

Literature Study of Cooking Oil Scarcity and The Increase of Cooking Oil Prices in Indonesia

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Abstract. The increased cooking oil prices in the market resulted in a scarcity of cooking oil in Indonesia. This study examines the impact of the shortages and increases in cooking oil prices in Indonesia on the economy and the surrounding community. This study uses a qualitative approach with a literature study method that explores the case in more depth by collecting various sources of information. The data analysis method uses content analysis such as data collection, data reduction, and concluding. It resulted in the scarcity of cooking oil in Indonesia, not due to decreased cooking oil production but the lack of cooking oil at affordable prices. In conclusion, the cooking oil shortages in Indonesia have led to new government subsidies, HET, export policies, and the B30 policy.

Keywords: Oil Prices; Scarcity; Cooking oil; B30 policy; HET.

I. Introduction

Macroeconomics is a branch of economics that focuses on learning specifically about the mechanism of economic work as a whole and is related to the effective use of production factors for the prosperity of society (Yuniarti, 2016). The purpose of studying macroeconomics is to be able to know and learn the basis of events and events related to the economy in a country or a region as well as improve economic policy in the country (Suleman, et al, 2020). Inflation is one of the leading macroeconomic indicators to see economic stability (Dewi, 2011). Inflation is an increase in prices at all price levels (Mankiw, 2000 in Sutawijaya, 2012). According to (Boediono, 1995 in Santosa, 2017), inflation is the tendency of prices to increase indirectly and continuously. According to (Lawrence, 2013), macroeconomics has widely discussed the relationship between the volatility of various world commodity prices that tend to be unstable over time.

Commodity prices function essentially in some developing countries' economies, making the country's commodity export income one of the primary commodity materials (Zirek et al., 2016 in Choiriyah & Auwalin, 2020). Commodity prices often experience shaking due to several economic factors, namely, the production of staples, lousy weather causing crop failure, insect disturbance, and fluctuations in the price of staples (Sunarta, 2010). According to (Gumilang, 2014), crude oil is a commodity that has a vital role in the Indonesian economy; the increase in crude oil prices will impact the rising prices of other necessities. Indonesia's commodity prices often experience price changes in staples such as corn, soybeans, wheat flour, cooking oil, and others (Sumaryanto, 2009 Rizaldy, 2017). Cooking oil commodities, in particular, experienced an increase in prices at the beginning of 2022. Where the increase will affect the condition of other commodities. (Fadila, Kusnadi & Rifin, 2014).

Cooking oil is one of the nine staples used by the people of Indonesia, from urban to rural areas. Cooking oil can easily be found in several supermarkets in Indonesia (Sinaga, Rusdina, Alfah, Windarto, & Wanto, 2019). Cooking oil is often used by the public because cooking oil can give a distinctive taste, crunchy texture, and brown color and increase nutritional value (Aladedunye & Przybylski 2009 in Ilmi, Khomsan & Marliyati, 2015). Cooking oil can be included in the category of strategic commodities; multifunctional that can be consumed as food or as raw material for industries such as food (Sulistiyowati, 2019). The benefits of cooking oil are good for industry and households (Kusuma, 2013).

II. Literature Review

The price of Palm cooking oil

The price of Palm cooking oil is driven by the amount of Palm cooking oil production in Indonesia (Rambe & Kusnadi, 2018). Cooking oil prices in Indonesia penetrate the price of Rp. 14,000 per/liter as of January 18, 2022. The government applies the highest retail price (HET) for cooking oil in Indonesia to become a standard price benchmark. Quoted from (cnbcindonesia.com), the government makes an effort to restore the market mechanism dependent on international CPO prices. Quoted from (kontan.co.id), the Ministry of trade implemented the Domestic Market Obligation (DMO) and Domestic Price Obligation (DPO) policies, which were implemented on January 27, 2022. It led to an increase in the price of cooking oil in the market mechanism in Indonesia (Nafisah & Amanta, 2022).

Rising Prices of Palm Cooking oil

Rising prices cause scarcity of Palm cooking oil which impacts the Indonesian economy. The cause of the scarcity factor of cooking oil in Indonesia can be seen in the falling supply and the demand for goods that rise, which can cause prices to rise (Fitri, et al, 2020). The demand for palm oil worldwide is vast because Palm cooking oil is traded to Europe and the United States, which increases palm oil production in Indonesia (Budidarson, et al, 2013). Quoted from (infosumsel.id), the scarcity of cooking oil caused a long queue at the minimarket in Indonesia. The scarcity of cooking oil in Indonesia indicates that the consumption of cooking oil in Indonesia is increasing.

