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Strategic Insight

Point Break

Vietnam CPI faces temporary pressure amid the global trend of "inflation shock – monetary tightening – slower GDP"

Global central banks are in a difficult situation in conducting monetary policies during the time of many uncertainties about future developments of the pandemic, potential escalating geopolitical tensions, and how severe ongoing inflation shock will be evolving in 2022 – 2023. However, in our opinion, this trend will not severely impact Vietnam's economy. Regarding the impact of the global commodity price surge on Vietnam CPI, we estimate that the current value of Brent price could push 2022 inflation to exceed the government target of 4%. However, implementing well-established tools allows the Vietnam government to mitigate external shocks proactively. To sum up, we forecast that the global commodity surge would create temporary pressure on Vietnam inflation.

The stock market reacts to inflation pressures

In the short term, the pressure from increasing world commodity prices to domestic inflation is still intact. However, inflation will still be under control and the market trend may form a short-term correction rather than a downtrend like 2008 and 2011 before. Some industries that can benefit from rising commodity prices can be the Oil and Gas Industry and the Material industry.

Midstream zigs while downstream zags

The global energy market is being rocked by the fallout from Russia's invasion of Ukraine. If the oil prices sustain at these heights, the climate could put a reward on the upstream and midstream companies in the energy chain whose output selling prices are moving in the same direction. On the contrary, the downstream players could face mounting cost and surging difficulties in the cost pass-through strategy. We view GAS as a good defensive play against the inflationary pressure. We recommend a conservative approach towards fertilizer, power, and steel industries.

KIS leading economic index (USD bn, %, % QoQ, % YoY)

	2Q21	3Q21	4Q21	1Q22F	2020	2021	2022F
GDP	6.57	(6.02)	5.22	6.00	2.91	2.58	7.50
Trade balance	(3.75)	(1.00)	5.38	1.50	19.86	4.00	6.00
CPI	2.67	2.51	1.89	2.50	3.24	1.84	3.50
Discount rate	2.50	2.50	2.50	2.50	2.50	2.50	2.50
VND/USD	23,043	22,878	22,787	22,900	23,252	22,936	23,200
US GDP	6.55	2	6	3.9	-3.4	5.6	3.9
China GDP	7.9	4.9	3.2	4.15	2.2	8	5.2

Source: KIS

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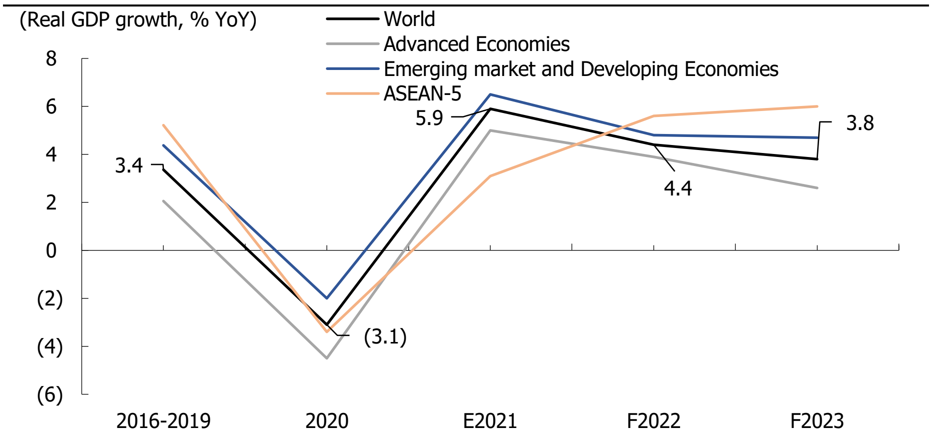
I. Vietnam economy in strong position against global headwinds

1. The future of global monetary trend – The divergence among central banks after the super-easing monetary era

World economy is on fast recovery, causing global supply chain bottlenecks

The world is experiencing the 2nd year of the COVID-19 pandemic at the beginning of 2022, with its bloodline the economy is more and more adapting to the new "pandemic-era" normalization. Back in the time of early-2020, while the global economy was in deep freeze and on the brink of a severe recession due to unprecedented social-distancing restrictions, governments with massive fiscal support packages and central banks with super-easing monetary policies were the ones that brought the economy back from trough to a like V-shaped recovery.

Figure 35. Global and regional economic recovery after 2 years of pandemic



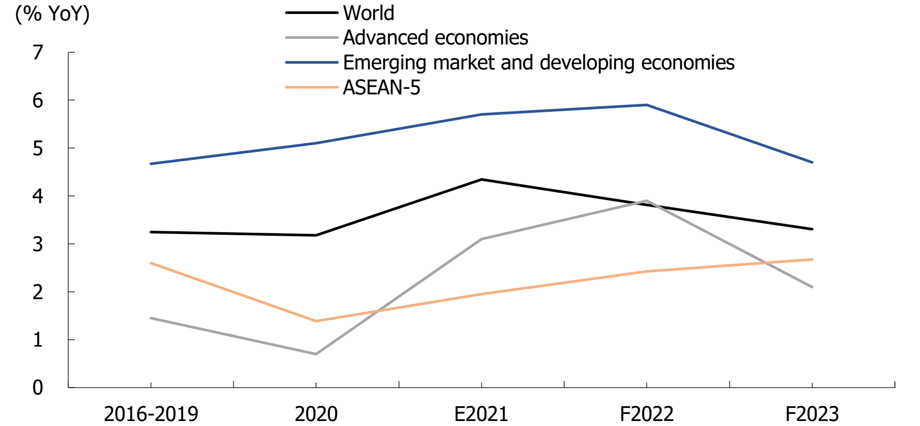
Source: IMF "January 2022 World Economic Outlook" Update, KIS

But, there are always two sides of a coin.

Inflation shock is a price for a "V-shaped" economic recovery

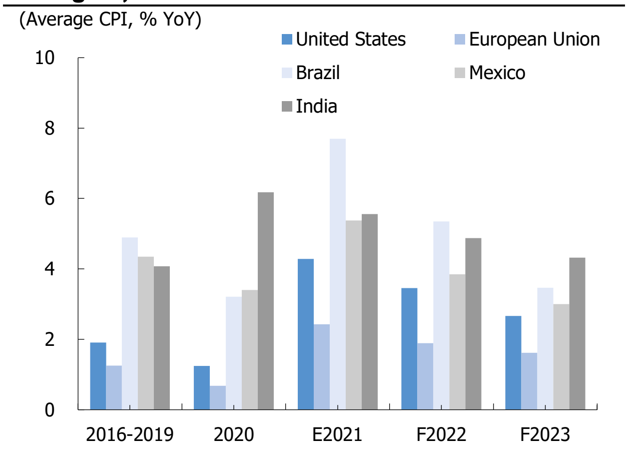
As an evitable consequence of the fast economic recovery to a pre-pandemic long-term potential growth trend, the economy has been suffering the largest inflation shock in decades, and it seemed to be underestimated by the policymakers, notably the Fed (U.S. Federal Reserves) and ECB (European Central Bank) until recently. There are many factors that lead to an underestimation of the inflation shock during the pandemic period, including: (1) the recovery momentum of most economies, especially the U.S. economy, was faster than expected before; (2) Consumption demand of people continues to increase strongly even after the withdrawal of COVID-19 fiscal support, exacerbating the demand-supply imbalance that has existed since early days of the pandemic. Then, we are now having decades-high inflation surges in many countries since the Great Inflation of 1965-1982.

Figure 2. Inflation surpasses pre-pandemic levels in advanced economies and emerging market & developing economies, peaking at 2021 - 2022



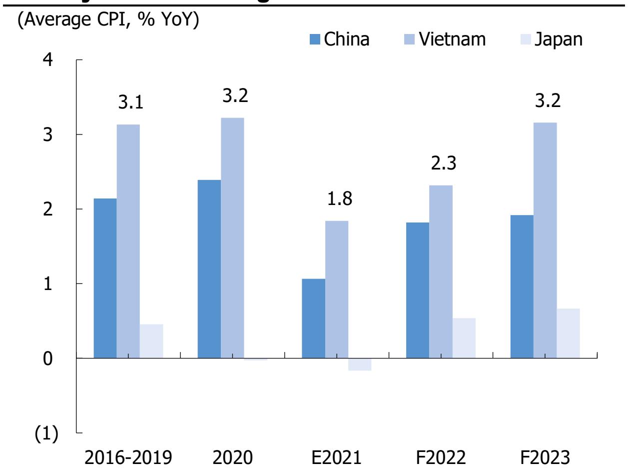
Source: IMF "October 2021 World Economic Outlook" Report and "January 2022 World Economic Outlook" Update, KIS

Figure 3. Inflation surges and peaks at 2021 in U.S., EU region, and Latin America EMs



Source: IMF "October 2021 World Economic Outlook" Report, KIS

Figure 4. Inflation remains low in other countries, notably manufacturing-oriented economies



Source: IMF "October 2021 World Economic Outlook" Report, KIS

Some central banks have to quickly tighten monetary conditions to cope with inflation

Central banks have to do something with it. The inflation crisis this time is caused by both cost-push (global supply bottlenecks) and demand-pull factors (pent-up demand from goods to services). As a matter of fact, few central banks in emerging markets, such as the BRICS group (excluding China) and South Korea are among the first ones making early moves since 2H21. However, despite these hawkish monetary stances, financial conditions across the globe have yet seen marked changes from the super-easing levels. In Figure 5 below, the financial conditions indexes are still around the bottom levels, even easing further from late-2021 due to the emerge of Omicron variant.

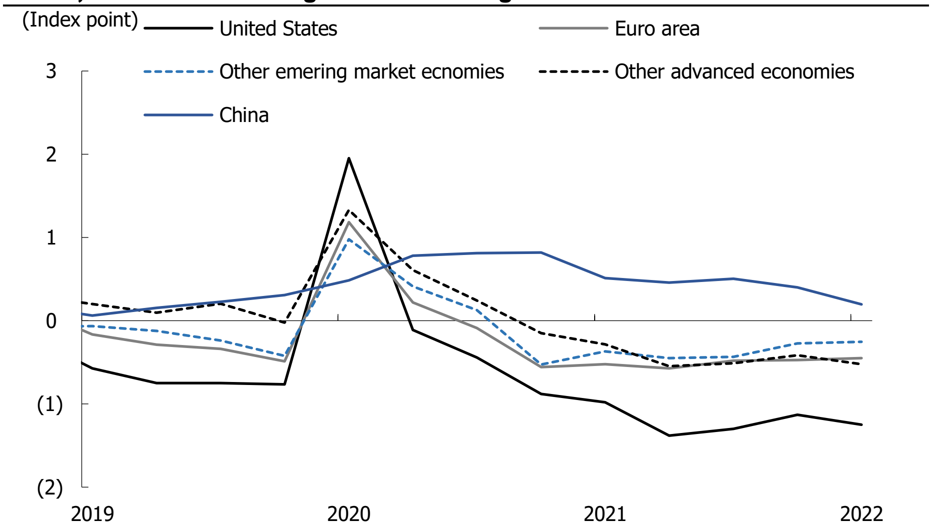
Table 1. Top central banks turn hawkish stance aggressively in 2021

	Inflation situation					Central bank reaction			
Period	2016-2019	2020	E2021	F2022	F2023	Policy rate, beginning-2020	Policy rate, end-2020	Policy rate, end-2021	Policy rate, end-2022 (*)
Brazil	4.9	3.2	**7.7**	5.3	3.5	4.50	2.00	9.25	12.25
Russia	4.5	3.4	**5.9**	4.8	4.5	6.25	4.25	8.50	20.00
India	4.1	**6.2**	5.6	4.9	4.3	4.00	3.00	4.00	4.50
Mexico	4.3	3.4	**5.4**	3.8	3.0	7.25	4.25	5.50	7.25
Korea	1.2	0.5	**2.2**	1.6	1.6	1.25	0.50	1.00	1.75

(*): Median central banks policy rates estimates of bloomberg economists' survey

Source: IMF WEO database, Bloomberg economists' survey of central banks policy interest rates, KIS calculates and compiles

Figure 5. Global financial conditions still remain around the super-easing levels, even further easing since the emerge of Omicron variant in late-2021

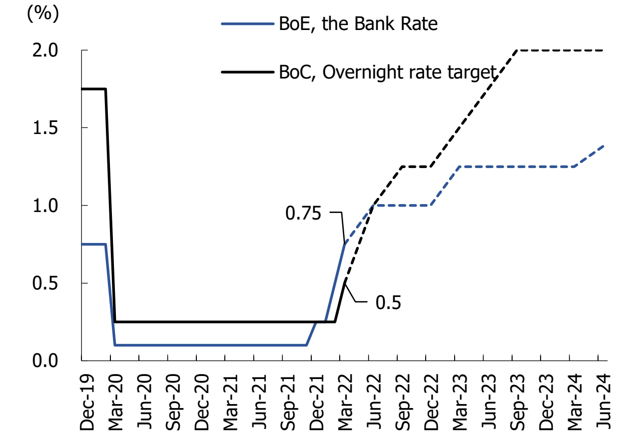


Source: IMF "January 2022 World Economic Outlook" Update and IMF "October Global Financial Stability Report", KIS

But, more and more key global monetary policymakers are signaling a remarkable turn in their views of the monetary path in 2022 – 2023 to cope with inflation concerns. For instance, the Fed, the Bank of Canada (BoC), and the Bank of England (BoE) are signaling the monetary tightening process unexpectedly, in which the two latter ones already raised their policy rates recently, in March and February, respectively.

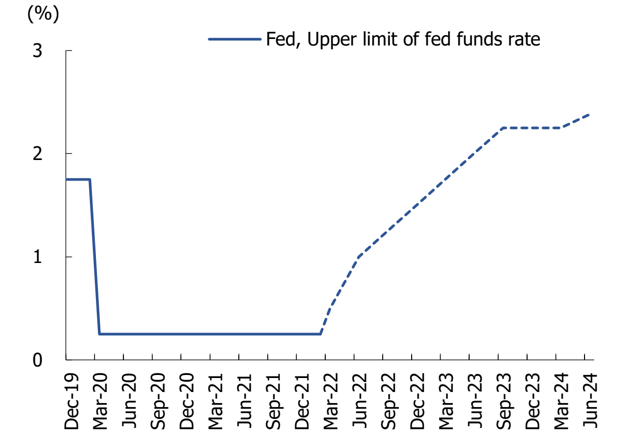
For the U.S. case, the Fed in the economic projections of December FOMC's meeting is expected for approximately 3 times hikes of 25 basis points on fed funds rate. However, just a month later, the Fed Governors totally reversed their forecast, acknowledging that inflation is likely to last longer and more serious with: (1) energy prices anchored at high levels. due to the increased supply-demand imbalance in the energy market; (2) the housing sector also witnessed a prolonged supply-demand imbalance, accelerating the inflation trend in both prices and rental rates for property assets (the shelter cost contributed more than 30% of the US CPI basket); (3) upward pressure to increase wages with a serious labor shortage in the services sector, which is reopening faster than expected.

