

economic

WEEKLY REVIEW SERIES

Our Notes on Crisis :

Supply Disruption, Commodity Boom & Inflation



MNC Sekuritas Research Division I November 2, 2021



Exhibit 1 Indonesia Macro Data Forecast

Macro Indicators	2020	2021F
Real GDP (%YoY)	-2.07	3.76
Average Inflation (%YoY)	2.04	1.87
BI-7 DRR (%)	3.75	3.5
Budget Deficit (%GDP)	6.09	5.73
USD/IDR	14,500	14,425
Current Account (%GDP)	-0.40	-1.03
10 Year Indo GB (%)	5.89	6.40
JCI	5,979	6,530

Source: BI, MoF, BPS, MNCS Estimate

Exhibit 2 Global & Domestic Key Rates

Rates (%)	Dec-20	Nov-21*
BI-7 DRR	3.75	3.50
Lending Facility	4.50	4.25
Deposit Facility	3.00	2.75
10 Year Indo GB	5.89	6.08
FFR	0.25	0.25
ECB Rate	0.00	0.00
BoE Rate	0.10	0.10
BoJ Rate	-0.10	-0.10

Source: Bloomberg, BI as of Nov 1, 2021

Tirta Widi Gilang Citradi

Economist & Fixed Income Analyst tirta.citradi@mncgroup.com

Devina Putri Elvaretta

MNC Sekuritas Research research.mncs@mncgroup.com

What's on Inflation

Inflation is starting to pick up anywhere from developed economies to emerging markets. The pressure on price stability is seen to hit a multi-year highs above central banks target. We believe that the rise of inflation worldwide is driven by supply and demand imbalance as the consequence of Covid-19 pandemic that disrupted global supply chain, despite remained anchored inflation expectation.

In response to a higher inflationary pressure, central bankers started to discuss the future monetary policy response. Reducing liquidity injection is likely followed by earlier interest rates hike should the inflation persist.

From Covid-19 to Commodity Boom & Higher Inflation

Input shortage and supply disruption due to lockdown policy have propelled commodity prices to surge. We all witnessed that from energy prices to food and industrial metals have reached a multi-year high.

According to World Bank report, rising commodity prices is expected to last until the end of 2021 before slowing next year. However, based on their forecast, commodity prices to remain above pre-pandemic level meaning that higher inflationary pressure to continue in 2022.

Note that this scenario would differ if input shortage and supply disruption can not be handled properly. The increase in geopolitical tension among commodity producing countries as well as the failure of central banks to communicate their stance would have an impact of rising inflation volatility.

Macro Impact of Commodity Boom on Indonesia's Economy

As commodity exporting countries, Indonesia would be benefitted from higher commodity prices. We expect commodity boom to increase government revenue. , An increase of oil price by USD1/bbl would add government revenue by IDR4.39tn. Should the average price of crude oil to reach USD74/bbl in 2022, we expect government revenue to increase by IDR22-30tn.

However, rising oil price also could burden government budget as the subsidy for fuel price rising. Increase in oil price would also have an inflationary impact. Our model showed that for an increase of USD1/bbl in oil price would be translated into 0.12 percentage point higher in CPI. We expect domestic inflation to gradually increase in 2022, yet the degree to remain manageable.

Impact of Inflation on Investment

High inflation would erode purchasing power and financial asset returns. Some worried that the risk of stagflation may materialize soon with persistence of high inflation. During 1970's U.S. stagflation, investment in gold outperformed equities, government bond significantly, indicating that gold is a good hedged against USD devaluation. Note that it was 5 decades ago when USD was no longer pegged to gold as a backdrop. However should inflation persist we expect gold to become a good safe haven.

In Indonesia, the period of high inflation occurred post 1977 Asian Financial Crisis to 2010. At that time, we observed domestic financial market was not quite sensitive. Stock market tumbled and government bond yield rose significantly due to 2008 GFC primarily caused by massive foreign outflows. We see that capital flows remained one of the most significant risk to domestic financial markets given foreign investors holdings on domestic asset is still considered high.

