

Measuring the Effectiveness of Inflation Control on the Eid Al-Fitr Religious Day in Tegal City

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Abstract. Inflation can be caused by many factors, including demand, supply, and expectations. Each factor individually or together can influence inflation differently over a period of time. Inflation Control in Indonesia faces structural challenges and is influenced by regional characteristics so that it requires different handling. Important things that need to be considered in controlling inflation are commodities that have high volatility, share, depending on supply availability especially seasonal / weather constraints, and other policy instruments. It can be understood, that before the Idul Fitri religious holidays there is an increase in the prices of goods and services in almost all regions in Indonesia, not least in Tegal City. The efforts to control regional inflation carried out by the Regional Inflation Control Team (TPID) carried out are no more than routine activities so that they are often ineffective in achieving the expected inflation control goals. As part of inflation control risk management in Tegal City, it is necessary to do any commodity-commodity inventory that contributes both the frequency and contribution of influencing inflation in Tegal City on every momentum of the Idul Fitri religious holidays, so that the handling of inflation is more effective and measurable. The author takes the inflation data at the momentum of Eid al-Fitr 4 (four) years from 2015-2018 which is processed simply using the Microsoft Excel program and mapped through 4 (four) awareness namely quadrant I, II, III, and IV which shows the frequency and contribution of 10 (ten) commodities that often appear in inflation at the moment of Eid al-Fitr. Furthermore, 3 (three) priority commodities are chosen for the most frequency and share in quadrant I for treatment through the strategic formulation of the things that need to be done. From the mapping done, it was concluded that the commodity of Chicken Meat, Chicken Eggs and City Transportation appeared as the cause of inflation and needed a handling strategy according to the inflation control roadmap in Indonesia, namely 4K (Supply Availability, Price Affordability, Smooth distribution, and Effective Communication).

Keyword: 1 Inflation Control 2 Prices of Goods 3 Prices of Services 4 Commodity 5 Influencing Inflation

1. INTRODUCTION

1.1 Background

Inflation is one of the economic indicators that can be seen as an economic development program and economic program carried out by regional heads. For this reason, managing conversions in the regions become very important as a regional economic condition, how to

carry out economic and world activities, how to run patterns of distribution and trade, public consumption, investment, and running the government.

Inflation can be caused by many factors between the other side of demand, supply, or expectation. Each individual factor is different Inflation Control in Indonesia challenges structural challenges, and regional challenges require different handling.

Tegal City is one of the cities whose inflation is calculated based on the cost of living survey (SBH) conducted by the Central Bureau of Statistics (BPS) of 90 cities throughout Indonesia consisting of 34 provincial provinces and 56 districts/cities with 859 purchase packages (www.bps.go.id).

Efforts to control inflation in the region have now been transformed to the Regional Inflation Control Team (TPID), which is chaired by the Regional Head with the execution of daily tasks carried out by the Regional Secretary. In 2018 532 Regional Inflation Control Teams (TPIDs) were formed at the Provincial and District / City levels.

The regional inflation control program is an important concern of the Central Government, Bank Indonesia as the central bank that has the goal of achieving and maintaining the stability of the rupiah exchange rate depicted in inflation (prices of goods / services) and exchange rates (exchange rates) in the implementation of central bank duties as mandated by law basic laws of the Republic of Indonesia (1945 Constitution Article 23D) and Law number 23 of 1999 concerning Bank Indonesia as amended several times.

It should be understood, that Bank Indonesia cannot work alone in controlling inflation, Bank Indonesia can only influence the demand side related to monetary policy and payment systems, while the role of controlling other inflation is more on the fiscal side carried out by the central government and regional governments.

So that it becomes essential, how the government carries out risk management on inflation pressure, especially in the regions.

Important things that need to be addressed in controlling inflation are commodities that have high volatility, share, frequency often appears as a commodity contributing to inflation, depending on supply availability, especially commodities that face challenges and constraints in season/weather factors, as well as policy instruments adopted.

On religious holidays (Ramadhan-Eid al-Fitr), inflation in Tegal City is more influenced by volatile food commodities and administered prices. The persistence of commodity contributors to inflation in the last four years of fasting period (2015-2018) chicken meat (0.06), chicken eggs with a share of 0.07, rice (0.18) and shallots (0.03). Meanwhile, during the Eid period, it was influenced by in-city transportation commodities (0.14), broiler meat (0.12), intercity transportation (0.14) and shallots (0.08). So that it can be understood, that before the Idul Fitri religious holidays there is an increase in the prices of goods and services in almost all regions in Indonesia, not least in Tegal City. Eid al-Fitr has become a day celebrated in Indonesia, a culture of homecoming or returning home. The culture of friendship realized or not has had an impact on

the level of consumption and the formation of prices of goods/services in the community. The distribution of people and goods also experiences movements in ticket prices and transportation. Mitigation of inflation control risk must be able to capture the potential risk of inflation in the region triggered by increased consumption levels in this period. So that through the Tegal City TPID inflation control roadmap can be directed to the right strategic steps so that inflation in Tegal City can be maintained low and stable.