The consumption of Palm cooking oil in Indonesia cannot be avoided. According to (Susenas, 2019), the consumption of Palm cooking oil, especially at the household level, increased during the 2015-2020 period and increased yearly. Spending on cooking oil consumption for the Indonesian population showed a positive increase. According to (the Ministry of Agriculture, 2021:50), in 2016, spending on cooking oil consumption was nominal at Rp. 127,000 per/capita and amounted to Rp. 139,000 per/capita in 2020.

The Problem that Arises during the Increase in Price of Cooking Oil

The increase in cooking oil prices in the market jumped from Rp. 11.500 per / Liter, simple packaging Rp. 13,500 per/liter, premium packaging Rp. 14,000 per/liter as of February 1, 2022 (regulation of the Minister of trade, 2022). Nevertheless, in the same year, oil experienced a surge in cooking oil prices up to Rp.20,000 per/liter; resulting in a scarcity of cooking oil in Indonesia, which occurred not because cooking oil production decreased but rather because of the scarcity of cooking oil at affordable prices so that people found it challenging to obtain it at low prices (Herman & Bata, 2022). The research focuses on factors affecting the scarcity of Palm cooking oil in Indonesia from 2021 to early 2022. The purpose of this study is to understand the causes of rising oil prices that soared, causing the phenomenon of the scarcity of cooking oil in the community. From the background above, it can be concluded that the internal government issue can cause the problems of rising cooking oil prices in Indonesia.

III. Research Method

This study uses a qualitative approach with the analysis of literature study (literature study), which explores the case by collecting several books and magazines related to the problem and research purpose. The primary purpose of this study was to understand the case in-depth, beginning with identifying the problem to ending with analysis and discussion related to the rise in oil prices. The object of this study is to explore the problems of the rise and scarcity of oil prices that cause riots and queues to buy oil at the lowest price. This study uses a systematic literature review, often abbreviated as SLR, which is a literature review method that identifies, assesses, and interprets all findings on a research topic to answer research questions that researchers have applied (Kitchenham & Charters, 2007). The study used applications such as Publish or perish and Google scholar to obtain information about previous research. The type of data used is secondary data generated by government institutions such as the Central Statistics Agency (bps), the Association of Indonesian palm oil entrepreneurs (GAPKI), and the Council of Palm Oil Producing Countries (CPC). The sources used include textbooks, scientific journals, statistical references, research results in the form of thesis, dissertation, and the internet, as well as other relevant sources. This study was conducted in Indonesia because Indonesia recently experienced oil scarcity caused by rising oil prices from 2021 until early 2022. The validity of the data used is triangulation, which seeks various articles of relevant research results and summarizes them among one another (Afriyanti, 2002). The data analysis method using content analysis for this study is data collection, data reduction, and conclusion.

IV. Results and Discussion

The results of the study in the article contained descriptive data analysis results written in Time New Roman 12 spaces 1.15. The year 2021 was the recovery year from covid-19, business slowly recovered, and the demand for goods of import for vegetable oil slowly increased (Irai, 2021); however, there was a stagnant production in the palm oil industry (GAPKI, 2022) due to various factors such as weather, fertilizer limitations, and labor shortages. Domestic palm oil consumption in 2021 reached 18 million tons, or about six percent higher than in 2020 (about 17 million tons of consumption) (GAPKI, 2022). This incident caused the initial increase in cooking oil prices in Indonesia, which has occurred since the end of 2021 and has not yet been solved. The increase in cooking oil prices began in November 2021, including the price of packaged cooking oil with a value of up to Rp. 24,000 per/liter. For this reason, the government intervened by fixing the unit price policy for cooking oil to about Rp. 14,000 per/liter (pemkomedan, 2022).

