MACROECONOMIC ANALYSIS SERIES

Inflation Outlook 2023

LPEM FEB UI
UNIVERSITAS INDONESIA

Key Figures

Inflation (2022)

5.51%

Core Inflation (2022)

3.36%

Inflation* (2023)

4.2 – 5.0%

Core inflation* (2023)

2.8 – 3.4%

Economic Growth (Q3 2022)

4.60%

% Current Account of GDP (Q3 2022)

1.33%

*) *Forecast*

Researchers

Chaikal Nuryakin

chaikal@lpem-feui.org

Fitawhidan Nashuha

fitawhidan.nashuha@ui.ac.id

Calvin Aryaputra

calvin.aryaputra@ui.ac.id

Walking Through the Double-Edged Sword of Energy Prices

Summary

Overall, we observed an increasing inflation rate trend throughout 2022; the figures were higher than the pre-pandemic level. It hit the highest level in September 2022 at 5.95%, the highest since October 2015. The increased inflation from January to August 2022 was mainly contributed by volatile inflation, which reached its peak in July 2022 at 11.47%. On the other hand, administered price inflation caused a rise in the inflation rate in the last four months, reaching its highest level in December 2022 at 13.34%. The core inflation figures were higher than in 2021 and experienced an increasing rate throughout 2022.

First, high inflation in 2022 was a demand-side phenomenon due to post-pandemic recovery that affected consumption growth and the inflation rate. The ultimate factor associated with higher inflation was a relaxed social restriction that led to higher mobility. Transportation, energy, and food ingredients were the most notable sectors with high inflation. It was mainly due to price adjustments of subsidized fuels and high global energy and food prices. On 3rd September, President Joko Widodo officially announced the price hikes of Pertalite, Pertamax, and Solar, causing an immediate rise in inflation in the energy and transportation sectors to 16.48% and 16.01%, respectively. The high inflation in the two sectors subsided in December 2022. The indirect (second round) effect of the fuel price adjustment combined with rising global food prices led to inflation in the food ingredients sector.

Table 1: Inflation Rate (Forecast LPEM FEB UI)

Dec 2022		Jan 2023 Forecast	
Headline	Core	Headline	Core
5.51%	3.36%	4.2-5.0%	2.8-3.5%

Second, the exchange rate in 2022 depreciated to its lowest point in November 2022 at IDR/USD 15,737. The depreciating exchange rates caused by the strengthening of the US dollar due to the monetary policy adopted by the Fed, as well as increasing financial uncertainty due to the tightening of monetary policy, especially in the US. The exchange rate is expected to stay in IDR/USD 15,000 to 15,200 range in 2023 due to the global financial uncertainty, with a better prospect at the end of 2023 as inflation and interest rates are under control.

We forecast inflation to stabilize at 5% at the beginning of 2023 and decrease toward the end of the year. In Q1 of the upcoming year, it is expected that the effect of fuel price adjustment still exists, and the exchange rate is still high due to global financial uncertainty. However, inflation may decrease in the subsequent quarters due to the slow global economic recovery and decrease in import prices.

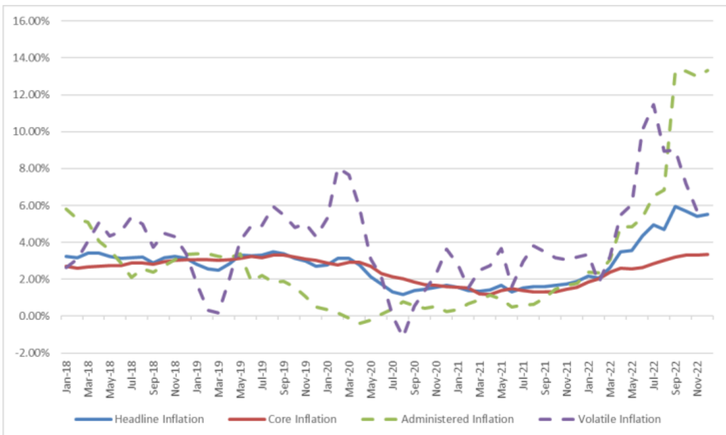
Higher Inflation Rate than 2021, Even Higher than The Central Bank's Inflation Target

Overall, we saw a relatively high inflation rate over 2022. We saw a jump in every aspect of inflation. The inflation on the administered goods experienced a substantial jump, even recording a double-digit increase in the last four months of the year, which saw over 13% YoY inflation from September to December 2022. This number is a massive jump over the previous two year's administered goods' inflation, when it never surpassed the 2 percent mark, even going under the negatives a couple of times.