Again we also observed risk on outflows partly due to monetary normalization by the Fed, yet we hope that the impact would not become as severe as in 2013. The combination of financial market development, domestic investor basis and appropriate policy response would be the effective buffer for although short term shock may happen and volatility risk is still haunting.

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What's on Inflation

We have to admit that we never prepare for a crisis driven by an outbreak on a global scale such as Covid-19 pandemic. It was a century ago that pandemic could cause a damage in economy and threaten the life of human species. It was Spanish Flu that recorded to wipe out 50 million lives on earth. Despite lower mortality cases, the impact on economy is even much severe.

The nature of the crisis is unique. As the world become more integrated through globalization, the shock in public health spread out in a very fast pace and infected real economy and financial markets as well. The global economy is facing a double hit on supply and demand balance causing output to shrink.

In order to contain the spread of the deadly virus, government took an unprecedented extreme response by imposing lockdown on a large scale. Firstly introduced in China, and then followed by other countries both in EM and DM, the mobility restriction should be paid costly.

Millions of people loss their loved ones and millions are also losing their job in a matter of months, the global wealth declined as the market collapsed and world has entered into a more realistic science fiction movie.

With the coordination and synergy among policy makers through fiscal and monetary expansion, market has calmed and global economy is now on track to its recovery trajectory, of course remain below pre-pandemic level.

However lockdown policy taken globally has another consequences that we might be unprepared to face. Widening supply and balance gap due to pent up demand has threatened price stability. We are now seeing inflationary pressure to rise.

Despite the debate among policy makers and analyst whether this is just a transitory phenomenon or persistent ones, we agreed that some low based effect also should be taken into account. Inflation in developed and emerging economies have risen to a level more than their long term average and central bank target (Exhibit 3).

Looking ahead, a higher and a more persistent inflation also pose a risk to growth on a global scale. Global central banks would have a more limited room to continue its accommodative policy to spur growth.

In addition, fiscal authority is expected to narrow the widening of budget deficit, therefore fiscal consolidation needs to be taken to maintain a healthy outlook and prudent policy. These would come to be fiscal and monetary tightening that could hinder global economy to reach its potential growth further.

The case in U.S. has taught us that monetary tightening may come earlier than we expect. Lower unemployment rate and rising inflation are carefully assessed by the Fed. In a 2-day meeting and press conference scheduled Wednesday (11/03/21), the Fed is expected to announce their detail plan to roll back QE or simply saidtapering.

Market consensus expected the Fed could reduce the pace of asset purchase by USD15bn per month, so that tapering could be concluded in 2H22. In a previous statement, the Fed has stated that tapering and interest rate hikes are two different things. However when it comes to inflation, some of FOMC participants foresee that rising 25 bps of Fed Fund Rates (FFR) would be justified next year.

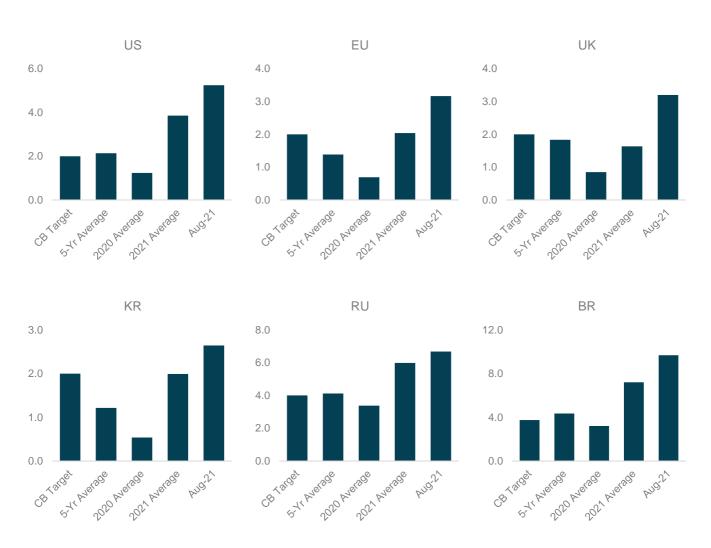
The signaled is carefully digested by markets. Based on CME Fed Watch contract, the probability of rate hikes in the end of 2022 is hitting more than 70%. The central tendency for FFR target is at 25-50 bps indicating a 25 bps increase from current state (Exhibit 4).



