

Panic Buying as a Cause of Inflation: al-Maqrizi's Perspective

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Abstract

The research was motivated by the phenomenon of panic buying that hit the whole world at the start of the COVID-19 pandemic, but studies on panic buying in Islamic economic discourse are still very limited, and no one has linked it to the theory of inflation from an Islamic perspective. Therefore, this study aims to classify panic buying as the cause of inflation from al-Maqrizi's perspective. This research uses qualitative methods with a literature study. The results showed that panic buying can be classified as "human error inflation." Finally, the government must be more agile in preventing panic buying, and individuals must prioritize rationality over being isrof or tabzir. Panic buying has all the criteria that can be used as a reference for classifying human error as inflation. Ultimately, this research provides valuable insights and the implication of that it is important for government to have a policy to be more responsive to avoid things that can trigger panic buying.

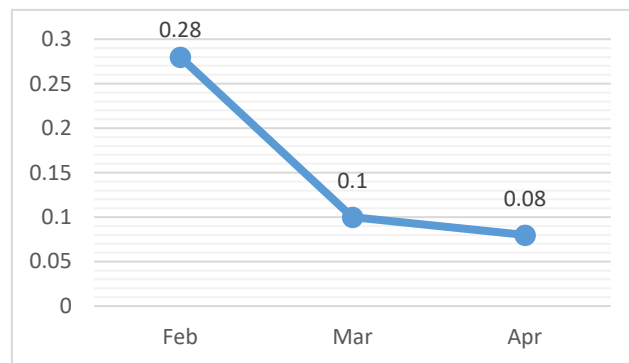
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INTRODUCTION

During the COVID-19 pandemic, the phenomenon of panic buying occurred in various countries. The peak of the panic buying phenomenon occurred in March 2020, with varying degrees of severity (Keane & Neal, 2020). During the COVID-19 pandemic, the phenomenon of panic buying occurred in various countries. The peak of the panic buying phenomenon occurred in March 2020, with varying degrees of severity (Keane & Neal, 2020). The stages of panic buying in various countries generally consist of four stages. The first and second stages are the panic buying of health and self-protection products such as health supplements, masks, and hand sanitizers. And in the third stage, the target is food and health products. Then in the fourth stage, there is a crisis in the availability of goods both online and offline (BPKN RI, 2020).

Panic buying also occurred in Indonesia three times. The first was on March 2, 2020, when President Jokowi announced that there was a positive case of Corona in Indonesia. Second, on March 14, 2020, the president issued an appeal to work and study at home for fourteen days. Third, on March 19, 2020, he tested positive after the government announced that COVID-19 cases in Indonesia had reached 308 cases with 25 deaths (Putri, 2020). Panic buying in Indonesia has reached the third stage, where people's panic buying is not only targeting health products but also food ingredients. This action caused an empty supply and an increase in the prices of several food and health products, such as masks and hand sanitizers, which experienced price increases of more than 100% (BPKN RI, 2020).

According to Aprilianti, a researcher from the Center for Indonesian Policy Studies (CIPS), panic buying has the potential to cause inflation (BPKN RI, 2020). BPS data shows that in March 2020 there was inflation of 0,10% with a Consumer Price Index (CPI) of 104,72. The inflation rate for the calendar year (January–March) 2020 is 0,76% and the year-on-year inflation rate (March 2020 to March 2019) is 2,96%. In April 2020 there was inflation of 0,08% with a Consumer Price Index (CPI) of 104,80 (Badan Pusat Statistik, 2020).



Source: Badan Pusat Statistik (BPS), 2020.

Figure 1
Inflation in February - April 2020

The inflation rate for the calendar year (January–April) 2020 is 0,84% and the year-on-year inflation rate (April 2020 to April 2019) is 2,67% (Badan Pusat Statistik, 2021). Three main groups contributing to inflation are the health group 0.23%; personal care and other services group 1.20%. And then, the food and beverage/restaurant supply group by 0.18%. And the three expenditure groups that contributed to the highest inflation in this period were the personal care and other services group at 0.99%; the food and beverage/restaurant supply group at 0.36; the household equipment, equipment, and routine maintenance group is 0.28%, while the health group is 0.21% is in 4th place (Badan Pusat Statistik, 2020). This shows that panic buying in March 2020 did not occur with high price inflation.