We also saw a high inflation rate for volatile goods (foods) which peaked at mid-year with double digits YoY inflation in June and July. We argue that this phenomenon resulted from the cooking oil hikes caused by the CPO (and its derivative) export ban in April and May. The increase in inflation rate was also affected by the rise of energy pricing following the increase in global crude oil prices. The war between Ukraine and Russia affects not only the global energy market but also the food market. As one of the world's primary producers of grain, Ukraine had its trade route blocked, resulting in higher grain prices.

The high inflation rates for administered and volatile goods drive a higher overall inflation rate than expected. Bank Indonesia's inflation targeting was set to 3±1 percent, as stated in the Regulation of The Minister of Finance No. 124/PMK.010/2017. On the other hand, the core inflation is going back to the pre-pandemic level.

Figure 1: Inflation Rate (Headline, Core, Volatile, Administered Goods), 2018-2022



Source: CEIC

We then break down the inflation rate by consumption type (figure 2). There are some hikes from the second quarter to several kinds of consumption. The two most significant were energy and then followed by transportation. Energy prices surged because of the global energy crisis following the tension caused by the Russian attacks on Ukraine. The proxy war between NATO and Russia included sanctions for Russia, which then responded by limiting gas exports to the EU. The price of crude oil skyrocketed during Q2 of 2022. Some variants even touched the US$120 / barrel mark. The disturbance in global oil prices also forced countries to adjust their fuel prices, including Indonesia. In April, the price of Pertamax (PT. Pertamina's RON 92) was increased to Rp 12.500 from Rp 9.000 per liter. In July, three variants announced to have a price increase, Pertamax Turbo (RON 98) was set to be Rp16.200 from Rp14.500, Dexlite (CN 51) was set to be Rp 15.000 from Rp13.700, and Pertamina Dex (CN 53) was set to be Rp16.500 from Rp13.700 for a liter each. In August, the three variants experienced an increase once more, Pertamax Turbo was increased to Rp17.900 from Rp16.200, Dexlite was set to be Rp17.800 from Rp15.000, and Pertamina Dex was set to be Rp18.900 from Rp16.500 per liter. And finally, in September, the subsidized Pertalite (RON 90) was going for Rp10.000, from initially priced at Rp7.650 per liter.

Other than energy prices, the inflation on transportation is affected by the easing of travel restrictions by the government. Some people started to live as they used to before the pandemic, commuting and traveling. The transportation service providers return the price to its original level (or even higher because of tariff adjustments to fuel price). The government also allowed celebrations for religious holidays such as *Idul Fitri, Idul* Adha, Islamic New Year, and Christmas. Besides commuting for business, the government also allowed people to have easier times attending recreational events. The return of music concerts, galleries, and playgrounds could also explain the incline in recorded inflation for recreation, sport, and culture.