Other central banks also started to discuss on monetary policy normalization. Bank of Korea was the first developed nation central bank to hike their interest rate from 0.5% to 0.75% on August. Some fragile economies such as Mexico, Russia and Brazil even took a more aggressive policy by hiking 25-150 bps of their benchmark rate in anticipation of foreign outflows that may trigger currency depreciation.

We understand that the degree of inflationary pressure may differ across countries and depend on the economic structure, yet we have to carefully assess the future path of inflation.

Exhibit 3 Inflation is rising across EMDE's



Source: Bloomberg, Trading Economics, MNCS



Exhibit 4 The probability of monetary tightening by the Federal Reserves Bank

Period	Ease	No Change	Hike	Central Tendency
Nov-21	0.0	99.5	0.5	0-25
Dec-21	0.0	99.5	0.5	0-25
Jan-22	0.0	99.5	0.5	0-25
Mar-22	0.0	95.6	4.4	0-25
May-22	0.0	93.5	6.5	0-25
Jun-22	0.0	77.5	22.5	0-25
Jul-22	0.0	70.1	29.9	0-25
Sep-22	0.0	49.1	50.9	0-25
Nov-22	0.0	41.9	58.1	0-25
Dec-22	0.0	21.9	78.1	25-50
Feb-23	0.0	18.9	81.1	25-50

Notes: central tendency for FFR target range in bps

Source: CME Fed Watch

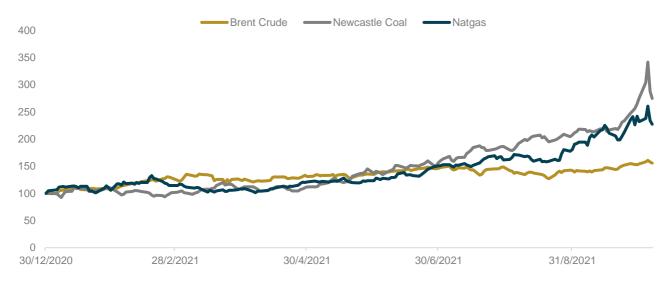
From Covid-19 to Commodity Boom & Higher **Inflation**

Recent inflation dynamic was driven by several factors including: 1) picking up economic activity along with improving mobility; 2) rapidly rising commodity prices and 3) input shortages and supply chain disruptions.

The outlook on future inflation remained uncertain. Even if inflation expectation to stay anchored recently, soaring basic need prices from energy to food could jack up both expectation and inflation. Crude oil, coal, natural gas surged to a multi-year highs followed by food staples and industrial metals (Exhibit 5).

It seemed that Covid-19 has also triggered another crisis such as energy and food security on the back of supply and demand imbalance.

Exhibit 5 Soaring energy prices to a multi-year highs



Notes: End-year 2020 = 100 (rebased)

Source: Bloomberg, MNCS

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According to World Bank, stellar increase in commodity prices to remain seen in 2021 and expected to start decelerating in 2022. However, the price forecast remains above pre-pandemic level. As demand picked up, supply and production is likely to follow the suit. Therefore, the impact is likely to stabilize the soaring prices.

From energy prices, crude oil price is projected hit USD70/bbl in 4Q21, primarily driven by U.S. supply disruptions due to unfavorable weather condition. Crude oil price is expected to reach USD74/bbl by 2022. Oil producing countries also known as OPEC+ is reported to stick on plan to gradually increase oil production ahead. They are willing to add another 400 bpd in oil production this November.

On average, natural gas price is expected to rise significantly by the end of 2021, from the previous year. This increase primarily driven by economic recovery in China boosting the demand for fossil fuels, unusual hot weather that steepens electricity demand and low wind speed resulting a decline in electricity production from renewable resources. However, natural gas price forecasted to fall further by approximately 11% next year. Meanwhile for coal that already rise significantly is predicted to start slowing next year.

From metals and minerals, copper is expected to strengthen at USD9,300/mt by the end 2021, a 40% higher than the previous year. However, a fall to USD8,800/mt is seen in 2022, weighed down by strong supply from Congo, Chile and Indonesia. A higher demand should also be considered as copper becomes main element for electric vehicles and renewables generation that projected to grow stronger in the future.