Even though panic buying in March 2020 was still under control, panic buying must still be watched out for as a threat to inflation. Economic experts in various countries agree that panic buying has the potential to cause inflation (Hall et al., 2021; Harahap et al., 2021; Loxton et al., 2020). Previous research has highlighted several factors that lead to panic buying and from Rajkumar & Arafat (2021) classify factors into three categories: 1) disaster, disease or crisis-related factors such as severity and duration (Akbar & Faizin, 2019; Jahromi et al., 2021); 2) personal factors, including human psychological and information (Yuen et al., 2020); 3) other factors related to supply chain and demand factors (Dulam et al., 2021). Panic buying can be a cause of inflation because panic buying causes stock disruptions and increases demand for goods (Sappeami & Aisyah, 2020). As Keynes explained that inflation occurs when aggregate supply is smaller than aggregate demand (Rasheed, 2020) Al-Maqrizi also linked inflation to aggregate demand and supply. According to him, inflation can occur because of the large demand and decreased supply either due to natural factors or human error factors (Akbar & Faizin, 2019).

Studies on panic buying have been carried out, especially from a psychological and economic point of view. However, only a few studies on panic buying from an Islamic economics perspective can be found on Google Scholar. Even though the phenomenon of

panic buying is very interesting to study based on the scientific treasures of Islamic Economics, for example, studied with Al-Maqrizi's inflation theory. Salam (2020), who conducted a study on inflation caused by the Covid-19 outbreak, concluded that the Covid-19 outbreak was classified as a natural cause of inflation. Kharismaputri et al. (2021) who contributed to a study on panic buying based on an Islamic consumption perspective, concluded that panic buying is not an Islamic consumption behaviour. However, Salam (2020) did not discuss Al-Maqrizi's theory of inflation with the phenomenon of panic buying. So, Kharismaputri et al. (2021) did talk about panic buying but they did not discuss it with Al-Maqrizi's inflation theory. Therefore, the authors are interested in conducting a literature study to discuss panic buying with the theory of inflation from Al-Maqrizi's perspective. This study aims to categorize panic buying as a cause of natural inflation or human error. Theoretically, these findings are expected to enrich the scientific body of Islamic economics on actual problems in society such as panic buying and inflation. Practically, these findings are expected to be useful as a material for consideration in dealing with panic buying that could occur again in the future.

LITERATURE REVIEW

An overview of Panic Buying

Panic buying is a psychological boost from fear and panic. Of course, there are internal and external factors that motivate someone to panic buy. According to Shadiqi et al. (2021), history has shown us that the emergence of panic buying always goes hand in hand with crises, such as epidemics, and forecasts of natural and non-natural disasters, such as nuclear war. According to Arafat et al. (2020), throughout human history, fear and panic have been the human responses to epidemics and pandemics since time immemorial.

Shadiqi et al. (2021) argued that the theory that could explain the social-psychological dynamics of panic buying behavior was Albert Bandura's social cognitive theory. Interpersonal dimensions, behavioral dimensions, and environmental dimensions play a role in causing panic buying behavior, the absence of one of which can reduce the severity of the behavior that appears. In the interpersonal dimension, people who make panic buying experience typical internal psychological conditions such as psychological conflict, stress, fear, anxiety, feelings of insecurity, and or the perception of uncertainty. Environmental dimensions such as pandemic conditions, availability of goods, mass media information, and social networks are among the causes of behavior. In the behavioral dimension, namely the emergence of panic buying behavior. These three dimensions are connected by the cognitive process. Meanwhile, social processes work when individuals make behavioral considerations based on the social influences that occur during a pandemic (Shadiqi et al., 2021).

