

ALBERT HASUDUNGAN | ALFI SYAHRIN ARIO WASKITO | ALFIAN BANJARANSARI ANGEL SANJAYA | CARMELO FERLITO | EUSEBIUS PANTJA PRAMUDYA | FELICIA GRACELLE John Arnold Matthew | Nixon Widjajapaolo Casadio | Razim Ismail Stevania Serena Tanuwijaya | Yohanes B. Kadarusman

INDONESIA ECONOMIC & BUSINESS OUTLOOK 2023



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INDONESIA ECONOMIC & BUSINESS OUTLOOK 2023

Albert Hasudungan | Alfi Syahrin Ario Waskito | Alfian Banjaransari Angel Sanjaya | Carmelo Ferlito | Eusebius Pantja Pramudya Felicia Gracelle | John Arnold Matthew | Nixon Widjaja Paolo Casadio | Razim Ismail | Stevania Serena Tanuwijaya Yohanes B. Kadarusman

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Authors:

Albert Hasudungan, Alfi Syahrin Ario Waskito, Alfian Banjaransari, Angel Sanjaya, Carmelo Ferlito, Eusebius Pantja Pramudya, Felicia Gracelle, John Arnold Matthew, Nixon Widjaja, Paolo Casadio, Razim Ismail, Stevania Serena Tanuwijaya, Yohanes B. Kadarusman

Editoroal Team:

Djisman Simandjuntak, Alvin Desfiandi, Rizkana Aprieska, M. Eko Yulianto

Cover Design & Layout:

N. Eka Wijaya

Preprinted:

Rahmat Hidayat

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TABLE OF CONTENT

Preface	vi
Deteriorating Macroeconomic Outlook	1
GDP: Where Does Indonesia Stand?	2
Indonesia's Inflation and Monetary Policy: A Closer Look	8
Indonesia's Debt Risk	20
Expectations and Confidence Climate	29
Towards Pragmatism or Populism:	
How Domestic Politics Will Shape 2023's Economy	38
Echoes from Selected Industries	47
Indonesia's Real Estate and Industrial Estate Trends	48
CPO: A Cash Cow for the Indonesian Economy	58
Outlook of Oil & Gas Economy in Indonesia	76
Indonesia: Forecasting Outlook 2023–2024	95
References	104
Index	109



PREFACE

Prof. Djisman S. Simandjuntak Rector of Universitas Prasetiya Mulya

he subdued projection by renowned institutions like the World Bank on economic conditions throughout 2023 and 2024 has long been a public knowledge. For reasons related to the Russian-Ukrainian war and associated economic sanctions imposed by NATO members on Russia and retaliatory measures by the latter, and the reversal of macroeconomic policy in the United States after the prolonged easing following the 2007 crisis and huge stimulation during the Covid-19 years, governments are now struggling to contain slowdown.

Under the deteriorated global outlook, East Asia is projected to do much better than Europe and North America. Enjoying a windfall from the risen prices of primary commodities, Indonesia is also projected to perform well in 2023, if not, a little weaker than in 2022. Going deeper into macroeconomic details, like household consumption and gauging conditions in some industries, offer a differentiated picture that strategists in governments and corporations will need to look into while striving to navigate the disrupted environment as winner.

We invite interested participants to the upcoming Outlook Seminar to share with another intended actions of adjustment for mutual benefit. Listen to the speakers who have prepared well-thought and informative materials as enrichment to strategy making and action.

Jakarta, April 2023







GDP:

WHERE DOES INDONESIA STAND?

Carmelo Ferlito

1. International Predictions about Indonesia's GDP

According to the World Bank, Indonesia's economic growth in 2022 will reach 5.2%, averaging 4.9% between 2023–2025, slightly above the country's estimated potential GDP growth rate of 4.7%. The projection is based on three assumptions. First, a continued recovery in domestic demand supporting private consumption—albeit condensed, given inflationary pressures as well as tightened monetary and fiscal stance. Second, a recovery in private investment as macroeconomic stability and the implementation of structural reforms (such as the Omnibus Law). Third, relatively high commodity prices offering positive terms-of-trade for Indonesia and boosting its key exports (i.e., coal, palm oil and metals) (World Bank, 2022, p. 25).

	2019	2020	2021	202€	2023	2024	2025
	Actual			WB projection			
Real GDP growth and inflation, percent change							
Real GDP	5.0	-2.1	3.7	5.2	4.8	4.9	5.0
Consumer Price Inflation (CPI) (average, %)	2.8	2.0	1.6	4.2	4.5	3.6	3.4
Consumer Price Inflation (CPI) (end of period, %)	2.6	1.7	1.9	5.4	3.7	3.4	3.3
Private Consumption	5.2	-2.7	2.0	5.0	4.6	4.9	5.0
Government Consumption	3.3	2.0	4.2	-1.5	0.2	1.4	-1.2
Gross Fixed Investment	4.5	-5.0	3.8	4.6	5.5	5.9	6.1
Exports	-0.5	-8.1	24.0	17.0	11.0	8.9	9.0
Imports	-7.1	-16.7	23.3	13.8	11.0	10.0	9.5

Figure 1: Actual and predicted economic growth and other macroeconomic indicators for Indonesia, 2019–2025

Source: World Bank (2022)

Beyond the general GDP prediction for 2022 (5.2%) and 2023 (4.8%), it is crucial to note that, according to the World Bank, gross fixed investments will play a growing role in influencing these performances compared to government spending and private consumption. As shown in the Figure 1, while the World Bank projects private consumption (5%) to outpace investment (4.6%) in 2022, figures should change in the next three years: investment is expected to grow at 5.5%, 5.9% and 6.1%; private consumption is expected to record the rates of 4.6%, 4.9% and 5% (government spending instead is expected to decline in 2022 and 2025, while recording moderate growth of 0.2% and 1.4% in 2023 and 2024). These numbers align with the historical composition of Indonesia's GDP, as we shall see.

The Asian Development Bank expects a 5.4% growth for 2022 and a 4.8% growth for 2023, following a downward revision in December 2022 (ADB, 2022, p. 6). Meanwhile, the University of Indonesia sees a 5.3–5.4% growth for 2022, moderating to 5–5.1% in 2023 (LPEM FEB UI, 2022, p. 2).

These figures will help us explain the peculiarities that characterize our approach.

2. A look at Indonesia's GDP composition

Indonesia's Gross Domestic Product (GDP) reached IDR11,118,869 billion at the end of 2021 (at 2010 constant prices), recording a 3.69% growth compared to 2020. We believe it is essential to understand the micro-foundations at the root of output, particularly the composition of GDP over time and how the different components grew over the same period.

Type of Expenditure	12/31/10	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
Household Consumption Expenditure	3.786.063	3.977.289	4.195.788	4.423.417	4.651.018	4.881.631	5.126.308	5.379.629	5.651.456	5.936.399	5.780.223	5.896.697
Non Profit Instutions Serving Household Consumption Expenditure	72.759	76.790	81.919	88.618	99.420	98.800	105.362	112.664	122.970	136.027	130.249	132.317
Government Consumption Expenditure	618.178	652.292	681.819	727.812	736.283	775.398	774.305	790.756	828.877	855.963	872.774	909.173
Grass Fixed Capital Formation	2.127.841	2.316.359	2.527.729	2.654.375	2.772.471	2.911.356	3.041.585	3.228.763	3.444.310	3.597.664	3.419.182	3.549.219
Changes in Inventories	129.095	118.207	174.183	124.454	163.583	112.848	133.400	126.884	197.370	129.954	51.334	62.709
Export of Goods and Services	1.667.918	1.914.268	1.945.064	2.026.114	2.047.887	2.004.467	1.971.183	2.146.565	2.286.395	2.275.488	2.090.273	2.592.682
Import of Goods and Services	(1.537.720)	(1.768.822)	(1.910.300)	(1.945.867)	(1.987.114)	(1.862.939)	(1.818.133)	(1.964.819)	(2.203.270)	(2.046.244)	(1.704.165)	(2.101.352
Statistical Discrepancy	0	1.252	30.882	57.576	81.318	60.957	100.604	92.487	97.744	63.904	83.185	77.423
COR	C 964 122	7 207 626	7 727 002	0 155 400	9 EGA 967	9 092 517	0.434.613	0.012.020	10 425 952	10 040 155	10 722 055	11 110 000

Figure 2: Indonesia's GDP by type of expenditure, billions of IDR, 2010–2021 Source: Bank Indonesia (2022)



Throughout the periods of lockdown, exports and imports fluctuated more than the GDP components, as expected, while consumption, investment and government spending followed parallel paths.

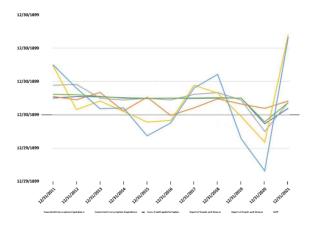


Figure 3: : Indonesia's GDP component yearly rates of growth, 2010–2021

Source: Our re-elaborations on data from Bank Indonesia (2023)

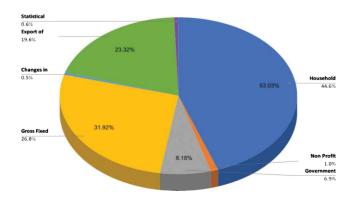


Figure 4: Indonesia's GDP by type of expenditure, 2021 Source: Our re-elaborations on data from Bank Indonesia (2023)

It is observed that gross fixed capital formation remained an essential part of GDP in the past years, consistently above 31% since 2010. It differs from Malaysia, where the relative incidence of investments declined to 20% over the past decades.

3. Growth model

We insisted on GDP composition since it is necessary to look beyond GDP as an aggregate value, which can be misleading. While most analysts look at GDP as a whole, positive performance per se is not enough. Not all GDP components are 'equal' and ceteris paribus, some of them can generate unsustainable growth. Here it is worth recalling the half-century old warning by the German economist Ludwig M. Lachmann (1973, p. 36):

Discussions on economic growth have become a favourite pastime of our age. Among newspaper readers and television viewers all over the world, even among some economists, the notion that, in this great age of ours, it has become possible to sum up in one single figure the result of the economic activity of groups of individuals in countries, regions, or industries, and it appears to have been accepted as a self-evident truth. Such figures are then used as a measure for comparisons over time and, with gusto, between countries. In many circles, a low rate of growth of the gross national product has come to be regarded as a symptom of social malaise.

Referring to Lachmann's jargon, in order for GDP analyses and forecasts to be useful, hermeneutics or interpretation are required. The following example will illustrate the point: if, ceteris paribus, the government devotes resources to unproductive expenditures that are further financed by printing or borrowing money, then statistics will show an increase in GDP, yet there most likely will result in inflation and unemployment. Indeed, the micro-foundations behind macro-aggregates matter more than the aggregates themselves.

Therefore, the actual economic challenge for Indonesia is not the growth of GDP per se but maintaining the current relevant role of investment within the GDP, and avoiding Malaysia's trajectory, where the investment relative weight



declined to 20% contrasting government and private consumption growth, which signalled the prevalence of consumption of resources rather than the production of it.

Long-term sustainable growth is based on investments financed by real savings, the counterpart of consumption. Therefore, the components of long-term sustainable growth are investments and savings as opposed to investments and consumptions. In other words, to promote sustainable growth, an increased demand for loanable funds for investments needs to be preceded by increased thriftiness among consumers (Garrison, 2001, p. 62).

In such a situation, when savings rise, the interest rate tends to fall (equilibrium).

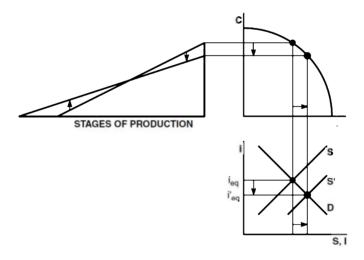


Figure 5: A restructuring of capital induced by the increase in saving (change occurring in time preferences)

Source: Garrison (2001)

Figure 5 describes sustainable growth characteristics fed by a modification in time preferences. Consumers are more future-oriented, making more loanable capital available through the increase in savings. This is reflected as the savings

supply shifts to the right (from S to S', lower quadrant on the right). Naturally, in the capital market this is reflected by a fall in the interest rate (from i_{eq} to i'_{eq}), with a consequent increase in demand for investment funds (downward movement of the point of equilibrium on curve D). This change can be projected on the PPF graph (top quadrant on the right), where one can see how a decrease in consumption frees up resources for investment. The lowest level of consumption can in turn be projected onto Hayek's triangle (top quadrant on the left): its height (consumption level) reduces, while the hypotenuse becomes flatter, thereby demonstrating the lengthening of the production period due to the increased level of investments in time-consuming projects (Ferlito, 2013, p. 84).

A policy agenda aiming at such a growth model needs to be based on the following pillars:

- increasing saving capacity (tackling household debt); and
- further strengthening private investments.

In conclusion, GDP growth can be insignificant and misleading if not based on the right pillars—investments and savings—which can drive the country toward sustainable growth, rather than growth per se. Improper attention to the micro-foundations may lead to a perilous path of unsustainable growth and a boom-and-bust cycle.



INDONESIA'S INFLATION AND MONETARY POLICY:

A CLOSER LOOK

Carmelo	Ferlito
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1. What inflation is and what is not

Predictions of inflation along with an impending global recession came to public attention throughout 2022. In the US, despite the annual inflation rate slowing down for a fifth straight month to 7.1% in November of 2022 (the lowest since December of 2021), and below forecasts of 7.3%, the annual inflation is set to remain more than three times the Fed's 2% target, pointing to broad price increases across the economy.

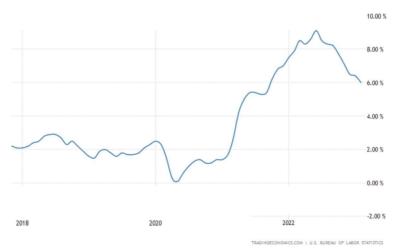


Figure 1: Inflation rate (CPI), United States, 2018–2022

Source: https://tradingeconomics.com/united-states/inflation-cpi (2023)

Meanwhile, towards the end of 2022, the European Union experienced its highest Consumer Price Index (CPI) ever recorded, with November 2022 showing a decline to 11.1% from the historical peak of 11.5% in October, which are unusual high figures for the union. Figure 2 shows the inflation rate (CPI) for the European Union from 2018 to 2022.

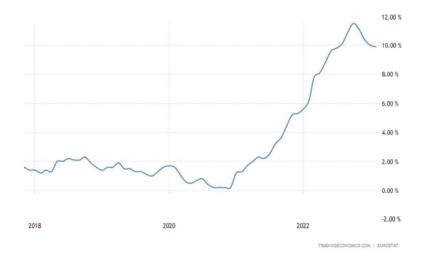


Figure 2: Inflation rate (CPI), European Union, 2018–2022

Source: https://tradingeconomics.com/european-union/inflation-rate (2023)

Unfortunately, central banks across the world failed to anticipate that the monetary expansion during the lockdowns of 2020–2021, which were generated by expansive fiscal and monetary policies and coupled with negative GDP performance, would inevitably trigger a post–Covid economic crisis (as predicted in Ferlito et al., 2021). The relationship between excess monetary and fiscal stimulus and inflation in the United States is shown in the Figure 3.



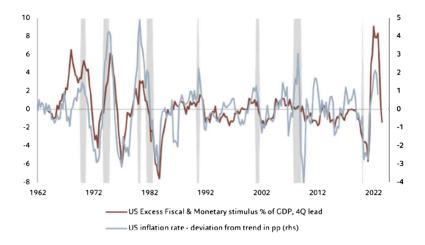


Figure 3: US excess monetary and fiscal stimulus (as % of GDP) and US consumer price inflation, year-on-year %, deviation from trend

Source: Paolini (2023)

The lack of anticipation with regard to the effects of expansive fiscal and monetary policies on price tensions is unfortunately coupled with a very limited understanding of the phenomenon, now that it has exploded. Politicians rush to blame supply-chain disruptions, without admitting how those very same disruptions were a result of lockdowns the government imposed upon the population and economy and above all, how the same lockdown policies forced the government into monetary expansion.

It is important to clarify that not all economists view price increases and inflation as synonymous. Certain schools of thought distinguish between one-time jumps in most prices without a continuing rise (which they do not call inflation) and inflation, which usually means a continuing general rise in most prices brought about by expansions in the monetary base. The difference is important because they are caused by different events. The former can be caused by demand pressures or supply-chain shocks (wars and lockdowns; these events are usually temporary) (Alchian, 1976, p. 251). As such, different causes call for different solutions.

"Necessary and sufficient condition for a persisting, increasing price level is that the quantity of money be increasing relative to the stock of real goods and services. That and only that is the source of a persisting inflation" (Alchian, 1976, p. 251). Similarly, Nobel laureate Friedrich Hayek said, "A general rise in prices, for instance one brought about by a shortage of food caused by bad harvests, is not inflation". For Hayek, inflation's "original and proper meaning is an excessive increase in the quantity of money, leading in turn to an increase in prices" (Hayek, 1979, pp. 44-45).

Milton Friedman similarly suggests that inflation is produced by "a more rapid increase in the quantity of money than in the quantity of goods and services available for purchase, and such an increase raises prices in terms of that money" (Friedman and Friedman, 1980, p. 252). Therefore, inflation "is always and everywhere a monetary phenomenon in the sense that it is, and can be produced only by a more rapid increase in the quantity of money than in output" (Doescher, 2021).