Figure 6. BoC and BoE recently start tightening



Dashed lines represent the median projection from Bloomberg economists' survey
Source: Bank of England, Bank of Canada, Bloomberg economists' survey, KIS

Figure 7. U.S. Fed will soon join the hawkish group



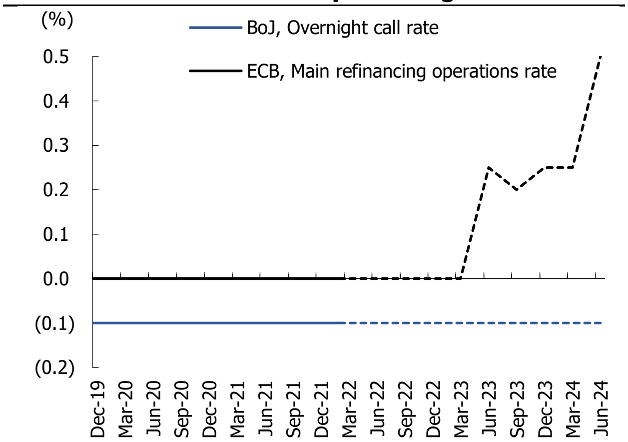
Dashed lines represent the median projection from Bloomberg economists' survey
Source: U.S. Federal Reserve, Bloomberg economists' survey, KIS

Other central banks hold a dovish stance, maintaining easing monetary policies

On the other hand, the central banks of some yet-fully-recovered economies, including Japan and the European Union, continue to maintain their ultra-easy monetary policies to be able to support the economy for longer, as consumer demand in these countries is reported to remain weak.

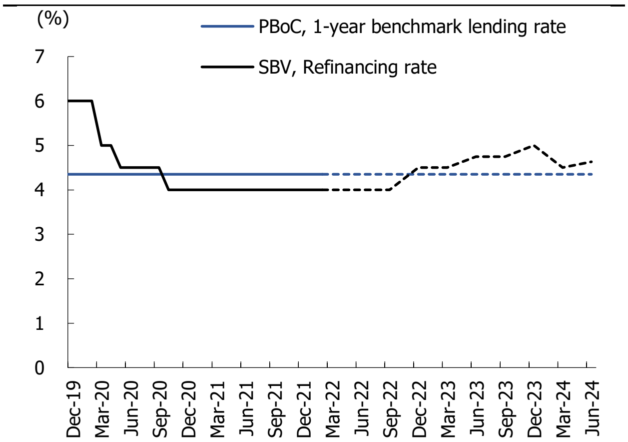
For other economies severely affected by the COVID-19 outbreak in 2H21 and 2022, e.g. ASEAN-5 and China, the monetary policymakers there will likely remain the dovish stance to stimulate those economies. In the case of Vietnam, we expect that the policy rate will remain the same or tend to be loosened so that it can harmonize with the massive fiscal stimulus package that is about to be implemented in 2022 – 2023.

Figure 8. ECB and BoJ likely remain monetary conditions at the current super-easing levels



Dashed lines represent the median projection from Bloomberg economists' survey
Source: Bank of England, Bank of Canada, Bloomberg economists' survey, KIS

Figure 9. PBoC and SBV also likely stay dovish stance to stimulate the still-wounded economies



Dashed lines represent the median projection from Bloomberg economists' survey
Source: Bank of England, Bank of Canada, Bloomberg economists' survey, KIS

It can be seen that the current global monetary trend is diverging, no longer sharing the ultra-easing trend like in 2020 - 2021. At the current time, central banks have faced "unknown uncertainties" about (1) the sustainability of the economic recovery; (2) a prolonged inflation shock; (3) other risks related to a possibly-new and more-dangerous COVID-19 variant and geopolitical tension between Russia versus Ukraine, European countries and the U.S.

But, one thing remains true that the monetary tightening process is not a must for every central bank.

2. Impact of global "inflation shock - monetary tightening – slower growth" trend in 2022 – 2023 to Vietnam's economy: Vietnam stands out to be a potential beneficiary of this trend

In our opinion, Vietnam's economy is in a strong defensive position against the global "inflation shock - monetary tightening – slower growth" trend. It is even more optimistic to think about that Vietnam is likely to be a potential beneficiary thanks to having a great competitive advantage in attracting FDI & FII investment in the period of 2022 - 2023 and in the long term. Our argument is based on the following theses:

Vietnam may become a bright spot in the world economy with potentially high economic growth

First, thanks to the upcoming fiscal – monetary expansion, it is with high possibility that Vietnam will become one of the bright spots in the world economy in 2022 – 2023 versus other emerging markets and developing economies. With the economy is expected to grow to 7.4% in 2022 and 6.7% in 2023, Vietnam is in the top countries with the highest potential growth after the pandemic, expectedly returning successfully to the pre-pandemic long-term growth trend.

In addition, Vietnam's inflation would likely remain stable at a safe level (lower than SBV's 4% inflation target), with inflation expected in 2022-2023 during the rapid economic recovery period at only 3.0% - 3.5%. Besides, in terms of monetary policy path in the near term, SBV is likely to continue implementing easing monetary policy in the next 2 years in order to harmonize with the upcoming fiscal support package. Except for a special situation that the PBoC may have to implement further monetary easing to support the weak economy (due to the recent housing crisis), macro indicators and economists' expectations are showing that Vietnam is among a few countries that could preserve the easing fiscal - monetary policies in the next 2 years.

Table 2. Comparisons between Vietnam versus other FDI-attractive emerging & developing countries, about real GDP growth – inflation level – and future's changes in monetary policy

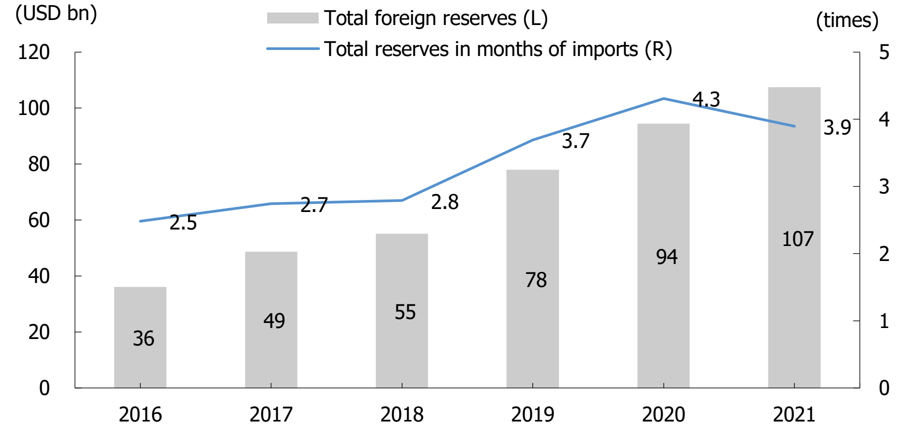
	Economic growth, real GDP % YoY					Inflation, average CPI % YoY					Changes in policy rates from end-2020 (basis point)		
Period	2016-2019	2020	E2021	F2022	F2023	2016-2019	2020	E2021	F2022	F2023	2021	F2022	F2023
Selected EM & DM economies													
China	6.6	2.2	8.1	5.2	5.2	2.1	2.5	0.9	2.2	2.2	-	(5)	(5)
India	7.4	3.7	(6.6)	9.1	7.8	4.0	6.6	5.1	5.4	5.0	-	55	110
Saudi Arabia	0.9	(4.1)	2.6	5.7	3.1	0.4	0.9	3.1	2.0	2.0	n/a	n/a	n/a
United Arab Emirates	2.5	(3.5)	2.3	4.5	3.7	1.2	(1.0)	0.1	2.1	2.0	n/a	n/a	n/a
South Africa	0.9	(6.4)	5.5	1.9	1.8	5.1	3.3	4.6	5.0	4.5	25	110	175
Selected Latin America economies													
Mexico	1.7	(8.2)	4.8	2.1	2.1	4.4	3.4	5.7	5.3	3.8	125	185	210
Argentina	(1.0)	(9.9)	9.6	2.5	2.0	38.4	36.1	48.5	52.1	44.4	-	460	(185)
Brazil	0.3	(3.9)	4.8	0.5	1.8	4.9	3.2	8.3	7.6	4.0	725	265	(90)
Chile	1.9	(5.8)	12.0	2.5	1.7	2.7	3.1	4.5	7.2	3.5	350	360	110
Colombia	2.4	(6.8)	10.6	4.4	3.0	4.7	2.5	3.5	5.9	3.6	125	375	305
Peru	3.2	(10.9)	15.9	3.0	3.2	2.5	1.8	4.0	4.5	3.0	225	165	115
Selected ASEAN economies:													
Vietnam	**6.8**	**2.9**	**2.6**	**7.4**	**6.7**	**3.1**	**3.2**	**1.8**	**3.0**	**3.5**	**-**	**40**	**85**
Indonesia	5.1	(2.0)	3.7	5.2	5.2	3.3	2.0	1.6	3.0	3.1	(25)	60	130
Malaysia	4.8	(5.6)	3.1	6.0	5.0	1.9	(1.1)	2.5	2.3	2.2	-	45	90
Thailand	3.5	(6.2)	1.6	3.9	4.2	0.7	(0.8)	1.2	2.2	1.2	-	5	60
Philippines	6.5	-9.6	5.6	6.9	6.3	2.9	2.4	3.9	3.45	3.2	-	45	90

Source: IMF WEO database, Bloomberg economists' survey, central banks of selected countries, KIS calculates and compiles

Vietnam's currency is highly stable and appreciate modestly in 2022 - 2023

Second, a strong foreign reserve would be a huge advantage for SBV to stabilize VND in the stronger USD environment. Data showed that SBV's foreign reserves increased markedly in 2018 – 2021, reaching nearly USD107bn thanks to a huge trade surplus in this period, equivalent to total foreign reserves in months of imports of approximately or above 4 months. Furthermore, VND is also a currency that holds two tremendous advantages versus other currencies, including (1) exhibiting low volatility compared to other currencies as the standard deviation of VND daily changes in the highly volatile market conditions during 2020 – 2021 was just 0.19%; (2) only VND and CNY appreciated against the greenback in 2020 – 2021, and VND is expected to further appreciate in 2022 – 2023.

Figure 10. Vietnam is holding strong foreign reserves for exchange rate shock



Source: IMF database, Vietnam's Customs, Bloomberg, KIS

Table 3. Volatility of comparable currencies & currencies performances in 2020 - 2023

	Volatility of currencies (*)	Currency appreciation/depreciation against USD, change from end of previous year			
		2020	2021	2022	F2023
Selected EM & DM economies					
China	0.34	6.3	2.6	(1.5)	2.0
India	0.41	(2.4)	(1.7)	(1.8)	1.2
Saudi Arabia	0.03	(0.0)	(0.1)	0.1	n/a
United Arab Emirates	0.00	-	0.0	0.1	n/a
South Africa	1.37	(4.6)	(8.7)	(0.4)	3.6
Selected Latin America economies					
Mexico	1.38	(4.9)	(3.4)	(1.3)	(0.1)
Argentina	0.22	(40.5)	(22.1)	(41.1)	(38.6)
Brazil	1.54	(29.0)	(7.3)	1.5	6.2
Chile	1.03	5.3	(19.7)	4.2	0.4
Colombia	1.15	(4.7)	(19.0)	3.2	3.8
Peru	0.78	(9.2)	(10.6)	6.0	(8.2)
Selected ASEAN economies					
Vietnam	**0.19**	**0.3**	**1.2**	**1.0**	**0.9**
Indonesia	0.83	(1.3)	(1.4)	1.1	0.4
Malaysia	0.35	1.7	(3.6)	0.6	2.4
Thailand	0.49	0.7	(11.5)	3.8	3.1
Philippines	0.32	5.2	(6.2)	(1.6)	2.3

(*) Currency volatility is measured by standard deviation of daily changes of fx rates in 2020 – 2021 period.
Source: Bloomberg economists' survey, Bloomberg, KIS calculates and compiles

Vietnam's economy is in strong position to hedge against global inflation shock

Third, Vietnam's economy is maintaining a strong position against the current inflation shock spreading globally, thanks to the well-structured economy against cost-push goods inflation. To be more specific, the structure of Vietnam's economy is export-oriented for goods and agricultural products, which means it was considerably less vulnerable to goods & foodstuff inflation pressure. Besides, the government also has effective tools to control inflation in some other sectors, such as Healthcare, Education, and Utilities. In addition, other government policies, including a 2% VAT reduction for most products (Decree 15/2022/ND-CP) along with the resolution bill of the environmental protection tax for oil and petroleum products (reduction of about 3.5% - 8.0% of oil & petroleum prices) will be protective factors in restraining inflation pressure in 2022. Besides, data for sales for a large part of the services sector is showing still-weakened demand, and the impact of pent-up consumption demand is currently not visible in a large part of services activities.

Table 4. Vietnam's government effectively controlled inflation pressure on several sectors in 2020 - 2021

Inflation on these sectors below are partially controlled by the government	2020 - 2025 Weight on CPI basket	Inflation, average CPI % YoY		
		2016-2019	2020	2021
Housing and construction materials	18.8	3.3	1.8	1.8
Medicine and health care	5.4	21.8	2.2	0.2
Postal services & Telecommunication	3.1	(0.6)	(0.6)	(0.8)
Education	6.2	6.9	4.1	1.9
Core Inflation Rate		**1.7**	**1.8**	**0.8**

Source: GSO, KIS calculates and compiles

It can be affirmed that the policymakers have effective tools to reduce pressure on inflation in the short term, of which a number of them are and will be implemented soon in 2022. Keep in mind that most global monetary authorities are expected global supply bottlenecks to be eased from 2H22, which means global inflation pressure may be at its peak in 1H22. Having the advantage of effectively controlling the impact of global inflation shock pressure on domestic inflation and production & consumption in 2022-2023 will be a great advantage for boosting export and attracting FDI & FII investment.

Table 5. Comparisons between Vietnam versus other FDI-attractive emerging & developing countries, about real GDP growth – inflation level – and future's changes in monetary policy

	Economic growth, Real GDP % YoY					Inflation, CPI % YoY					Changes in policy rates from end-2020 (basis point)		
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Selected EM & DM economies													
China	6.6	2.2	8.1	5.2	5.2	2.1	2.5	0.9	2.2	2.2	-	(5)	(5)
India	7.4	3.7	(6.6)	9.1	7.8	4.0	6.6	5.1	5.4	5.0	-	55	110
Saudi Arabia	0.9	(4.1)	2.6	5.7	3.1	0.4	0.9	3.1	2.0	2.0	n/a	n/a	n/a
United Arab Emirates	2.5	(3.5)	2.3	4.5	3.7	1.2	(1.0)	0.1	2.1	2.0	n/a	n/a	n/a
South Africa	0.9	(6.4)	5.5	1.9	1.8	5.1	3.3	4.6	5.0	4.5	25	110	175
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Mexico	1.7	(8.2)	4.8	2.1	2.1	4.4	3.4	5.7	5.3	3.8	125	185	210
Argentina	(1.0)	(9.9)	9.6	2.5	2.0	38.4	36.1	48.5	52.1	44.4	-	460	(185)
Brazil	0.3	(3.9)	4.8	0.5	1.8	4.9	3.2	8.3	7.6	4.0	725	265	(90)
Chile	1.9	(5.8)	12.0	2.5	1.7	2.7	3.1	4.5	7.2	3.5	350	360	110
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Indonesia	5.1	(2.0)	3.7	5.2	5.2	3.3	2.0	1.6	3.0	3.1	(25)	60	130
Malaysia	4.8	(5.6)	3.1	6.0	5.0	1.9	(1.1)	2.5	2.3	2.2	-	45	90
Thailand	3.5	(6.2)	1.6	3.9	4.2	0.7	(0.8)	1.2	2.2	1.2	-	5	60
Philippines	6.5	-9.6	5.6	6.9	6.3	2.9	2.4	3.9	3.45	3.2	-	45	90

Source: IMF WEO database, Bloomberg economists' survey, central banks of selected countries, KIS calculates and compiles

Consumer demand in Vietnam's top trading partners are not likely affected by the tightening monetary conditions

Fourth, the consumption demand of major export partners is expected not to be strongly affected by the global monetary tightening process. With the economy dependent on goods export-oriented, Vietnam's economy will considerably depend on the strength in consumption demand from major export markets, including China, Japan, South Korea, and especially the U.S. and European Union (two major markets for global final consumption). Among these countries, only the Bank of Korea is conducting early tightening and the Fed is preparing for this tightening process from the upcoming March FOMC meeting. Meanwhile, the Bank of Japan, the European Central Bank, and the People's Bank of China are very likely to maintain the current super-easing monetary policies at least until late 2023.