Nickel projected to grow to USD18,500/mt, a 30% higher than the previous year's figure at USD13,787/mt. This jump resulted from a higher demand of stainless steel and battery markets, which has not been catered due to supply disruptions in Canada and Russia. In 2022, there will be a slight fall to a level of USD17,750/mt, with an adequate nickel supply growth primarily from Indonesia. It is important to note that nickel demand would be benefitted from trend in energy transitions.

Moving to agricultural commodities, a deeper emphasize is put in palm and coconut oil as Indonesian top commodity exports, recorded a rise of 38% and 41.2% respectively by the end of this year. This rise driven by the production shortfall as a result of poor weather.

The projection for 2022 is mixed, with palm oil expected to fall to USD1,075/mt while coconut oil will climb to USD1,560/mt. Some risks to be taken into future account are volatile input prices attributable to energy prices movement, poor weather and diversion of food commodities to biofuels.

Despite a slower growth or even a contraction is expected to happen in some commodities in 2022, prices to stubbornly staying above pre-pandemic level. From the abovementioned development and future prospect of commodity prices, we expect higher inflation to remain seen at least in 2022.

Note that this scenario would differ if input shortage and supply disruption can not be handled properly. The increase in geopolitical tension among commodity producing countries as well as the failure of central banks to communicate their stance would have an impact of rising inflation volatility.



Exhibit 6 Forecast of global commodity prices

Commodities	Unit	2019	2020	2021F	2022F	%YoY	%from Pre- Pandemic Level
Energy	_	_	_	_	_	_	
Coal, Australia	USD/mt	77.9	60.8	140.0	120.0	-14.29	54.04
Crude Oil, avg	USD/bbl	61.4	41.3	70.0	74.0	5.71	20.52
Natural Gas, U.S	USD/mmbtu	2.5	2.0	4.1	4.0	-2.44	60.00
Agriculture							
Coffee Arabica	USD/kg	2.89	3.36	4.28	4.11	-3.97	42.21
Coffee Robusta	USD/kg	1.63	1.53	1.94	1.96	1.03	20.25
Tea (Avg)	USD/kg	2.56	2.70	2.65	2.60	-1.89	1.56
Palm Oil	USD/mt	601	752	1,100	1,075	-2.27	78.87
Coconut Oil	USD/mt	736	1,010	1,525	1,560	2.30	111.96
Timber (Avg. SEA)	USD/cum	485	490	515	520	0.97	7.33
Soybean Oil	USD/mt	765	838	1,375	1,425	3.64	86.27
Maize	USD/mt	170	165	250	225	-10.00	32.35
Rice, Thailand 5%	USD/mt	418	497	455	400	-12.09	-4.31
Wheat, U.S., HRW	USD/mt	202	211	255	250	-1.96	23.76
Meat, Beef	USD/kg	4.76	4.67	5.3	5.45	2.83	14.50
Meat, Chicken	USD/kg	2	1.63	2.2	2.25	2.27	12.50
Sugar, World	USD/kg	0.28	0.28	0.39	0.37	-5.13	32.14
Metals & Minerals							
Iron Ore	USD/dmt	94	109	165	130	-21.21	38.59
Copper	USD/mt	6,010	6,174	9,300	8,800	-5.38	46.42
Nickel	USD/mt	13,914	13,787	18,500	17,750	-4.05	27.57
Aluminum	USD/mt	1,794	1,704	2,550	2,700	5.88	50.50
Lead	USD/mt	1,997	1,825	2,200	2,100	-4.54	5.16
Tin	USD/mt	18,661	17,125	31,250	31,000	-0.80	66.12
Zinc	USD/mt	2,550	2,266	2,950	2,822	-4.34	10.67
Precious Metal							
Gold	USD/toz	1,392	1,770	1,795	1,750	-2.51	25.72
Silver	USD/toz	16.2	20.5	25.5	24.8	-2.74	53.09
Platinum	USD/toz	864	883	1,100	1,000	-9.10	15.74

Source: World Bank, MNCS



Macro Impact of Commodity Boom on Indonesia's Economy

As a commodity exporting countries, the rise in commodity prices would benefit Indonesia. Based on MoF sensitivity analysis, an increase of oil price by USD1/bbl would add government revenue by IDR4.39tn. Should the average price of crude oil to reach USD74/bbl in 2022, we expect government revenue to increase by IDR22-30tn.