In this regard, the Coordinating Ministry for Economic Affairs as Chair of the National Inflation Control Team issued a letter No. EK.2.1 / 85 / M.EKON / 04/2019 on April 8, 2019, regarding Maintaining Availability and Affordability of Prices in the Fasting Month and Eid Al-Fitr in 2019. Hopefully, inflation in the fasting month and Eid al-Fitr in 2019 can be controlled. So that control measures that can be measured are needed. Gradually inflation in Tegal City can be in line with the national inflation target even though it fluctuates, but the direction is good.

Table 1 : Six Cities Inflation in Central Java in 2010-2018

Kota	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cilacap	-	-	-	-	8.19	2.63	2.77	5.07	3.01
Kudus	-	-	-	-	8.59	3.28	2.32	4.21	2.61
Purwokerto	6.04	3.40	4.73	8.50	7.09	2.52	2.42	5.24	2.82
Semarang	7.11	2.87	4.85	8.19	8.53	2.56	2.32	3.45	2.39
Surakarta	6.65	1.93	2.87	8.32	8.01	2.56	2.15	4.50	2.54
Tegal	6.73	2.58	3.09	5.80	7.40	3.95	2.71	4.46	3.05
Jawa Tengah	6.88	2.68	4.24	7.99	8.22	2.73	2.36	4.40	2.62

Source: Central Statistics Agency, 2018

Every year the government establishes macroeconomic policies including inflation in 2019 as stipulated in Act No. 12 of 2018 concerning the 2019 State Revenue and Expenditure Budget (www.kemenkeu.go.id). Bank Indonesia has changed the inflation control strategy through monetary policy to manage inflation through the flexible Inflation Targeting Framework (www.bi.go.id), namely the policy mix by maintaining internal and external balance so that inflation can be maintained. The inflation target was announced to the public both by the central government and Bank Indonesia. What about the local government? The central government certainly directs policies in line with the central government's macro policies, including in terms of achieving the set inflation target. To keep inflation in line with the above policy, local governments need to maximize the role of the Regional Inflation Control Team (TPID). The TPID has the role of formulating strategic policies and steps that can be taken to control inflation at the regional level so that economic performance can run well. The TPID consists of regional work units (SKPD) that have and complete their respective performance targets so that to coordinate inflation control together still face the sectoral ego.

1.2 Problems

Then, how effective the TPID can manage inflation, and how to measure it, it needs to be formulated so that control of regional inflation can be in line in supporting the achievement of the set inflation target.

Inflasi inflation control must be formulated in a targeted manner, based on commodity persistence and measured so that the performance of inflation control can be monitored and evaluated in the short and medium term.

In the assessment of TPID performance in appreciation of the national work meeting TPID is divided into 2 aspects, namely: 1) process aspects (60%) which include the intensity of activities with a weight of 20% and the quality of implementation with a weight of 40% and 2) output aspects (40%) namely year-end inflation realization with a weight of 20% and monthly inflation volatility with a weight of 20%. To see the output and outcome, it is necessary to formulate tools that can illustrate the movement of commodity inflation, which has an inflation persistence so that it ultimately has an impact on achieving annual inflation.

The TPID performance assessment above can still be optimized through the use of tools that can provide visualization of success in controlling regional inflation.

1.3 Purpose

Looking at the problem of regional uniqueness and the problem of coordinating inflation control in the regions in the face of Eid al-Fitr, the control of regional inflation needs to be developed in a useful framework. One of them is mitigating risk for key commodities contributing to inflation. The TPID needs to formulate appropriate policy recommendations to be carried out as efforts of regional head policies in controlling inflation. The results of the policies or steps taken are expected to be measured by the decreasing pressure on the contribution of inflation to commodities that have been mitigated from the start. To develop the visualization of the main commodities contributing to inflation, mapping was carried out in the inflation risk management quadrant. The purpose of the visualization is as follows:

1. Providing data and information on inflation control priorities per commodity whose control techniques can be directly followed up by SKPD at the TPID forum.
2. As a risk management tool for controlling inflation per commodity in the short, medium and long term.
3. As a reference for stakeholders in appreciating the TPID's efforts in controlling the prices of key commodities contributing to regional inflation.