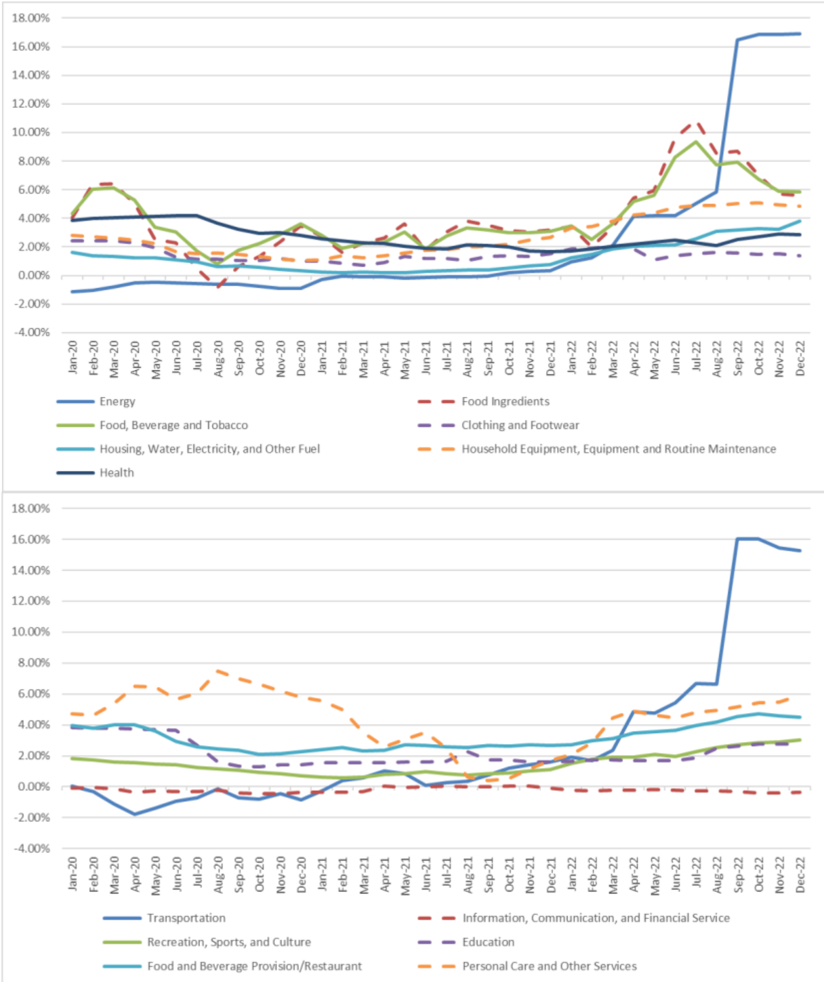
Although less extreme than energy and transportation, we also saw an increase in food ingredients, beverages, and tobacco products. The hikes were started in early 2022, almost in time with the rise in energy and transportation prices. Many things happened in a span of a few weeks: crop failures were reported throughout the country, imported foods and food ingredients, an export ban on CPO, and the shortage of cooking oil, all of these are responsible for the surge of food pricing in Q2-Q3. Fortunately, food prices are coming back in the latter part of 2022.

After analyzing the inflation rate by consumption type, we found that the impact of health and economic recovery is clearly seen throughout 2022. We are coming back to the pre-pandemic condition. However, several big shocks and disturbances also occurred in 2022. People started to travel domestically or internationally, and recreational events are popping up again. The wave of people working from the office is also turning the wheel of economic activities after a two-year drought. The slow and steady inflation rate for the health sector also implies a lower concern about health risks due to COVID. The abundance of COVID vaccine, easily accessible for those who need it (especially in big cities), and the cheaper services fee for COVID testing could be interpreted as a good sign moving forward.

The exchange rate market experienced a roller-coaster ride in 2022. However, Rupiah faced an ever-stronger dollar throughout the year. The Fed's long-awaited tapering decision hit the market starting in January 2022. However, the strong push from the global supply side causes high inflation in the 'west' economy. The US and EU are faced with the highest inflation they have ever seen for such a long time. The Fed responded by increasing the rate by 4.00%-

4.25% in 7 months, even by 0.75% at once a couple of times. An increase of 0.75% rate has yet to be seen since 1994.

Figure 2: Inflation Rate by Consumption Type, 2020-2022 (YoY)

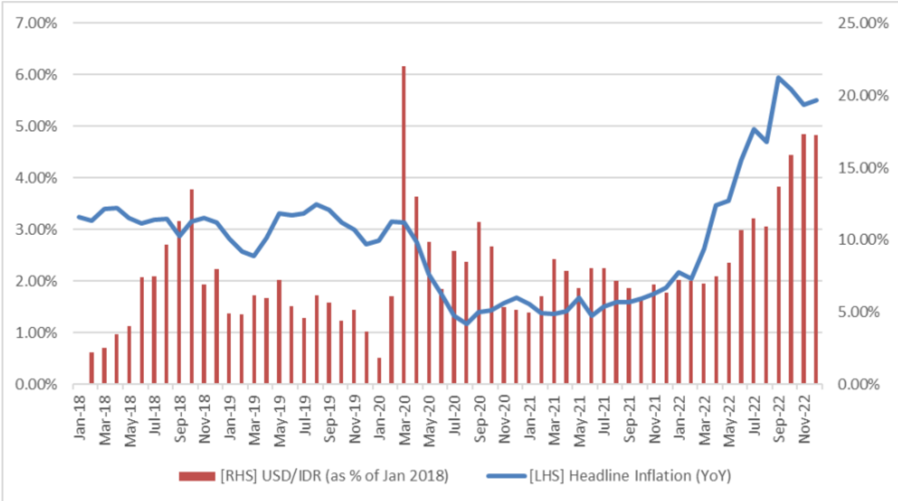


Source: CEIC

At the same time, the cryptocurrency was also hit hard. Terra (LUNA) crashed from US$120 a pop to a mere $0.02 within 48 hours in May. Mining was done for the mainstream after Ethereum switched to Proof-of-Stake (POS) in September from the Proof-of-Work scheme. As the cherry on top, FTX collapsed and filed for bankruptcy in November. Inflation and high global risk always haunt cryptocurrencies, and people have begun to pull out their assets. Then, flowing the market with money withdrawn and buying investments with increasing yields.