In addition with the implementation of Tax Harmonization Law, we estimated the additional state budget could be collected would equivalent to IDR104-129tn. Note that this not include scenario from other commodity export duties can be collected by government.

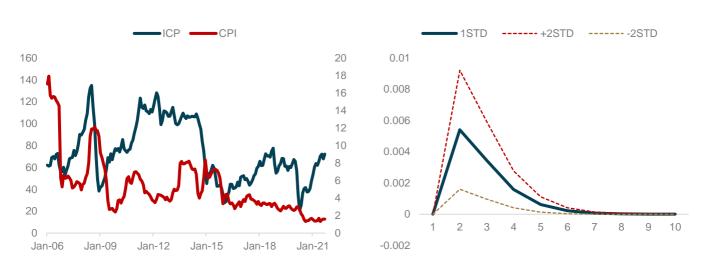
However, the increase in global oil price would also burden government budget due to rising the energy subsidy. Soaring oil price also could have an inflationary impact. Based on our sensitivity model, an increase of USD1/bbl in oil price would be translated into 0.12 percentage point higher in CPI. For 1STD shock in oil price would be positively responded by inflation for at least 5-6 months, our model showed (Exhibit 7).

Despite the prospect of gradual increase in domestic price, we still believe inflationary pressure to stay manageable. The tail risk coming from imported inflation due to rupiah depreciation against USD could be minimized by central bank intervention on the back of ample FX reserves and deepening financial market agenda as well as Local Currency Settlement (LCS) policy enacted by policy maker.

On top of that, assuming that vaccination target of 80% population and herd immunity could be achieved in 1Q21, we expect oil and gas imports to rise and triggering a wider current account deficit (CAD) to -2.04% GDP next year. The figure again to remain manageable.

On the monetary policy side, room to support accommodative policy is becoming more limited. With the gradual rise in domestic inflation as well as normalization policy taken by central banks globally, BI has room to increase the benchmark rates by 50 bps in 2022 considering a front loading, pre-emptive and ahead the curve policy framework.

Exhibit 7 Oil price and Indonesia inflation



Notes: the left graph depicted co-movement of ICP (LHS) and Indo CPI (RHS); the right graph is IRF of oil price shock to inflation Source: Bloomberg, CEIC, MNCS



We also believe that commodity boom could bring another positive catalyst for domestic economy. Higher exports due to rising demand and higher price may also be followed by higher FDI that could stimulate growth.

Impact of Inflation on Investment

The problem with inflation is when it is running too hot it erodes purchasing power and return on investment for financial asset. Meanwhile when it is running to cold, it also ruins real economy due to increasing the value of money. In both cases inflation risk poses a self-fulfilling prophecy.

Now the tail risk of higher and persistence inflation is mounting. Some are associating it with stagflation risk back in 1970's. U.S is a good country to depict how stagflation impact asset performance.

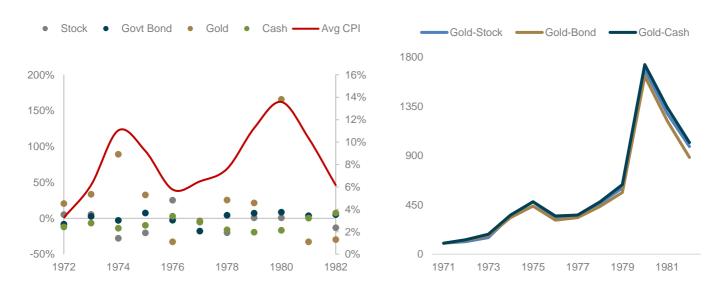
Eroding purchasing power and return on financial assets triggered investors to seek hedging assets. The devaluation of USD and cash propel gold price to record a stellar performance. Nearly 5 decades ago, particularly during stagflation, gold real value has risen more than 1,000%.