Putting the blame on the supply chain or money creation as the source of current monetary tensions has radically different consequences. In the past months, we have seen different interpretations, all rooted in the idea that "somebody who is in control and who is doing it for profit" (Leijonhufvud, 1975, p. 29).

As explained by Heymann and Leijonhufvud (1995, p. 5), "high inflation is typically a symptom of a deep-seated crisis in the public finances. The general picture is one of governments unable to gain control over fiscal policies. Under strong pressures to spend, they lack the corresponding capacity to tax or borrow". Agreeing with Friedman, the Swedish economist remarked that it "is a truly well-documented empirical regularity that all persistent inflations are accompanied by a rising stock of nominal money", although "the channels which transform monetary impulses into price changes are neither simple nor direct" (Heymann and Leijonhufvud, 1995, p. 12).

2. Inflation in Indonesia

Does our explanation apply to the case of Indonesia? Is Indonesia's inflationary pressure due to a money supply growing at a rate faster than the output?

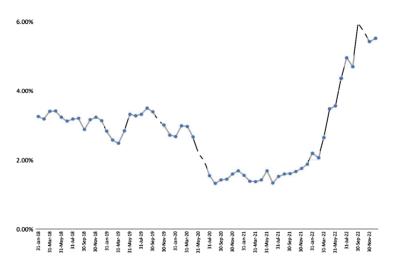


Figure 4: Inflation rate, Indonesia, 2018–2022

Source: Bank Indonesia (2022)

Indonesia's annual inflation rate rose to 5.51% in December 2022 from November's three-month low of 5.42%, surpassing the upper limit of the Bank Indonesia's 2-4% target for the seventh straight month.

To test our hypothesis, we need to observe the behavior of GDP and money supply during the two years of the pandemic and associated lockdowns. In 2020, Indonesia's GDP declined by 2.07%, and grew by 3.69% in 2021. It suggests the country's output grew by 1.55% cumulatively over the "hot years" of the pandemic. If GDP of 2019 was 100, GDP of 2021 was 101.55.

What about money supply? M1 grew by 18.54% and 22.98% in 2020 and 2021 respectively, while M2 recorded growth rates of 12.53% and 13.97%. It

means that, given the values of 2019 equal to 100, at the end of 2021 M1 was 145.79 and M2 was 128.25. Accounting for the money supply expansion in 2022, M1 at the end of October 2022 was 62.2% higher than in 2019 and M2 34% higher. Even accounting for a potential GDP growth of 5.4% in 2022, the speed of growth of the money supply outpaced the output.

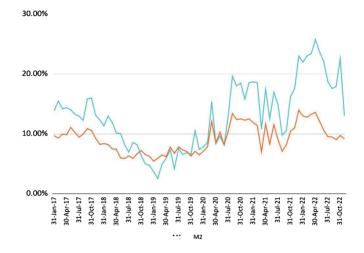


Figure 5: Indonesia's Money Supply (M1 and M2) Yearly Change, 2017–2022 Source: Our re-elaborations on data from Bank Indonesia (2023)

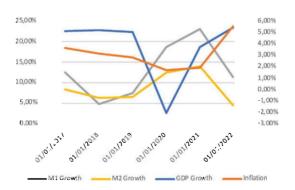


Figure 6: GDP, M1, M2 growth and rate of inflation in Indonesia, 2017–2022

Source: Our re-elaborations on data from Bank Indonesia (2023)

Note: *GDP for 2022 is a forecast. ** M1 and M2 information for 2022 are referred to the month of October.



The different pace of growth between money supply and GDP is further illustrated in the Figure 7.

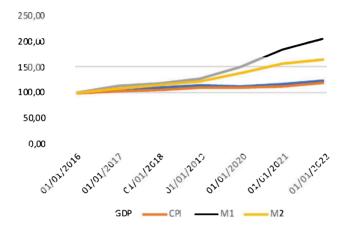


Figure 7: GDP, Inflation, M1 and M2 indexes, given 2016 = 100

Source: Our re-elaborations on data from Bank Indonesia (2023)

Note: *GDP for 2022 is a forecast. ** M1 and M2 information for 2022 are referred to the month of October.

As economic theory would have predicted, there exists a temporal lag between the growth of money supply and the appearance of inflationary pressures. The economic recession obscured these tensions, which only manifested in 2022 in connection with the economic recovery, highlighting the dichotomy between the real economy and excess of money supply.

As mentioned earlier, the situation could have been anticipated also by looking at the dynamics of producer prices, which showed an accelerating trend since 2020. They slightly declined during the peak of the of the recession and now are accelerating as a consequence of both world supply chain constraints and expansion of money supply.

Figure 8: Producer Prices Change, Indonesia, 2018-2022

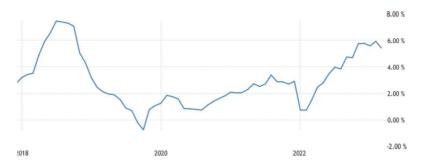


Figure 8: Producer Prices Change, Indonesia, 2018-2022

Source: https://tradingeconomics.com/indonesia/producer-prices-change (2023)

3. Monetary policy: pre and post-pandemic

The behavior of central banks during the lockdown-induced world recession and when inflation pressures became evident followed what could have been expected: expansive policies during the recession and higher interest rates when inflation began to be seen. It was also the case for the Federal Reserve and the European Central Bank.

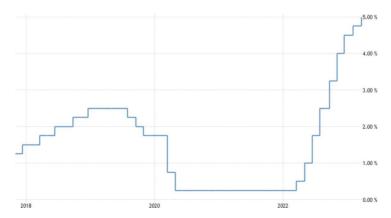


Figure 9: United States Fed Funds Rate, 2018–2022

Source: https://tradingeconomics.com/united-states/interest-rate (2023)



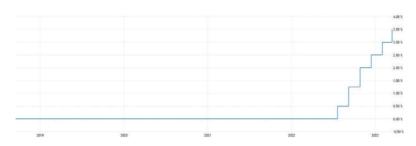


Figure 10: Euro Area Interest Rate, 2018–2022

Source: https://tradingeconomics.com/euro-area/interest-rate (2023)

As seen in the West, interest rates moved from being negative in real terms to a rapid increase during 2022, particularly in the United States. In Indonesia, interest rates were never as low as in the US and Europe, the pattern is very similar.

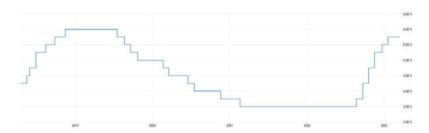


Figure 11: Indonesia Interest Rate, 2018–2022

Source: https://tradingeconomics.com/indonesia/interest-rate (2023)

Meanwhile, as shown in the Figure 12, the radical change in monetary policy is happening worldwide.

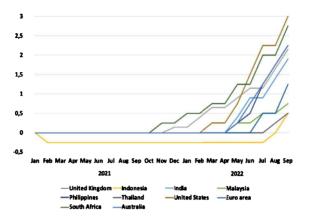


Figure 12: Cumulative changes in policy rates (percentage points)

Source: LPEM FEB UI (2022)

Many still believe in the power of monetary policy. However, is this confidence warranted? We must consider that central bank base their ever-evolving actions on past information, and it takes time for such actions to produce effects (and the bigger the time lag, the bigger the evolution of the context).

It is essential to understand that monetary policy is a signal more than an objective fact. By lowering the interest rate, central banks wish to communicate that more financial resources are available for investment (or that borrowing is cheaper) and vice versa. Yet economic reality is not shaped merely by facts; what counts more is how economic agents interpret the signals generated by objective facts. Prices, for instance, are objective figures, but purchasing decisions are taken by consumers according to how those figures are interpreted. Similarly, with interest rates, how reality will be shaped after a cut or a raise depends on how those moves are interpreted by economic agents, which is in no way univocally determined. Alas, it will require more than simply adjusting interest rates to avoid the negative economic consequences of inflation.



4. Inflation and economic outlook

Inflation affects the general heath of the economic system much beyond the mere deterioration of purchasing power. Changes in the quantity of money not only affect the general price level, but, probably most importantly, alter the structure of relative prices, which is the source of "the most harmful effects of inflation: the misdirection of resources it causes and the unemployment that ultimately results from it" (Hayek, 1979, pp. 42-43).

How the current inflationary pressures will affect economic growth will depend not only by the international decisions of monetary policy but also by domestic decisions in term of fiscal policy. To drive away the economic system from the risk of a serious inflation-led economic crisis, which many are already announcing, it is imperative "to terminate resolutely the increase in the quantity of money—a step that would soon, through the appearance of substantial unemployment, make manifest all the misdirection of labor that the inflation in the past years has caused and that the other two procedures would further increase" (Hayek, 1979, p. 4).

Such a decision cannot avoid a so-called "stabilization crisis" with substantial unemployment. However, while stopping the growth of money, an impending deflation should also be prevented, and such an intention should be announced to avoid the recession degenerating into a depression. Secondly, the primary aim should be achieving the stability of the value of money (Hayek, 1979, pp. 16-17). This means bringing about a reduction in the rate of monetary growth, but this entails a problem of political will (Friedman and Friedman, 1980, p. 270).

However, aiming for a successful cure with such decisions may incur slower growth and higher unemployment as side effects (Friedman and Friedman, 1980, p. 273). Therefore, it is important to slow inflation gradually but steadily (Friedman and Friedman, 1980, p. 277).

At this regard, however, the rise in interest rates—which only started a year too late—are likely not to work in isolation. The next field of action is limiting government spending. "Budgets cannot be left adrift in the sea of democratic politics. They must be constructed within constraints that impose external form and coherence on the particular decisions about size and distribution which an annual budget reflects." (Buchanan and Wagner, 1977, p. 182). In this regard, the most basic rule is to re-establish the primacy and superiority of balanced budgets (Buchanan and Wagner, 1977, pp. 184–185).

5. Conclusions

Tackling inflation is not easy, and it will imply political will. However, it is very much necessary. If not taken seriously, the misallocation of resources that ensues will increase the depth of the economic slowdown, which is about to come.

Cutting the quantity of money in circulation will generate an economic slowdown. But such a slowdown will direct the economy toward stabilization of the economy through a reconciliation between the real fundamentals of the production structure and the amount of money into circulation: it will be a pain for a higher gain. If the government pairs it with a series of spending cuts, the slowdown will be limited in time and lay the foundations for a future sustainable growth path.

Instead, if that readjustment get delayed, the magnitude of resource misallocation will put the foundations for a deep unemployment crisis, paired with a longer and deeper economic recession.

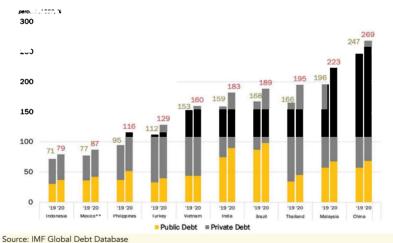


INDONESIA'S DEBT RISK

Carmelo	Ferlito
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1. Indonesia's public and private debt: size and general considerations

An additional risk for Indonesia's economic outlook is the rising debt burden. Its recent evolution is a consequence of the Great Lockdown, which forced governments into a higher amount of spending not backed up by revenues, increasing financial instability risks and generating inflation. In 2020, the sums of public and private debt as a percentage of GDP rose to 79.3% from 71.4% in 2019, of which 6.1% was contributed by additional government spending (LPEM FEB UI, 2022, p. 5).



Note: Public sector debt are general government debt (percent of GDP), **only central government data (percent of GDP), Private sector debt are loans and debt securities made by household and non-financial corporations (percent of GDP)

Figure 1: Public and private debt ratio in developing countries, % of GDP, 2019–2020 Source: LPEM FEB UI (2022)

Despite the jump during the Great Lockdown, Indonesia's public debt/GDP ratio remained at 36.6% in 2020. Meanwhile, the cumulative public and private debt/GDP ratio of 79.3% was much lower than the ones recorded in other developing countries. In particular, it was much lower than 223.4% of Malaysia and 268.7% of China (LPEM FEB UI, 2022, p. 5). In these two countries, the size of private debt poses a serious risk of financial instability. It does not mean risk elements are not present in Indonesia as well.

One concern is the path of Indonesia's government debt. After an effective fight against debt during the first decade of the millennium, during which Indonesia's government debt to GDP ratio fell from 87% to 23%. Since 2015, the ratio started to rise to 30% before the pandemic and to jump above 40% in 2021. A slight decline during the first part of 2021 had to be imputed to higher commodity prices, not structural reforms. Between 2010 and 2021, the share of domestic creditors rose from 43% to 59%, while the debt constituted by securities rose from 63% to 88%, with the remaining 12% being loans (LPEM FEB UI, 2022, p. 7).

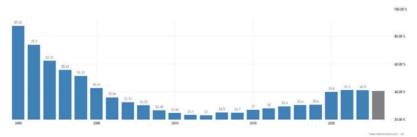


Figure 2: Indonesia Government Debt to GDP, 2000–2023

Source: https://tradingeconomics.com/indonesia/government-debt-to-gdp (2023)

The growing debt was accompanied by wider deficits, which moderated in 2022. However, as mentioned, such moderation was highly affected by the positive cycle in commodity prices.



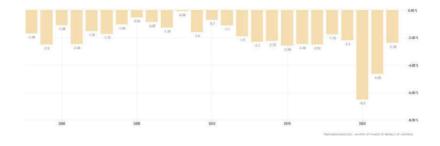


Figure 3: Indonesia's Government Budget, 1998–2022

Source: https://tradingeconomics.com/indonesia/government-budget (2023)

The rising amount of central government debt historically since 1990 is shown in the Figure 4.

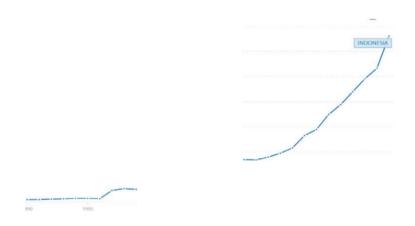


Figure 4: Central government debt, total (current LCU), Indonesia, 1990–2020

**Source: The World Bank (2022)

Another element of concern regarding the trend of government debt is the rising weight of government expenditures as a percentage of GDP. The years of the Great Lockdown, again, inverted the declining and stabilization trend that Indonesia was virtuously able to embark on during the first part of the millennium.

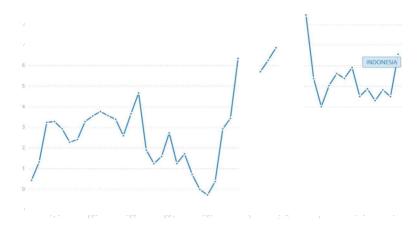


Figure 5: Expense (% of GDP), Indonesia, 1972–2020 Source: The World Bank (2022)

The rising amount of expenditures is paired with a worrying trend of government spending on interests as a percentage of revenues, which has been increasing rapidly in the past decade towards the historically high sum (above 25%) recorded in 2004.

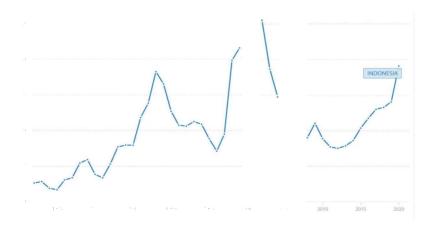


Figure 6: Interest payments (% of revenues), Indonesia, 1972–2020

Source: The World Bank (2022)



Higher expenditures, amplifying government debt, are unfortunately matched by a rapid decline in tax revenues as a percentage of GDP. It means that Indonesia increasingly relies on non-fiscal revenues to support its expenditures, a perilous path that makes Indonesia dependent on the price cycle of commodities.

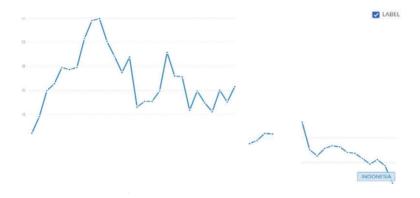


Figure 7: Tax revenues (% of GDP), Indonesia, 1972–2020

Source: The World Bank (2022)

2. The risks of fiscal deficit and high government debt

The deficit government spending and growing debt are often justified by policymakers arguing that such expenditures are implemented to stimulate growth (demand for capital goods and investments) and employment by increasing aggregate demand. However, Hayek (1939, p. 3) demonstrated that consumption does not stimulate but, on the contrary, discourages demand for capital goods. Consequently, stimulating aggregate demand does not have a beneficial effect on income and, as a result, on employment.

Following Sanz Bas (2011, pp. 297-299), we can identify three main reasons why such a direct relationship does not exist. The first reason is that, in modern economies, only a given number of workers are directly employed in

the production and manufacturing sector close to consumption, whereby a significant portion of production resources has no direct relationship with end markets. The second reason lies in what Hayek called the "Ricardo effect": for a production structure to remain such, the relative structure of the pricing system must not be changed.