According to Nurishaq, a comprehensive understanding of the Coronavirus and simple psychotherapy such as relaxation, assist therapy, play therapy, Spiritual Emotional Freedom Technique (SEFT), and Islamic therapy such as ablution, prayer, and remembrance, and patience help manage anxiety because it can bring calmness within yourself (Jarnawi, 2020). It is the same with Cognitive Behavioral Therapy (CBT) as proposed by Arafat et al. (2020). CBT can help fight irrelevant thoughts and make evidence-based decisions. Shopping starts with checking the stock at home, making a shopping list according to your needs, avoiding waste, and considering the needs of others (Nabi et al., 2021)

According to Arafat et al. (2020), the media spread panic by depicting panic buying more negatively, with as many as 96.6% of the titles, 75.4% of the causes, and 62.3% showing photos of empty shelves. Keane & Neal (2020) found that the peak of panic buying in various

countries occurred in March 2020 and took place after the announcement of government policies on social restrictions. Octaviani & Akhrani (2020) found that a lack of public trust in the government is one of the factors that causes panic buying behavior.

Panic buying can be the cause of inflation because it creates a short burst of demand (Sappeami & Aisyah, 2020). The increase in demand occurs in a short time due to great need, and buyers are willing to pay a high price to get it; according to Ibn Khaldun, it makes supplies less and the price increase (Hidayatullah, 2018). One of the causes of inflation is due to high consumer demand for consumer goods, which will cause price increases (Gunarso, 2019). Inflation due to soaring consumer demand ($AD\uparrow$) is called demand-pull inflation. On the other hand, inflation due to soaring production costs ($AS\downarrow$) is called "cost-push inflation."

Natural and Human Error Inflation

Al-Maqrizi (1364 – 1365M) was one of the students of Ibn Khaldun. Al-Maqrizi explained in detail the phenomenon of price increases. Inflation can be caused by a surge in demand ($AD\uparrow$) and a boost in production ($AS\downarrow$), both of which can come from natural factors and human error factors.

Natural Inflation is inflation that occurs due to natural factors that cannot be avoided by mankind. Natural factors such as natural disasters, wars, and embargoes can create inflation if they cause an increase in aggregate demand or a decrease in aggregate supply, the price level higher than before. Natural inflation is normal and *sunnatullah*. The increase in price due to natural inflation will gradually decrease as the source of the cause disappears (Akbar & Faizin, 2019).

Natural inflation has occurred in the past, for example during the caliphate of Umar bin al-Khattab. First, it increases people's purchasing power, which means that aggregate demand increases ($AD\uparrow$). At that time there was a positive net export where exports ($X\uparrow$) are greater than imports ($M\downarrow$) which made the domestic money supply increase. Second, it is caused by a decrease in aggregate supply ($AS\downarrow$) due to famine which causes lower production and scarcity of wheat ($AS\downarrow$) (Fadilla & Aravik, 2018). When there is a decrease in supply and scarcity, while the amount of demand is still increasing due to the high demand for these goods, the prices will increase (Siwu, 2018).

Money and inflation are two aspects that during the reign of Rasulullah and Khulafaurrasyidin did not cause problems. The problem arose after the increasing number of deviations from Islamic values, especially in these two aspects, which were carried out by the heads of government of the Bani Umayyah and so on (Huda, 2021). Thus, Al-Maqrizi stated that another cause of inflation is human error. Even when there was a disaster and drought in 1404, Al-Maqrizi considered it a punishment from God Almighty, because the ruler deviated from Islamic teachings (Noh, 2020). Human error inflation is inflation caused by human error that deviates from Islamic rules and regulations (Suar et al., 2020). Islam regulates all aspects of human life as whole worship and *muamalah* so that all activities including economics must be based on sharia principles (Rahmah, 2021). In Islam, the economic goal is *Falah*, to achieve it all actions are evaluated by considering the social benefits (*masalih*) and disadvantages (*mafasid*) of social life. According to Hardivizon & Sholihin (2021) individual actions in Islamic economics are assumed rational based on their compliance with Islamic laws. So muslim consumers do not prioritize personal interests and utilitarianism has different philosophy based on individual's wants or desires and aims to maximize individual's self-satisfaction in contrast to *maslahah* (Muttaqin & Pusparini, 2019). Human violations of sharia can cause damage that is detrimental to humans themselves. As mentioned by Allah Swt., in

Surah Ar-Rum verse 41 which warns people that damage in the oceans and on land is caused by human actions. Actions have consequences. Allah gives punishment so that humans realize their mistakes and then return to the right path.