Furthermore, the US Dollar strengthened because other currencies weakened. European economies are struggling because of the war in Ukraine, facing an ever-increasing energy cost. At the same time, Japan got hit by lower demand for manufactured goods in the global market. The bursting real estate bubble also shook China's economy.

Figure 3: Inflation Rate and Relative Change in USD/IDR, 2018-2022



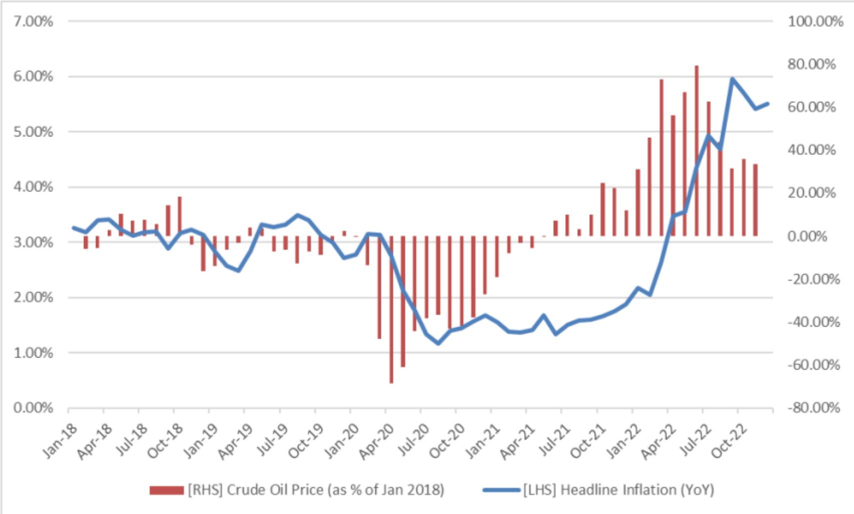
Source: CEIC

Crude oil prices in 2022 were constantly above those in January 2018 (Figure 4). While 2021 was marked by an upward trend in crude oil prices as growing global crude oil demand outpaced supply, 2022 is characterized by the fluctuation of crude oil prices. In Q1 – Q3 2022, the Indonesian crude oil price increased because of the global energy crisis following oil supply disruptions due to the conflict between Russia and Ukraine. In March 2022, crude oil prices surpassed an all-time high at 11.348 USD/barrel with a concurrent domestic cooking oil crisis. Therefore, the government imposed a mandatory domestic market obligation for exporters, in which exporters must put aside 30% of the volume of palm oil products for the local market (it was 20% before).

Further, the government banned palm oil export in late April 2022 but was lifted the following month. After reaching its highest price in June 2022, the crude oil price declined until the end of 2022. There are two reasons why this occurred—first, the financial uncertainty due to monetary policy by the Fed. Increment of the Fed rate declined global economic activities, which decreased global crude oil demand. Second, there was an increase in global crude oil supplies due to increasing production in Libya, the United Arab Emirates, and Saudi Arabia, among others.