For the case of the U.S., in the most recent speech of the Fed's Governor Christopher J. Waller on February 24, the current macro data of the U.S. economy is showing evidence that the current employment is getting nearly back to the long-term potential employment level, and consumer demand continued to remain strong under pent-up demand in both goods and services consumption. This means that consumer demand from the most important export market is secured in the near term.

Table 6. Impacts of changes in monetary policies from major trading partners on Vietnam's trade sector in 2022 - 2023

Top trading partners	Export		Import		Implied monetary conditions in 2022 - 2023 (*)	Expected impact on the trade sector
	2021 (USD bn)	Weight (%)	2021 (USD bn)	Weight (%)		
The U.S.	96,293	28.7	15,270	4.6	Maintaining super-easing monetary conditions	Positive
European Union	40,122	11.9	16,892	5.1	Tightening monetary conditions	Neutral
China	56,010	16.7	109,875	33.2	Maintaining super-easing monetary conditions	Positive
South Korea	21,945	6.5	56,155	17.0	Tightening monetary conditions	Likely negative
Japan	20,129	6.0	22,649	6.8	Further monetary easing	Positive

Source: VN Customs, GSO, central banks of selected countries, KIS calculates and compiles

CONCLUSION:

It is certain that global central banks will be in a difficult situation in conducting monetary policies during the time of many uncertainties about future developments of the pandemic, potential escalating geopolitical tensions, and how severe ongoing inflation shock will be evolving in 2022 – 2023.

Advanced economies with economic growth recovering to their long-term potential economic growth (such as the US, Canada, and the UK) and experiencing decades-high inflation will be under pressure to end the ultra-easing monetary conditions in 2022 - 2023. Some other regions, including South America emerging markets with high inflation pressure (typically Brazil & Mexico) and other areas affected by geopolitical tensions Russia - Ukraine (typically Russia, Ukraine, Poland, Czech Republic, Hungary, etc.), will run aggressive monetary tightening to cope with escalating inflation even though these economies are yet fully recovered.

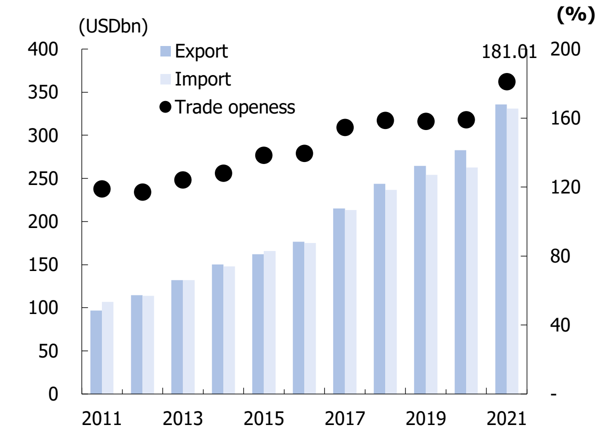
On the other hand, other developed countries that have not recovered to the pre-pandemic long-term potential growths, typically Japan and the European Union, will continue to maintain super-easy monetary policies to stimulate the economy. For the emerging and developing countries that were heavily impacted by the COVID-19 pandemic during the 2H21 period, and for the case of China with the recent housing crisis, those central banks will likely remain unchanged or further loosen, including China, Vietnam, and Thailand.

With Vietnam's economic growth considerably dependent on FDI inflows as well as consumer demand in major export markets (including the U.S., EU, Japan, South Korea, China), we strongly believe that the impact of the monetary decisions of those central banks in 2022-2023 as well as "surging inflation - monetary less easing - slower economic growth" global trend will not have a great impact on Vietnam's economy. On the contrary, it is likely to be a potential beneficiary thanks to having a great competitive advantage in attracting FDI & FII investment in 2022 - 2023 and in the long term.

II. Vietnam inflation under the global commodity surge

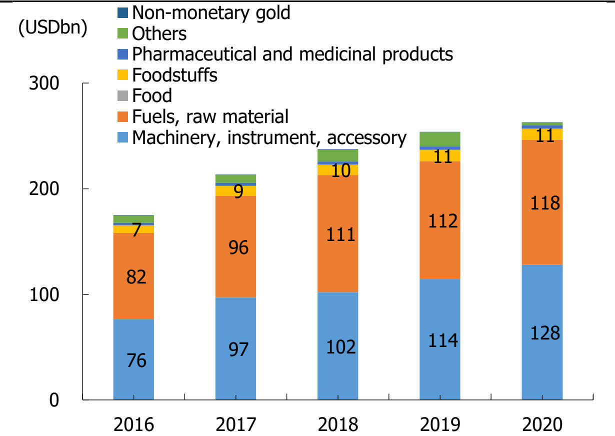
Different natures between inflation in western countries and Vietnam. The Vietnam consumer price index is under pressure from global development due to the connection between domestic commodity markets and outside. However, there are significant differences in nature and reason between Vietnam's CPI and Western countries, typically the U.S.

Figure 11. Vietnam trade openness by year



Source: GSO, KIS

Figure 12. Vietnam's import by commodity group

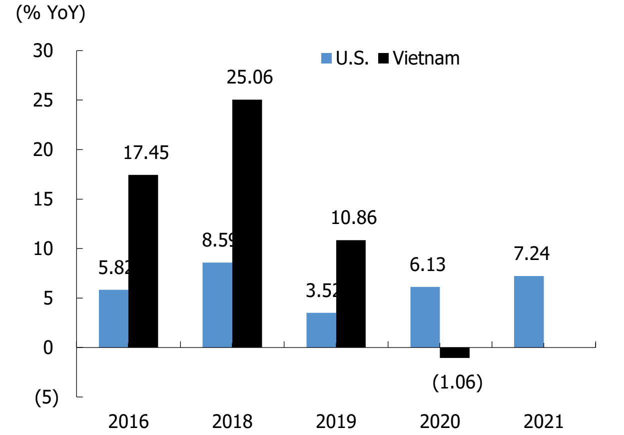


Source: GSO, KIS

Current U.S. inflation was attributable to the supply bottleneck and the pent-up demand resulting from COVID-19 and supportive fiscal and monetary policies. We can see that, even in the pandemic, U.S. national income per capita still significantly rose by 6.13% YoY in 2020 and 7.24% YoY in 2021 when the government provided financial support for impacted employees via multiple programs. A healthy financial condition strengthens the buying power of U.S. consumers, resulting in strong domestic demand.

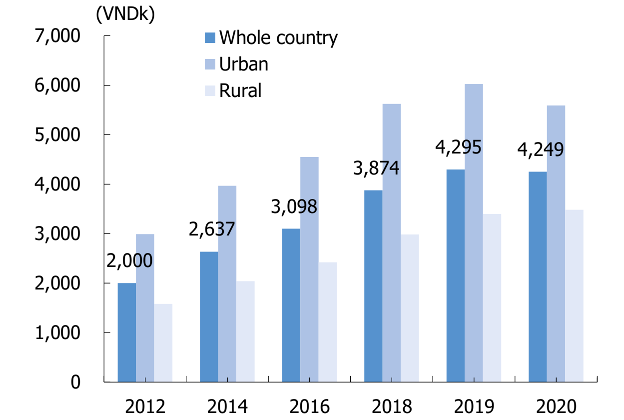
Vietnam's inflation development is different because national income per capita reduced by 1.06% YoY in 2020 and was seemingly unchanged in 2021 under the COVID-19 impact and the lack of financial aid. According to GSO, the average income of Vietnamese workers reached VND5.70mn per month in 2021, reducing 0.5% compared to 2020. Income losses in industrial and construction (I&C) and service sectors were particularly high, with reductions of 3.0% YoY and 0.4% YoY due to their more severe COVID19-impact. Therefore, domestic consumers in Vietnam tend to be more cautious in purchasing decisions than those in the U.S.

Figure 13. National income per capita by year



Source: BLS, GSO, KIS

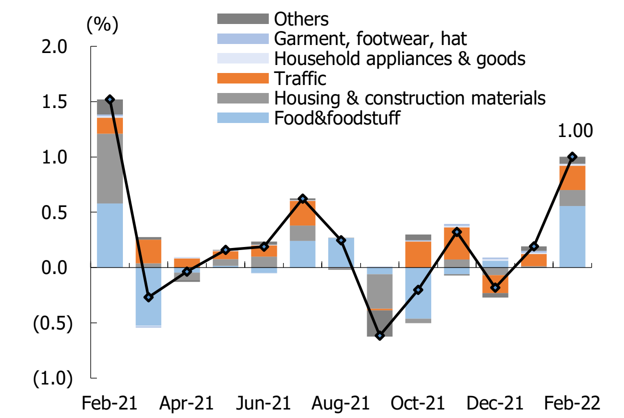
Figure 14. Vietnam household income by region



Source: GSO, KIS

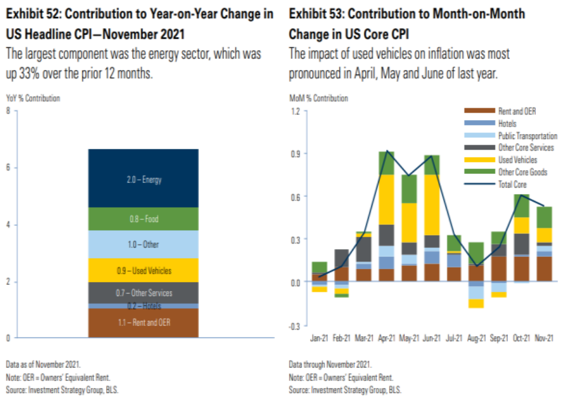
The inflation of the U.S. was widespread and enduring not only in energy items but also in others, such as food, rent, and used vehicles. On the other hand, Vietnam's inflation, in 2021 and the early months of 2022, just concentrated on the traffic index which was primarily constituted by inherently global-sensitive gasoline prices and transportation costs. The food and foodstuff (F&Fs) and housing indices witnessed limited increases, mainly attributed to Tet season and fading later.

Figure 15. Vietnam inflation by item



Source: GSO, KIS

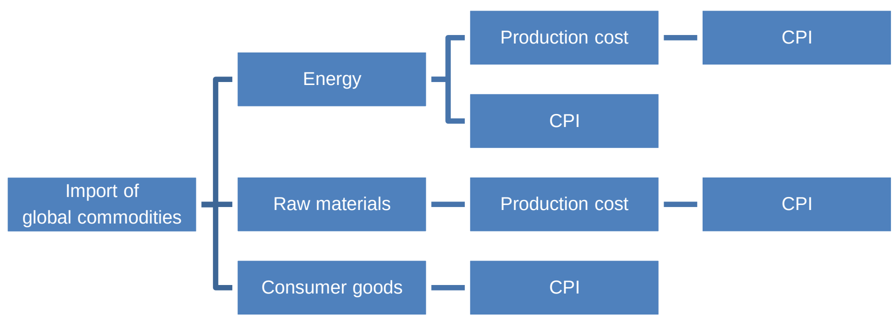
Figure 16. U.S. inflation by item



Source: Goldman Sachs, KIS

Given high import values of consumer goods, fuels, and raw materials, the global commodity surge could transmit into Vietnam inflation through two popular channels: consumption and production.

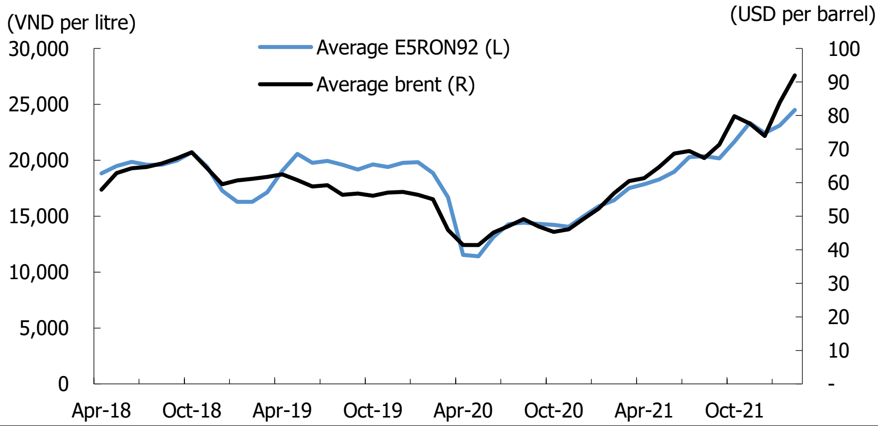
Figure 17. Transmission mechanism of global commodities to Vietnam's inflation



Source: KIS

Direct impact of global energy prices on domestic CPI was straightforward. Provided the measurement approach in calculating retailing prices of several energy commodities, Vietnam's economy imported inflation through the linkage between the global gasoline prices and domestic ones. According to the former leader of GSO, gasoline accounts for 1.50% of household spending, meaning that an increase of 1% of gasoline price would directly contribute 1.5 basis points (bps) to CPI. However, the impact of gasoline on CPI was more strong because of the indirect impact on transportation costs which were highly sensitive to the movement of gasoline price. We estimate that a 1% increase in gasoline prices would cause traffic index to increase by 0.37%, contributing 3.6bps to inflation.

Figure 18. Linkage between Vietnam's gasoline and global crude oil prices



Source: MoIT, Bloomberg, KIS

In our scenario analysis, if the Brent price is unchanged to 2022-end at USD110.68 per barrel (the close price on 14th March 2022), implying an increase of 60.94% in average price, Vietnam's traffic index would increase by 18.02% YoY and contribute 1.74 percent points (ppts) to inflation. Given that the total contribution of other items in 2015-2021 was averagely around 2.70 ppts, inflation could reach 4.44% in 2022.