Based on the results of Al-Maqrizi's analysis, there are three main things that partially or collectively caused inflation in Egypt in 806 - 808 H, namely 1) Corruption and bad government administration, 2) High taxes and agricultural land rent, 3) Uncontrolled circulation of *fulus* currency (Akbar & Faizin, 2019; Suar et al., 2020). Corruption and high taxes reduce the incentives and enthusiasm of farmers so that they are counterproductive for agriculture and have an impact on decreasing production or aggregate supply ($AS\downarrow$), resulting in scarcity which causes prices to increase ($P\uparrow$). Meanwhile, excessive printing of money has increased the circulation of money in society which has increased purchasing power or aggregate demand ($AD\uparrow$) increasing prices ($P\uparrow$) (Ashari, 2021).

Al-Maqrizi's theory is relevant for the modern economy until now inflation is still associated with human error, for example, Keynes (1883 – 1946M), who is dubbed the father of macroeconomics, said inflation is caused by the behavior of a society that wants to live beyond the limits of its economic capacity (Parisi, 2018). There is Gunawan says that inflation in Indonesia is caused by a personality crisis, a crisis of faith, a moral crisis, and a materialistic lifestyle (Imani et al., 2020). In the context of our current monetary system, al-Maqrizi's theory of the role and function of money in *Ighasah al-Ummah bi Kasyf al-Ghummah* shows that the interest system is the main contributor to inflation and monetary crises that hit the global economy (Parisi, 2018). In addition, Al-Maqrizi's concept is very appropriate to be implemented for the welfare of society by increasing the income dominant sector of life through changes in government administration reforms that are clean from extraordinary crimes and economic fraud (Firmansyah, 2021). So, the human error mentioned by al-Maqrizi can be interpreted broadly, both by the authorities and by individuals.

According to Akbar & Faizin (2019), the natural disaster factor is no longer relevant today, because it has facilitated and increased the ability of disaster mitigation. Moreover, the impact of natural disasters is only around the disaster area and is short-term in nature. According to Budi et al. (2020) in the short term, the amount of inflation does not change much and only affects the price at the producer and consumer levels, so it does not affect stability. On the other hand, the inflation rate in the long term can disturb the level of stability, because it disrupts the intermediation function of financial institutions. It was shown in some studies. In Parker (2018) researched that natural disaster will raise the marginal costs from domestic producers and which leading to the creation of upward pressure on the inflation rate. From the previous research by Fratzscher et al. (2020) and Klomp & Sseruyang (2021) it was shown when a country hit by large adverse in the form natural disaster, became economies under an inflation targeting significantly lower. Some studies have proven that corruption affects inflation, including by Akbar & Faizin (2019). Their research results show that the main factor causing inflation in Indonesia is human error. The high level of corruption, interest, taxes, and the money supply are positively correlated with the inflation rate. Then there is the research of Westermarck (2019), which concludes that changes in the labour market such as employment levels and changes wage rates which is also affected by cost pressure can significantly affect inflation. Another research by Salisu et al. (2018) and Lorusso & Pieroni (2018) found that an increase in energy consumption or oil prices result has impact on increasing inflation. Meanwhile research by Van (2020) used analyzed based on the theory of money supply stated that in long-term the continuous increase in money supply became causes inflation. According to research by Leonidovna & Nikolaevich (2019) heterogeneous corruption has impacts on inflation in both the short and long run. In addition, the indirect impact can reduce the inflation

balance. The results show that the higher the corruption in the country, the higher the inflation. Likewise research Akbar & Faizin (2019). Some of the literature reviews above show that there has been no study of panic buying in the discourse of inflation theory from the perspective of a Muslim economist named al-Maqrizi. That is why this study is important to do.

METHOD

This research is literature research and use of the qualitative approach. Type of data used in this study is secondary data and research data were obtained from scientific text search results in the form of books and journal articles taking into account the relevance, up-to-dateness, and adequacy of the the problem of the studied object are panic buying and inflation. This study uses descriptive analysis techniques, namely collecting data, compiling it, and providing interpretation (Dahliana, 2020).

