

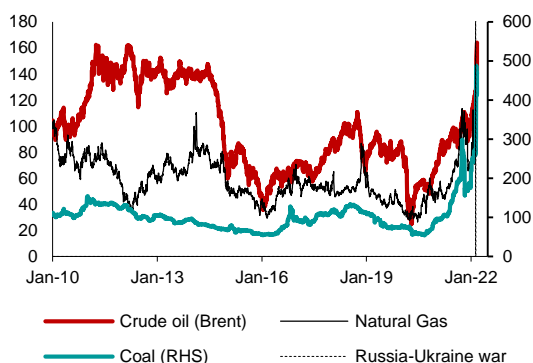
The Russia-Ukraine War and Global Oil Prices: Will They Fuel Problems for the ASEAN+3 Region?¹

March 13, 2022

I. Introduction

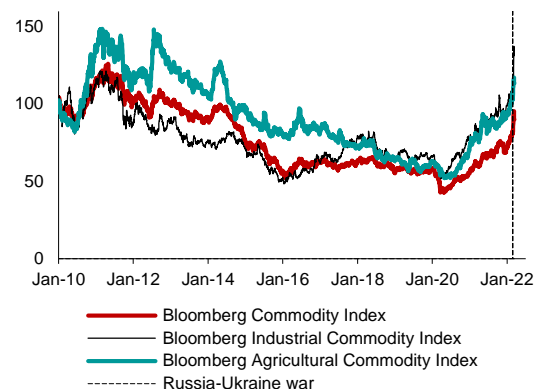
1. **The Russia-Ukraine war has caused a surge in oil and other commodity prices.** The conflict, which had been simmering since late 2021, exploded on February 24, 2022 when Russia invaded Ukraine. Meanwhile, Brent crude prices, which had been rising gradually, from USD 70 per barrel in November 2021 to above USD 90 per barrel by mid-February—as markets grew increasingly nervous about the build-up in geopolitical risks—accelerated and reached an intraday high of USD 139 per barrel on March 7, 2022. A surge was also seen in other energy commodities (Figure 1), pushing them to multi-year highs; prices of agricultural and industrial commodities have also risen sharply (Figure 2).

Figure 1. Price Trends in Energy Commodities
(Index, January 1, 2010 = 100)



Sources: Bloomberg Finance L.P.; and author's calculations.

Figure 2. Price Trends in Key Commodity Groups
(Index, January 1, 2010 = 100)



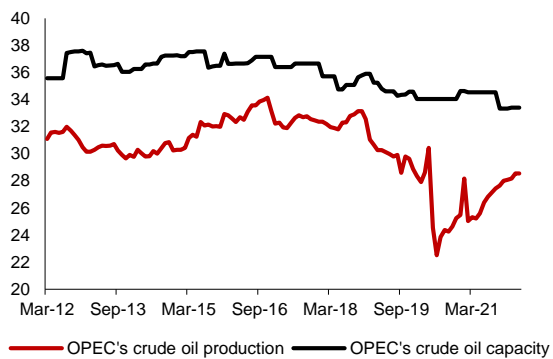
Sources: Bloomberg Finance L.P.; and author's calculations.

¹ Prepared by Prashant Pande (Prashant.B.Pande@amro-asia.org, Financial Surveillance); reviewed by Li Lian Ong (Financial Surveillance); authorized by Hoe Ee Khor (Chief Economist). The views expressed in this note are the author's and do not necessarily represent those of the AMRO or AMRO management. The author would like to thank Diana del Rosario and Catharine Kho for their helpful inputs, and Toshinori Doi for useful comments.