The beginning of the increase in cooking oil prices

Cooking oil is one of the nine necessities used by the Indonesian people (Nasution, 2021). Cooking oil can be included in the category of multifunctional commodities and can be used for various food products and industrial raw materials (Sulistiyowati, 2019). The increase in cooking oil prices described in the background has impacted the Indonesian economy. The cause of the scarcity of cooking oil in Indonesia can be seen in the rising demand while the supply of goods decreases, which causes prices to rise (Briantika, 2022). In some parts of Indonesia, high demand and reduced supply of cooking oil have caused shortages in these areas. Therefore, these factors caused a decrease in supply, especially among producers who experienced a decline in the marketing of cooking oil in the country. It causes an increase in the price of oil in the market, which tends to rise.

A significant increase in oil prices since October 7, 2021, has led to a shortage of cooking oil in Indonesia. According to research (Andriessa, 2022), the price of cooking oil on October 7, 2021, reached Rp. 15,550 per/kilogram. Until now, the price has soared to reach Rp. 18,550 per/kilogram. Therefore, the government provides several policy instruments. These policies include cooking oil subsidies and a domestic market obligation (DMO) that exports CPO to sell 20% of its export volume for domestic consumption at a set price of Rp. 14,000/liter for premium packaged cooking oil based on the Regulation of the Minister of Trade Number 6 of 2022. Regulation of the Minister of Trade Number 6 stipulates the Highest Retail Price (HET) for Palm cooking oil as referred to in article 2 paragraph 1 that the price of bulk cooking oil is Rp. 11,500 per liter, simple packaged cooking oil is Rp. 13,500 per liter, and premium packaging for Rp. 14,000 per liter.

Policies from the government

Export policy based on research (Pratiwi, et al, 2016) is a policy carried out by the government to issue trade policies in the CPO industrial sector in the form of export taxes to limit CPO exports. With the export policy, the volume of CPO exports will affect the balance of the industrial market, namely the palm industry market, which will be reflected in the price of palm cooking oil in the domestic market. The policy was written such that if domestic demand is still lacking, the government can increase export taxes, thereby reducing the motivation of domestic producers to export oil abroad due to high taxes. The government policy described above attempts to stabilize oil prices and prevent a shortage of cooking oil in Indonesia. However, to expand the domestic palm oil DMO and DPO, the trade government froze biodiesel export permits due to the soaring price of cooking oil. The policy of freezing export permits is implemented in the Regulation of the Minister of Trade of the Republic of Indonesia Number 08 of 2022 concerning the Second Amendment to the Regulation of the Minister of Trade Number 19 of 2021 concerning Export Policies and Regulations. Due to that, the freeze is imposed on many biodiesel products with tariff headings or HS covering 8826 with an alkyl ester content of 96 percent or more but not exceeding 98 percent for other biodiesel. Therefore, it can be concluded that biodiesel exporters have followed the DMO and DPO provisions applied to crude palm oil product exporters on January 27, 2022. However, the 20% DMO policy mechanism is mandatory for all exporters who use CPO raw materials.

The raw material for CPO is used as the core material for making cooking oil. The price of Crude Palm Oil (CPO) or crude vegetable oil soared to US\$ 1,340/m T or equivalent to Rp. 19,291,243 (Andriessa, 2022). The increase in the price of crude vegetable oil in the market affects the price of crude oil on a global scale. The Council of Palm Oil Producing (CPOPC) explained that since April 2022, global CPO prices have increased by Rp. 317 from Rp. 15,471 to Rp. 15,788 per kilogram. Meanwhile, according to the Indonesian Palm Oil Association (GAPKI), the price of CPO on the stock exchange was recorded on April 14, 2022, at Rp. 21,792,480 per tonne. It happened because of the conflict between Russia and Ukraine, which impacted the global economy by affecting CPO sub-study commodity goods such as soybeans, rapeseed, and canola so that CPO prices became more expensive (Kamalina, 2022). The increase in commodity goods greatly affected the price of CPO, which brought new domestic policies such as the B30 policy. In the first quarter of 2020, the government implemented the B30 policy. The B30 policy is a policy that requires fuel oil companies in Indonesia to mix 70% diesel with 30% biodiesel (Andriessa, 2022). This policy aims to save limited fossil fuels by mixing other fuels in the oil fuel processing process (Kominfo, 2022). Through this proposal, the government hopes that the B30 policy can suppress the increase in demand for crude vegetable oil to reduce consumption figures to 3 million tons to meet domestic cooking oil needs.