Hayek explains that, after applying Keynesian demand policies, this particular modification takes place in relative prices, and as a result, many entrepreneurs will modify their production strategies and will try new, less capital-intensive production strategies (which are more profitable in relative terms, given the new pricing structure). This change in production strategies will result in change in the composition of demand for capital goods of those entrepreneurs, as well as reduce the aggregate amount of money devoted to buying higher-order capital goods in the market. Therefore, many entrepreneurs will stop buying capital goods from their usual suppliers. As a result, these suppliers will lose part of their markets, and may be forced to lay off workers or eventually cease business operations (Sanz Bas, 2011, p. 298).

It means that the change in the structure of relative prices, set in motion by policies intended to stimulate demand, triggers a disinvestment process that, by weakening the production goods sector, generates unemployment. Thirdly, Hayek suggests that even when employment is stimulated with additional spending, it cannot be assumed that increased incomes will be distributed to sectors experiencing a crisis.

As seen in the previous sections, furthermore, inflationary dynamics is the price to be paid for implementing persistent full employment policies (stimulating aggregate demand) through growing central planning (Hayek, 1950, pp. 174-175); in fact, Hayek precisely disputed that a higher level of employment (full employment) can be achieved and maintained by means of monetary pressures (Hayek, 1950, pp. 175-176). The Austrian economist's central thesis is that short term injections of money may well help maintain jobs at a higher level than would be possible otherwise; nonetheless, in the long run, the employment level resulting from these policies is destined to fall. While it is true that an

increase in monetary incomes may increase employment, the basic mistake is believing that unemployment is due to insufficient aggregate demand and that pressure on it may therefore automatically generate employment (Hayek, 1950, p. 176). Rather, if spending is spread across the various sectors in a manner other than that in which employment is spread in the same sectors, then it cannot be assumed that an increase in spending will have a positive effect on employment.

Unemployment can be a consequence if the distribution of labour is different from the distribution of demand. In this case the low aggregate money income should be considered as a consequence rather than as a cause of unemployment. Even though enough expenditure may "spill over" into depressed sectors during the process of increasing incomes to temporarily cure unemployment, as soon as the expansion comes to an end, the discrepancy between the distribution of demand and the distribution of supply will appear once again. Where the cause of unemployment and of low aggregate incomes is such a discrepancy, only a re-allocation of labour can lastingly solve the problem in a free economy (Hayek, 1950, p. 177).

The result is a misallocation of resources: full employment policies artificially direct demand towards sectors that would not experience such a growth without exogenous stimuli. When the external support comes to an end, probably because inflation has reached an unsustainable level, demand will be forced to return in the direction expressed by the temporal preferences in existence prior to expansive fiscal policies; given this, employment created artificially in all probability will not be permanent. The new unemployment level may even be higher than the pre-stimulus situation, if fiscal injections have not only increased employment in the stimulated sectors but also indirectly in other sectors. This is why the result of inflation created with full employment policies is worse than the problem intended to be resolved.

In conclusion, increased deficit spending and debt, while producing desirable effects in the short term (increase in employment and monetary wages), ends up being harmful. Indeed, distorting the structure of employment in order to

maintain an artificially high level of employment requires continual injections of money. Yet this situation is not indefinitely sustainable. When further artificial inflation is no longer possible, the system will begin to move towards realignment, which entails the loss of such artificially created employment, as well as the closure of economic activities launched in sectors where demand has been artificially sustained. The outcome is consequently a situation worse than the initial one, which necessarily requires a readjustment crisis.

3. The risks of private debt

A crucial aspect of modern economic development is that capitalism with no fluctuations does not exist. While Marx was the first to acknowledge this fact, scholars from different schools of thought shared similar awareness, such as Joseph A. Schumpeter, Arthur Spiethoff, Marco Fanno, Paolo Sylos Labini, and Hyman Minsky. Friedrich Hayek also recognized, to some extent, the unstable nature of the market process driven by profit expectations.

Why do business cycles matter in the present reflection? Following Joan Robinson (1971), Minsky (1986, p. 197) explains that, in the economic cycles, there are periods of tranquillity during which rapid disruptive changes are not taking place. However, "tranquillity is disrupted by investment booms, accelerating inflations, financial and monetary crises, and debt deflations." Following his teacher Schumpeter, Minsky (1986) admits that business cycles are inevitable, but he does not attribute the responsibility for such fluctuations to creative entrepreneurial disruption. Rather, he observes that the unstable nature of the economic path is due to financial features (Minsky, 1986, p. 194).

While Schumpeter attributed cyclical fluctuations to entrepreneurial innovations, Minsky (1986, p. 199) emphasizes the role of financial innovations. He explains that "during periods of tranquil expansion, profit-seeking institutions invent and reinvent 'new' forms of money, substitutes for money in portfolios, and financing techniques for various types of activity: financial innovation is a characteristic of our economy in good times."



INDONESIA ECONOMIC AND BUSINESS OUTLOOK

However, the introduction of available new money will create additional demand for capital and financial assets, or more investment, resulting in higher asset prices that, in turn, raise the demand price for current investment. In short, financial innovation "tends to induce capital gains, increase investment, and increase profits: the economy will try to expand beyond any tranquil full-employment state" (Minsky, 1986, p. 199).

During the boom following a tranquillity period, "innovative debt practices and speculative excesses" are encouraged, and an "unrecognized system fragility evolved" (Prychitko 2010, p. 206).

Minsky's scenario, known as Minsky's financial instability hypothesis, is becoming increasingly prevalent in the current capitalist dynamic and can be used to explain, for instance, the 2008 financial crisis (Leijonhufvud, 2009).

These considerations are crucial because rising household debt within the growth and structural financial instability scenario exposes people to financial fragility. Financial innovations drive the system towards more frequent and violent economic fluctuations. Thus, saving rather than debt becomes the most important tool available to households to shield themselves against the Minsky hypothesis.

Promoting savings is, therefore, not only the key to promoting investments and sustainable growth, as observed in previous sections but also the necessary tool against recurring financial crises.

EXPECTATIONS AND CONFIDENCE CLIMATE

1. The importance of expectations in economics

When dealing with economic forecasts, expectations tend to be neglected. Expectations depend on economic actors' interpretations of reality and therefore are not easily captured within statistical frameworks. However, expectations are crucial because economics "is not about things and tangible material objects" but "it is about men, their meanings and actions. Goods, commodities, wealth and all the other notions of conduct are not elements of nature; they are elements of human meaning and conduct. He who wants to deal with them must not look at the external world; he must search for them in the meaning of acting men" (Mises, 1949, p. 92).

Understanding this interpretative process brings forth the concept of verstehen (understanding), which is central to the analysis of human action and perhaps the most important novelty introduced by the German economist Ludwig Lachmann. Indeed, interpretative processes must be seen as the necessary and subjective link between different objective facts and events. Bellet and Durieu (2004, p. 236) illustrates that "the relationship between objective economic variables or 'business situations' and expectations depends on the interpretation which the agents give to the former."

As such, it is impossible to build an economic outlook without considering expectations as to how individuals will build the future as dictated by those expectations and the interpretative processes set in motion to achieve their ends.



2. Consumer confidence and expectations in Indonesia

As mentioned, expectations are not an easy tool to handle. To measure consumer confidence and expectations, we decided to use the Consumer Confidence Index Development in 18 Cities released by Bank Indonesia (BI) from January 2017 to November 2022. The index has three main components: 1) the Consumer Confidence Index (CCI), 2) the Current Economic Condition Index (CECI), and 3) the Consumer Expectation Index (CEI). The monthly values are summarized in the Figure 1.

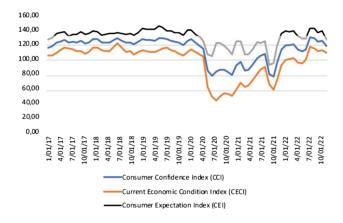


Figure 1: CCI, CECI and CEI in Indonesia, monthly values, 2017–2022

Source: Bank Indonesia (2022)

As shown in Figure 1, the three indicators move in parallel, with CECI showing signs of higher distress at the peak of the pandemic and during the periods of lockdown. The lack of policy consistency and different degrees of enforcement resulted in considerable uncertainty. It is demonstrated by the monthly variations shown by the indexes.

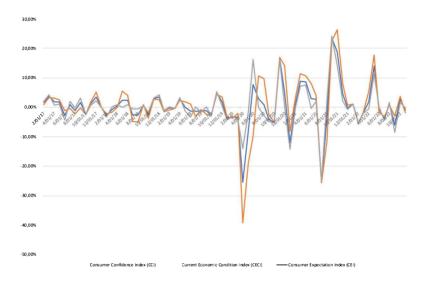


Figure 2: Monthly percentage variations of CCI, CECI and CEI in Indonesia, 2017–2022

Source: Our re-elaborations on data from Bank Indonesia (2023)

What immediately strikes readers is how the different confidence and expectations measures became much more unstable with the beginning of the pandemic and the Great Lockdown. If we take the absolute values of the index monthly variations (in percentage), we find the following average figures as shown in Table 1.

Table 1: CCI, CECI and CEI average monthly change in Indonesia, 2017–2022

Index	Average Monthly Change (ABS) 2017-2019	Standard Deviation 2017-2019	Average Monthly Change (ABS) 2020-2022	Standard Deviation 2020-2022
CCI	1.88%	1.15%	6.80%	7.13%
CECI	2.33%	1.50%	9.19%	8.86%
CEI	1.71%	1.48%	6.00%	6.77%

Source: Bank Indonesia (2022)



The numbers in the table indicate that the oscillations in confidence and expectations have been relatively mild during the three years before the pandemic. At the same time, the standard deviation remained limited, further supporting the hypothesis of stable confidence and expectations among consumers in Indonesia. However, the impact of the pandemic, associated with a higher degree of government intervention in the economy and inconsistent movement restriction decisions, introduced a very high degree of uncertainty. Between 2017 and 2019, CCI changed on average by 1.88% monthly, CECI by 2.33% and CEI by 1.71%. Meanwhile, between 2020 and 2022, the monthly average changes jumped to 6.8% for CCI, 9.19% for CECI and 6% for CEI. Furthermore, variability also increased, as shown in the last column of the table. If we isolate 2022, the situation has improved between January and November. The average monthly CCI variation has been 3.61%, while CECI monthly changes declined to 4.1% and CEI to 3.39%. While last year's values are around half the values of the period between 2020 and 2022, showing that the confidence level among consumers is improving and stabilizing, the average monthly changes still remain very high (circa double) compared to the prepandemic levels. Therefore, the confidence climate is far from being settled. The situation may worsen given the alarming news coming from China paying the consequences of a suicidal lockdown policy that may bring new movement restrictions as they are an important trading partner for Indonesia.

3. Business Confidence Index (BCI)

In contrast with consumer confidence, the Business Confidence Index (BCI)—as measured by the OECD—presents a much lower degree of variability, demonstrating that businesses tend to be less emotional than consumers.

Despite the lower oscillations, BCI reached the lowest point of 96.54 in the history of the index for Indonesia. Although it has since recovered, the index has never reached the 100 benchmarks like in previous years.

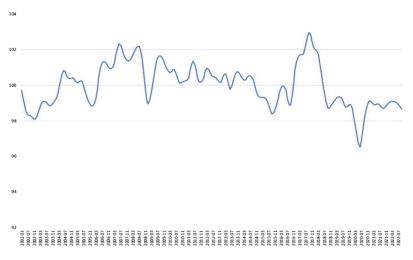


Figure 3: BCI in Indonesia, 2002–2022 Source: OECD (2023)

The average monthly variation (measured on the absolute values) has been 0.21% between 2017 and 2019 and 0.19% between 2020 and 2022 (September). However, the constant negative variation recorded since April 2022 remains a concern.

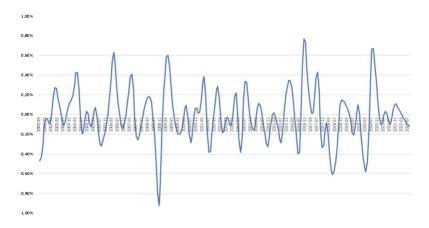


Figure 4: BCI monthly variation (%) in Indonesia, 2002–2022 Source: Our re-elaborations on data from OECD (2023)



The long series of negative changes are a concern and may be amplified by the ongoing situation in China, the monetary policy scenario, and the conflict in Ukraine. How these international scenarios unfold will affect how businesses react and further investment decision-making.

4. The Purchasing Managers' Index (PMI)

Standard and Poor argue that the Purchasing Managers' Index (PMI) is perceived as an "accurate and timely indicator of business conditions that helps analysts and economists to correctly anticipate changing economic trends in official data series such as gross domestic products (GDP), industrial production, employment and inflation. Because PMI data are sometimes released months ahead of comparable official data, the PMI surveys are ranked among the world's most market moving economic data releases." (Williamson, n.d.).

The PMI released by Bank Indonesia is based on five indicators: 1) Production Volume, 2) Order Volume, 3) Speed of Supplier Delivery Time, 4) Inventory, and 5) Labor. The quarterly figures for each indicator and the overall index from 2010 to 2022 are summarized in the Figure 5.

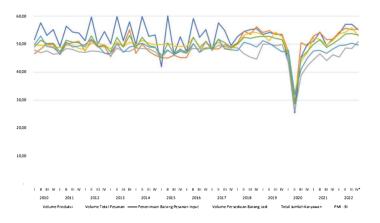


Figure 5: PMI components in Indonesia, 2010–2022

Source: Bank Indonesia (2022)

It is commonly understood that a PMI above 50 indicates an expanding economy, while values below 50 indicate a contraction (Ence, 2016). During 2020, the overall PMI for Indonesia was constantly below 50: 45.64 during the first quarter (Q1), 28.55 in Q2 (the lowest level since 2010), 44.91 in Q3 and 47.29 in Q4. The index was slightly above 50 in Q1, Q2 and Q4 of 2021, dipping below in Q3 (48.75), when movement restrictions pinched the economy again. The situation of 2022 is particularly worth examining.

2022				
Ţ	II I	III	IV*	
53,81	57,05	57,12	55,06	Production Volume
54,33	55,72	55,14	55,30	Order Volume
45,22	48,59	48,34	50,79	Speed of Supplier Delivery Time
53,59	54,23	55,78	52,85	Inventory
49,40	49,61	50,32	49,60	Labour
51,77	53,61	53,71	53,18	PMI - BI

Figure 5: PMI components in Indonesia, 2010–2022 Source: Bank Indonesia (2022)

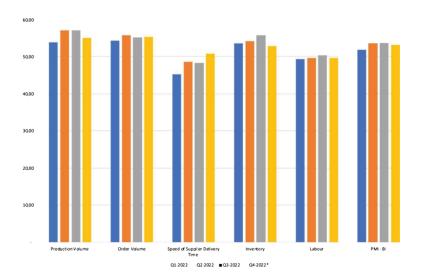


Figure 6: PMI for Indonesia in 2022 Source: Bank Indonesia (2022)

The aggregate PMI constantly grew over the first three quarters of the year, but



it is expected to slightly decline in Q4. The same applies to production volume, inventory, and labor. Instead, order volume and particularly supplier delivery time are expected to keep on growing as the speed of supply was mostly below 50 in the past year, signalling the still existing difficulties in the global supply chain. However, the situation is expected to improve.

We can understand from the data that the recovery, emerging from rebounds of the lockdowns, while firmly established during 2022, remains fragile and volatile due to internal and international factors. This is consistent with CME's anticipation of an inflation-led economic crisis that would have followed the natural post-Covid economic rebound (Ferlito et al., 2021).

5. Conclusions

While market players determine the evolution of the economy by being continuously involved with interpretational processes to understand reality, economists themselves must deal with a different type of hermeneutical activity: the understanding of the meaning of human actions in the market and of the unintended consequences that go beyond players' intentions.

Then what do we see emerging from the expectations, as captured by the indexes described above? First of all, consumer confidence is improving, but remains fragile. Instead, business confidence is constantly deteriorating, and PMI is expected to slightly decrease too.

How do we relate this to an outlook for the Indonesian economy? It seems to us that the main factors that will affect expectations are the following ones:

- Evolution of the COVID-19 situation in China with the following possible consequences:
 - > worsening of the international trade scenario; and/or
 - > new movement restrictions.
- Decision in monetary and fiscal policy.

Concerning the situation in China, institutional and economic actors may act in the direction of panic, followed by further restrictions, by seizing the opportunity to build in Indonesia as an alternative manufacturing hub. How the Indonesian government will react and communicate about this remains crucial to determine the positive or negative effect on economic growth.

As for monetary and fiscal policy decisions, inflation remains the main element. Tackling money supply excess will imply contractionary decisions. Therefore, proper communication by the government would allow the best possible interpretation to emerge. Restrictive policy measures may be positively interpreted as a sign that the government is serious about tackling the rising cost of living. Therefore, the economy may be supported by the right set of expectations. The chosen line of official communications will be the key element to link expectations and economic performances.



TOWARDS PRAGMATISM OR POPULISM:

HOW DOMESTIC POLITICS WILL SHAPE 2023'S ECONOMY

Alfian Banjaransari & Razim Ismail

Indonesia entered 2023 with several significant developments worth noting for a comprehensive economic outlook. 2023 is set against the backdrop of the global recovery from the Covid-19 pandemic, with the pandemic aftermath and imminent recession still looming. President Joko Widodo has described the situation as both "challenging" and "beyond normalcy" (Yanwardhana, 2022).