2. DEFINITION OF THEORY

2.1 Definition of Inflation

The movement of prices of goods and services is common in the economy. Changes largely influence changes in commodity prices in demand and supply. Momentary price increases do not necessarily have an impact on inflation.

Changes in prices that tend to increase over commodity goods and services in general and continuously are referred to as inflation (Suseno and Astiyah-2019).

Inflation is a significant economic indicator and has a direct impact on society. United States President Gerald Ford called it the main enemy of the community "Inflation is the number one public enemy."

More inflation is measured using the Consumer Price Index (CPI). CPI has grouped in 7 (seven) expenditure groups according to the COICOP (2015 Central Bureau of consumption by purpose). Nevertheless, the producer price index and the large trade price index are also often used to calculate the inflation rate.

The inflation calculation can be done monthly (month to month), quarterly (quarter to quarter), or yearly (year on year).

The inflation theory is grouped into 2 (two) understandings, namely monetarism, and non-monetarism. The notion of monetarism known as the classical theory on inflation states that the supply of money and the amount of money in circulation are related to changes in price levels. Changes in the circulation of money will drive changes in the price level moving upwards or vice versa. The theory is also known as the quantity theory of money (Mankiw-2012).

While the theory of Non-Monetarism is grouped in structuralist theory and post-Keynesian theory. The structuralist theory believes inflation occurs because of economic imbalances. While Keynes's theory explains the quantity of money is not the only determinant of the price level, because inflation can occur even though the quantity of money does not change. Keynesians argue that inflation occurs when the total demand for goods/services exceeds the total supply in full employment conditions or exceeds its potential output.

2.2 Inflation Component

In general, inflation is grouped based on the characteristics or nature of changes in the price of commodity groups. The inflation component is divided into two, namely core inflation and non-core inflation called inflation disaggregation. Core inflation is referred to as underlying inflation, which can be influenced by central bank policies. The core inflation component tends to be constant or persistent, influenced by fundamental factors such as demand-supply, external environmental conditions such as exchange rates, international commodity prices, inflation at the trading level, and expectations of business people and the public.

Whereas non-core inflation is a component of inflation with high volatility due to non-fundamental factors. This inflation component is primarily influenced by the disruption of supply and beyond the control of the central bank because it is temporary. Okun (1970) and Fleming (1976), in Tjahjono et al. (2000) refer to as a component of relative change, due to supply-side disruption. Non-core inflation is separated into two parts, namely volatile food inflation, which is affected by shocks in the foodstuffs such as harvest season, natural disturbances, developments in domestic and international food commodity prices, and inflation price components set by the government (administered prices).) who are influenced by government policies such as electricity rates, oil/gas prices, transportation fares, and others.

2.3 Causes of Inflation

Based on quantity theory, the primary source of inflation is due to the existence of excess demand (demand) so that the money circulating in the community increases. In this theory, the source of inflation is divided into two, namely cost-push inflation and demand-pull inflation. Rising prices and falling production usually characterize Cost-push inflation. This situation arises due to a decrease in the aggregate supply as a consequence of increasing production costs. If the situation lasts long enough, there will be inflation accompanied by an economic recession. This type of demand-pull inflation starts from an increase in total demand (aggregate demand), while production is in a situation that is almost close to or in the condition of full employment. In a situation nearing full employment, the increase in total demand in addition to raising prices can also increase output. In a state of full employment, the subsequent increase in demand will only increase prices. If this increase in demand causes the condition of the output balance to be above or exceed the full-employment output, it will cause an inflationary gap. This inflationary gap causes inflation (Nophirin, 2009).

2.4. Impact of Inflation

Inflation that is not well controlled will have an impact on the economy, among others: Reducing purchasing power, causing social inequality, inhibiting investment, reducing savings, reducing competitiveness. Inflation can have an impact on the income distribution for those who have fixed income, the allocation of production factors due to the pursuit of increased production, and national production, namely the increase in production, on the other hand decreasing production if inflation tends to rise or higher (Nopirin, 2009). Therefore, it is important to pay attention to the acceptable inflation threshold so that it does not have a negative impact. The threshold of inflation value is associated with the relationship of inflation to economic growth that is not linear (Fischer, 1993). The inflation threshold for developed countries is 1-3%, developing countries 11-12% as reviewed by Khan and Senhadji (2000), while for Asian countries the inflation threshold value is 5.45 (Vinayagathan, 2013).