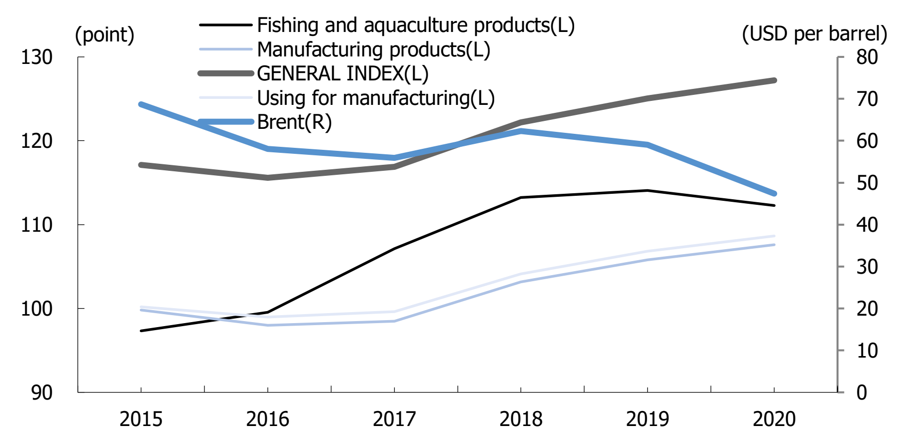
Table 7. 2022 Inflation by crude oil price scenario

2022F average Brent (USD per barrel)	2022F average Brent %YoY	2022F traffic index (%)	Contribution to inflation (%)	Remaining contribution (%)	2022F Inflation (%)
52.00	(22.55)	(6.67)	(0.64)	2.70	2.05
59.26	(11.74)	(3.47)	(0.34)	2.70	2.36
64.50	(3.94)	(1.16)	(0.11)	2.70	2.58
68.97	2.73	0.81	0.08	2.70	2.77
73.15	8.96	2.65	0.26	2.70	2.95
77.34	15.19	4.49	0.43	2.70	3.13
81.81	21.85	6.46	0.62	2.70	3.32
87.05	29.65	8.77	0.85	2.70	3.54
94.31	40.47	11.97	1.16	2.70	3.85
108.06	60.94	18.02	1.74	2.70	4.44
111.56	66.16	19.56	1.89	2.70	4.59

Source: KIS's calculation

Fuels and raw materials form a significant portion of the cost structure of domestic production. According to GSO's former leader, domestic manufacturers averagely spend around 3.50% of their costs to buy fuels for their productions. Ratios of fuels cost in fishing, transportation, and coal mining were exceptionally high at 76.73%, 63.36%, and 45.18%, respectively. Although import value of fuels has decreased by year as the domestic production increased under establishments of Binh Son and Nghi Son chemical refineries, the close association of domestic gasoline prices with global ones cause the cost of manufacturing goods locally exposure to external energy shocks. This impact, combined with surging transportation costs, created a material cost-push problem for domestic manufacturers.

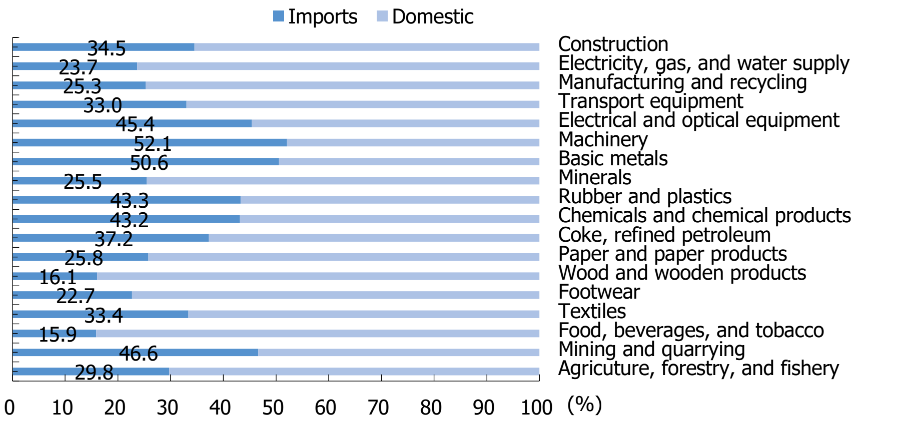
Figure 19. Brent and Vietnam input producer price index



Source: GSO, Bloomberg, KIS

Besides the impact of energy prices, the increase of global raw material, resulting from the high shipping cost and the supply shortage, creates potential risks for domestic production. According to the 2017 Vietnam's input-output table of ADB, basic metals, rubber and plastics, chemicals and chemical products were among sectors with high intermediate consumption imported from outside at 50.6%, 43.3%, and 43.2%, respectively. The high dependence on external resources in those sectors raises cost-push concern and its consequences to domestic prices in the context of recent commodity surges around the globe.

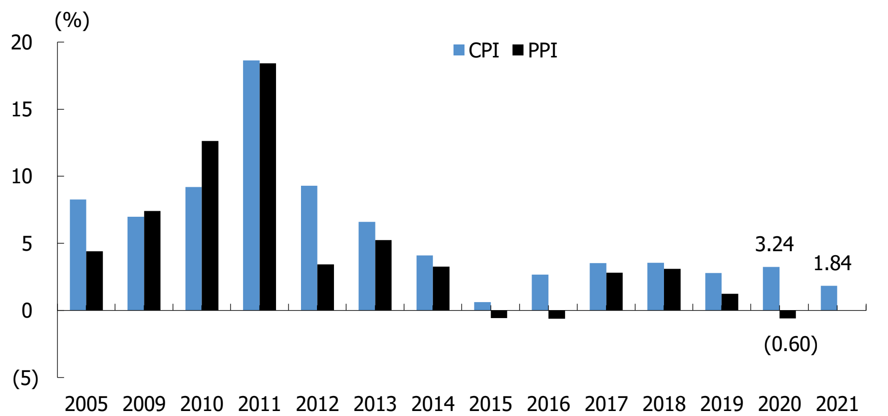
Figure 20. Imported and local intermediate consumption



Source: ADB, KIS

However, the transmission of fuels and raw materials to the domestic CPI through cost-push channel was less strong. Given that Vietnam's production was export-oriented with increasingly high proportion of electronic products, various domestic producers with high foreign investment participated in the global value chain as assemblers. Labor was the key concern in local production while retailing prices of finished products usually were decided by global brand manufacturers, such as Nike, Apple, and Samsung, resulting in a low connection between the domestic producer price index for industrial products and their selling prices to Vietnamese consumers.

Figure 21. Vietnam PPI and CPI



Source: GSO, KIS
Note: GSO has not yet provided the estimate of 2021 PPI

The cost-push problem in agriculture, forestry, and fishery (AFF) sector creates potential risks concerning future supply shortage and household income reduction. Domestic consumption of agriculture products was mainly supplied by local production. Besides the evident impact of energy surge on CPI, we see potential risks in the current economic situation could trigger an increase wave in consumer prices in 2Q22 or 2H22 due to an imbalance between increase in cost production and increase in selling price, especially in food and foodstuff market.

Import value of consumer goods was around USD20.00bn per year, accounting for less 10% of the domestic final consumption. Therefore, impact of higher food and foodstuff prices importing outside on CPI was limited. However, the impact of global commodity price surge on performance of AFF sector was more complicated. Prices of raw materials for AFF production, such as fertilizer, animal fodder and pesticides, have increased significant while selling prices of agriculture products, such as live hog, have not increased equivalently, implying that profit of households in AFF sector would be eroded. Given the weak consumption demand in 1Q22, retailing prices of agriculture products remain low. But when domestic demand becomes more strong, upward pressure on prices of agriculture products would be non-trivial.

Table 8. Vietnam CPI structure

Item	Weight (%)*	2021 (%)	2022F (%)
Consumer Price Index		1.84	3.50
Food and foodstuff	33.56	0.73	Increase ↑
Beverage and cigarette	2.73	1.85	Increase ↑
Garment, footwear, and hat	5.70	0.88	Increase ↑
Housing and construction materials	18.82	1.78	Increase ↑
Household appliances and goods	6.74	0.66	Increase ↑
Medicine and healthcare	5.39	0.20	Stable →
Traffic	9.67	11.01	Increase ↑
Postal services and telecommunication	3.14	-0.75	Stable →
Education services	6.17	1.90	Increase ↑
Culture, entertainment, and tourism	4.55	-0.91	Stable →
Other goods and services	3.53	1.50	Stable →

Source: GSO, KIS

Policymakers are more likely to focus on fiscal measures to respond to the global commodity price surge. Given the cost-push phenomenon, fiscal policies to mitigate the raising cost in production seem to be more feasible than others in monetary framework. Although the impact of energy prices on domestic CPI was strong, the regulatory mechanism for mitigating the impact of external shocks on domestic inflation was specific and long-standing. Accordingly, the petroleum stabilization fund was effective in reducing extreme movement. Although Russia-Ukraine tension was an unforeseen externality, stabilization funds and other measures related to the state budget (proposed environmental tax reduction) help reduce upward pressure on CPI.

Regarding our above-mentioned analysis, current Brent price of around USD110 per barrel could create upward pressure on traffic index and increase the possibility that the inflation could exceed 2022 government target of 4%. In our point of view, government would manage to delay price increases in several goods and services such as electricity, education, and healthcare to temporarily offset the adverse effect of the global commodity price surge. Furthermore, measures to ensure production in AFF sector would be considered to stabilize food and foodstuff prices.

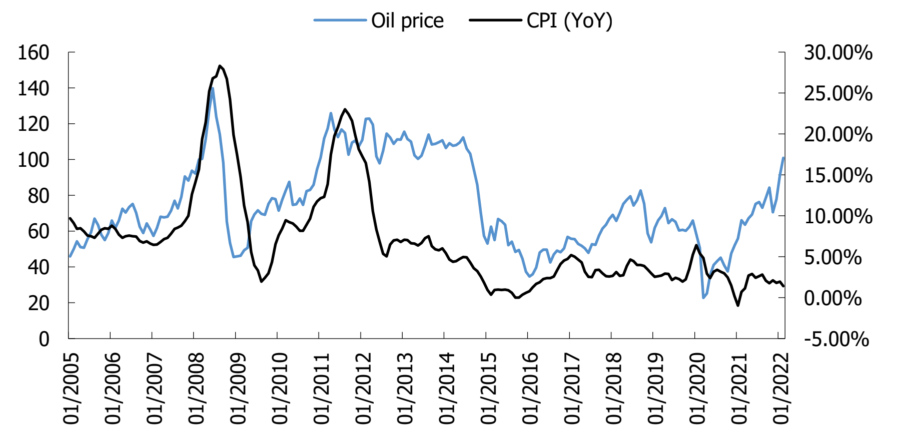
III. Stock market reacts to inflationary pressure

Since joining WHO, Vietnam's economy has witnessed high inflation in two periods of 2007-2008 and 2010-2011.

The period 2007-2008 witnessed a sharp double-digit growth in inflation. There were many reasons for high inflation during this period. First, the process of opening Vietnam's economy can be mentioned. Accordingly, in November 2016, Vietnam officially joined the WTO and opened its economy to the world. WTO participation has reduced tariffs and facilitated importing goods from outside, resulting in a higher demand for foreign goods. The second reason for the extremely high Vietnam inflation was the upside of global commodity prices, especially crude oil prices with Brent's high value of more than USD140 per barrel. The third reason was the monetary easing policy of SBV.

Under the pressure of inflation, the market was also heavily affected when it sharply decreased 65% in 2008. This also stems from the global financial crisis.

Figure 22. Movement of Oil price and CPI



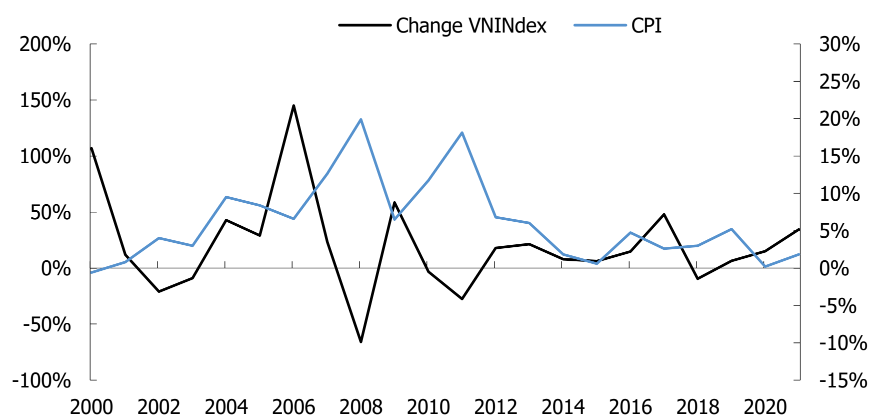
Source: Fiinpro, KIS

The period 2010-2011 saw inflation in Vietnam return to higher, more than 18%. The cause of high inflation comes from external factors. Accordingly, after the global financial crisis in 2008-2009, major central banks implemented monetary easing policies, especially quantitative easing packages. Large amounts of cash flowed into the economy, likely resulting in the upward trend of commodity prices in 2009-2011.

During 2010-2011, Vietnam's economy heavily depended on imported raw materials for domestic production, so it was significantly affected by the growth in commodity prices. Besides, the increase in the minimum wage at the beginning of the year significantly increased total demand, thereby creating considerable pressure on domestic commodity prices. Finally, the 9.3% devaluation of exchange price was the ultimate cause of domestic inflation hitting record highs this year. Under inflationary pressure, the stock market fell 27% in 2011 and fell during 2010-2011.

The relationship between inflation and the performance of the Vietnamese stock market generally depends on the regulatory inflation threshold. Under normal conditions, when inflation is controlled below 4% by the government, we do not find any clear relationship between inflation and stock market return (represented by the VNIndex). However, when inflation was high in 2008, 2010-2011, we did find a relationship between inflation and market return. Accordingly, when inflation increases sharply and tends to peak, the stock market returns are often negative, reaching the bottom. For example, in 2008, the return of VNINdex fell by 65% (possibly affected by the global financial crisis) when inflation hit 23%. Additionally, when inflation peaked in 2011, the index dropped by 27%, implying that the stock market is often bearish in years of high inflation.

Figure 23. Stock market returns and inflation



Source: Fiinpro, KIS

In 2011, inflation started with an increase in the minimum wage effective January 1, 2011, which caused total demand to increase. Then, in February, the State Bank devalued the Vietnamese dong against the US dollar, adjusting the exchange rate down 9.3% to fight the deficit and low foreign exchange reserves. An increase in the exchange rate affects the entire input cost of the economy (Vietnam's economy mainly imports raw materials for production during this period). In addition, world commodity prices during this period also increased sharply, especially oil prices peaked at more than $100 per barrel. These reasons jointly created a significant increase in inflation, resulting in a shock to the economy and causing the stock market to correct during this period.

However, the context is very different in 2022. First, global commodity prices are bullish, with Brent crude oil price reaching the peak value of USD140 mark per barrel. This development creates significant pressure on global inflation. However, this is not true for Vietnam. Unlike in 2011, when Vietnam had to import gasoline to meet domestic demand, in 2022, Vietnam has self-sufficient more than 70% of domestic petroleum thanks to Binh Son and Nghi Son oil refineries. Besides, fuel prices can affect transportation costs and Vietnam commodity prices, but total demand has not yet recovered due to the impact of the COVID-19 epidemic. Hence, inflation pressure would be limited.

Second, the COVID-19 pandemic strongly affected the domestic consumption demand, resulting from the income reduction in 2021. Besides, the pandemic remains complicated, with the consistent increase in infected cases exceeding 150,000 cases per day. This situation will impact the total demand of the economy in 2022. Therefore, inflation in 2022 will slightly increase and remain within the government's control.