However, it is agreed upon that 2023 is a critical year for Indonesia because it is the year leading up to the 2024 general election (both parliamentary and presidential). The Indonesian general election is among the largest and most complex in the world, given its vast population and geography, and thus deserves significant attention. With over 200 million eligible voters spread across thousands of islands (Shafira, 2022), the 2024 general election is central to any political or economic analysis.

Furthermore, the stakes are also higher as the election will bring a new face to the presidency, with current President Joko Widodo leaving office after two consecutive terms since 2014. The winner of the presidency is a matter of speculation at the time and is beyond the scope of this writing. However, we intend to highlight the political challenges that arise and influence the economic outlook of 2023.

At a Glance

Indonesia began 2023 with several noteworthy developments. Shortly before New Year's Eve, the government lifted public activity restrictions, or locally known as PPKM, nationwide (GO.ID, 2022), signalling that the government is ready to deal with the pandemic more pragmatically and tactically. It also indicates a shift to a different trajectory than, for instance, China's zero Covid-19 policy, which resulted in mass protests and criticisms worldwide (Mao, 2022). This decision to lift PPKM restrictions received a warm welcome from the business community (Junida, 2022), as it arguably bolsters consumption and growth. With over 85% of the population vaccinated against Covid-19, Indonesia ranks 5th globally^[1] among vaccinated countries, fueling the government's confidence in returning to normalcy while sending a message that it is indeed open for business. But is there a wave to ride on?

As we have seen in the previous chapters, there are still risks ahead for the economic evolution of Indonesia. Beyond international factors such as the war in Ukraine, the aggressive monetary policy in the West, and the increasing trade tensions between the US and China, we have highlighted the risks posed by post-Covid-19 inflation as well as reflections on consumer and industrial sentiments. This section adds to the risk factors, including considerations derived from political circumstances.

From an outsider's perspective, it is worth observing the government attempting to navigate the country's economy, given the current political ramifications. Similarly, it is worth weighing political developments when examining the pulse of the economy.

Pragmatism vs Populism: an ever-present undercurrent

This paper argues that, as far as policymaking is concerned, pragmatism and populism as two contending ideas will continue to animate Indonesia's political discourse. In late 2020, the government passed the Jobs Creation Law, also known as the Omnibus Law to attract foreign and domestic investments.



Despite being praised as a landmark breakthrough, the law was not passed without controversy and criticism for its process and content. Its promoters highlight its simplifying nature, while its detractors decry the numerous loopholes it exposes. The law is currently being challenged in the constitutional court (MKRI, 2021). To bypass the ongoing judicial process, the government passed a government regulation in lieu of the contested law (Setkab, 2022), allowing it to enforce points contained in the Omnibus law, despite still being challenged in court.

Legal proceedings aside, it is worth noting that the government has positioned itself at odds with significant segments of the labor force (if not the population) to persuade investment and promote growth. This tension between pragmatic, supposedly pro-market policies and economic populism will continue to animate public discourse in Indonesia. Indeed, this is central to understanding Indonesia's political and economic undercurrents.

This paper defines economic pragmatism as an umbrella term for policies and approaches that favor long-term sustainable growth. These policies need not be ideological but they must be anchored in sound thinking and trade-off analysis. Meanwhile, economic populism, in the context of Indonesia being a popular democracy, refer to policies and approaches taken that favor immediate gratification, yielding to popular (and pressing in some cases) demand while minimizing consideration for their long-term impact. Although these two are not being mutually exclusive, they are often at odds with each other in practice.

The differentiator between pragmatism and populism is the attention given to trade-offs and unintended consequences. Economist Thomas Sowell reminded us that in policymaking, "there are no solutions, there are only trade-offs, and you try to get the best trade-off you can get, that's all you can hope for" (Sowell, 1987). While Sowell's statement does not endorse any particular policy, it is a sober reminder that trade-offs are the core of policymaking, and (inevitably) unintended consequences must be taken into account.

A case in point is the government raising subsidized fuel prices. For the past 20 years since the nation's reformation era, all four presidents raised fuel prices shortly after being inaugurated and at various points during their respective terms (with the latest price adjustment in September 2022). In practice, the price increase is merely an attempt to bring fuel prices in Indonesia closer to alignment with their actual market price. Even with the adjusted price, Indonesia's fuel prices are still among the cheapest in the world, thanks to decades-long policy of keeping fuel prices artificially low. With the fuel subsidy bloating, the government is stuck between a rock and a hard place. Every time a price adjustment takes place, it is met with resistance and opposition. Therefore, the government must persuade the public to accept the subsidized fuel price adjustment policy to minimize its contractionary impact (Ferlito & Banjaransari, 2022).

Whether a fuel price hike will occur soon is not germane to this discussion. However, it is this ever-present tension between pragmatism and populism that we are attempting to highlight. This is worth noting since the degree to which the government succumbs to pressure (be it popular or specific, interest-driven) corresponds to the degree of uncertainty it will generate among investors.

What's in Store

In less than a year, the executive and legislative seats will be accessible. With the current cabinet being patched from various political parties forming a giant coalition, cracks on the surface are easier to spot for the trained eye. Political parties that make up the coalition (and parliament) will gear up their engines, and doing so will appeal to populist aspirations. The degree to which they appeal to populist aspirations will mostly depend on two factors: (1) the perceived success (or failure) of President Joko Widodo's government and its supposed legacy and (2) the polarization resulting from potential coalition roadmaps.

Fragmentations are likely to occur since, despite the current government being backed by a massive 81% of the parliament, only 20% of parliamentary seats are required to back a presidential candidate. The splintering of coalition parties



is thus near impossible to avoid. Therefore, we can expect various ministers to go maverick at the behest of their host parties. Since Indonesia's cabinet is presidential, these maneuvers will only cause little disturbance to day-to-day governance. With little influence on policy, party maneuvers are best seen as political grandstanding to fuel future electoral ambitions. A coalition member party previously onboard with lifting fuel subsidies or austerity measures can easily take a U-turn and decry such policies despite initially being the political patron if doing so will help them reap electoral rewards.

Such a condition merely translates into noise in the economic sphere. Still, one should be watchful of the prevailing public discourse. If, for instance, the discourse leading to the election campaigns gravitate towards propagation of massive spending through handouts and or heavy subsidies with candidates trying to out-promise their competitors, then it is safer to assume that the upcoming government will put less emphasis on austerity and aim for popular appeasement.

Concerning the current administration, however, it is worth noting that governments tend to be pragmatic, choosing to steer the ship as farthest away from the storm as their term is ending.

It will mean that the government will try their best to placate typical business concerns. Issues on registration, regulation, taxation, and so on will be among the lowest hanging fruits. The passing of the ad hoc government regulation in lieu of the contested Omnibus Law is a prime example. These conditions, along with a conviction for rebound post-COVID-19, promote opportunities that are worth embracing by foreign and domestic investors. Not to mention, President Joko Widodo aims for a whopping IDR 1,400 trillion investment this year (Rachman, 2023), which is a 200 trillion increment that of 2022 and is certainly not an easy feat. One can wonder about the mechanics at play in turning this target into reality.

With most foreign investment (direct or via proxy) originating from mainland China, from a geopolitical standpoint, Indonesia will play safe amidst the ongoing (and often escalating) tensions between the United States and China. Combined with the slowdown in Europe exacerbated by the situation in Ukraine, this will affect commodity prices. It poses both a risk as well as opportunity for Indonesia. Since Indonesia's exports are commodity-driven, Indonesia must anticipate corrections in its demand (and consequently revenue). On the flip side, it also yields an opportunity for Indonesia to expand beyond its traditional trading partners.

However, trade is a two-way street. Recently, Indonesia has been increasingly inclined to use export bans to achieve domestic economic goals (Guild, 2022). In 2022, the government temporarily banned coal and palm oil exports to prevent domestic shortages despite high global commodity prices. Previously, the government banned nickel ore exports, wasting another windfall opportunity. The move is supposedly to fast-track homegrown nickel industrialization, making it higher in value as opposed to exporting them raw. Recently, the government announced a ban on bauxite exports in late December 2022 (Nangoy & Christina, 2022).

While the use of export bans is nothing novel nor unique to Indonesia, it is worth noting that the exportation bans are not uniform in nature and purpose. For instance, the palm oil export ban was temporary and introduced specifically to secure domestic supply. On the other hand, the nickel ore ban appears to be in effect for the foreseeable future and is deliberately intended to transform the domestic nickel industry. In virtually all cases, it is worth noting that such moves garnered near unanimous national support, since they buttress the idea of trade policy as a legitimate expression of national sovereignty. With practically no opposition arguing against nor any meaningful mechanism of restraint, one can imagine further unilateral maneuvers such as export bans shaping Indonesia's trade policies in the near future. Of course, what this implies will vary by industry. One can hope and strive to be in the government's good graces.

Tying it all Together

Going into 2023 (and beyond), tensions between pragmatic and populist ideas will continue to animate public discourse. With the general election approaching, ideas on how to best navigate the economy in times of pressure and uncertainty will contend to win hearts. It is in this light that we review Indonesia's political outlook.

Should further developments in the political sphere suggest a move towards a more economically populist trajectory, then it would be reasonable to expect the upcoming government – irrespective of the candidate – to respond by satisfying such impulses, which will likely manifest in populist policies. We should expect a different trajectory should a move towards pragmatism and prudent trade-off analysis take precedence.

Considering the challenges, it is worth observing what trade-offs the government aims to pursue as they reflect its priorities. As we have argued, pragmatic policies will be seen as painful in these trying times despite a more favorable outcome in the long run. Meanwhile, populist policies are more celebrated, yet will result in a heavier price to pay in years to come.







ECHOES FROM SELECTED INDUSTRIES



INDONESIA'S REAL ESTATE AND INDUSTRIAL ESTATE TRENDS

Alfi Syahrin Ario Waskito, Alfian Banjaransari & Carmelo Ferlito

1. Introduction

Real estate plays a crucial role in understanding the future trends of the general economy. There is a close connection between housing market behavior and economic crises in general. For the American economy, Gjerstad and Smith (2014, pp. 268-269) found that most of the twelve smaller recessions between the Great Depression and the Great Recession (1929-2008) were preceded by declines in housing investment. Furthermore, housing investment decline consistently becomes a superior indicator of the duration and depth of recessions than declines in firms' fixed investment. Accurately studying the behavior of the property market, therefore, means keeping an attentive eye on the possibility of more global economic turmoil.

Over the past decades, the outbreak of an economic crisis has always faced a mix of monetary and fiscal policies focused on monetary ease and fiscal stimuli. However, as the experience in the USA demonstrated, with particular reference to the Great Recession (Gjerstad and Smith 2014, p. 279), traditional policies failed to properly address the faced problems after the housing bubble. First of all, monetary easing is recognized as one of the factors that fueled the bubble, and thus cannot be used as a potential remedy. It was true for the American case, characterized by the developments of special financial instruments that increased household risk. Moreover, a growing level of household debt, like the one observed in Indonesia, suggests the possibility of a balance sheet crisis, as analyzed by Gjerstad and Smith (2014), where "large inventories of homes on

the market and the central bank might lose control over housing and mortgage markets having, therefore, limited ability to stimulate a recovery" (p. 279). Government deficit spending might be ineffective for the same reason: "Too many households [...] are mired in negative equity, and the financial system stalls in the slow process of diverting income into debt reduction" (p. 279).

2. Monetary policy

After holding it at 3.5% for 18 months, Bank Indonesia raised the BI 7-Day Reverse Repo Rate reference rate to 3.75% in August 2022 and 4.25% in September 2022. The trend in monetary policy continued throughout 2022 and extended to the beginning of 2023. During the January 2023 meeting, Bank Indonesia (BI) raised its key interest rates by 25bps to 5.75%, marking the sixth consecutive hike and the first rate hike in 2023. The increase aimed to curb inflation within the 2%-4% range in the second half of the year. The latest move brought the benchmark 7-day reverse repurchase rate to the highest level in more than three years, in line with market forecasts.

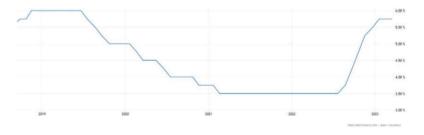


Figure 1: Indonesia interest rate

Source: https://tradingeconomics.com/indonesia/interest-rate#:~:text=Interest%20Rate%20in%20 Indonesia%20averaged,percent%20in%20February%20of%202021 (2023)

Like other central banks, Bank Indonesia is trying to fight inflation and avoid or limit the impact of a recession. Increasing interest rates are expected to affect the property market negatively. Within three months of the first increase in interest rates, the lending rate inverted its path and started to rise in October 2022.



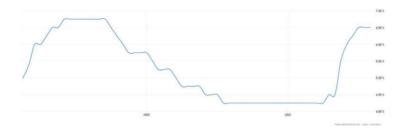


Figure 2: Indonesia lending facility rate

Source: https://tradingeconomics.com/indonesia/lending-rate (2023)

The property market may suffer from banks becoming more selective when granting financing loans, in addition to the increased cost of borrowing. However, analysts expect the impact of a tighter monetary policy to be milder than the effects of the Great Lockdown. In particular, Indonesia remains optimistic about the effects of an economic downturn because of the price trend in several export-oriented commodities such as coal, palm oil, nickel, and other natural resources.

3. Government stimuli

An important factor that kept the landscape of the property market in good condition throughout 2022 is the stimulus from the government, including easing down payments for property ownership loans to zero percent and Value Added Tax Borne by the Government (VAT DTP) up to 50%.

The government's plan to extend the exemption from VAT for property buyers is meant to incentivize home purchasing. Housing is not the only sector benefiting from this policy, as certain sectors also qualify under the new omnibus law. However, the long-term effects of such stimuli may backfire because by distorting demand, they may disguise the actual preferences of consumers without stimuli, leading to the emergence of long-term investment projects that would otherwise be unsustainable. The risk is that when such stimuli end, consumers may encounter difficulties and construction projects

may be abandoned. As of this writing, Bank Indonesia stated it would extend the down payment concession until the end of 2023.

This policy or stimulus for the property sector is in line with the 2023 Draft State Revenue and Expenditure Budget (RAPBN). This year, program credit interest subsidies increased by 57%, while subsidies for DTP taxes decreased by almost 40% compared to last year.

VAT subsidies from the government support demand. Data from Rumah.com Indonesia Consumer Sentiment Survey H2 2022 shows that the VAT easing policy is driving consumer optimism. Meanwhile, few consumers benefit from the subsidized housing program, one of the government's mainstay housing programs.

4. Residential real estate

Bank Indonesia's Residential Property Price Survey showed an upward trend for residential properties in the primary market through Q3-2022. It is reflected in the increase of the Property Price Index (IRPI), which in Q3-2022 rose by 1.94% y-o-y, further strengthening the result of the previous quarter (+1.66% YoY).



Figure 3: Indonesia Residential Property Index (IRPI)

Source: Bank Indonesia (2022)



IRPI is rising across every type of housing, with the highest growth recorded for medium-sized residential properties (+2.92% YoY), which is higher than the previous quarter (+2.36% YoY). Meanwhile, the price for small-sized and large-sized houses rose by 1.58% (YoY) and 1.35% (YoY), respectively.

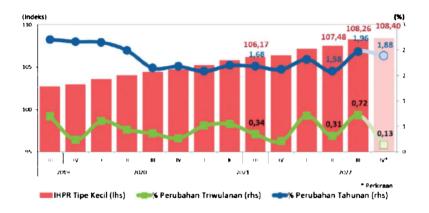


Figure 4: Indonesia Residential Property Index Small Sized House (IRPI)

Source: Bank Indonesia (2022)



Figure 5: Indonesia Residential Property Index Medium Sized House (IRPI)

Source: Bank Indonesia (2022)



Figure 6: Indonesia Residential Property Index Large Sized House (IRPI)

Source: Bank Indonesia (2022)

There is an indication that primary residential property sales are facing a positive surge. It is reflected in the growth of sales, which recorded +13.58% (YoY) in Q3-2022, although it is a lower figure than the previous quarter when growth was 15.23% (YoY). The increase in sales was supported by the growth of small-sized residential property sales, which grew by 30.77% in Q3-2022, a performance more than double that of the previous quarter (14.44% YoY).

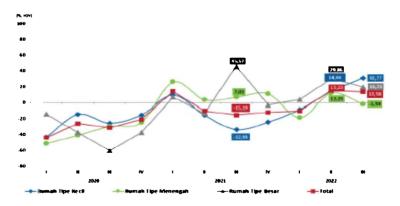


Figure 7: Indonesia Residential Property Index Large Sized House (IRPI)

Source: Bank Indonesia (2022)



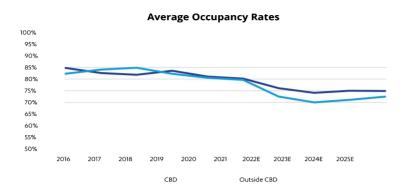
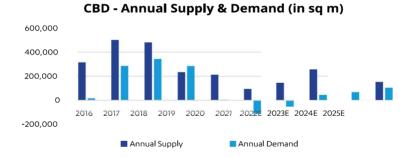
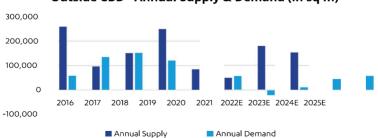


Figure 8: Average office occupancy rates Source: Colliers (2022)

The mismatch between supply and demand is shown in the Figure 9.