RESULT AND DISCUSSION

This study aims to determine Al-Maqrizi's perspective on panic buying. This discussion begins with the belief that panic buying is a form of destructive coping that only creates new problems and is not an Islamic individual behavior (Soenjoto & Mujiyono, 2020). The author believes that panic buying is not an Islamic individual behavior because it contains *israf* (excessive), greedy, and selfish actions that are not following Islamic values in Surah Al-A'raf verse 31 and Al-Baqarah verse 96. However, consumer behavior and fulfillment of the needs of a Muslim must be based on Islamic values such as justice, simplicity, cleanliness, generosity, and morality. According to the Islamic perspective, all activities including meeting needs and utilizing benefits are basically directed at fulfilling obligations based on established religious standards, but if done greedily and excessively beyond the limits of following lust then Allah doesn't like it (Martinelli, 2019). So that individualists will prioritize their egos and care less that the sustainability of society affects the peace of their lives, while pious people are not only determined by their relationship with God, but also in social relations with society (Rusydi, 2018). Panic buying as a destructive coping shows a person's inability to control their passions. Panic buying can cause new problems, including inviting hoarding (*ihthikar*) (Zahra, 2019). *Ihtikar* is supply engineering, a form of market distortion (Abidillah, 2019). Besides that, supply disruptions are included in the resulting impacts. A disrupted supply chain of goods will cause shortages due to a drastic depletion of stock and provoke traders to increase prices (Izzaty, 2020). According to Zheng, Shou, and Yang (2021) if it is carried out at a moderate level it can be a positive stimulus or provide benefits for retail and social welfare, but it can damage retail profits and social welfare if the level is very low or very high.

The author agrees with Shadiqi et al. (2021) and Arafat et al. (2020) that panic buying can be predicted and prevented. The argument that panic-buying is predictable has been demonstrated by historical experience. In the history of mankind, panic buying has always occurred as a complication of a disaster. The first recorded panic-buying event in history occurred in 1918 during the Spanish flu (Shadiqi et al., 2021). The second recorded panic buying in 2003 during post SARS (Severe Acute Respiratory Syndrome) where the phenomenon of a sharp in sales insurance business to increasing demand for protection and then the third occurred used to hit Hong Kong in 2019 during outbreak pandemic Covid-19 by the panic buying of masks and antiseptic materials (Lam et al., 2021). Meanwhile in Singapore, panic buying and emptying of shelves in the supermarket because national alert was raised (Sim et al., 2020). Furthermore, the argument that panic buying can be prevented is supported by Nurishaq who states that comprehensive knowledge and understanding can prevent panic.

Shadiqi et al. (2021) can prevent panic buying behavior from the individual himself and his environment, both the behavior of others such as neighbors, the government's role, and the media.

Thus, the entry of the Corona virus into an area should be a signal or prediction of the emergence of panic buying, so that preventive mitigation can be sought from an early age to prevent it. To help individuals manage their panic, everyone must first be given understanding and trust in a conducive environment through positive, clear, open, and proportionate information that all is well and stock is available in sufficient quantities. Important information about price and stock guarantees and how to obtain them should be disseminated. Meanwhile, negative information that scares the public is provocative and misleading (hoax) and must be prevented from spreading. Of course, this information must be balanced with efforts to provide and maintain sufficient stock availability and stable prices (Rosita, 2020). Market mechanism regulations such as the highest price limit and the limit on the number of purchases should also have been implemented when the signal appeared before the panic buying action by the public (Wijaya, 2020).

Corona virus has been detected in China since December 31, 2019, and is spreading rapidly to many countries. Several countries that confirmed cases of Covid 19 in January 2020 include the US, France, Thailand, Singapore, and Japan. By that time, lockdowns and social distancing were implemented in China and many European countries to prevent the spread of the virus. Meanwhile, the attitude of the Indonesian government at that time, according to the results of the LP3ES research, tended to respond in a relaxed manner, not being vigilant and not making serious efforts to prevent the entry of the virus into Indonesia even though some international institutions had given warnings. The unclear attitude and slow response of the government made the public unprepared for the virus outbreak, on March 2, 2020, the government announced the findings of the first Covid 19 case in Indonesia, and there was public panic including *panic buying*. It was shown that the government has wasted time and opportunity. During this period, it should be used to mitigate the spread of the virus, and they can educate the public about the virus and how to protect themselves.