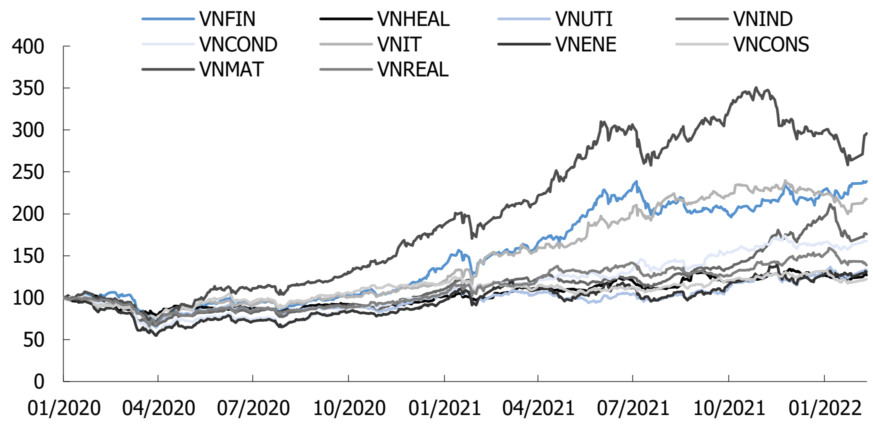
Third, unlike the period 2010-2011, Vietnam is currently in a trade surplus, so the pressure on the exchange rate is not tremendous. Besides, foreign reserves are also at a high level of nearly USD110bn, ten times higher than 2010 and nearly four times higher than 2015. This development keeps the exchange rate stable and does not create additional economic risks.

Therefore, the pressure from the global commodity prices surges to domestic inflation is still intact in the short term. However, inflation will still be under control, and the market trend may form a short-term correction rather than a downtrend like 2008 and 2011 before.

The high oil price will increase the cost of transportation and living expenses of Vietnamese households, generally resulting in the negative impact for several industries. First, the increase in commodity prices, such as iron, steel, petroleum products, will directly affect companies that import goods and materials from abroad for production. This situation was so-called the cost-push.
Second, if inflation is high, the SBV will have macroeconomic policies to control inflation. In which raising interest rates is often the first choice of banks. This will generally affect the current low-interest rates, affecting all firms on the stock market. Notably, companies with high leverage will be strongly affected, such as the real estate industry.

On the other hand, some industries that could benefit from rising commodity prices are the Oil and Gas (O&G) and Material industries. Bullish oil prices will support oil and gas projects in Vietnam to be implemented, implying the increase of the workload of firms in the industry. Besides, since the price of refinishing tends to increase, firms producing raw materials will have the advantage of increasing selling prices, thereby benefiting significantly.

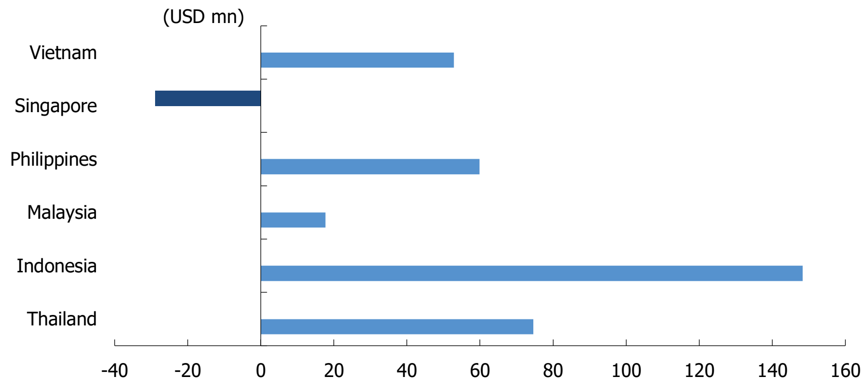
Figure 25. Performance of sectors in Vietnam stock market



Source: Fiinpro, KIS

Positive flow of money via major ETFs. The flow of money across Vietnam has continued to surge despite the high inflation rate environment since 3Q21. From 3Q21, Vietnam has attracted a total of USD53mn. Notably, money inflow across Vietnam during the third week of Jan skyrocketed, recording at a 6-month high. Although there is an increase in US's inflation rate, as well as an interest rate hike, is tending to follow, the positive flow of money across Vietnam has continued to surge.

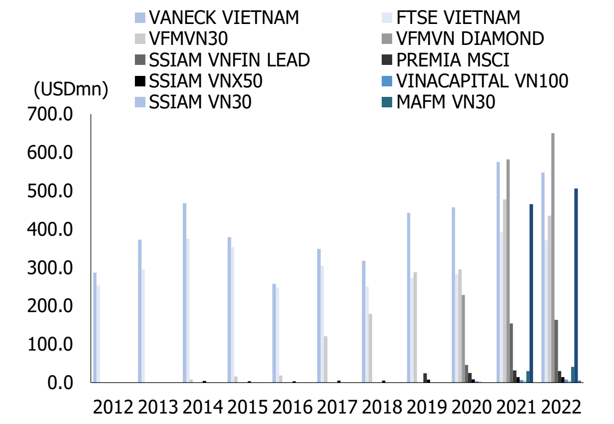
Figure 26. Net inflow/outflow of SEA countries (from 3Q21)



Source: Bloomberg, KIS

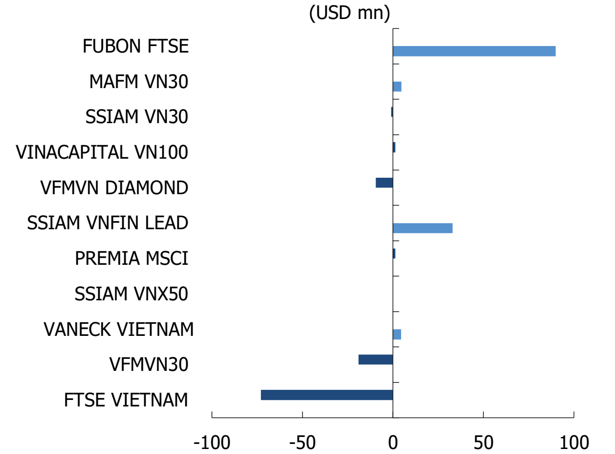
However, the flow of money across Vietnam via major ETF has shown some signs of weakness and divergence due to the US's inflation rate increase. Notably, foreign ETFs were divested while domestic ETFs kept attracting demand. From 3Q21, FTSE Vietnam has been strongly divested, recording the outflow of USD73mn. However, the substantial divestment of FTSE Vietnam has been faded by the solid demand on Fubon FTSE. In the context of high inflation, rate hikes could be followed, major foreign ETFs could experience a significant outflow, such as FTSE Vietnam, and the inflow on Fubon could be decreased. Nevertheless, major domestic ETFs seem to be not heavily impacted within this period, proved by the solid demand on SSIAM VNFIN Lead.

Figure 27. AUM of Vietnam's major ETFs



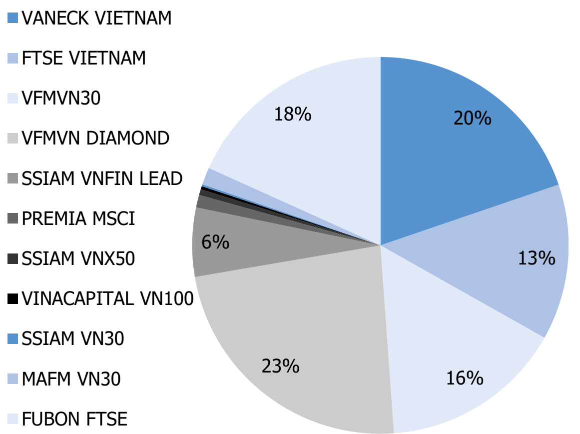
Source: Bloomberg, KIS

Figure 28. Vietnam ETF net flow (from 3Q21)



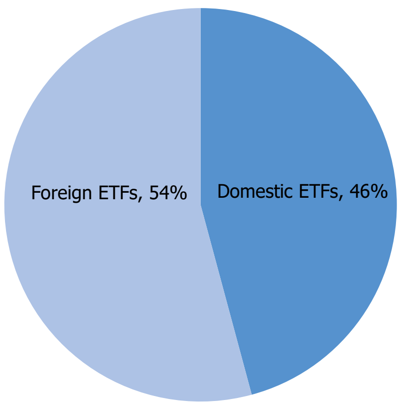
Source: Bloomberg, KIS

Figure 29. AUM of Vietnam's major ETFs



Source: Bloomberg, KIS

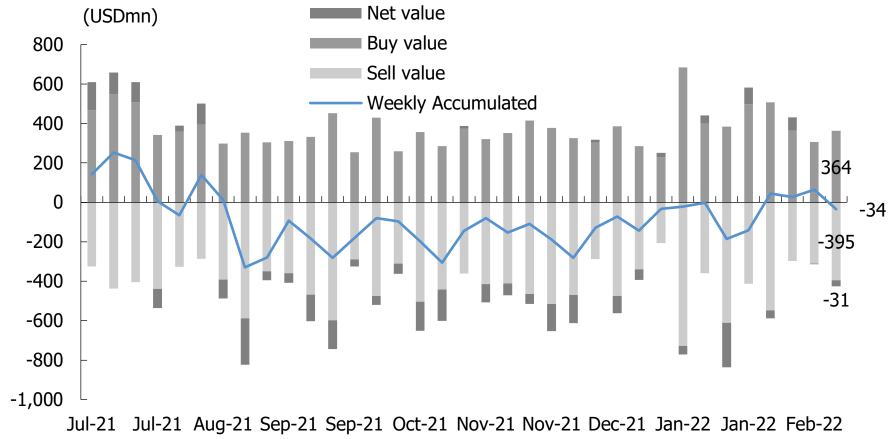
Figure 30. Proportion of Domestic and Foreign ETFs



Source: Bloomberg, KIS

Foreign supply is overwhelming. Foreign activity has been recorded at the negative level since 3Q21. Foreign investors' selling activity has faded the strong demand and pushed the market to be net sold with net sell value at USD35mn. The high inflation rate environment could negatively impact foreigners' trading activity. Particularly, as Fed made it clear in Jul 2021 meeting that the QE program would be gradually scaled down and rate hikes would take place, there has been a negative signal for the trading strategy of foreign investors across the Vietnam capital market since 3Q21. Particularly, the high inflation rate could be followed by a rate hike, leading likely to the capital outflow due to the appreciation of the U.S. dollar. Thus, the capital outflow has occurred across Vietnam's capital market since 3Q21, and foreign trading strategy is expected to be net sold in the high inflation rate environment.

Figure 31. Net foreign buy/sell (From 3Q21 (weekly data))



Source: Fiinpro, KIS

In 2022, Vietnam's capital market would face three significant headwinds: the tightening of monetary policy in the United States, China's slowing growth, and ongoing geopolitical tensions (especially Ukraine-Russia).

The threat of Fed's quantitative tightening. The Fed's triple rate hike plan and the asset purchases scale down would raise the target range for the federal funds rate and shrink its balance sheet. As a result, it poses a downside risk to emerging markets, especially Vietnam's capital market.

Particularly, as the tapering process has begun in Dec 2021, there is some significant impacts on the trading activity of foreigner. The planned QE tapering would lead to the capital outflow due to the appreciation of the U.S. dollar on the back of rate hikes in the US. Notably, with no signs for the slowdown of US's inflation rate, the Fed may hike rates four time in 2022. This event might lead to the depreciation of emerging market currencies and rate hikes by the local central banks. Thus, capital outflow has been maintained on Vietnam's capital market since Dec 2021 where foreign trading activity has remained net sold.

Similar to the foreign trading strategy, the flow of money via ETFs could be negatively impacted, especially the foreign ETFs. To be specific, as the increase of capital outflow backed by the taper tantrum and rate hike, the flow of money across Vietnam major ETFs would be decreased or even experiencing the outflow. However, from 3Q21, only foreign ETFs have been negatively effected by this event. Thus, we expect a slight drop in the flow of money across Vietnam due to the maintenance of high demand among domestic ETFs. Domestic ETFs would continue to attract high demand whilst foreign ETFs could experience the outflow, especially Fubon FTSE Vietnam ETF and X FTSE Vietnam.

Macro scorecard (USD bn, USD, %, % YoY)

	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	4Q20	1Q21	2Q21	3Q21	2017	2018	2019	2020
Real GDP growth		6.61			(6.17)		4.48	4.65	6.61	(6.17)	6.81	7.08	7.03	2.91
Registered FDI	1.74	1.28	1.45	2.40	3.02	1.59	7.32	10.13	5.14	6.88	35.88	35.47	38.02	28.53
GDP per capita											2,353	2,551	2,730	
Unemployment rate											2.21	2.21	2.25	2.48
Export	26.19	27.20	27.87	27.23	27.00	27.30	80.15	78.40	79.95	82.09	215.1	243.5	263.6	282.7
Import	28.27	27.66	29.11	27.34	26.50	26.20	76.86	75.57	83.70	82.95	213.2	236.7	254.4	263.0
Export growth	36.52	20.56	12.03	(1.71)	(0.60)	0.15	15.14	23.42	34.74	2.95	21.82	13.19	8.16	7.02
Import growth	55.52	33.54	31.75	20.34	9.49	7.97	16.43	26.60	45.79	20.19	21.85	11.01	7.41	3.81
Inflation	2.90	2.41	2.64	1.79	2.06	1.77	3.24	0.30	2.67	2.16	3.53	3.54	2.79	3.24
USD/VND	23,048	23,020	22,947	22,784	22,761	22,752	23,126	23,076	23,020	22,761	22,698	23,175	23,173	23,126
Credit growth	4.95	6.44	6.92	7.40	7.54	8.14	10.14	2.95	6.44	7.54	18.24	13.89	13.70	10.14
10Y gov't bond	2.27	2.21	2.19	2.06	2.14	2.15	2.01	2.40	2.21	2.14	5.14	5.07	3.37	2.01

Source: GSO, Bloomberg, FIA, IMF

IV. Midstream zigs and downstream zags

1. GAS benefits the most from rising oil prices

Russia is a big player in global oil & gas markets. Russia is the second-largest gas, and the third-largest oil producer, accounting for nearly 17% and 11% of the global output, respectively. Russia is the world's third-largest oil producer behind the United States and Saudi Arabia. In January 2022, Russia's total oil production was 11.3 mb/d (million barrels per day). By comparison, US total oil production was 17.6 mb/d while Saudi Arabia produced 12 mb/d. Russia is the world's largest exporter of oil to global markets and the second-largest crude oil exporter behind Saudi Arabia. About 60% of Russia's oil exports go to OECD Europe, and another 20% go to China. In December 2021, it exported 7.8 mb/d. Oil product exports totaled 2.85 mb/d. Production of natural gas and exported gas volume were 638 Bcm (billion cubic meters) and 238 Bcm, respectively.