Outside CBD - Annual Supply & Demand (in sq m)

Figure 9: Office supply and demand Source: Colliers (2022)

The situation is made more difficult by multinational companies continuing to opt for hybrid working arrangements. In the meantime, retail spaces are showing signs of recovery.

5. Industrial real estate

According to Colliers (2022), 2022 had seen a slowdown in the absorption of industrial land, but there are expectations of an acceleration towards the end of the year and in 2023. The sales of industrial land will still be supported by the logistics and data center sectors, as well as high-tech based industries. Another sector that will actively absorb land is the automotive industry, specifically related to electric vehicle technology, energy, food, and basic chemicals.

Active Industrial Sectors in 2022 YTD

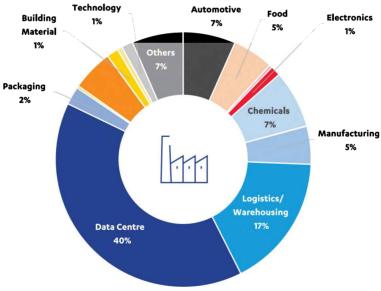


Figure 10: Active industrial sectors in 2022 YTD Source: Colliers (2022)



Some distress may be brought into industrial real estate by inflation and rising interest rates, which may cause some projects to be abandoned. However, in general, the outlook for it remains characterized by stability.

Indonesia's industrial outlook has long been dominated by manufacturing, contributing to 20% of its GDP. As the biggest manufacturer in the region, it is poised to be among the top 10 in the world. Indeed, Indonesia's manufacturing sector has played a significant role in shifting the country from its agricultural past. As such, Indonesia's industrial estate landscape reflects this reality.

Already home to over 100 industrial estates, the Indonesian government has recently added several up-and-coming industrial zones to its Proyek Strategis Nasional (PSN) or National Strategic Projects, which is ever-changing and – as of this writing – consists of 200 plus projects spanning various sectors. A closer look at the geographic spread of these newly developed zones reveals that most are set to be outside Java, Indonesia's most populous (and arguably most developed) island. With the economy projected to grow over 5% strongly post-pandemic, new industrial estate projects are expected to continue to sprout in 2023 and beyond. It is safe to say that these industrial zones serve as hotbeds for industrial estates. It is in this particular light that we present an outlook for industrial estates in Indonesia.

Furthermore, the government is open with regard to its ambitions of shifting the focus from Java to other islands such as Sumatra, Sulawesi, Kalimantan, and Papua in a move towards "developmental equality." The most radical of such notions is the announcement to move the nation's capital as well as the seat of government into a new city built from scratch in Kalimantan. The Nusantara capital project was announced in 2020 and is projected to cost USD \$32 billion. The government promised to fund no more than 19% of the costs, with the remainder coming from public-private partnerships as well as direct investment. In response, CME has published an analysis of the government's decision to establish the new capital. The move towards a newly built capital city is seen as a top-down attempt that presumes substantial knowledge and wisdom at the top, disregarding the reality of widely dispersed knowledge.

Our view is, therefore, that while the attempt to create a more equal distribution of development through government-led industrial plans may lead to some plans failing to respond to market signals, it is critical that such projects do not respond to policymakers' equality dreams but to actual economic conditions. In particular, they may stimulate artificial real estate booms followed by targeted or widespread economic crises.

In conclusion, it is likely that sustainable industrial real estate projects will remain solidly anchored in greater Jakarta and Java, focusing in particular on data centers, logistics, and new technologies.

6. Conclusions

Despite rising residential prices and good performance in 2022, the residential market may face challenges in 2023 due to higher interest rates and a growing preference for mobility over long-term financial commitments.

The commercial market is still facing challenges (despite rising chances for green buildings), while for industrial real estate, arising opportunities are still present for data centers, logistics, and new technologies.

In general, the evolution of the real estate market will be affected by a tighter monetary policy and the prevalent uncertainties at both the domestic and international levels. Uncertain or moderate performances may become a decelerating factor in the general economic performance of Indonesia in the next two years.

A more stable outlook needs to be reserved for the industrial sector despite an excess of top-down government-led industrial plans that may generate localized artificial booms, which is not sustainable in the medium and long run.



CPO:

A CASH COW FOR THE INDONESIAN ECONOMY

Eusebius Pantja Pramudya, Yohanes B. Kadarusman, Felicia Gracelle, dan Nixon Widjaja

1. A Strategic Commodity for the Nation

The Indonesian palm oil sector plays a strategic role in the Indonesian economy. According to the Ministry of Economic Affairs, the industry is labor-intensive, with 4.2 million direct and 12 million indirect employments. Furthermore, 41% of the total plantation areas are smallholder plantations. The palm oil industry contributes to the nation's social welfare and has shown resilience during the pandemic.

Crude Palm Oil (CPO) is a versatile vegetable oil with three main uses: cooking oil, biofuel, and oleochemical. The use of palm oil-based biofuel has been increasing and is almost as prevalent as the traditional use of CPO for cooking oil. In Indonesia, the increasing use of biofuel comes under the biodiesel mandate, with the government setting a target of biodiesel blending to 35% by 2023 to cut fuel imports, manage the impact of high global energy prices, and shift towards cleaner energy. In the oleochemical industry, the use of CPO is rising for biosurfactants, fat substitutes in food products, and health supplements.

The various uses of CPO have raised concerns about competition with food for other uses, particularly for energy. Last year, such concerns were perceived to be more visible with the increasing cooking oil prices locally. However, further analysis showed that the soaring prices were caused by multiple factors, including the shortage of vegetable oil production, distortion of the migrant labor movement during the pandemic, speculation in the future market, and

price disparity between the domestic and international markets, with the failed attempt to impose a domestic market obligation.

CPO is the most used vegetable oil, the most productive oil crop, and the least land-intensive oil crop. Based on the FAO's statistical data, in 2020, there were 75.87 million tonnes of palm oil used worldwide, in comparison to soybean oil (58.57 million tonnes), rapeseed oil (25.18 tonnes), sunflower oil (20.57 million tonnes), and coconut oil (1.61 million tonnes). The yield of palm oil was 2.91 tonnes per hectare (according to OurWorld in Data in 2019), while for sunflower oil, it was 0.72 tonnes per hectare, rapeseed oil, it was 0.71 tonnes per hectare, soybean oil, it was 0.47 tonnes per hectare, and for coconut oil, it was 0.27 tonnes per hectare. In terms of land use, it only takes 0.34 hectares to produce one tonne of vegetable oil (according to OurWorld in Data in 2019), while for sunflower, it is 1.38 hectares, for rapeseed, it is 1.41 hectares, for soybean, it is 2.12 hectares, for olive oil, it is 3.63 hectares, and for coconut oil, it is 3.68 hectares.

2. CPO Production

Based on the National Plantation Statistics released in August 2022, approximately 83.7% of the world's total palm oil production is produced in Indonesia and Malaysia. Indonesia produces 58.7% (or 49.7 million tonnes), followed by Malaysia (25%), Thailand (4.1%), Colombia (2%), and Nigeria (1%). In Indonesia, 20.66% of palm oil is produced in the province of Riau, followed by Central Kalimantan (15.93%), North Sumatra (11.93%), West Kalimantan (11.34%), and South Sumatra (9.91%). There are three main categories of palm oil producers in Indonesia: large plantation companies contributing to 61.17% (with a productivity of 4.13 tonnes per hectare), smallholders contributing to 33.73% (with a productivity of 3.27 tonnes per hectare), and state-owned companies contributing to 5.08% (with a productivity of 4.74 tonnes per hectare) of the total production in 2022.

CPO production is increasing; however, GAPKI (Indonesian Palm Oil Association) has raised concerns about a declining trend, citing the lower



average production growth from 10.12% in 2005-2010 to 7.39% in 2010-2015 and 3.2% in 2015-2020. With the predicted growth of -1.15% in 2020-2025, the declining trend raises concerns about the availability of CPO for various uses, particularly in maintaining affordable cooking oil prices.

GAPKI has also warned that declining production growth has occurred alongside rising production costs, as seen in the Figure 1.

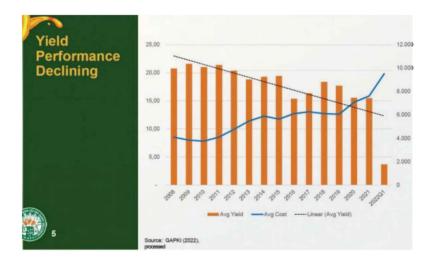


Figure 1. Trend of Cost versus Yield Source: Gapki (2022)

The soaring cost threatens the sustained CPO production growth, raising questions about meeting demand in the face of decreasing production.

Smallholders, who use 41.47% of the total areas with an increasing trend in numbers, have the lowest productivity. Improving their productivity is challenging due to their limited technical skills, access to legitimate seeds and good inputs, and organizations. The replanting scheme arranged by the government, with funding from The Indonesian Oil Palm Plantations Fund

Management Agency (BPDPKS), has been slow. Although the government has set an annual target of 180,000 hectares, the implementation between 2017 and 2022 only covered 258,653 hectares. The main challenges were land legality (either not having formal land certificates or located in the forest zone), minimum collaboration among stakeholders (Directorate General of Plantation, BPDPKS, plantation companies, smallholder associations, and local governments), and reluctance from smallholders (with the potential to lose income for several years and their lands being used as collateral for other loans).

3. Demand of CPO

CPO produced by Indonesia has a high demand both internationally and domestically. The data from GAPKI shows the export consumption of Indonesian palm oil, as seen in the Figure 2.

	2018	2019	2020	2021	2022 (as of August)
Oleochemical	2,746	3,218	3,871	4,036	2,721
Biodiesel	1,356	1,090	31	167	228
Refined PKO	1,484	1,396	1,529	1,458	755
Crude PKO	369	651	301	52	34
Refined Palm Oil	23,822	23,677	21,103	25,481	14,514
СРО	6,554	7,399	7,171	2,482	1,267
Total Export	36,333	37,430	34,007	33,674	19,519

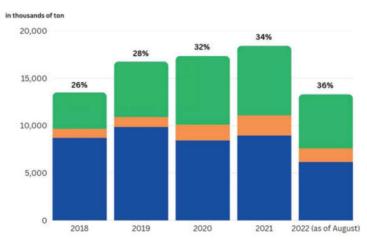


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СРО	6,554	7,399	7,171	2,482	1,267
Total Export	36,333	37,430	34,007	33,674	19,519

Figure 2. CPO Export from Indonesia Source: Gapki (2022)

The largest export of Indonesia is refined CPO, which is further processed to become food, biodiesel, and oleochemical products. The export of biodiesel has decreased since 2020 due to the decreasing demand during the pandemic, competition with biodiesel from other vegetable oils, and more stringent requirements demanded by importing countries.

Meanwhile, domestic consumption can be seen in the Figure 3.



	2018	2019	2020	2021	2022 (as of August)
Biodiesel Consumption	3,824	5,831	7,226	7,342	5,693
Oleochemical Consumption	963	1,056	1,695	2,126	1,448
Food Consumption	8,704	9,860	8,428	8,954	6,159
CPO & PKO Production	47,388	51,828	51,583	51,300	31,609

Figure 3. Domestic Consumption of Palm Oil Source: Gapki (2022)

In the domestic market, CPO is mainly for food and biodiesel, with both commodities sharing almost the same proportion. The concern for competition between the use of CPO for food and energy might become valid without solid direction from the government to manage the absorption of CPO for biodiesel production. Biodiesel production is more controllable with the government's monopoly over fuel distribution.

Meanwhile, the oleochemical industry is not a massive absorber of CPO despite Indonesia being the largest palm oil-based oleochemical producer in the world (APOLIN Indonesian Oleochemical Manufacturer Association mentioned that there were 22 oleochemical companies with a total capacity of 11,388,000 tonnes in 2021). In the global market, the palm oil-based oleochemical industry faces competition from the oleochemical industry based on other vegetable oils.

4. CPO Export Market

Around 66% of Indonesia's total production of CPO is exported. That figure represents a decline from previous years (72%, 77%, and 80% for 2020, 2019, and 2018, respectively). It is estimated that the growth rates for 2021 and 2022 remained similar. The main export destinations for Indonesian CPO are China, India, Pakistan, and the United States. Export growth in 2021 has fluctuated and is projected to be negative in 2022, except for India, the US, and the Middle East, as shown in the Figure 4.



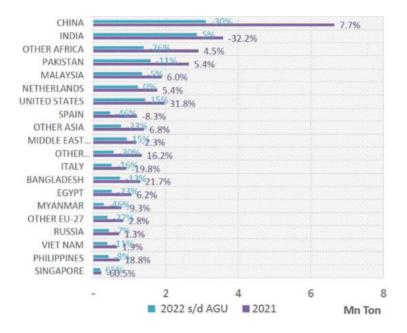


Figure 4. Indonesian exports to main exporting country destinations Source: BPS (2022)

The price of CPO started to decline after a surge in 2020, but it is still considered high in 2023 when compared to the CPO price between 2005 and 2019, according to GAPKI. The price trend of CPO in the last five years is exhibited in the Figure 5.

The CPO domestic market is expected to remain relatively stable, as has been the trend since 2019. The main absorption comes from the food and oleochemical industry. However, the demand for oleochemicals has also increased due to the rising demand for cleansing agents and food supplements during the pandemic. Although there was a surge in the price of cooking oil at the beginning of 2022, it is estimated that this trend will not continue as the price has declined, although it is still above historical price data.

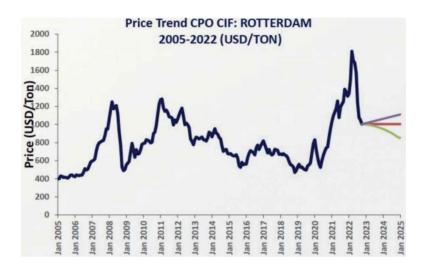


Figure 5. Price Trend of CPO

Source: : https://www.investing.com/commodities/crude-palm-oil-cif-rotterdam-futures (2023)

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The estimated weaker demand in 2023 is expected to cause a decrease in the price of CPO, caused mainly by the slowing economic growth and the anticipation of a slowing global economic growth in 2023. Ineffective policies, especially over the last 1.5 years, have had a considerable impact on the CPO market. These policies have caused a significant rise in the volatility of palm oil prices in producing countries. The largest disruption to the market occurred in April 2022 when the Indonesian government imposed a palm oil export ban in response to soaring cooking oil prices. The export ban led to a drop in the FFB



price from Indonesia to below IDR 1,000 per kg, which is a low level that had been avoided by the biodiesel mandate since 2015.

The significant increasing CPO use for biodiesel since 2015 corresponds with the increase of CPO blending in Indonesian biodiesel. In 2023, the implementation of palm oil biodiesel blending will be raised to 35%, which would increase biofuel demand by 13.15 kilolitres, or around 19%, compared to 2022. The increasing trend can be exhibited in the Figure 6.

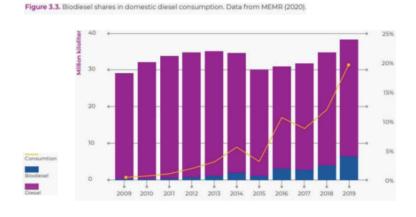


Figure 6. Biodiesel Shares in Domestic Diesel Consumption

Source: IESR (2020)

The increasing use of CPO for biodiesel occurs when there is a price gap, as biodiesel that aims to substitute petroleum diesel frequently has a higher price, as shown in the Figure 7.

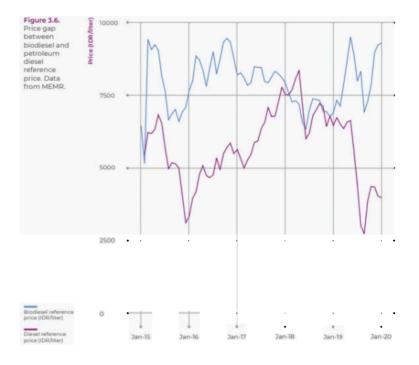


Figure 7. Price Gap Between Biodiesel and Petroleum Diesel Reference Price Source: IESR (2021)

5. CPO Price Trend

CPO price depends on several factors, including the price of other vegetable oils and crude oil, as well as the stock of palm oil and other vegetable oils. In 2022, the price of CPO followed a similar trend to that of other vegetable oils, as shown in the Figure 8.

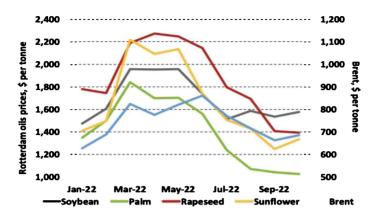


Figure 8. CPO and Other Vegetable Price Trend Source: GAPKI (2022)

CPO is the most competitive vegetable oil, and the trend of high vegetable oil prices in the first semester of 2022 also occurred for other vegetable oils. However, in the second semester of 2022, the surge in vegetable oil prices was moderated to a level close to that of 2021. Meanwhile, the price trend of crude oil was also moderated in the second semester of 2022, as exhibited in the following graph.