The stages of panic buying in various countries generally consist of four stages. The first and second stages are panic buying of health and self-protection products such as health supplements, masks and hand sanitizers. And in the third stage, the target is food and health products. Then in the fourth stage, there was a crisis in the online and offline availability of goods (BPKN RI, 2020). At high levels, panic buying can lead to a significant increase in the inflation rate. It denotes the failure of the individual to manage their panic and control their passions; the greed of hoarders; weak disaster mitigation and the government's ability to overcome panic buying (Sappeami & Aisyah, 2020). Panic buying occurred in Indonesia three times. First, on March 2, 2020, the day President Jokowi announced that there were two positive cases of corona in Indonesia. Second, on March 14, the day the call was issued to work and study at home for two weeks or fourteen days. Third, on March 19, the day the positive cases of the Corona were announced in Indonesia, there were 308 cases with 25 deaths. Based on the stages, panic buying in Indonesia has reached the third stage where panic buying by the public does not only target health products but also food ingredients. This action has temporarily caused the supply of goods to be empty resulting in an increase in the price of food and health products, such as masks and hand sanitizers by more than 100%.

Based on the discussion above, human behavior is responsible for panic buying. The role of the individual in the occurrence of panic buying is a destructive form of human coping, reflecting actions that are isrof, redundant, and irrational. Uncontrolled panic buying behavior has an impact that harms many people and does not cause problems but instead causes losses.

Luckily the panic buying that occurred in Indonesia in three waves, namely on March 2, 14, and 19 2020 was not severe and did not cause high inflation. BPS data shows that inflation is still low, in March 2020 it was 0.10%, and in April 2020 it was 0.08%. Regardless, the author attempts to look theoretically to classify panic buying as a cause of inflation from al-Maqrizi's perspective. Panic buying can occur anywhere and anytime, whether due to the spread of disease outbreaks such as Covid-19, natural disasters, or changes in government policy. If panic buying is not overcome, it has the potential to cause inflation. (Hall et al., 2021; Harahap et al., 2021; Loxton et al., 2020) According to the authors, panic buying is the cause of inflation which is classified as human error inflation. As al-Maqrizi said that the indicators of human error inflation are human behavior that causes shocks on the supply and demand side, causing prices to rise, behavior that is contrary to Islamic teachings, and behavior that should be prevented by humans. self. According to the authors, panic buying has all of these criteria to be classified as human error inflation.

CONCLUSION

The panic buying that occurred in Indonesia in March 2020 was not severe and did not cause high inflation. Based on the classification of causes of inflation according to al-Maqrizi, panic buying can be classified as human-error inflation. Panic buying has all the criteria that can be used as a reference for classifying human error as inflation, namely behavior that is contrary to Islamic teachings, behavior that causes disturbances in demand, supply, and prices, as well as behavior that can be controlled by humans themselves.

Based on the research results, the authors recommend that individuals avoid isrof, tabzir, and irrational buying behavior. to the community, media, and government to be more responsive to avoid things that can trigger panic buying. Even though at this time it is not dangerous for inflation, there are still parties who are harmed by panic buying, for example, the poor and sick patients. Finally, the author realizes that this article is not perfect and that there are still opportunities for Islamic economic studies on inflation or panic buying from various aspects and other methods. This study provides several important implications related to the panic buying phenomenon that occurs in Indonesia, it is important for the government to improve market and supply chain supervision in order to more quickly detect early signs of panic buying and take preventive steps as a policy to be more responsive to avoid things that can trigger panic buying. This study has a number of limitations that need to be considered the availability of data used may not cover all aspects that affect panic buying behavior and inflation. For example, data on the distribution of goods, the response of consumers in different regions, or data from the informal sector may be limited or unavailable.

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