The vital role of Russia and Ukraine in Europe gas supply. The reliance of the European Union and the United Kingdom on Russian gas supplies has increased over the last decade. Natural gas consumption in the EU and UK remained broadly flat in aggregate over this period, but production fell by a third and the gap has been filled by increased imports. Consequently, the share of Russian gas supplies increased from 25% of Europe's total gas demand in 2009 to 32% in 2021. Pipeline deliveries from Russia declined by 25% yoy in 4Q21, which contributed to strong upward pressure on hub prices in Europe, which rocketed in 4Q21. Meanwhile, the importance of Ukraine as a transit country has lessened due to the build-up of additional transit corridors bringing Russian piped gas to the EU and UK. Transit flows via Ukraine accounted for over 25% of Russia's pipeline deliveries to the EU and UK in 2021, significantly down from more than 60% in 2009. Therefore, Ukraine remains an important conduit for

Russian gas to Europe since transiting about 8% of the EU and UK combined gas demand. European gas prices surged by 50% dod on 24 February 2022 to USD 44/MMBtu, following the invasion of Ukraine by Russia.

A tension led to a surge in oil prices. An invasion into Ukraine by Russian troops on 24 February 2022 has as of yet not resulted in a loss of oil supply to the market. The Brent prices nevertheless surged by USD8/b to USD105/b following the news and daily spot prices for Brent closed at almost USD124/b in the first week of March, on expectations that sanctions against Russia would cripple energy exports. These events are occurring against a backdrop of low oil inventory and persistent upward oil price pressures. Global oil inventories have fallen steadily since mid-2020, and inventory draws averaged 1.8mn (b/d) in 3Q20 through the end of 2021, according to IEA.

GAS benefits the most from rising oil prices. Rising oil prices not only strengthen market sentiment on the GAS stock, but also directly benefits GAS's net profit as the majority of its product selling price is benchmarked to Singapore FO price, which moves in the same direction to Brent oil price. Thus, we expect that GAS will raise the selling price of dry gas, LPG, CNG equivalent to the spike in oil prices. Meanwhile, nearly 84% of the volume from Nam Con Son basin (contributed about 65% dry gas volume for GAS) mostly use fixed prices to supply ToP agreements, fixed-cost pricing is set according to wellhead prices adjusted up by 2% per year. Thus, it prompts the gross margin of the dry gas segment to expand. In our view, the general gross margin of GAS will expand to 20.5%/21.5%/22.1% for best case/base/worst case for oil prices, respectively, from 17.7% in 2021.

Table 9. Scenarios for Brent oil and Singapore FO

	Singapore FO (USD/tonne)	(yoy) (%)
Worst case	630	57
Base case	580	45
Best case	530	32

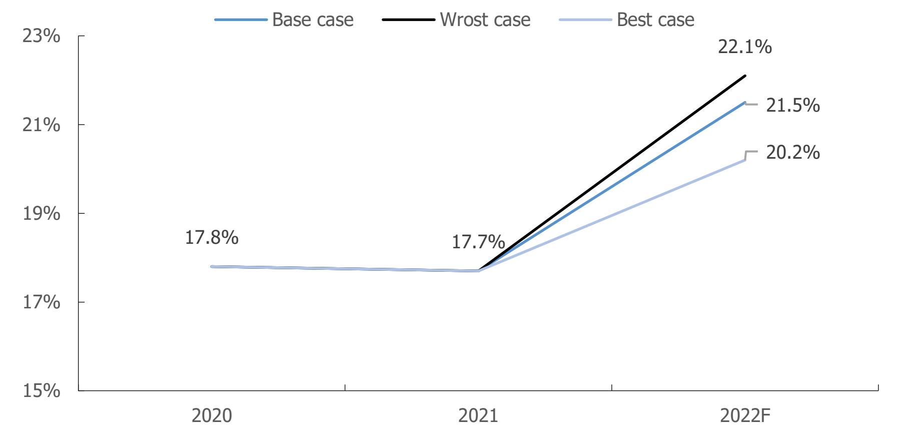
Source: Bloomberg, KIS

Table 10. GAS's gross margin sensitivity analysis

		Average selling price					
		+0%	+8%	+16%	+24%	+32%	+40%
FO price	+0%	17.0%					
	+10%		18.5%				
	+20%			19.4%			
	+30%				20.2%		
	+40%					21.1%	
	+50%						21.7%

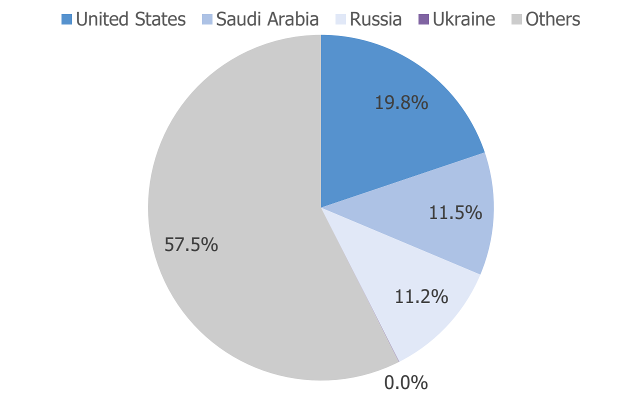
Source: KIS

Figure 32. GAS's blended gross margin scenarios



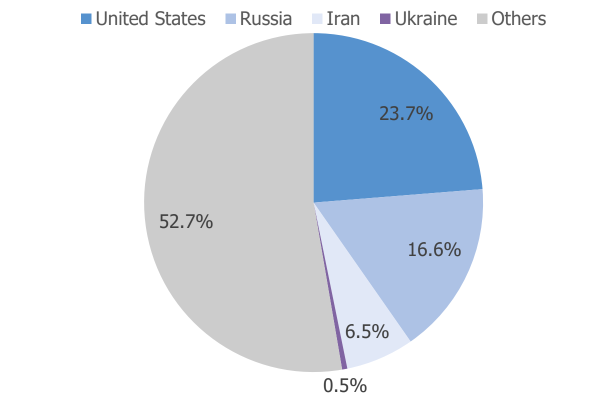
Source: Company data, Fiinpro

Figure 33. Russia is the third-largest oil producer



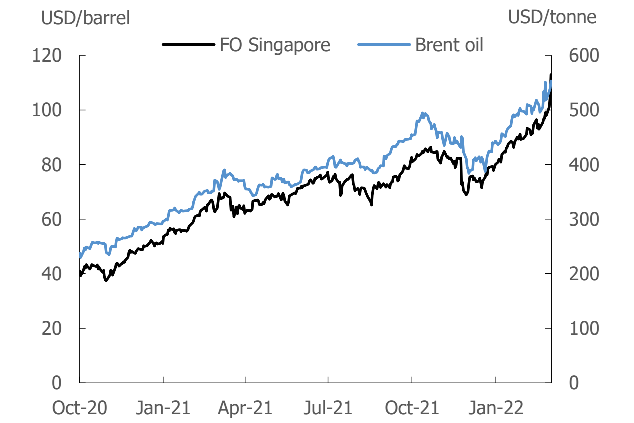
Source: IEA

Figure 34. Russia is the second-largest gas producer



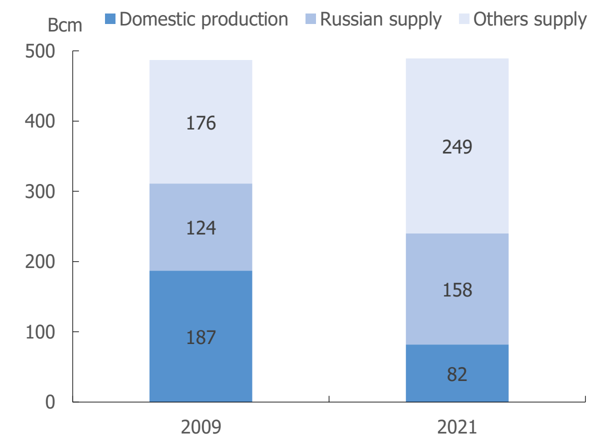
Source: IEA

Figure 35. Brent oil and FO prices spiked after Russia and Ukraine conflict



Source: Bloomberg
Note: Oil prices are updated on 01-Mar-22.

Figure 36. Share of Russian gas supplies increased in EU and UK



Source: IEA

2. The rise of coal thermal power

EVN's shift to thermal power to ensure power supply. EVN basically holds the monopolistic role in Vietnam's power market when it has the decisive role in terms of output and selling price through Power Purchase Agreement (PPA) with each power maker. Thanks to the economic rebound and the removal of harsh lockdown measures, Vietnam's power consumption is expected to grow 8.2% yoy in 2022F. As the La Nina wanes since early 2022F, reservoirs of hydropower in the northern provinces could suffer water shortage from Jan to Jun 2022F. Accordingly, we expect that EVN will shift its focus to coal thermal plants to ensure power supply.

The gross margin of gas thermal makers could be damaged. If the Russia – Ukraine tension is prolonged and sanction on Russia is persistent, the gross margin of gas-fired power could be hit when gas input price is highly correlated with fuel oil (FO) price on Singapore market. In the base case, we estimate that FO price could rise up to an annual average of USD580/tonne, causing the input gas price to jump by 40-45% yoy in 2022F. The gas price supplied to domestic gas thermal power could trend upward in 2022F due to the increasing FO Singapore price ([1]). For gas thermal makers, gas accounts for about 75%-81% of total COGS. Therefore, with the continuous rise in FO Singapore price, gross margin of domestic gas thermal firms could squeeze.

Given the price developments that have occurred in 2021 along with the possibility of stronger fertilizer control by the Government to stabilize the market, we construct one scenario for the domestic selling prices. We expected DPM's domestic selling price of urea could hit a new peak around VND18,000 – VND19,000/kg in 2Q22F, sustain through mid-2022 and then fall steadily by 17% to reach VND15,000 at the end of the year. On average, we estimated urea selling prices in 2H22F could be VND16,250/kg.

The gross margin of gas thermal makers could be damaged. The imported coal often makes up only 20 –25% of total coal consumption, and Vietnam primarily imports from Indonesia and Australia. Meanwhile, domestic coal prices of feedstock to coal-fired plants supplied by Vinacomin (TKV) are periodically modified (usually quarterly/semiannually) by the Ministry of Industry and Trade (MoIT) and the Ministry of Finance (MoF), which usually has a large gap with global coal prices. Hence, MoIT's assigned prices are normally less volatile than global coal prices which could swing dramatically in 2022F.

In 2M22, despite the rising trend of global coal price, domestic coal prices of feedstock to thermal plants stay unchanged. However, Newcastle coal price witnessed a sharp rally in the last month to USD369/tonne on Mar 11, up 51% mom. Thus, we forecast that in the base case, MoIT will increase the domestic coal price supplied to thermal power since 2Q22F by 10% and keep this price unchanged throughout the year. However, we believe that EVN will prioritize the cheaper coal-fired power plants driven by their lower COGS than gas supply and increase the bidding price of coal-fired power to compensate the rising price of input.

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[1] The gas price PVGas supplies to gas thermal companies is calculated based on Singapore FO prices as the following formula: Selling price = Max [46% HSFO price, wellhead price] + transportation & tariffs (including markup).

The gross margin of gas thermal makers could be damaged. Given the coal price increase of 10% yoy, COGS could go up by 11% yoy. QTP nearly ran its designed capacity in 2021, thus we forecast total volume will inch only 5.7% yoy in 2022F. In addition, QTP could leverage the contracted volume sold to EVN by 12.3% yoy and hence, QTP could enjoy a higher average selling price (ASP) by +7.7% yoy. Overall, net revenue could rise by 13.8% yoy, leaving gross margin expand by 2.4%p yoy to 10.8%. In the worst case, when global coal price keeps its rising trend in 2022F, domestic coal price may deliver a significant increase of 15% yoy, causing the COGS to go up 14% yoy. However, ASP could grow by 11% yoy and the total output sold to EVN could only edge up by +3.4% yoy, QTP's gross margin could stay 9.2%, +0.8%p yoy.

Table 11. Scenarios for coal price

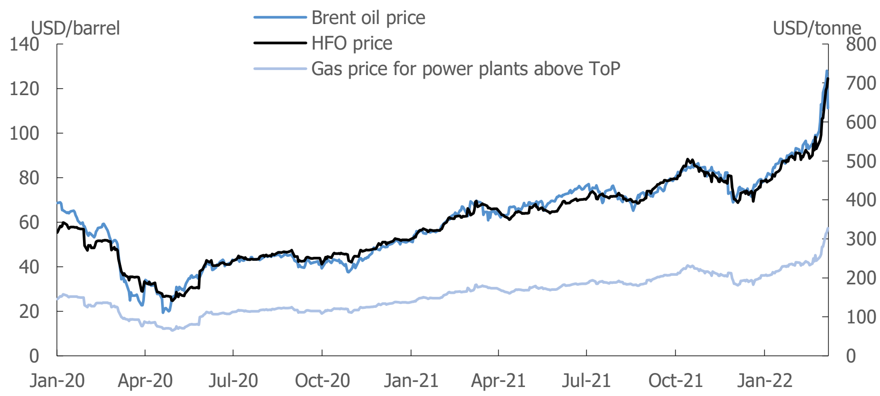
	Scenario	Average coal price (% yoy)
Worst	TKV increases coal price in 2Q21 and continue to increase coal price in 3Q21	+15%
Base	TKV increases coal price since 2Q21 and keep this price throughout the year	+10%
Best	TKV increases coal price since 3Q21	5%

Source: TKV, KIS

Table 12. Coverage for thermal companies

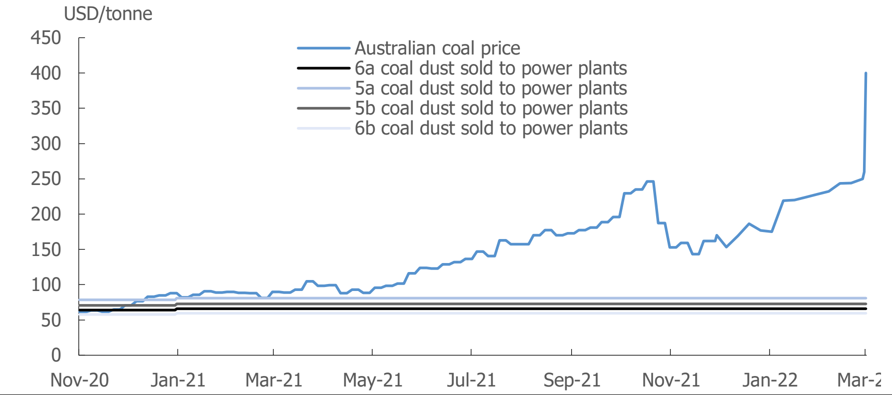
	Company name	Market cap (VND bn)	2021 Revenue (VND bn)	PB (x)
Gas-fired companies				
NT2	Nhon Trach 2	6,477	6,150	1.79
POW	PV Power	37,119	24,565	1.38
PGV	EVNGENCO3	40,726	37,695	2.68
BTP	Ba Ria Thermal Power	1,071	1,213	0.84
Coal-fired companies				
QTP	Quang Ninh Thermal Power	8,775	8,571	1.39
HND	Hai Phong Thermal Power	9,900	9,026	1.36
PPC	Pha Lai Thermal Power	7,005	3,885	1.57
DTK	Vinacomin Power	10,378	13,059	1.46

Figure 37. Gas price sold to domestic power plants



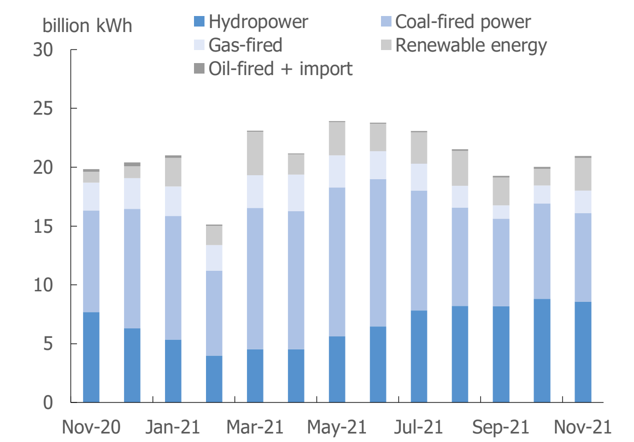
Source: Bloomberg, GAS
Note: The FO and Brent oil were updated as of Mar 9th; The gas price is calculated based on Singapore FO price.