The scarcity of cooking oil caused a unique event in Indonesia. The impact of the scarcity of cooking oil in Indonesia brought new alternatives for cooking. Events such as panic buying, long queues in some supermarkets in Indonesia, and the emergence of innovative products such as the air fryer are solutions to the oil shortage among the people. The scarcity of cooking oil causes long queues at

minimarkets in Indonesia. The Highest Retail Price (HET) policy as of January 19, 2022, regarding the mechanism for replacing subsidies, causes local communities to experience panic buying (Nasution, 2022). Panic buying occurs because people fear running out of cooking oil (Wulandari, 2022). Scarcity and rising cooking oil prices resulted in strategies to overcome these events.

Strategy for economic recovery

Several policy strategies have been issued by the Ministry of Trade (Kemendag) to overcome the problem of cooking oil in Indonesia, such as the DMO mechanism, domestic price obligations (DPO), and setting the highest retail price (HET), which requires cooking oil prices not to soar too high so that people still can buy. For economic recovery, the domestic cooking oil policy will switch to domestic again, accompanied by a domestic price obligation or DPO (Wahyudi, 2022). This policy can ease the burden on the community so that they can still buy cooking oil at affordable prices. The problem of cooking oil has occurred since 2021, but the policy was implemented to deal with the availability and stabilization of cooking oil prices (Anisah, 2022). However, the results of this policy failed.

Based on the results of the systematic literature review, it can be concluded that the high world CPO price caused the increase in oil prices in Indonesia due to the conflict between Russia and Ukraine, which made subsidized commodity prices rise. Knowing the causes of the scarcity of cooking oil in Indonesia with research conducted by (Nafisah & Amanta, 2022), (Andriessa, 2022) and (Nasution, 2022). The scarcity of cooking oil in Indonesia has led to new policies such as cooking oil subsidies, DMO, DPO, B30 policy, and biodiesel export permits to reduce the price of cooking oil in the market. However, it is stated that (Andriessa, 2022) and (Nafisa & Amanta, 2022) these policies are declared ineffective because the selling price of cooking oil is the same and limits the number of buyers.

V. Conclusions

Based on the results of the discussion above regarding the increase and scarcity of cooking oil in Indonesia, it can be concluded that after the economic recovery from COVID-19, the price of CPO in the world experienced a fairly high increase of up to US\$ 1,340/m T or equivalent to Rp. 19,291,243. This impact is a factor in the scarcity of cooking oil in Indonesia. Moreover, when the economic recovery becomes stable, the rise in the price of cooking oil in the market could be affordable. However, the government has implemented several special policies to restore the price of cooking oil so that people can buy it at an affordable price. Includes many policy changes according to government requirements. In the early stages, the increase in cooking oil prices was caused by farmers' productivity at the beginning of the 2020 pandemic with a shortage of labor that hampered palm oil production, thus disrupting productivity. In the second stage, the increase in global CPO prices was due to the conflict between Russia and Ukraine, which caused an increase in global commodity prices so that CPO prices soared. In addition, the increase in the demand for cooking oil in some parts of Indonesia and the reduced supply of cooking oil caused shortages in these areas. Therefore, the scarcity of cooking oil in Indonesia has led to new government subsidies, HET, export policies, and the B30 policy.

However, with the government's policy, negative things arise for the people of Indonesia. Providing a policy to restore the government's cooking oil shortage could be ineffective and lead to a 'single price' policy or subsidy in mid-January 2021. Supply shortages at some retailers also remain a problem. Another thing that can cause a negative impact after the policy is the long queues at various supermarkets in Indonesia. It causes 'panic buying' among the people because of the fear of running out of cooking oil at affordable prices in the market. Furthermore, the increase in the price of cooking oil which until now has reached Rp. 25,000 per liter on April 27, 2022, because the government abolished cooking oil subsidies.

As a suggestion, government agencies must always pay attention to domestic supply needs so that domestic prices remain stable. In addition to lowering the price of simple packaged cooking oil to Rp. 14,000 per/liter. The government must also be firm in applying the highest retail price to restore the scarcity of domestic cooking oil. However, recently the problem has become more complicated because the Director-General of the Ministry of Trade, Indrasari, has become a suspect in the cooking oil export case. If in the country there is a loss between the government, the impact will be directly on the economy and society.