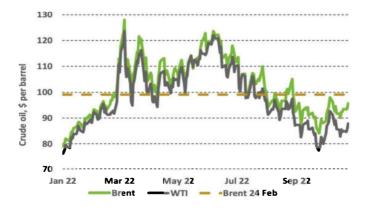


Figure 9. CPO Price Trend Source: GAPKI (2022)

Regarding the stock of palm oil, the price will decrease if stock is high and vice versa. PASPI (Palm Oil Agribusiness Strategic Policy Institute) estimated that supply disruptions in Indonesia and Malaysia in 2019-2021 due to El Nino, the COVID-19 pandemic, and Indonesian policies contributed to the consistent decline of ending stocks in Malaysia, while stocks in Indonesia remained relatively fluctuating.

Stock fluctuation of other vegetable oils estimated by several analysts are as follows: soy production will increase due to the expectation of a high crop yield in Brazil and the good harvest situation in Argentina. Rapeseed stock will experience a significant recovery, and the calming situation in Ukraine will boost global supply. Sunflower stock will be bearish due to the geopolitical situation in Ukraine. Oil World expects a downward trend in sunflower, soy, and rapeseed oil prices, implying that palm oil price discounts will narrow in 2023. There is little downward potential for PO prices.

The comparison of local CPO premia against gasoil in Malaysia, Indonesia, and the EU shows that biodiesel is a competitive diesel fuel today. While the local premia in producing regions are declining, the premium in Indonesia and Malaysia is getting cheaper than gasoil due to export taxes or levies applied in both countries. This trend can be seen in the Figure 10.



Figure 10. Local CPO Premia against London Gasoil Source: GAPKI (2022)



6. CPO Market Dynamism in Other Countries

In the first semester of 2022, the Indonesian market experienced high fluctuations due to the export ban, whereas other countries' market did not fluctuate as much.

Malaysia, the second-largest palm oil producer, continued to show strong performance as the second-largest palm oil exporter in the world. During the pandemic, the output of the Malaysian palm oil sector dropped due to labor shortages, which caused the growth to decline to 1%.

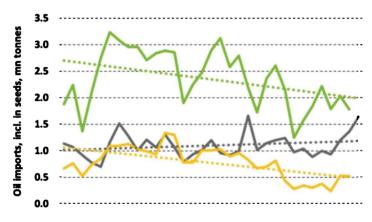


Figure 11. Annual Palm Oil Production at Origins

Source: GAPKI (2022)

In 2023, Malaysia's palm oil production is expected to rise 7% YoY due to the anticipated improvement in the labor shortage situation faced in 2021 and 2022.

Although the CPO market in Indonesia fluctuated in 2022, such fluctuations did not occur in the destination markets due to fewer policy interventions.

The two main destinations of Indonesian CPO are India and China. According to the analysis from Commodity Market Mentors from India, from 2020 to 2022, CPO imports to India and China showed a declining trend.

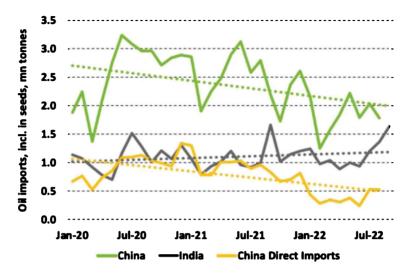


Figure 12. CPO Imports to India and China Source: GAPKI (2022)

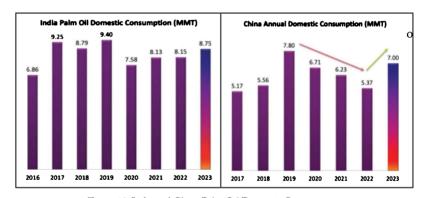


Figure 13. India and China Palm Oil Domestic Consumption

Source: TRANSGRAPH (2022)

Imports to the EU stabilized in 2022 after a decline in 2021, as exhibited in the following graph. The CPO demand in the EU had declined due to renewable energy policies and the Covid-19 pandemic in 2020-21. However, the demand level has recovered with the disruption of vegetable oil and energy supply at the onset of the Russian-Ukraine conflict. The demand is expected to decline with



the policy trend to phase out palm oil due to the development of deforestationfree products.

EU Palm Oil Domestic Consumption (MMT)

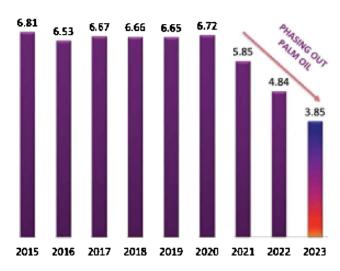


Figure 14. EU Palm Oil Domestic Consumption

Source: TRANSGRAPH (2022)

7. Non-Market Requirements

Non-market requirements also affect the CPO market. Firstly, there is increasing concern for sustainability. Palm oil is considered a commodity with risks of taking over areas for forests and food production, which raises concerns about its contribution to climate change, biodiversity loss, and food scarcity. In response to this situation, several sustainability governance arrangements have been developed, the most well-known of which are RSPO (Roundtable on Sustainable Palm Oil) for palm oil in general and ISCC (International Sustainability and Carbon Certification) for biodiesel. The producing countries also develop national standards: Indonesia's ISPO (Indonesian Sustainable Palm Oil) and Malaysia's MSPO (Malaysian Sustainable Palm Oil).

Despite efforts to improve the sustainability of the palm oil sector, market requirements are becoming more stringent, especially in the European Union (EU). The development of EU policy on palm oil can be seen in the Figure 15.

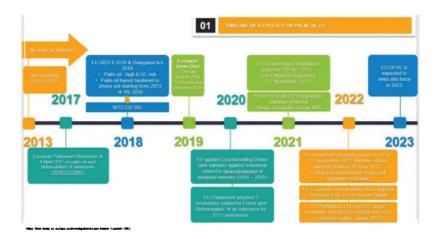


Figure 15. Diagram of the EU Policy on Palm Oil

Source: Hadi (2022)

The more stringent EU regulation directly impacts the market for biodiesel. However, palm oil imports from Indonesia remain significant, especially for palm oil-based consumer products.

In December 2022, the European Union developed more concrete action to ensure a deforestation-free supply chain. The target of ensuring a deforestation-free supply chain covers not only palm oil but also cattle, soy, coffee, cocoa, timber, and rubber, as well as derived products (such as beef, furniture, and chocolate). Biodiesel and maize are not included, but both commodities will be considered for inclusion in the future. The European Union also widens the definition of forest degradation, which formerly focused on primary forests, but under the new regulation, includes naturally generating and plantation forests. The producing countries—led by Indonesia—responded by signing a joint letter reminding that the proposal for increasing commodity governance to ensure



deforestation-free products should be based on the Paris Agreement and the achievement of SDGs, non-discriminatory principles, consideration of impacts on smallholders, respect for national regulations, compliance with fundamental WTO rules, and respect for developing countries' rights to development. Instead of being implemented a top-down approach, the producing countries expect the EU to develop substantive, genuine, and constructive dialogue. Furthermore, both Indonesia and Malaysia express that losing the European Union market under increasingly complex requirements would not become a major issue for them.

8. Outlook of CPO Market

A number of assumptions are key important to understand the market outlook of oil palm (CPO) in 2023, particularly about the direction of market supply, demand and price. GAPKI has predicted that challenges in 2023 are in production and export market. Palm oil production tend to decline due to the slow growth of new planting and re-planting program and lower productivity. They are subject to sustainability issue in palm oil (Oil World, 2022). Meanwhile, the global recession predicted in 2023 will adversely affect global demand for oil palm. Nevertheless, the slowing export demand will be offset by the growing domestic demand, particularly due to the Biodiesel B30 Mandatory Program by the Government of Indonesia (GOI). The price of palm oil is predicted declining, despite a relatively high (Hasan, 2022).

Demand for CPO in the domestic market is predicted to grow, particularly for food use (cooking oil) and biofuel (biodiesel). The economy of Indonesia is predicted to grow at 4.5-5.4% in 2023 due to the easing of the scarring effect of the Covid-19 Pandemic. The GOI expects that private consumption could support economic growth in 2023. It can be expected that the consumption and demand for food, including cooking oil, will also increase in 2023. Meanwhile, the Mandatory Biodiesel Program is on track. In 2022, the production of biodiesel was 11.8 million KL, which increased from 9.3 million KL and 8.5 million KL in 2021 and 2020, respectively (APROBI, 2022 & ESDM, 2022). Furthermore, starting from 1st February 2023, the GOI continued the program

by accelerating the biodiesel blend of 30% palm oil and 70% diesel (B30) with the B35. The B35 biodiesel program would increase domestic demand for CPO. To secure the supply of CPO for domestic uses, the GOI increased the domestic market obligation (DMO) from the ratio of 1:8 to 1:6.

Meanwhile, global economic growth is projected to slow down to 2.9% in 2023 according to the IMF. The low global economic growth is due to the rise in central bank interest rates to fight inflation and the Russian-Ukraine war. Nevertheless, low economic development takes place in advanced economies, particularly the Euro Area, which is projected to grow at 0.7% in 2023. However, the economic growth of developing economies such as India and China is relatively unaffected. India's growth is expected to slow down slightly from 6.8% in 2022 to 6.1% in 2023, while China's growth is projected to increase from 3.0% in 2022 to 5.2% in 2023 (IMF, 2023). Because the main export destinations of Indonesia's CPO are China and India, the export demand for CPO in 2023 is more likely to grow. In addition, the Russia-Ukraine war has caused gas supply disruptions and a decrease in sunflower oil trade due to the boycott of Russia, which is expected to increase demand for substitutes such as CPO (Oil World, 2022). As discussed in the previous section, the production and supply of CPO in 2023 will continue to increase, albeit at a diminishing rate. A decrease in production and supply and an increase in consumption and demand will put pressure on market prices. CPO prices are likely to increase in 2023, as reflected by the increase in the forward price of CPO in the following months (Bappebti, 2023).

In anticipating the possible upsurge in palm oil demand and price, Indonesia might restrict exports to prioritize domestic consumption for cooking oil and biodiesel mandates. In 2022, the GOI attempted to do this by implementing the DMO policy. The DMO itself should be accompanied by market-friendly policies that consider the interests of CPO exporters. Otherwise, implementing the DMO might become a boomerang, requiring intensive law enforcement, which could impact market and investor confidence in the Indonesian CPO industry and economy.

OUTLOOK OF OIL & GAS ECONOMY IN INDONESIA

Albert Hasudungan, Angel Sanjaya, Stevania Serena Tanuwijaya, John Arnold Matthew

1. Introduction

This paper provides an overview of the economic trends of oil and natural gas in Indonesia. Since the discovery of the first oil in North Sumatra in 1885, Indonesia has had a significant presence in the oil and gas industry for over 130 years. At the end of 2018, Indonesia's proven oil reserves were estimated to be 3.2 billion barrels (BP, 2019). However, since 2004, Indonesia has been a net importer of oil due to decreased oil production and rising consumption (PwC, 2019).

Indonesia's position as a net importer of oil and gas will have economic implications. Firstly, Indonesia will be exposed to global natural gas and oil price fluctuations, as the majority of Indonesian energy is still sourced from fossil fuels. Given the economic context, the outlook will determine how resilient Indonesia is in meeting its oil and natural gas requirements.

Regarding production, it seems challenging for Indonesia to boost its net export for oil due to bottlenecked domestic production (PwC, 2019). Currently, the realized ratio is 69%, as the realized oil production is 660 MBOPD, and the realized oil supply requirement for refineries is 958 MBOPD in Indonesia (as shown in Table 1). According to the calculation, domestic refineries can still handle domestic oil production.

Table 1. Realized Oil Production vs. Supply Requirements

No	Indicators	Realized Production	Data Source
1	Domestic Oil production	660 MBOPD	ESDM
2	Oil Supply Requirement	958 MBOPD	ESDM
	for Refineries		

Furthermore, natural gas production is far below the expected domestic market demand. For instance, the domestic gas consumption was expected to be 440,198 MMSCFD in 2021 (ESDM, 2019). However, the actual natural gas production was 6,668 MMSCFD. Consequently, the natural gas production to domestic gas needs ratio would be 1.52% (see Table 2).

Table 2. Natural Gas Production vs. Demand

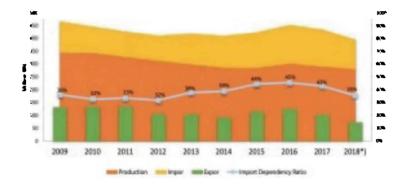
No	Indicators	Realized Production	Data Source
1	Natural Gas Production	6668 MMSCFD	ESDM
2	Oil Supply Requirement	440148 MMSCFD	ESDM
	for Refineries		

This outlook scrutinizes the critical issue of the lack of oil and gas production to meet domestic demand. Furthermore, it is essential to understand the longitudinal basis of domestic oil and gas demand in Indonesia. This paper highlights the domestic Indonesia's demand for oil and gas, and provides some insight into the policy context of oil and gas in the country. Once the relevant information has been mapped out, this outlook will present several scenarios (pessimistic, optimistic, and moderate) relating to the future of oil and gas in Indonesia.

2. Indonesian Oil & Gas Export and Import

Over the last two decades, around 35% of Indonesia's oil needs have been met by imports, and to meet this requirement, including importing crude oil from the Middle East. However, the crude oil production has decreased significantly during the past ten years, falling from 346 million barrels in 2009 to 283 million barrels in 2018 (ESDM, 2019). McKinsey (2020) also asserts that Indonesia's

recoverable reserves of oil and natural gas are believed to be around 25 billion barrels of oil equivalent, yet production decreased by 20% between 2010 and 2019. By 2030, Indonesia, already a net oil importer, may also be a net natural gas importer (McKinsey, 2020). As net oil and gas importers (as shown in Figure 1), this outlook exemplifies the global trend of the world energy supply and demand concerning Indonesian energy exports and imports.



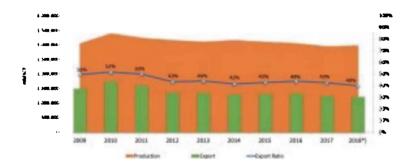


Figure 1. Indonesia's Exports and Imports of Oil (Left) and Natural Gas (Right)

Source: The Ministry of Energy and Mineral Resources (ESDM), (2019)

The COVID-19 pandemic has drastically slowed down worldwide economic activity, leading to a decline in demand for crude oil. At the same time, Russia

and Saudi Arabia are experiencing increasing strain on the oil market. The price of crude oil has reached its lowest point in thirty years due to these two causes. As for nations such as Indonesia that export oil while also buying it, the drop in oil prices has significant ramifications. For the last three years, as seen in Tables 3 and 4 below, Indonesia's export value of crude oil has been lower than its import value.

Table 3. Indonesia's Total Export Value of Crude Oil from 2019–2021

Period	Country	Export Value
2019	Indonesia	\$1,726,630,215
2020	Indonesia	\$1,396,868,368
2021	Indonesia	\$2,795,919,222

Source: The Ministry of Energy and Mineral Resources (ESDM) (2021)

Table 4. Indonesia's Total Import Value of Crude Oil from 2019–2021

Period	Country	Import Value
2019	Indonesia	\$5,704,588,947
2020	Indonesia	\$3,391,684,209
2021	Indonesia	\$7,047,198,512

Source: The Ministry of Energy and Mineral Resources (ESDM) (2021)

There has been a significant trend of oil and gas exports and imports due to the Russian and Ukrainian war that can affect the global economy, including the Indonesian economy (see Figure 2). According to the official report from IEA (IEA, 2022), Russia is the world's largest oil exporter to international markets and therefore has a significant influence on world oil prices. The production of Russian crude and condensate in 2021 was 10.5 million bpd, which represents 14% of the global supply. Russian oil shipments decreased by 230 kb/d, or 560 kb/d, from pre-war levels to 7.5 mb/d in September 2022 (IEA, 2022). Shipments to the EU decreased by 390 kb/d month over month. Despite this, EU countries have yet to divert more than half of their pre-war import levels away from Russia, with less than two months until a ban on Russian crude oil imports takes effect. The nation's export earnings decreased by \$3.2 billion to \$15.3 billion (IEA, 2022).



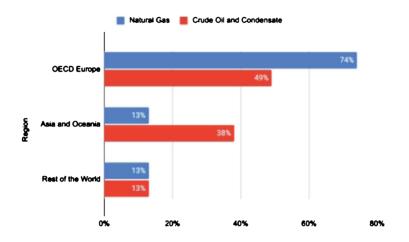


Figure 2. Major Importing Destinations from Russia in 2021

Source: Egypt Oil & Gas Newspaper (https://egyptoil-gas.com/) (2023)

Russia's invasion of Ukraine in February 2022 led to the worst food and fuel crises since World War II (EOG (Egypt Oil & Gas), n.d.). Since Russia is the world's largest exporter of oil and natural gas to international markets, the war had a massive impact on the majority of economic sectors nationally and internationally. The oil and gas sector were particularly affected. As one of the biggest importers, the European Union recommended a ban on Russian crude oil exports as a result of its war in Ukraine and intended to change the source of its imports of liquefied natural gas (LNG) (EOG (Egypt Oil & Gas), n.d.).

3. Oil and Natural Gas Production

This section illuminates the major producers of Indonesian oil and gas, as well as their geographical sources, as follows.