Figure 38. Correlation between Australian coal and domestic coal prices



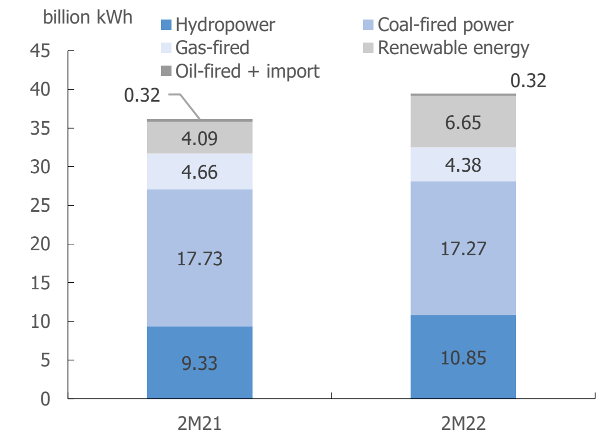
Source: Bloomberg, TKV, ERAV
Note: The coal prices were updated as of Mar 2nd

Figure 39. Vietnam's power market breakdown by sector



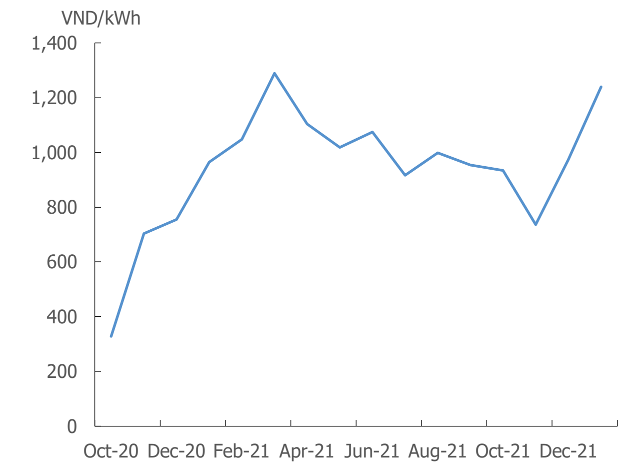
Source: EVN

Figure 40. Rising FO price may benefit coal-fired power volume in 2022F



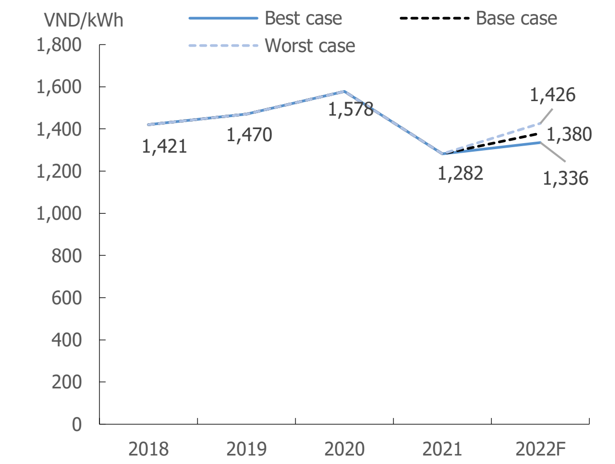
Source: EVN, KIS

Figure 41. FMP price has upward trend



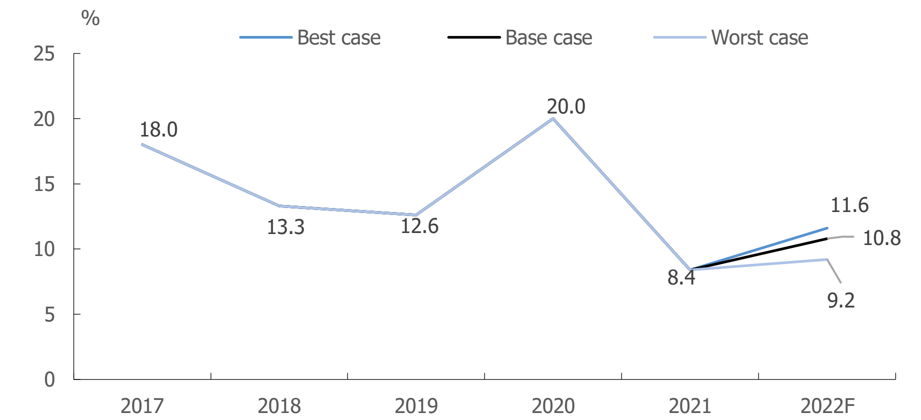
Source: EVNGENCO3, KIS
Note: FMP was updated as of Jan 2022

Figure 42. QTP's forecasted average selling price



Source: Company data, KIS

Figure 43. QTP's gross margin for 2022F



Source: Company data, KIS

Table 13. QTP's gross margin sensitivity analysis

		Selling price						
		+0%	+4%	+8%	+12%	+17%	+21%	+25%
Input coal price	**7%**	8%	12%	15%	18%	22%	24%	27%
	5%	5%	8%	11%	15%	19%	21%	24%
	10%	1%	5%	8%	12%	16%	18%	21%
	15%	-2%	2%	5%	9%	12%	15%	18%
	20%	-6%	-2%	1%	5%	9%	12%	15%
	25%	-10%	-5%	-2%	2%	6%	9%	12%
	30%	-13%	-9%	-5%	-1%	3%	6%	9%

Source: KIS

3. Fertilizer: Warrior or opportunist?

Tight control from the government. Viet Nam fertilizer industry is influenced by Viet Nam Chemicals Group (Vinachem) and Petro Viet Nam (PVN). Petrovietnam Fertilizer and Chemical (DPM) is the subsidiary of PVN, which accounted for more than 30% domestic urea market in 2020. While DPM uses natural gas as raw material as well as the fuel for nitrogen production, DHB (Upcom), a subsidiary of Vinachem uses coal to gasify into ammonia. The surging global fuel prices have exposed fertilizers to gross margin squeeze at various extents.

Coal-based urea producers could be less hit thanks to MOIT's tight control on selling coal prices from Coal Mineral Group of Vietnam (TKV). In detail, TKV will adjust periodically the coal price sold to coal-based plants and others, mostly at the beginning of the year based on the spread over the fixed cost of local coal mining. Hence, the extent and the frequency are immaterial. On the contrary, natural gas selling price from PVGas Vietnam (GAS VN Equity, Non-rated) to fertilizer subsidiaries is based on the monthly adjustment with relation to Singapore FO price. The high correlation of FO price and global natural gas price and monthly frequencies results in the stronger volatility of the cost of goods sold of gas-based plants than the coal-based ones.

Petrovietnam Fertilizer and Chemicals volatiles the most. On average, the FO price in Singapore traded at USD512/tonne, + 48% yoy and 9% mom in Feb, while the natural price moved to USD277/tonne, +38% yoy, and 7% mom. In our model, natural gas accounts for about 74% of the total material cost in urea production. In the worst case, we forecast that the Singapore FO price could climb to a full-year average of USD630/tonne in 2022F, which prompts the gas price to hit USD331/tonne, an 20% additional increase from this present. However, in the best case, when the global supply chain could be resumed, the gas price may inch up 3% to USD285/tonne vs Feb. In the base case, FO could rise up to USD580/tonne, causing the gas price to jump to USD308/tonne, +11% compared to Feb.
Given the price developments that have occurred in 2021 along with the possibility of stronger fertilizer control by the Government to stabilize the market, we construct one scenario for the domestic selling prices. We expected DPM's domestic selling price of urea could hit a new peak around VND18,000 – VND19,000/kg in 2Q22F, sustain through mid-2022 and then fall steadily by 17% to reach VND15,000 at the end of the year. On average, we estimated urea selling prices in 2H22F could be VND16,250/kg.

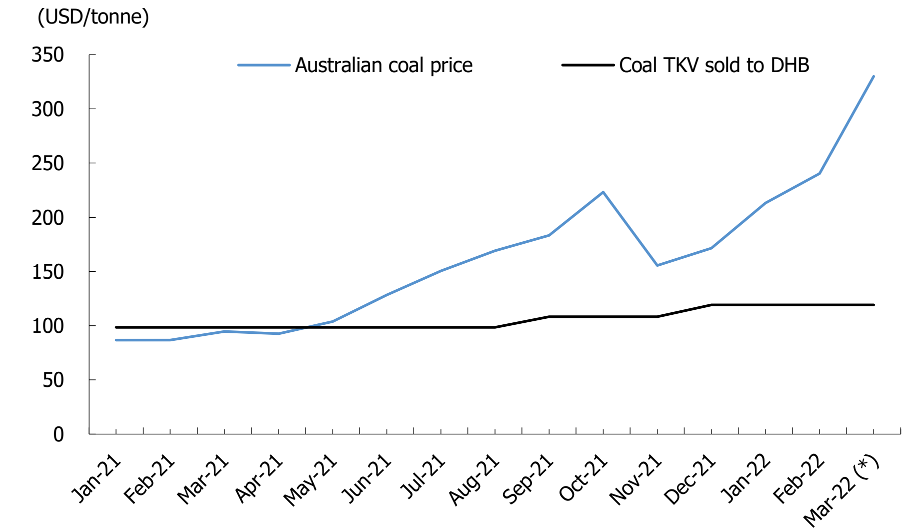
Political tension could worsen Europe's fertilizer shortage, leading to some potential record of global fertilizer price in 1H22F. Although domestic urea/kali/NPK prices in Feb have cooled down by 10%/14%/5% vs in Dec since the Winter-Spring crop has passed by, we think that the local fertilizer could start trending upward with the global prices in 2Q22F. Taking advantage of low domestic demand and the high export price, DPM could boost the urea export in 1Q22F. Bolstering the export-driven sales, DPM's revenue could be booming and gross margin contraction could ease thanks to lucrative export price in 1Q22F. Despite the prospect of high domestic selling prices until 2Q22F, we think DPM could not compensate for the input increase. Hence, DPM's gross margin could contract more since 2Q22F due to (1) the sharp hike of FO Singapore price following the rise of global oil price and (2) the potential control of the Government for the domestic selling price in order to ensure social security. Based on these reasons, in the base case, we believed DPM's gross margin of in-house products could fall by 5%p qoq to 50% in 1Q22F and 2%p yoy to land at 40% in 2022F.

Ha Bac Fertilizer could be less impacted. Currently, Vinacomin (TKV) directly supplies coal to fertilizer and power producers. The domestic coal selling price is much lower than the global price and stable over the years, which is strictly controlled by the MoIT. Therefore, changes in global coal price could less impact to urea producers such as DHB. Although TKV increased the supply coal price up to 20% in 2021, DHB's gross margin in 4Q21 still recorded a positive signal to hit 46% thanks to high selling price. We suggest DHB will have the same price movement route as DPM, that urea selling price will hit a peak at VND16,000/kg in Mar, then sustain until Jun 2022, before falling gradually until the end of the year. Currently, TKV has not yet announced the new pricing policy in 1Q22F so we assumed that TKV will not implement the adjusted coal supply price until 2Q22F. Based on that, with the benefit of the upward trend of domestic selling price, DHB's gross margin in 1Q22F could reach a new peak of 52%, which is the highest level through its operation.

In the base case, we assume TKV will increase selling coal price in Apr and Oct by about 20%, so DHB's gross margin could hit 49% in 2022F. In the best case, if TKV implement the same policy as 2021 (adjust 10% each time in Sep and

Dec), gross margin for the whole year of DHB will rise up to 50%. And in the worst case, TKV may adjust the price policy up to 30% in Jun and last until the end of the year, in which DHB's gross margin will be estimated at 48% in 2022F.

Figure 44. Correlation between Australian coal and domestic coal prices



Source: Bloomberg, company data, KIS
Note: The coal prices were updated at Mar 2nd

Table 14. DPM's IN-HOUSE products gross margin sensitivity analysis

		Selling price				
		+0%	+5%	+10%	+15%	+20%
Singapore	**512**	48%	50%	52%	54%	55%
	530	47%	49%	51%	53%	55%
	580	44%	46%	49%	51%	52%
	630	41%	44%	46%	48%	50%

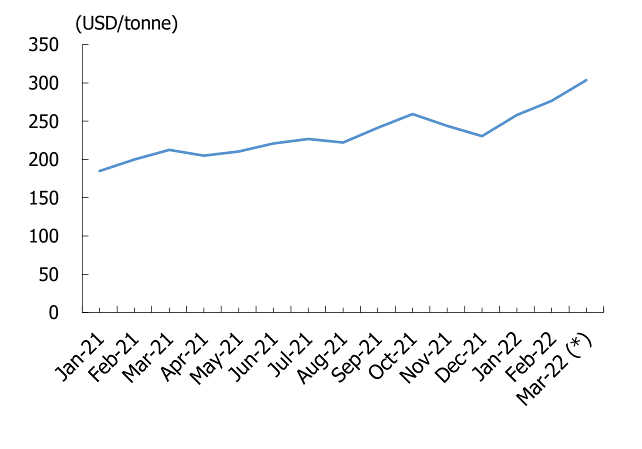
Source: KIS

Table 15. DHB's gross margin sensitivity analysis

		Selling price				
		+0%	+5%	+10%	+15%	+20%
Coal price	**+0%**	50%	53%	55%	57%	59%
	+10%	49%	51%	53%	55%	57%
	+20%	47%	50%	52%	54%	56%
	+30%	46%	48%	51%	53%	55%

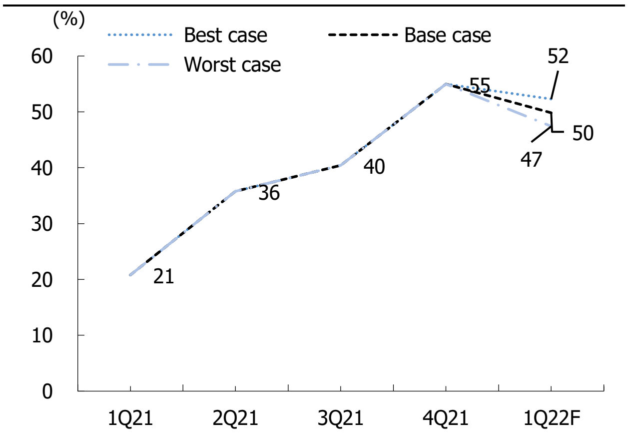
Source: KIS

Figure 45. Gas input price in urea producing



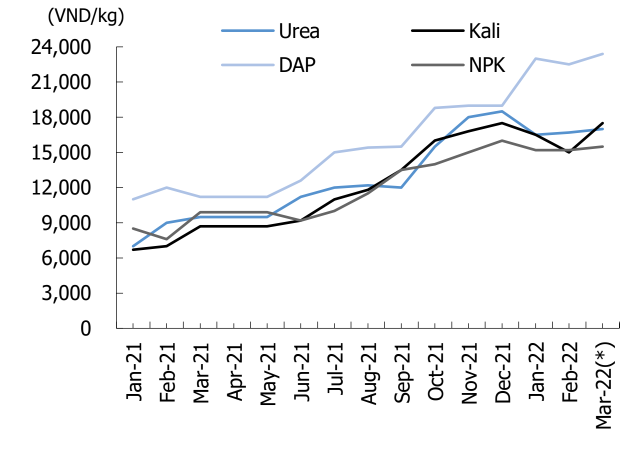
Source: PetroVietnam, KIS
Note: The gas price is calculated based on Singparore FO price; gas price was updated at Mar 2nd