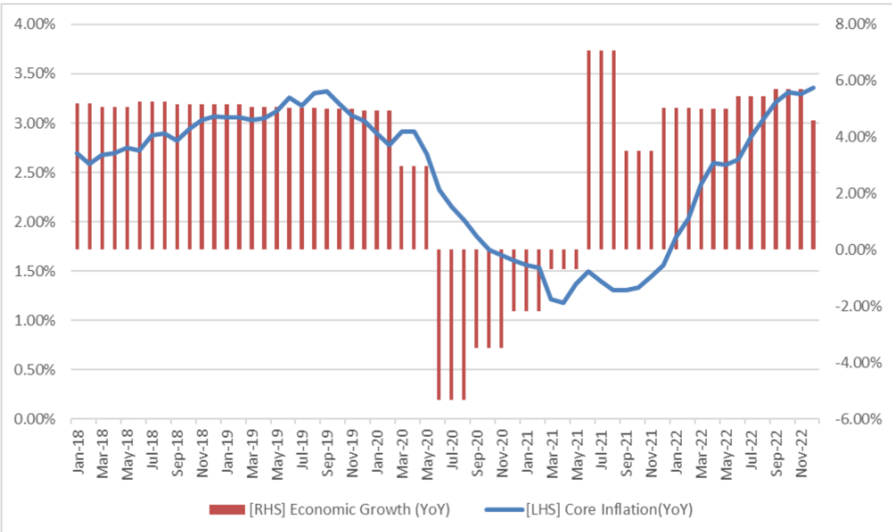
Economic growths were constantly positive at around 5% YoY in 2022 despite the global economic uncertainty caused by the Fed and Russo-Ukrainian war (Figure 5). Although there was a threat of Omicron in Q1 2022, Indonesia managed to reach a positive economic growth of 5.02% YoY. It was due to strong export performance, household consumption recovery, and investment inflow. In the next quarter, economic growth increased to 5.45% because of household consumption following the relaxed COVID-19 restrictions, the Ramadan and Idul Fitri celebrations, and high export growth due to high commodity prices. However, there was a temporary palm oil export ban from April – May. The economic growth further rose to 5.72% YoY in Q3 2022 due to increased exports, foreign direct investment, and government spending. Employment conditions also continued to improve following the recovery of economic conditions. According to Statistics Indonesia (BPS), the labor force participation rate (LFPR) was reported at 68.63% in August 2022, which was the highest LFPR since 1986.

Figure 4: Inflation Rate and Relative Change in Oil Price (Brent), 2018-2022



Source: CEIC

Figure 5: Core Inflation Rate and Economic Growth, 2018-2022



Source: CEIC

2023 Inflation Forecast: Lingering Risk from The War and Pandemic Scarring Effect

We estimate the 2023 inflation rate will still be high. Some sources even say that it might repeat the same as 2022, where the inflation rate will be higher than the targeted inflation for 2023, which is still at 3±1 percent. The foundation of this estimation is the combination of intense demand, especially during political years leading to presidential and legislative

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elections. There is pressure from the global supply side, where prices are high and might affect imported inflation. The alleviation of the social restriction policy by the Indonesian government will trigger an even more vibrant economy.

Despite the US Dollar getting stronger each day, we expect the Rupiah will remain stable or more robust, at least against other currencies. High inflation is still raging in the US and EU, although it is getting slightly lower as of November. We expect the exchange rate to be around Rp15.000 - 16.000 per USD. Nevertheless, Bank Indonesia's commitment to maintaining the stability of the Rupiah and bonds will force them to keep adapting to the global financial market condition. We expect other decisions to increase the BI-7 Day Reverse Repo Rate (BI7DRR) soon. We can see the BI7DRR return to its initial pre-pandemic level, at around 5.75% to 6.00%.

Moving forward, despite the high climb of crude oil prices in 2022, even more than in 2021, we expect more stable prices in 2023. However, the geopolitical tension between several oil-producing countries and several countries along the transportation route might change things instantly. Even though the economy will likely continue to thrive, a sudden energy demand increase will not likely happen in the short term. Furthermore, issues around China's health crisis pose a risk for slower-than-expected industrial activities.

Ukraine, other than grains, also produces a massive proportion of the world's Krypton, Neon, and Xenon. As purified neon gas is a critical input for manufacturing semiconductors, disturbance in neon's supply might hinder the world's industrial process, which relies on semiconductors.

Although the world is facing a risk of recession, we expect a strong economy for Indonesia. A growth rate of 5.0-5.1% is expected for the Indonesian economy. Campaign-related spending from political parties will boos consumption. Bank Indonesia's effort to control inflation and its relatively high-interest rate might pull foreign portfolio, strengthening Rupiah amidst treacherous global financial conditions. However, we cannot expect a sudden boost in the economy. Making a big move in the current economy feels like walking on thin ice. Markets, especially labor and financial markets, are experiencing the scarring effect, where they will make more passive decisions.

The government has also scarred fiscal capabilities, let alone its commitment to reducing the deficit to the normal level by 2023 (at 3%). It might force the government to cut some ongoing social assistance programs or subsidy funding. By doing so, we might see another increase in the inflation rate for administered goods. Even if it is not popular amongst the voters, the end of the presidential terms coming closer might become a green light for those kinds of policies. Finally, we still need to be cautious of external factors affecting the global financial market. Furthermore, the tension around the world is not only causing harm to the countries directly related, but other countries might also suffer from market deviation, including Indonesia.