Producers of Indonesian Oil & Gas

OPEC (Organization of the Petroleum Exporting Countries) is the dominant oil producer in the current global oil market. About 80% of the oil supply is sourced from OPEC (WEF, 2022). OPEC's intervention was adequate to help

balance the oil market in 2021, with prices continuing at a sustained level of \$50 to \$55/bbl through 2025 (McKinsey, 2021). Prices might increase shortly to more than \$55/bbl if GDP growth rebounds more quickly than anticipated. However, prices could be low or extremely volatile over the following three to four years if demand recovers more slowly than anticipated or if OPEC+ stops reducing output (McKinsey, 2021).

Long-term equilibrium oil prices have dropped by \$10 to \$15/bbl. The decline is due to a flattening cost curve and decreasing demand. A long-term equilibrium price range of \$50 to \$60/bbl under an OPEC-control scenario in which OPEC preserves its market share is anticipated (McKinsey, 2021). Under an accelerated energy transition scenario, most offshore oil-producing regions will be under pressure. However, the sector will still need new production of over 23 MMb/d to meet demand after 2030 (McKinsey, 2021).

The intervention of OPEC will affect Indonesian oil and natural gas prices and production. For instance, the Indonesian central bank stated that global oil prices are anticipated to fall progressively after 2022 as the use of renewable energy sources rises (Bank-Indonesia, 2021). A consistent current account deficit is expected to sustain the BOP's forecast trend of improvement over the medium term. The non-oil and gas trade balance surplus is anticipated to rise as a result of export-focused manufacturing and sectors that replace imports. Due to rising domestic consumption and falling domestic oil and gas output, it is expected that the oil and gas balance would continue to deficit. However, this growing non-oil and gas trade balance surplus would make up for this imbalance (Bank-Indonesia, 2021).

In terms of Indonesian oil production, multinational companies are still the dominant oil producers, despite Indonesia having its state-owned Enterprise, PT Pertamina (see Figure 3). Multinational oil and gas corporations continue to produce most of the nation's oil and gas and PT Pertamina is the state oil and gas company that has been tasked with managing the sector, including taking over the operations from those corporations whose production-sharing contracts have expired. Additionally, seven of the nine oil refineries in the



nation are owned and run by PT Pertamina. Due to the country's refineries' inadequate installed capacity of around 1.1 million barrels per day, Indonesia must import a sizable portion of its refined product needs. Pertamina has been increasing investment opportunities in conjunction with the government to address this scenario.

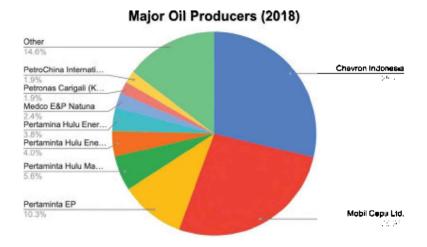


Figure 3. Major Oil Producers in Indonesia Source: PwC (2019)

Similarly, in terms of natural gas production, while Indonesia owns PT Perusahaan Gas Negara (PGN), most producers are multinational companies (see Figure 4). They can operate under a permit from SKK Migas (SKK-Migas, 2018). Meanwhile, the natural gas transmission pipeline network and the natural gas distribution pipeline network are run by PT Perusahaan Gas Negara (PGN). Its affiliates and subsidiaries operate a floating storage and regasification facility as well as upstream and downstream operations, telecommunications, and other industries (SKK-Migas, 2018).

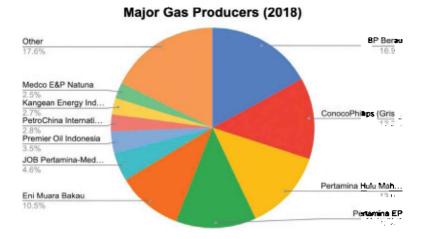


Figure 4. Major Natural Gas Producers in Indonesia Sources: PwC (2019)

Sources of Indonesian Oil and Gas Production

The distribution of Indonesian Oil and Condensate Reserves varies for different regions (see Table 3). In Sumatra (Central, North, and South), the proven oil distribution is 895.41 MMSTB, with the highest in Central Sumatra at 466.97 MMSTB. In Java (West and East), the proven oil distribution is 897.82 MMSTB, with the highest in East Java at 587.84 MMSTB. The proven oil distribution in Kalimantan is 199.58 MMSTB and in Natuna is 60.31 MMSTB (ESDM, 2021).

Considering the spatial location, we can conclude from the geographical analysis that some of these oil explorations are located near the 'Ring of Fire' that might be susceptible to earthquakes. We can prove that some exploration locations might stop producing if an earthquake occurs. Hence, mitigation to secure and anticipate earthquakes in those exploration oil production sites is suggested.



Table 3. Spatial Location of Oil in Indonesia

	Tubio everpului Deculion et eli in Indenteni				
Distribution of Indonesian Oil and Condensate Reserves Year 2020					
	(in MMSTB)				
Area	Area P1 (Proven) P2 (Probable) P3 (Possible)				
Aceh	38.67	9.89	0.92		
Sumatera Utara	24.28	17.39	24.24		
Sumatera Selatan 404.16 86.95 147.91					
Sumatera Tengah	Sumatera Tengah 466.97 97.59 64.16				
Natuna	60.31	47.43	27.43		
Jawa Barat	291.98	189.95	547.22		
Jawa Timur	587.84	224.71	30.03		
Kalimantan 199.58 46.67 39.79					
Sulawesi 33.86 14.83 11.1		11.1			
Maluku	214.02	69.27	19.26		
Papua	120.44	3.67	6.19		

Source: ESDM (2021)

Furthermore, through a network of distribution pipelines, PGN sells natural gas directly to consumers during the distribution process. This sale generates income for PGN. The largest consumer segment for PGN is the distribution market share of the household sector. The distribution of Indonesia's Natural Gas Reserves varies for different regions (see Table 4). In South Sumatra, the proven natural gas reserves are 3,950.61 BSCF. In Kalimantan, the proven natural gas reserves are 4,128.99 BSCF. The proven natural gas reserves in Natuna are 767.23 BSCF. As oil, some of these natural gas locations are located near the Ring of Fire. Structural mitigation to anticipate production in the probe of a disaster event is required.

Table 4. Spatial Location of Natural Gas in Indonesia

Distribution of Indonesia's Natural Gas Reserves Year 2020				
(in BSCF)				
Area P1 (Proven) P2 (Probable) P3 (Possible)				
Aceh 581.95 198.25 75.24				
Sumatera Utara 209.71 61.28 1.56				
Sumatera Selatan	3,950.61	1,037.61	2,138.05	

Sumatera Tengah	218.03	399.44	40.67
Natuna	767.23	390.72	106.30
Jawa Barat	1,769.05	325.23	291.17
Jawa Timur	3,324.97	721.94	583.15
Kalimantan	4,128.99	1,679.66	1,327.71
Sulawesi	3,088.44	1,223.89	902.15
Maluku	1,398.60	4,554.42	1,094.58
Papua	11,544.76	625.15	1,037.23

Source: ESDM (2021)

The Key Issue for Oil & Gas Production in Indonesia

While crude oil and natural gas are dispersed throughout the Indonesian islands, the decreased oil and gas production challenges Indonesian energy security. The drivers of declining crude oil production and gas over the last decade are the natural maturation of producing oil fields, slower reserve replacement rate, and decreased exploration and investment.

In relation to natural maturation, despite being richly endowed with natural resources, there has been a lack of progress in new exploration investment for domestic crude oil sites in Indonesia (ADB, 2020). The pertinent issue is uncertain energy regulation and lack of investment for innovation in crude oil production (ADB, 2020). With few significant oil and gas reserves discovered in Indonesia over the last decade, Indonesia relies on increasingly mature oil and gas fields that continue to decline in production. In 2020, oil production reached 708.5 MBOEPD (Million Barrels of Oil Equivalent Per Day), which is a 36.6 MBOEPD decrease compared to the production in 2019 of 745.1 MBOEPD (See Figure 5). Meanwhile, gas production reached 6,679 MMSCFD, which is a 556 MMscfd decrease compared to the production in 2019 of 7,235 MMSCFD (SKK-Migas, 2021). As a result, the production rate for oil and gas has been constantly decreasing over the last decade.

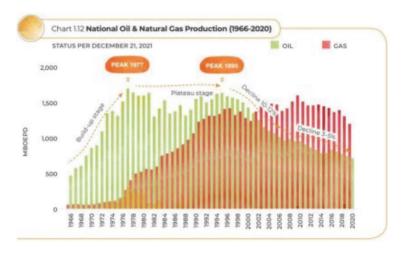


Figure 5. The trend of Indonesian Oil & Gas Production Source: SKK Migas (2021)

In addition, slower replacement has been a pertinent issue in oil and gas. All oil and gas production must be replaced immediately, at least in an equivalent amount. The Reserves Replacement Ratio (RRR) is the amount of oil added to a company's reserves divided by the amount extracted for production. Indonesia experienced a declining RRR from 2010 to 2017 before increasing in 2018. It is expected that the RRR will remain higher than 100% in the coming years to achieve the target of 1 million BOPD and 12 thousand MMSCFD in 2030.

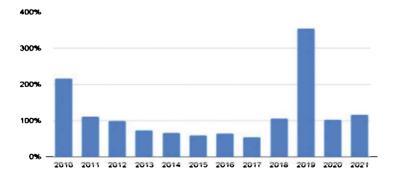


Figure 6. Indonesian Oil & Gas RRR Achievement in 2010–2021 Source: SKK Migas (2021)

Moreover, due to regulatory instability and an uncertain investment climate, many existing contractors have lost interest in further exploration in Indonesia, and few new players are entering the market. As a result, the oil and gas industry has not seen significant new developments for many years, despite the Government's efforts to stimulate exploration and attract new investors through offers of new acreage and a joint study facility. Indonesian exploration activities were also hit by the oil price shock. The number of exploratory wells drastically decreased from 64 in 2014 to 33 in 2015 (see Figure 7).

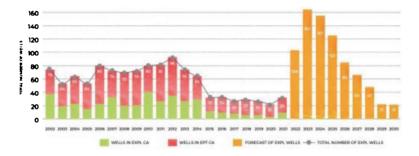


Figure 7. Indonesia's Exploration Drillings Source: SKK Migas (2021)

Furthermore, investment in exploration contact areas experienced a downward trend and only increased in 2021 (See Figure 8).

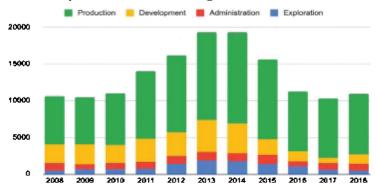


Figure 8. Upstream Oil & Gas Investment (in million US\$)

Source: PwC (2019)



For the last two centuries, there has been a strong link between economic development and energy demand. As economies grow, energy demand increases, and if energy is constrained, GDP growth will slow down. To accumulate wealth, the amount of energy needed by countries has soared (Sharma, Smeets, & Tryggestad, 2019).

Indonesia has experienced positive economic development over the last few decades. GDP per capita has been constantly increasing despite experiencing a fall due to the 1998 financial crisis and the COVID-19 pandemic. Moreover, an increasing CPI indicates higher average prices, which implies improved living standards. Lastly, the unemployment rate follows a decreasing trend despite fluctuations, which leads to improved well-being and economic growth as spending increases (Sharma et al., 2019).

Along with economic development, oil consumption in Indonesia has been increasing. Figure 9 shows the oil consumption by type of oil product in Indonesia. Oil products with growing consumption over the decades include LPG/ethane, motor gasoline, and gas/diesel. Consumption of other types of oil remained relatively stable, while consumption of other kerosene has been minimized.

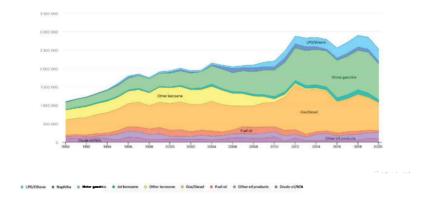


Figure 9. Oil final consumption by product, Indonesia 1990–2020 (in Terajoules)

Source: IEA (https://www.iea.org/countries/indonesia) (2022)

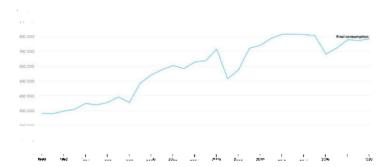


Figure 10. Natural gas final consumption, Indonesia 1990–2020 (in Terajoules)

Source: IEA (https://www.iea.org/countries/indonesia) (2022)

Aside from this, technological improvements are also expected to increase energy efficiency, like the advances in LED lighting and smart appliances. We also have the rise of electrification, including electric vehicles, which will not only shift demand from petroleum but also curb the total amount of energy required in transportation. However, the rise of electrification will not benefit Indonesia if it does not succeed in developing its renewable energy sector since most of Indonesia's electricity is generated in coal-fired power plants. With this being said, the growth in renewable energy sources in Indonesia also has the potential to flatten the demand curve for oil and gas.

5. Indonesia's Policy Related to Oil & Gas

The critical governance issue to stimulate oil and gas is the governance itself, which can enhance the supportive environment to drive more oil investment. Investors always compare investment risks and related regulations in various countries or regions (Aprizal, Juanda, Ratnawati, & Muin, 2022). In Indonesia, investors are confronted with two problems: the high global crude oil prices and the rising cost of a barrel of oil due to the weakening rupiah (ADB, 2020). Indonesia's budget balance is under strain due to the nation's rising oil and gasoline import costs, especially since the Indonesian government continues to subsidize some of the country's fuel consumption. Therefore, it would be



better for Indonesia to reduce its reliance on oil imports. Two straightforward measures that may be taken to increase Indonesia's energy independence are to increase domestic oil output by promoting private investment in oil exploration and exploitation and concentrating on the development of alternative energy sources.

The government has been eager to improve the regulatory bottlenecks of the past bureaucracy, hazy regulatory and legal framework, as well as lack of transparent management. The reformed bureaucracy in the oil and gas governmental institutions has been taken to improve foreign investment perception of Indonesian regulations. Digitalization is one action that has been taken into action to deliver an applicable and friendlier bureaucratic system in oil and gas in Indonesia (ADB, 2020).

In Indonesia, The Oil and Natural Gas Law No. 22 of 2001 is the regulation that governs the oil and gas industry. On all of Indonesia's land, the state still maintains the mineral rights, and the government is in control of mining. The upstream and downstream activities that make up the oil and gas industry are governed and organized independently. Government Regulation No. 35 of 2004 regarding Upstream Oil and Natural Gas Business Activities, as most recently updated by Government Regulation No. 55 of 2009 on governance over the upstream activities, including exploration and exploitation controlled and monitored by SKK Migas. Government Regulation No. 36 of 2004 regarding Downstream Oil and Natural Gas Business Activities, downstream activities, which are governed by MEMR and BPH Migas, include processing, transportation, storage, and trading.

The government aims to transfer technology from oil and gas investment overseas. The country's long-term national development plan for 2005–2025 outlines Indonesia's overarching development objectives. Four phases of five years each make up this plan. The 2014 KEN, which will be implemented in the National Energy Plan (RUEN), outlines long-term objectives for the energy sector with an emphasis on resource diversification, environmental sustainability, and optimum use of domestic resources. By 2025, the policy aims

to have a mix of energy consisting of coal (30%), gas (22%), oil (25%), and new and renewable energy sources (23%). The government's 2020–2024 policy is focused on reducing reliance on foreign oil imports and encouraging domestic businesses and energy sources, particularly coal, geothermal, hydropower, and electric vehicles (Indonesia-Investments, 2022).

When overviewing fiscal policies, the government has initiated efforts to increase long-term national oil and gas production to 1 MBOPD and 12 MMSCFD in 2030. However, a reference should be provided to support this claim. In oil and gas policies, several fiscal incentives have been implemented to encourage oil and gas companies to undertake exploration and exploitation activities, and to increase national production of oil and gas to boost non-tax revenues from natural resources. To encourage investors to invest their capital in the oil and gas upstream sector, the government revised Government Regulation (GR) No. 79 of 2010 to GR No. 27 of 2017 on Cost Recovery and Taxation in Upstream Business at the end of 2015. This revision was made to create a more attractive oil and gas upstream business in the midst of world competition tightness through tax deductions in exploration and exploitation periods, such as free of custom duty, VAT, and import tax.

In addition, the following stimulus and incentives proposed by SKK Migas have been approved and stated in the annex of the President of the Republic of Indonesia's speech on August 16, 2021: improvement of Tax facilities, improvement of Domestic Market Obligation (DMO) price of up to 100% for PSC Contractors using the cost recovery scheme, and exemption or reduction of the Branch Profit Tax (BPT), for instance, tax exemption if they reinvest their profits (dividend) in Indonesia and or tax rate based on tax treaties (reference). Regarding land regulation, the government has committed to equating conservation and oil exploration. In this regard, Forestry Law No. 41/1999 (and its amendments 1/2004 and 18/2013) prohibits oil and gas activities in protected forest areas, except where a government permit is obtained. GR No. 104/2015 allows projects, including oil and gas activities, to take place in protected forests deemed strategically important. Forestry area use will often also require land compensation transfers or compensation payments to local



landowners. A reference should be provided to support this information. This can be achieved through sustainable improvement of the one map policy in Indonesia to enhance land transparency management in oil and gas business exploration (Ramadani, Pakpahan, Pradana, Supriyanto, & Mardiyono, 2019).