References

- Ab Rahman, A. K. (2012). Impact of palm oil supply and demand on crude palm oil price behavior. *Malaysia Palm Oil Board (MPOB)*.
- Afriyanti, D., Kroeze, C., & Saad, A. (2016). Indonesia palm oil production without deforestation and peat conversion by 2050. *Science of The Total Environment*, 557-558, 562-570. <https://doi.org/10.1016/j.scitotenv.2016.03.032>
- Antara News. (2022, January 18). GAPKI prediksi harga CPO bertahan tinggi hingga Maret 2022. Retrieved from <https://www.antaraneews.com/berita/2651109/gapki-prediksi-harga-cpo-bertahan-tinggi-hingga-maret-2022>
- Arshad, F. M., & Hameed, A. A. A. (2013). Crude oil, palm oil stock and prices: How they link. *Review of Economics & Finance*, 3, 48-57.
- BPKRI. 2021. *Peraturan Menteri Perdagangan tentang Penetapan Standar Kegiatan Usaha dan Produk Pada Penyelenggaraan Perizinan Berusaha Berbasis Risiko Sektor Perdagangan*. PERMENDAG No. 26 Tahun 2021 Tentang penetapan Standar Kegiatan Usaha Dan Produk Pada penyelenggaraan Perizinan Berusaha berbasis Risiko Sektor Perdagangan
- Budidarsono, S., Susanti, A., & Zoomers, A. (2013). Oil palm plantations in Indonesia: The Implications for Migration, settlement/resettlement and local economic development. *Biofuels - Economy, Environment and Sustainability*. <https://doi.org/10.5772/53586>
- Choiriyah, E. A. N. M., & Auwalin, I. (2020). Pengaruh Harga Komoditas, Kurs, Inflasi, Foreign Direct Investment (FDI), Dan Sumber Daya Manusia (SDM) Terhadap Perekonomian Negara OKI. *Jurnal Ekonomi Syariah Teori dan Terapan*, 7(8), 1607-1628.
- Dadi, D. (2021). Oil Palm Plantation Expansion: An Overview of Social and Ecological Impacts in Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(3), 6550-6562.
- Dewi, M. S. (2011). Analisis Pengaruh Variabel Makroekonomi Terhadap Inflasi di Indonesia Sebelum Dan Sesudah Diterapkannya Kebijakan Inflation Targeting Framework Periode 2002: 1-2010: 12. *Media Ekonomi*, 19(2), 3-29.
- Falatehan, A. F., & Setiawan, B. I. (2020). Economic risk characteristics of an Indonesian palm oil value chain and identifying sources of uncertainty in policy making. In *Supply chain resilience* (pp. 109-137). Springer, Singapore.
- Fadila, J. D., Kusnadi, N., & Rifin, A. (2014). Analisis Pergerakan Harga Internasional Minyak Bumi, CPO, dan Kedelai dengan Pendekatan VECM.
- Gumilang, R. C. (2014). *Pengaruh variabel makro ekonomi, harga emas dan harga minyak dunia terhadap indeks harga saham gabungan (Studi pada Bursa Efek Indonesia Periode 2009-2013)* (Doctoral dissertation, Brawijaya University).
- Herman & Bata, A. (2022, Februari, 18) Minyak Goreng Selangit di Lumbung Sawit [beritasatu]. Retrived from <https://www.beritasatu.com/fokus/minyak-goreng-langka-dan-mahal-salah-siapa>
- Ilmi, I. M. B., Khomsan, A., & Marliyati, S. A. (2015). Kualitas minyak goreng dan produk gorengan selama penggorengan di rumah tangga Indonesia. *Jurnal aplikasi teknologi pangan*, 4(2), 61-65.
- Irai. 2021. Outlook demand dan supply minyak nabati dan minyak sawit pada tahun 2021. Jakarta.
- Kementan. 2019. Outlook Komoditi Kelapa Sawit. Pusat Data dan Sistem Informasi Pertanian. Jakarta: Sekretariat Jenderal, Kementerian Pertanian
- Kementan. 2021. Buletin Konsumsi Pangan Semester II Tahun 2021. Pusat Data dan Sistem Informasi Pertanian. Jakarta: Sekretariat Jenderal, Kementerian Pertanian.
- Kementerian Energi dan Sumber Daya Mineral. (2022). ICP Januari 2022 Terkerek Jadi US\$85,89 per Barel. [migas.esdm.go.id]. Accessed from <https://migas.esdm.go.id/post/read/icp-januari-2022-terkerek-jadi-us-85-89-per-barel>
- Marwanti, S. (2017). Keunggulan Komparatif dan Kinerja Ekspor Minyak Sawit Mentah Indonesia di Pasar Internasional. *Jurnal Agro Ekonomi*, 35(2), 89-103.
- Muhammad, I. (2022). Produsen Beberkan Penyebab Kelangkaan Minyak Goreng di Negeri Kaya Sawit. [money.kompas.com]. Accessed from <https://money.kompas.com/read/2022/02/11/084332826/produsen-beberkan-penyebab-kelangkaan-minyak-goreng-di-negeri-kaya-sawit?page=all>
- Nafisah, N., & Amanta, F. (2022). Oil Palm Productivity Remains Limited as Price of Cooking Oil Soars in Indonesia.
- Ningrum, N. P., Kusuma, M. A. I., & Rokhati, N. (2013). Pemanfaatan minyak goreng bekas dan abu kulit buah kapuk randu (soda qie) sebagai bahan pembuatan sabun mandi organik berbasis teknologi ramah lingkungan. *Jurnal Teknologi Kimia Dan Industri*, 275-285.