Figure 46. DPM's gross margin of IN-HOUSE products



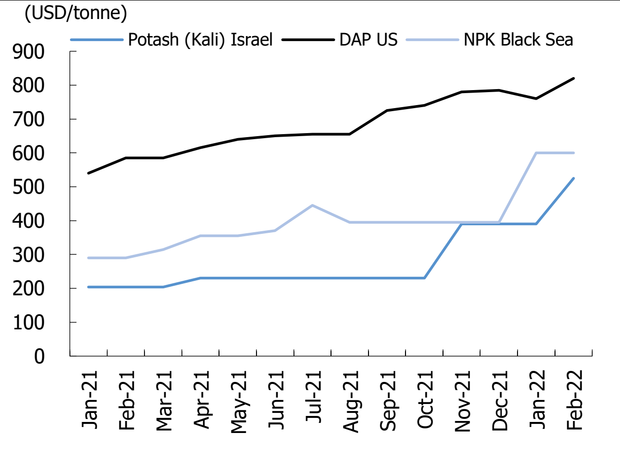
Source: Company data, KIS

Figure 47. Domestic fertilizer prices have upward trend



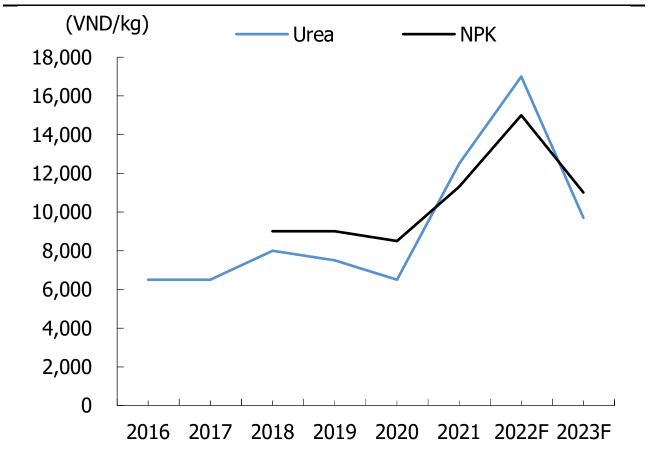
Source: Fertilizer prices are collected from the quoted retail markets, KIS
Note: Fertilizer prices was updated at Mar 2nd

Figure 48. Global fertilizer prices



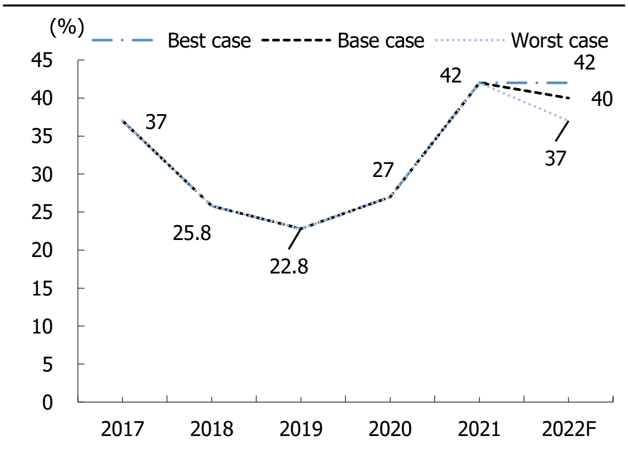
Source: Bloomberg, KIS

Figure 49. DPM's forecasted AVERAGE selling prices



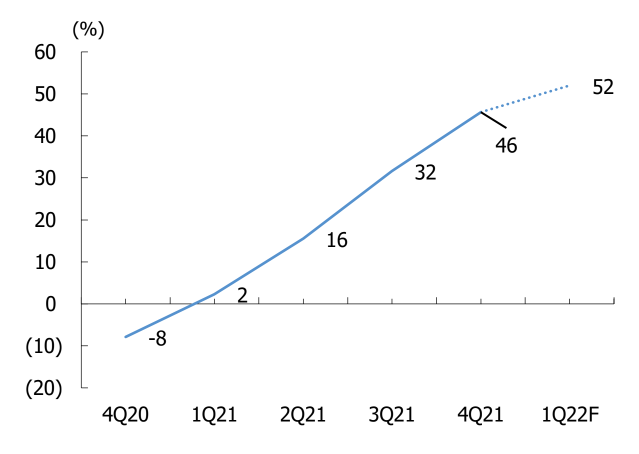
Source: Fertilizer prices are collected from the quoted retail markets, KIS
Note: DPM started introducing NPK to the market in 2018

Figure 50. DPM's gross margin for IN-HOUSE products for 2022F



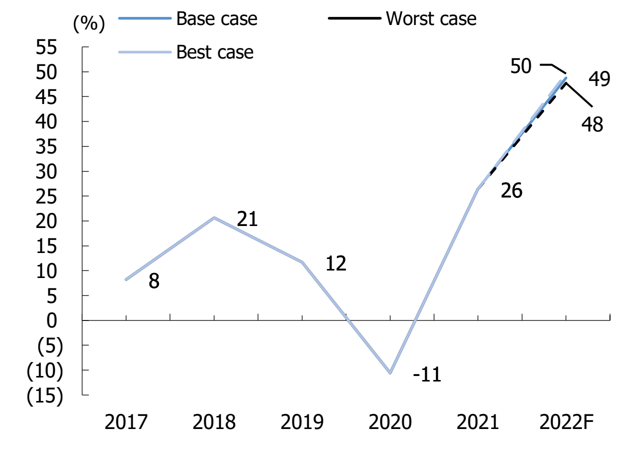
Source: Company data, KIS

Figure 51. DHB's gross margin qoq



Source: Company data, KIS

Figure 52. DHB's gross margin yoy



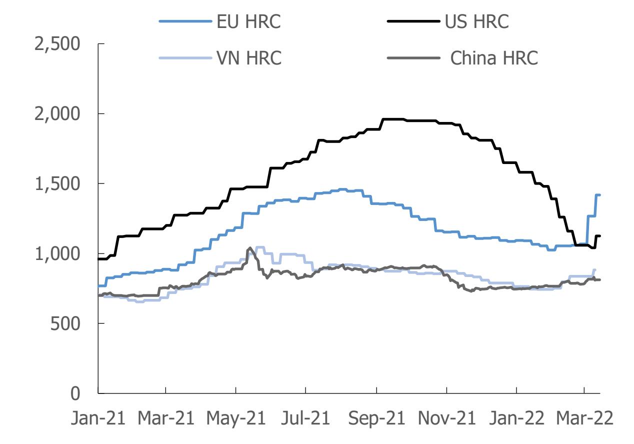
Source: Company data, KIS

4. Steel: Facing mounting cost and uncertainties

Geopolitical tension created a short-term shortage of steel. Russia, Ukraine were 2nd and 9th biggest global steel exporters; and 1st and 3rd biggest EU steel exporters with 7.3 and 4.5 mil tonnes in 2020, respectively. Russia is also one of the top exporters of coking coal. The geopolitical tension and sanction raised the steel shortage concern in EU owing to disruptions of transportation routes required for steel and iron ore. The sanctions on Russian banks involve in financing trades could scupper steel & commodities export deals. The disruptions create upward pressure on steel prices in EU and then global caused by the shortage of steel and the spike in input costs. The price of Australian coking coal surged by 50% while the price of EU HRC increased by 32% from 3rd March.

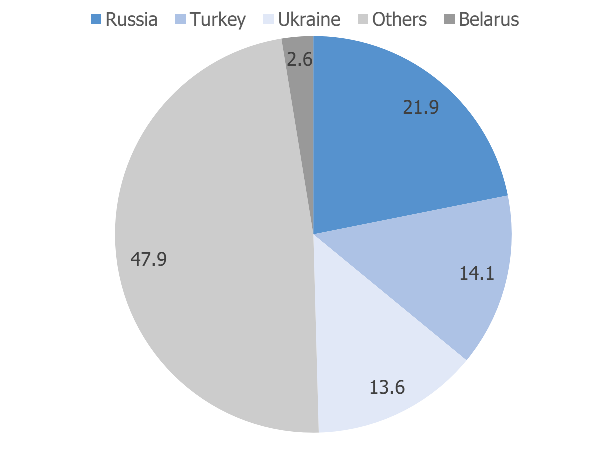
Boded chances to export to EU partners. If the sanction on Russia is persistent, the EU steel supply and demand imbalance could sustain amid global accelerating infrastructure spending and China's constraint on steel export to support domestic demand. With capacity utilization of EU steel production of 63% in 2020 and expected toward 70-80% in 2021, EU producers could increase the volume. However, the plan is not efficient amid the EU expensive production costs compared with major steel-producing regions due to costly raw material, energy, labor. Therefore, we expect the export opportunity to EU market will grant to lower-cost producers from India, Vietnam etc. In Vietnam, we expect HPG, the cost-efficiency steel mill and NKG, HSG, flat steel exporters are among the beneficiaries.
Since China has not joined the sanction, we expect China could import Russian steel and other commodities. Russian steel would help China stabilizes its material input costs and achieve its carbon neutrality target. As consequence, global steel export flows would be reshaped, where steel products from as India, Korea, Vietnam, replace Russia's ones in EU and other regions, and vice versa in China market. In addition, we also expect that steel price gaps exist among regions.

Figure 53. EU HRC price surged amid the turmoil



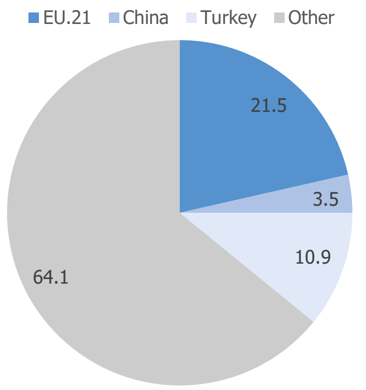
Source: Bloomberg

Figure 54. The absence of Russia steel export direct and indirect to EU may create short-term shortage (EU import market share in 2020 based on volumes)



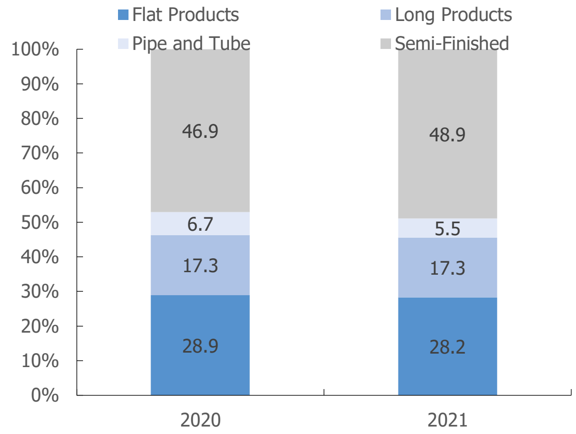
Source: International Trade Administration

Figure 55. Russia export market breakdown by countries (based on volume)



Source: International Trade Administration

Figure 56. Russia semi-finished export product may benefit China with their targets (breakdown based on volume)



Source: International Trade Administration

Steel price hike to shelter the gross margin contraction. The tension and sanction would create a better average selling price (ASP) for steel mills and exporters, however, the volatility in input materials prices (coking coals, iron ore, scraps) would negatively affect gross margin. Depending on the rally pace of ASP or input prices, the time that mills stock their input materials, and how dependent the mills are on the imported sources, the magnitude of the impact of tension will be varied depending on each steel mills. March is the usual month for mills to stock materials for the next quarter, therefore, if the input price is still at a high level in March, we expect to see the full impact of input price spike on mills performance in the next quarter. Besides, the increasing logistic cost as oil price surged can also be another factor that affects domestic steel exporters. However, as we mentioned above about price gaps among regions, we expect the companies utilizing the export opportunity for all types of products can minimize the impact of input price volatility. As for flat steel exporters, the HRC price growth pace are significantly different between markets (for example EU +32%; Vietnam +8.6% from 3rd Mar) so we expect a better gross margin for flat steel exporters starting in 2Q22 or 3Q22 depending on export contracts.

In the scenario of the persistent sanction, we expect to see the coking coal price will be cool down from late 2Q22F or early 3Q22F based on (1) the better weather condition in Indonesia could support production volume from 2Q22 and (2) China plans to boost domestic production capacity to cut reliance on coal import. While Indonesia production cut and China mining operation halt were two of main factors that drove the coal price surged over last quarters, the reverse of those two factors is expected to strongly contribute to stabilize coal prices amid the uncertainty of the sanction lifting.

We assumed the coking coal and iron ore input price for 2Q22F is USD530 and USD140 per tonne, respectively. The gross margin on rebar is showed in table below with 3 price scenarios for BOF technology deployed.

Table 16. Scenarios for Gross Margin for rebar in 2Q22F

	BOF	ASP (VND/Kg)
Worst case	17%	19,030
Base case	21%	19,895
Best case	24%	20,760

Source: KIS

Table 17. Gross margin on rebar sensitivity analysis (BOF) 2Q22F

		Selling price			
		+5%	+10%	+15%	+20%
Production	+10%	29%	32%	35%	38%
	+27%	18%	21%	25%	28%
	+34%	13%	17%	21%	24%
	+45%	6%	10%	14%	18%

Source: KIS

Table 18. Rebar production cost change sensitivity analysis 2Q22F

		Coking coal price			
		+40%	+60%	+90%	+120%
Iron ore price	+20%	+24%	+31%	+42%	+53%
	+30%	+27%	+34%	+45%	+56%
	+40%	+31%	+38%	+49%	+60%
	+50%	+35%	+42%	+53%	+64%

Source: KIS

Note: The tables above are with assumptions:
- BOF technology.
- Scrap price is unchanged at VND12,000/kg.
- Coking coke price (APAC Hard Coking Coal FOB Aust) starts at $332; Iron Ore price (Iron Ore 62%) starts at $108. The price of each material is calculated by the average price of December 2021.
- Selling price starts at VND17,300/kg.

Table 19. Gross margin on rebar sensitivity analysis (EAF) 2Q22F

		Selling Price			
		+5%	+10%	+15%	+20%
Scrap Price	+0%	17%	20%	24%	27%
	+5%	12%	16%	20%	23%
	+10%	8%	13%	16%	20%
	+15%	4%	9%	13%	16%

Source: KIS

Notice: The tables above are with assumptions:
- EAF technology.
- Scrap price starts at VND12,000/kg.
- Selling price starts at VND17,300/kg.

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