6. Outlook for Oil and Gas Economy in Indonesia

Oil and other commodity prices may be impacted by a worldwide recession in 2023. Due to the extremely high inflation, which is at its highest level in 40 years and is currently being addressed by raising benchmark interest rates and tightening liquidity, the United States and Europe will undoubtedly face a very high risk of experiencing a recession. The disruption brought on by the COVID-19 epidemic initially led the central banks in the US and Europe to believe that inflation was only temporary. However, oil was also being utilized as a weapon of war when the conflict between Russia and Ukraine started to initiate. Oil and natural gas might increase slightly if the supply is interrupted by economic and military shocks. Energy prices, including those for coal, natural gas, and crude oil, have increased 2-4 times between mid-2022 and mid-2019 as a result of the energy crisis.

On the other hand, the Indonesian government has taken several actions to address the country's energy issues in the short term. These include continuing the Domestic Market Obligation (DMO) policy, allocating fossil energy subsidies totalling 650 trillion, and changing fuel prices to reduce subsidy obligations. However, a long-term solution is necessary to prevent an energy crisis in Indonesia in the future, as coal, oil, and gas sources are being depleted annually and there is pressure to combat the threat of climate change. Such a policy could change market expectations regarding the long-term government interest in fossil fuels, potentially encouraging private investment in alternative energy, including renewable energy sources. Such investment is necessary to support private investment in the manufacturing and service sectors in Indonesia.

The prices of fossil fuel and gas have been declining moderately in the past six months, inducing private and public petrol stations to sell gas and oil at more affordable prices to consumers. At least for Micro, Small & Medium Enterprises (M/SMEs), it means they can use energy at a relatively affordable prices to support their daily business activities.

Glossary

Term	Definition
BBL	Barrel of crude oil
BSCF	Billion Standard Cubic Feet
KB/D	Thousand Barrels per day
MB/D	Millions of Barrels per day
MBOPD	Thousand Barrels of Oil per day
MBOEPD	Thousand Barrels of Oil Equivalent per day
MMSCFD	Million Standard Cubic Feet per day
MMSTB	Million Stock Tank Barrels







INDONESIA:

FORECASTING OUTLOOK 2023-2024

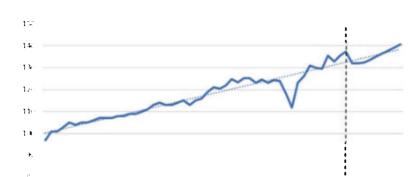
The Indonesian outlook is strongly dependent on the evolution of the international economy. In what follows, we develop the main scenario (baseline, probability 50%).

1. Three scenarios on international exogenous variables

We considered three scenarios for the international economy, and we specified the World Trade, the Oil price, and the Indonesia Rupiah as per the table below.

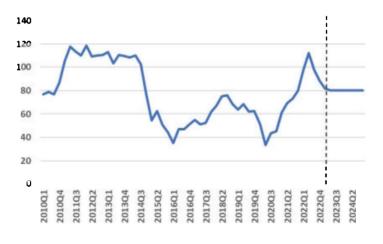
Table 1: International exogenous variables: 3 scenarios

	Baseline	Downside	Upside
International Variables	90%	35%	15%
World Trade	Slowdown in world trade in 2023 and recovery only in 2024, oscillating around the long-term trend	World trade in a more severe contraction, down to - 2% in 2023 and only slowly back to trend by the end of	World trade quick back to the long term trend already in 2023
Oil price	Oil stable around 75-80m USD/bar in 2023 and 2024	Oil price going back to over 100 USD/bar in the second half of 2023	Oil price going heading down to 65-70 USD/bar
IDR	Indonesian Rupiah stable vs. main currencies	Indones ian Rupiah depreciating sharply main currencies	Indones ian Rupiah s lightly depreciating vs. main currencies



Graphically, we can visualize the intuition behind the scenarios.

Graph 1: World Trade Index



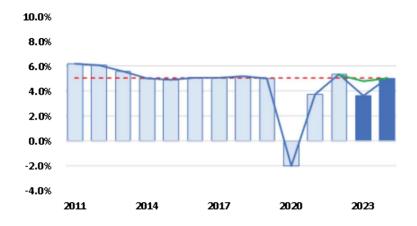
Graph 2: Oil price (USD/bar)

2. Economic projections: GDP and expenditure components

The long-term growth potential of the Indonesian economy has decreased to around 5% since 2014. The country has also managed to recover to that level after the COVID-19 crisis.



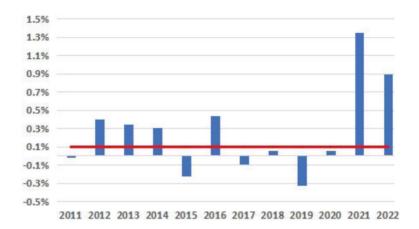
For 2023, the consensus forecast projects a marginal gap of a few decimals below the potential (about 4-5% below potential), soon reverting to 5% in 2024 (green line in the Graph 3).



Graph 3: Long-term growth (GDP Y/Y), 2023-2024 projections

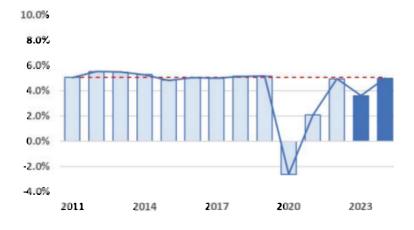
Based on our econometric analysis, the growth projection for 2023 is at 3.6%, about 30% below potential and back to potential only in 2024 (forecasts in bold rectangles in the Graph 3), for the following three reasons:

- 1. We expect that the anomaly regarding the errors in the computation of GDP will return to normal over the forecasting period, eliminating about one point of artificial growth scored in 2021–2022.
- 2. We consider a more conservative scenario in terms of world trade compared to the other forecasters, factoring in lower international growth.
- 3. We see specific weaknesses in consumption and investment.



Graph 4: anomalous contribution % of errors to GDP in 2021-2022 vs. the average

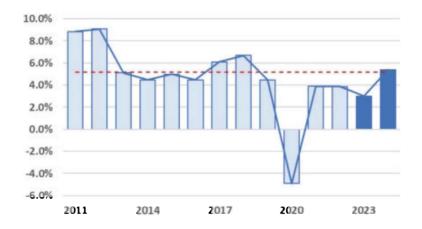
Private consumption is expected to grow by 3.6% in 2023 and 5% in 2024. The slowdown in consumption in 2023 depends on relatively high unemployment, over 5%, and a decrease in the purchasing power of salaries. Salaries are expected to grow by 2.7%, below the projected inflation rate of 3%. Retail sales already indicate a weakness in the slow dynamics of private consumption.



Graph 5: Private consumption (Y/Y), 2023-2024 projections



Gross fixed investments are forecasted to underperform in 2023, with a growth of 3.1% in the baseline scenario compared to between 2014 and 2019 at 5.1%.



Graph 6: Gross fixed investment (Y/Y), 2023-2024 projections

The main reasons for slower investment growth compared to the consensus are the following: 1. There is a general slowdown of the economy, with a non-negligible probability (35%) of running into a technical recession in the downside scenario; 2. There is contraction in revenues and profits due to slower growth, together with a constant margin over costs (considering both the cost of the raw materials and the stability of the unit labor cost, ULC. The ULC resulted from an increase in wages of 2.7%, which align with productivity; 3. An average margin of non-utilized capacity in the industrial sector, non-urging for an acceleration of investment.

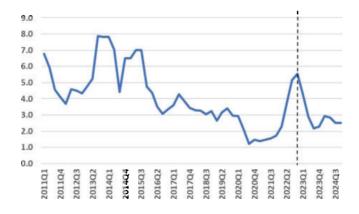
Both imports and exports are expected to slow down considerably in 2023 after the strong dynamics in 2022. However, they are projected to re-accelerate in 2024. The dynamics of imports and exports depend on world trade and the relatively high prices of coal and palm oil Indonesia exports. The contribution to GDP from external trade is thus confirmed to be positive and above the halfway point of growth for the projection period.



Graph 7: Import Y/Y (blue line) and Export Y/Y (red line), 2023–2024 Projections

3. Inflation and Monetary policy

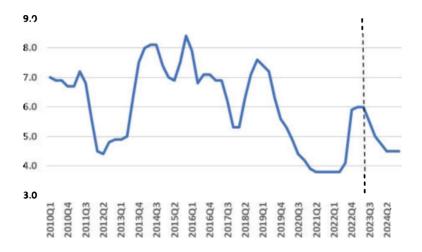
Inflation is expected to quickly and consistently reduce in the coming quarters. The stability of all elements of costs, in the context of deceleration of economic activity, will favor convergence toward 3% at the end of 2023 and its successive stabilization between 2.5% and 3% afterward. The core inflation can show some lag but will follow the reduction in the headline inflation index. A similar positive development is expected at the wholesale price level too.



Graph 8: Inflation (CPI Y/Y), 2023–2024 Projections



Based on the outlined inflation scenario, monetary policy should be on hold for 2023 and should observe a gradual decrease of interest rates in 2024 toward 4.5%.



Graph 9: 3-Month interest rate, 2023-2024 Projections

4. Risks of the scenario

The risks are tilted downward. The downside scenario with a 35% probability may bring an overall worsening macroeconomic outlook.

Table 2: Indonesia's Economic Outlook 2023–2024 Projections

	Actual			Projections		
	2014-2019	2020	2021	2022	2023	2024
Real GDP	5.0%	5.0%	-2.0%	5.3%	3.5%	5.1%
Private Consumption	5.1%	5.2%	-2.6%	4.9%	3.6%	5.0%
Government Consumption	2.9%	2.3%	4.2%	-4.6%	2.1%	2.1%
Gross Fixed Investment	5.2%	-4.9%	3.9%	3.9%	3.1%	5.0%
Export	2.1%	-8.3%	18.4%	16.2%	5.2%	9.2%
Import	1.1%	-17.5%	25.5%	15.1%	4.5%	9.0%
Inventories (contrib to GDP)	0.0%	-0.7%	0.1%	0.1%	0.0%	0.1%
Errors (contrib to GDP)	0.0%	0.1%	1.4%	0.9%	0.1%	0.1%
Inflation (CPI)	4,4%	1.9%	1.5%	4.2%	2.9%	2.7%
Interest Rate of Monetary Policy	7.0%	4.7%	3.8%	4.4%	5.6%	4.6%

The economy could experience a technical recession (with two consecutive quarters of GDP contraction in 2023) and growth by around 2%. As for the oil price increase, this scenario would imply a new rise in inflation, but more moderate than in the previous case and shorter in duration.

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INDEX

A	CECI, 30-32	supply chain, 73	
absorption: CPO, 63;	CEI, 30-32	developmental equality,	
industrial land, 55	CME, 36, 56, 105	movement, 56	
ADB, 3, 85, 89–90, 104	commodity: oil, 92;	diesel: consumption, 66,	
analysis: 2024 general	palm oil, 72–73;	75, 88; reference	
election, 38;	prices, 2, 21, 43	price, 67	
CME's 56;	Consumer: Confidence	digitalization, 90	
Commodity	Index, 30, 32, 36;	disinvestment, 25	
Market mentors,	Expectation Index,	disruption: creative	
70; oil exploration,	30; Price Index,	entrepreneurial,	
83; trade-off 40, 44	9–10; sentiment, 39, 51	27; gas supply, 75,	
APOLIN, 63	*	92; market, 65,	
APROBI, 74	COVID-19, 9, 36, 38–	71; supply chain,	
automotive, industry, 55	39, 42, 69, 71, 74, 78, 88, 92, 97, 105	10, 69	
	, , , ,	DMO, 75, 91–92	
В	CPI, 8–9, 88, 101	DTP, 50–51	
bauxite, exports ban, 43	CPO, 58–72, 74–75	_	
BCI, 32–33	Crisis: 1998 financial,	E	
	88; 2008 financial,	efficiency, energy, 89	
BI, 30, 34–35, 49, 104	28; COVID-19,	efficiency, energy, 89 election, general, 38,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63,	28; COVID-19, 97; economic, 9,		
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75	28; COVID-19,	election, general, 38,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74	28; COVID-19, 97; economic, 9, 18, 36, 48; energy,	election, general, 38, 42, 44	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58,	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93;	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21–	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21– 22, 24; household,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81 ESDM, 74, 77–79,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61 BPH, 90	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21–	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61 BPH, 90	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21– 22, 24; household, 7, 48–49; private,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81 ESDM, 74, 77–79,	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61 BPH, 90 BPT, 91	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21– 22, 24; household, 7, 48–49; private, 20–21, 27; public,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81 ESDM, 74, 77–79, 83–85, 105, 107	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61 BPH, 90 BPT, 91 C capitalism, 27	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21– 22, 24; household, 7, 48–49; private, 20–21, 27; public, 21, risk, 20–22,	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81 ESDM, 74, 77–79, 83–85, 105, 107 EU, 69, 71–74, 79	
BI, 30, 34–35, 49, 104 biodiesel, 58, 62–63, 66–67, 69, 72–75 biofuel, 58, 66, 74 blending, biodiesel, 58, 66 BPDPKS, 61 BPH, 90 BPT, 91	28; COVID-19, 97; economic, 9, 18, 36, 48; energy, 92; unemployment, 19 D debt: government, 21– 22, 24; household, 7, 48–49; private, 20–21, 27; public, 21, risk, 20–22, 26–28	election, general, 38, 42, 44 Energy, 55, 58, 63, 71, 76, 78–79, 81, 85, 88–93, 104–108 enterprise: micro, small & medium, 93; state-owned, 81 ESDM, 74, 77–79, 83–85, 105, 107 EU, 69, 71–74, 79 expectation: consumer,	



expenditure, 3–5, 22–24, 26, 51, 97 exploitation, oil, 90–91 exploration, oil, 83, 85, 87, 90–92 exportation, ban, 43	fuel, 58; oil and gas, 77–82, 89–91; tax, 91 importer, oil and gas, 76, 78, 80 inflation, 5, 8–15, 17–20, 26–27, 34, 36–37,	M macroeconomic, 1–3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 102, 105	
F FAO, 59 fiscal, 2, 9–11, 18, 24, 26, 36–37, 48, 91 Forestry Law, 91 fossil, fuel, 76, 92–93	39, 49, 56, 75, 92, 99, 101–103, 105–106 innovation: entrepreneurial, 27; financial, 27–28; investment, 85 instability, financial, 20– 21, 28; regulatory, 87	MEMR, 90 Ministry: Economic Affairs, 58; Energy and Mineral Resources, 78–79 Minsky, hypothesis, 28 monetary, policy, 8–11, 15–18, 34, 36–37, 39, 48–50, 57,	
gap, price, 66–67 GAPKI, 59–64, 68–71, 74 gasoil, 69	intervention, OPEC,	101–102 MSPO, 72 N Nusantara, capital	
103, 107 geopolitical, 42, 69	85, 87, 89–90, 92, 98, 100, 106–107 investor, 41–42, 75, 87, 89, 91 IRPI, 51–53 ISCC, 72	project, 56 O OECD, 32–33 oleochemical, 58, 62–65	
GOI, 74–75 H household: debt, 7, 20, 28, 48–49	ISPO, 72 K Keynesian, 25	Omnibus Law, 2, 39–40, 42, 50 OPEC, 80–81, 108	
hydropower, 91 Hypothesis, Minsky's 28	L LNG, 80 lockdown, 4, 9–10, 12,	palm, oil, 2, 43, 50, 58–61, 63, 65–67, 69–75, 100 PASPI, 69	
IEA, 79, 88–89, 106 IESR, 66–67 IMF, 20, 75 import: CPO, 70–73;	15, 20–22, 30–32, 36, 50 LPEM, FEB UI, 3, 17, 20–21	Pertamina, 81–82 PGN, 82, 84 PMI, 34–36, 105 policymakers, 24, 57	

populism, 38–41 populist, 41, 44 pragmatism, 38–41, 44 producer: palm oil, 59, 63, 70, 80–82; prices, 14–15 projection: economic growth, 97–98,	policies, 71; energy sources, 81, 89, 91–92 residential, real estate, 51–53, 57 RRR, 86 RSPO, 72 RUEN, 90	subsidy, fuel, 41–42, 92 sustainability, 72–74, 90 T tension: monetary, 10–11, 14; trade, 39–41, 43
102; import- export, 101; Indonesia's GDP, 2; investment, 100; private consumption, 99 Proyek Strategis Nasional, 56 PwC, 76, 82–83, 87	S sentiment: consumer, 51; industrial, 39 SKK-Migas, 82, 85–87, 90–91 slowdown: consumption, 99; economic, 19, 100; industrial land absorption, 55; investment, 43	U ULC, 100 unemployment, crisis, 19, 25–26, 88, 99 V VAT, 50–51, 91 vehicle, electric, 55, 89, 91 verstehen, 29
RAPBN, 51 rapeseed, oil, 59, 69	smallholder, 58–59, 61, 74	W
recession, 8, 14–15, 18–19, 38, 48–49, 74, 92, 100, 103 refineries, 76–77, 81–82 renewable: energy	SMEs, 93 spatial, oil location, 83–84 stimuli: fiscal, 9–10, 48; government, 50–51	WEF, 80, 108 WTO, 74



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