- Noviantoro, B., Emilia, E., & Amzar, Y. V. (2017). Pengaruh harga CPO, harga minyak mentah dunia, harga karet dunia dan kurs terhadap defisit neraca transaksi berjalan Indonesia. *Jurnal Paradigma Ekonomika*, 12(1), 31-40
- Rambe, K. R., & Kusnadi, N. (2018, July). Permintaan dan Penawaran Minyak Goreng Sawit Indonesia. In *Forum Agribisnis: Agribusiness Forum* (Vol. 8, No. 1, pp. 61-80).
- Rizaldy, D. Z. (2017). Pengaruh Harga komoditas pangan terhadap inflasi di Kota Malang Tahun 2011-2016. *Jurnal Ekonomi Pembangunan*, 15(2), 171-183.
- Santosa, A. (2017). Analisis Inflasi Di Indonesia. *Proceeding SENDI_U*. Retrieved from <https://www.unisbank.ac.id/ojs/index.php/sendu/article/view/5062>
- Sinaga, D. M., Rusdina, R., Alfah, R., Windarto, A. P., & Wanto, A. (2019). Analisis Metode ELECTRE Pada Pemilihan Produk Minyak Goreng Kemasan Terbaik Berdasarkan Konsumen. *Jurnal Sains dan Informatika: Research of Science and Informatic*, 5(2), 129-135.
- Siswanto, S. (2010). Systematic review sebagai metode penelitian untuk mensintesis hasil-hasil penelitian (sebuah pengantar). *Buletin Penelitian Sistem Kesehatan*, 13(4), 21312.
- Stemler, S. (2000). An overview of content analysis. *Practical assessment, research, and evaluation*, 7(1), 17.
- Sulistyowati, A. (2019). *Pengaruh Kualitas Produk Dan Harga Terhadap Keputusan Pembelian Minyak Goreng Kemasan Bimoli Di Kecamatan Sumbersari Kabupaten Jember* (Doctoral dissertation, Universitas Muhammadiyah Jember)
- Sunarta, K. (2010). Analisis kebijakan stabilisasi harga minyak goreng Indonesia. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 1(1), 1-13.
- Surani, D. (2019, May). Studi literatur: Peran teknolog pendidikan dalam pendidikan 4.0. In *Prosiding Seminar Nasional Pendidikan FKIP* (Vol. 2, No. 1, pp. 456-469).
- Sutawijaya, A. (2012). Pengaruh faktor-faktor ekonomi terhadap inflasi di Indonesia. *Jurnal Organisasi dan Manajemen*, 8(2), 85-101.
- Teti, E., Hutabarat, S., & Nofionna, A. (2009). The factors influencing on consumption of palm cooking oil in Indonesia. *Economic Journal of Emerging Markets*, 1(2), 137-146.
- Virdita, R. (2022). Ini Penyebab Kenapa Minyak Goreng Mahal dan Langka Menurut Kemendag. [kontan.id]. retrived from <https://industri.kontan.co.id/news/ini-penyebab-kenapa-minyak-goreng-mahal-dan-langka-menurut-kemendag-1>
- Yuniarti, V. S. 2016. *Ekonomi Makro Syariah*. Edisi cetakan 1. Pustaka Setia. Bandung. Indonesia