Gold investment outperformed stocks and government bond. The value of cash experienced the most severe drop at that time. Gold price volatility tended to move along with inflation volatility. Note that we have to take into account that during the stagflation period, U.S. President Nixon declared that USD was no longer pegged to gold, causing gold value to rise.

Now the alternative assets become more varied. The digital asset such as cryptocurrency and NFT are increasingly adopted both by retail and institutional investors boosting its popularity. However, the market value and investor exposure on those assets remained low relative to conventional ones. Those assets also posing another risk for investors portfolio in terms of volatility and government regulation.

Despite the expectation that gold price to normalize next year, should inflation volatility to stay high, we foresee that the precious metal would remain act as safer assets amid rising concern on stretched asset valuation (Exhibit 8).

Exhibit 8 Asset performance during U.S. high and rise inflation



Notes: the left graph depicted U.S. CPI (RHS) vs asset real return (LHS); the right graph is the gold outperformance relative to other assets Source: Bloomberg, CEIC, MNCS



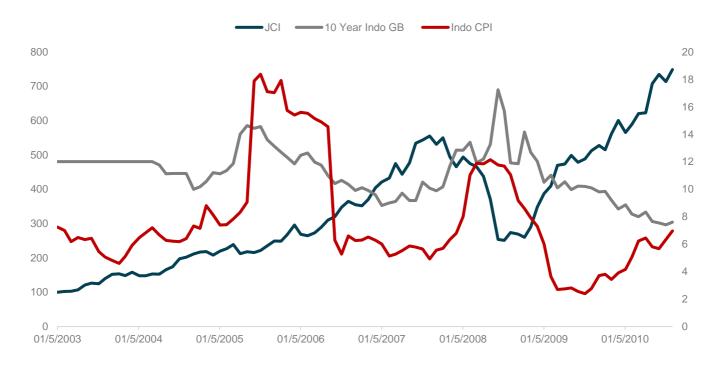
During Asian Financial Crisis in 1997, Indonesia become one of the most severely affected country. Real GDP contracted by 13% while inflation overshot to more than 50%. As the impact of massive foreign outflows, rupiah value depreciated against USD from below IDR2,500/USD in 1996 to above IDR14,000/USD. Domestic stock market was relatively young at that time and remained underdeveloped.

High inflation to last until early 2000. The domestic inflation decelerated after that, until another shock came. Global oil price surged and it continued to a record high and peaking on June 2008. The rise of domestic fuel price triggered inflation to increase more than 10% at that time (Exhibit 9).

However we observed domestic financial market was not quite sensitive. Stock market tumbled and government bond yield rose significantly due to 2008 GFC primarily caused by massive foreign outflows. We see that capital flows remained one of the most significant risk to domestic financial markets given foreign investors holdings on domestic asset is still considered high.

Again we also observed risk on outflows partly due to monetary normalization by the Fed, yet we hope that the impact would not become as severe as in 2013. The combination of financial market development, domestic investor basis and appropriate policy response would be the effective buffer for although short term shock may happen and volatility risk is still haunting.

Exhibit 9 Indonesia financial asset performance during high and rise of inflation



Notes: JCI (LHS), 10 year Indo GB yield and inflation (RHS)

Source: Bloomberg, CEIC, MNCS

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OVERWEIGHT: Stock's total return is estimated to be above the average total return of our industry coverage universe over next 6-12 months

NEUTRAL: Stock's total return is estimated to be in line with the average total return of our

industry coverage universe over next 6-12 months

UNDERWEIGHT: Stock's total return is estimated to be below the average total return of

our industry coverage universe over next 6-12 months

MNC Research Investment Ratings Guidance

BUY: Share price may exceed 10% over the next 12 months **HOLD**: Share price may fall within the range of +/- 10% of the next 12 months SELL: Share price may fall by more than 10% over the next 12 months Not Rated: Stock is not within regular research coverage

PT MNC SEKURITAS

MNC Financial Center Lt. 14 – 16 Jl. Kebon Sirih No. 21 - 27, Jakarta Pusat 10340

Telp: (021) 2980 3111 Fax: (021) 3983 6899 Call Center: 1500 899

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