 0.60 and it is stated that the data has consistency. Based on the results of the normality test for the variables of the increase in fuel prices and basic necessities, the KS-Z value of 0.120 with Asymp. Sig. (probability) of 0.200. It states that the data is declared to be normally distributed according to the normality test from Lilliefors. This is because the level of significance is 0.200 > 0.05. Based on the Pearson correlation value in the correlation test, it is known that the correlation value is 0.844, so the level of relationship between the increase in fuel prices and the price of basic necessities is in a very strong position. This is compared with the interpretation table according to Sugiyono (2020: 214). Therefore, it means that the hypothesis Ha is accepted and H0 is rejected.
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