3. METHODOLOGY

3.1 Framework for thinking

Inflation in Indonesia has a destructive tendency influenced by the supply side due to disruption of production, distribution, and government policy (M.H.A Ridwan et al., 2013). Structural

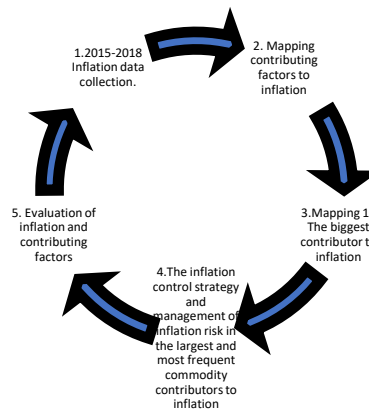
constraints in the real sector cause volatile price fluctuations as stated in the speech of the Governor of Bank Indonesia at the 2015 National TPID Rakornas, namely:

- 1) Strategic commodity production capacity is limited due to the limited land area and low productivity.
- 2) Exchange rate volatility that is affected by external conditions is primarily a dependence on exports of natural resource commodities
- 3) Disruption of supply of food commodities caused by changes in climate that are difficult to predict.
- 4) The reliance on national energy on imports of BBM and LPG
- 5) Long distribution chains controlled by few / groups of economic actors lead to inefficient markets.
- 6) Limited connectivity between regions, especially infrastructure that supports distribution and logistics systems.

Given the importance of controlling inflation through coordination of monetary policy and fiscal policy, the Regional Inflation Control Team (TPID) has been established since 2008. This is simply because the control of regional inflation plays an important role in achieving low and stable national inflation in the direction of the target set. TPID has duties including (G.A Diah Utari, 2015):

- a. Maintain and increase productivity, supply availability, smooth distribution of agricultural products, especially the basic needs of the community.
- b. Encourage the development and development of infrastructure that supports point 1.
- c. Encourage the creation of market structures and competitive and efficient trading procedures
- d. Manage the impact of adjusting prices for goods and services determined by the central and regional governments
- e. Encourage the availability of information regarding production, stock, and prices
- f. Conduct intensive coordination between the Regional Work Unit (SKPD), Bank Indonesia, relevant Ministries / Institutions in the region to ensure the production, supply, and smooth distribution of basic needs.
- g. As a forum for coordinating inflation control in the region.

Through coordination forums, Central and Regional coordination meetings, regional coordination meetings, TPID national coordination meetings, and forums initiated by TPID various strategic programs were formulated and implemented to solve the problem of controlling inflation in the regions from the short term to the structural ones. Some activities include increasing access to price information, encouraging the realization of cooperation between regions in overcoming surplus-deficits, harmonizing inflation assumptions according to the national inflation target. In general, the inflation control program is carried out on efforts to achieve the TPID roadmap, namely (Supply Availability, Price affordability, Smooth distribution, and Effective Communication)



Design Thinking for managing inflation

From this framework, visualized in commodity awareness that has a large share of inflation in Tegal City with the highest frequency of occurrence at a certain time period (2015-2018) which is divided into 4 quadrants as a priority for controlling inflation per commodity, namely:

- a. Commodities in **Quadrant 1** are the focus of short-term inflation control attention because they have a large contribution to the formation of inflation and often appear within 48 months of observation (4 years).
- b. While commodities in **Quadrant 4** are the focus of attention in controlling medium-term inflation because it has a large enough share but has a frequency that often appears as a commodity contributing to inflation.
- c. **Quadrant 2** is the focus of attention in controlling long-term inflation because it has a large share in the formation of inflation but has a frequency that does not often appear as an inflationary commodity.
- d. **Quadrant 3** is an ideal condition in controlling inflation because each commodity has a low share in the formation of inflation and does not often appear as a commodity contributing to inflation, but in this quadrant needs attention because if there is an increase in consumption or supply of commodity shock it can move (shifting) to another quadrant.

3.2 Approach to analysis

To conduct an inflation risk mitigation analysis, the facts that are the cause of problems are traced (Heryana, 2016). The data collected is secondary data originating from the Central Bureau of Statistics and Bank Indonesia Tegal Bailey Office, which is carried out through direct observation. Based on commodity data contributing to inflation in 2015-2018 in the map of commodities contributing to inflation on the Eid-ul-Fitr festivities as follows:

Table 2: Inflation Contributing Commodities on the Eid Al-Fitr

2015		2016		2017		2018	
Juli	Share	Juli	Share	Juni	Share	Juni	Share
INTER-CITY TRANSPORTATION	0.14	CITY IN TRANSPORTATION	0.21	ELECTRICITY RATES	0.32	RAS CHICKEN MEAT	0.16
RAS CHICKEN MEAT	0.13	RICE WITH OTHER	0.17	CITY IN TRANSPORTATION	0.18	INTER-CITY TRANSPORTATION	0.16
CITY IN TRANSPORTATION	0.09	INTER-CITY TRANSPORTATION	0.17	RAS CHICKEN MEAT	0.11	TEMPE	0.06
RICE	0.07	RED ONION	0.13	INTER-CITY TRANSPORTATION	0.07	SATE	0.06
CAYENNE PEPPER	0.05	MIE	0.08	RED ONION	0.07	CITY IN TRANSPORTATION	0.05
MUSLIM DRESS	0.04	RAS CHICKEN MEAT	0.08	STONE / STONE TELA	0.04	RED ONION	0.05
TEMPE	0.04	PRIMARY SCHOOL	0.07	BANANA	0.03	HOUSEHOLD FUEL	0.04
LAMB	0.03	JUNIOR HIGH SCHOOL	0.06	TEMPE	0.03	KNOW RAW	0.04
Yam	0.03	SOTO	0.05	KRETEK FILTER CIGARETTE	0.03	RED CHILI PEPPER	0.02
RED CHILI PEPPER	0.03	SENIOR HIGH SCHOOL	0.04	CIGARETTE	0.03	GUDEG	0.02

Source: Central Statistics Agency & Central Bank Of Indonesia (Proceed), 2018

The data is then processed using Microsoft Excel, to determine the frequency and weight of inflation contributions to determine the location of the commodity quadrant contributing to inflation during Eid al-Fitr 2015-2018:

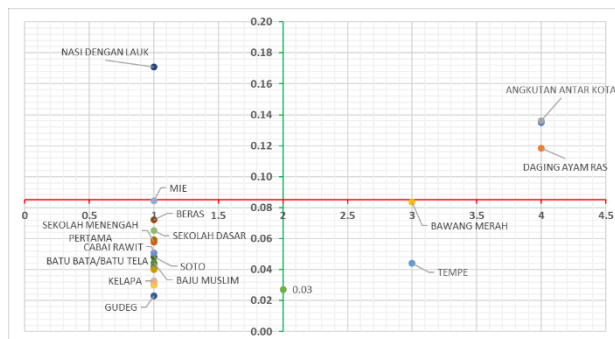


Table 3: Commodity quadrant contributed to inflation at Eid al-Fitr in 2015-2018

4. RESULTS OF ANALYSIS

From determining the location of commodities contributing to inflation, the priority of attention and solutions that need to be carried out focuses on awareness, where commodities Chicken and Transport in the city have frequencies or often appear and a more significant share of other commodities. Inter-city transportation appears as many as 4 (four) times, or every Eid-ul-Fitr holiday always appears as a commodity contributing to inflation, with an average share of 0.13%, this is the same as the commodity of chicken that appears every year. Eid al-Fitr with a weight of 0.12%. So that 2 (two) commodities visualize inflation control priorities that must be done. The effort that needs to be done is how inter-city transportation and commodity of chicken meat can be reduced based on the contribution of inflation, if possible it can be eliminated as a commodity contributing to inflation. From these conditions mitigation efforts that can be done by Tegal City TPID with a 4K approach include:

Alternative follow-up efforts needed

1. The TPID Coordination Meeting was chaired directly by the Mayor, the Regional Secretary focused on discussing 4K on commodities that had historically been a major contributor to the formation of inflation on the territory.
2. Bring experts and resource persons who have authority in decision making and provide strategic solutions that are accurate in price control.
3. Performed a press conference in the context of implementing effective policy communication to the community.
4. TPID technical meeting with breeders and broiler breeders at meat and egg centers. Gather information on production, distribution, demand cycles compared to normal conditions.
5. Coordination between regions and cooperation between regions both Government to Government, business to business so that chicken and egg farmers to prioritize fulfillment in Tegal City to help price stability.
6. While for City transportation, it is necessary to coordinate with organda for policies that can be influenced at the local level, not by the ministry, or PT. Indonesian Railways.

5. CLOSING

5.1 Conclusions

From the data analysis carried out, it can be concluded that inter-city transportation and chicken meat have frequency often appear as a cause of inflation in Tegal city in 2015 until 2018. Besides, inter-city transportation and chicken meat also contribute to considerable inflation on every holiday Eid Al-Fitr.

5.2 Suggestions

In controlling regional inflation, there needs to be synergy and strengthening coordination between TPID stakeholders.

Mitigation of commodity contributors to inflation and the weight of the largest contribution needs to be mitigated and carried out strategic steps and efforts earlier so that they are truly effective and able to bring about a measurable impact on inflation.

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