II. The Russia Effect on Oil Markets

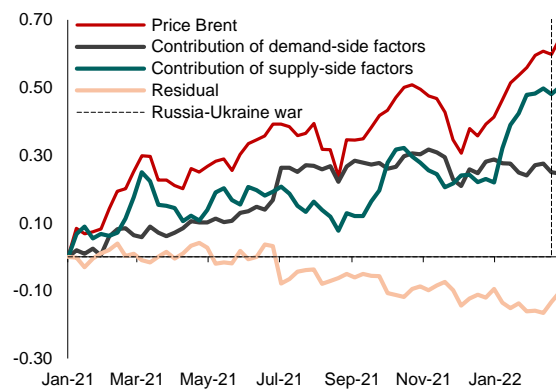
2. **The war has created significant uncertainty over Russia's oil exports, adding to supply-side concerns.** The drivers of higher oil prices have evolved in recent months. The demand optimism supported by the global recovery from pandemic ran up against the OPEC+ self-imposed supply curbs (Troderman, 2022) (Figure 3), pushing oil prices higher through most of 2021. However, supply side concerns rose, initially due to potential supply chain disruptions, when the geopolitical tensions manifested. However, the latest jump in oil prices has been driven by concerns around sanctions being imposed on Russia's oil exports, which exacerbated the supply-side worries (Figure 4).

Figure 3. OPEC's Oil Production and Capacity
(Million barrels per day)



Sources: Bloomberg; and author's calculations.

Figure 4. Contribution of Supply and Demand Factors to Oil Price Changes
(Percent)



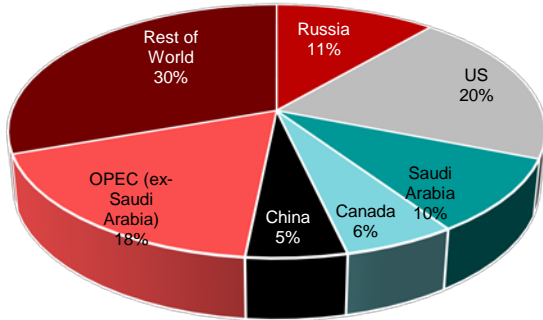
Sources: New York Federal Reserve; and author's calculations.

3. **Markets are fully cognizant that any shortage created by locking out Russian oil from international markets would be difficult to fill.** In 2021, Russia produced 10.7 million barrels per day (mb/d) of oil (11 percent of the global oil production) (Figure 5), of which 7.2 mb/d was exported. Russia's net oil exports in 2022 are also estimated to be more than 7.2 mb/d (OPEC 2022; EIA 2022) (Figure 6). In comparison, OPEC's spare production capacity stood at only 4.9 mb/d as of end 2021. Not all of this spare capacity is attributable to OPEC's voluntary production cuts; it also include factors such as political instability (Libya), sanctions (Iran, Venezuela) and temporary production outages due to technical failures, weather, and physical damage. Separately, major non-OPEC producers are producing only 2.7 mb/d less than their highest annual production since 2018 (derived from EIA 2022). Overall, even in the most optimistic scenario, all other oil producers together can barely compensate for the shortfall if Russian oil is completely cut off from the markets. Additionally, Russia's influence on OPEC+ should not be discounted, and is a potential deterrent against any rapid production increases by OPEC.

4. **An argument could be made about the use of the Global Strategic Petroleum Reserves (GSPR),** as we have seen recently when International Energy Agency (IEA) announced a release of 60 million barrels to ensure adequate supply of petroleum in the markets. According to OPEC's estimates, the GSPR stood at 1.4 trillion barrels as of end-2021, of which 0.6 trillion barrels are held by the United States. And on March 2, member countries of the International Energy Agency (IEA) committed to the release of 60 million barrels of crude oil to ensure adequate supply of petroleum in the markets. However, even though the GSPR can theoretically compensate for the loss of access to Russian oil for

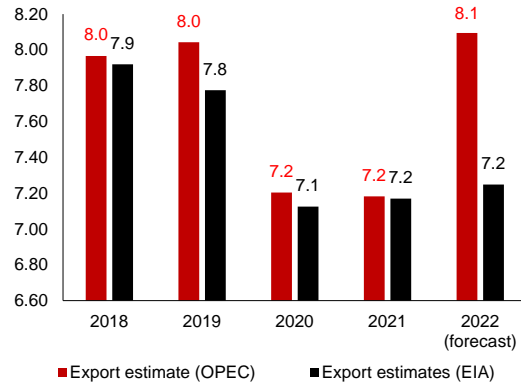
almost 200 days, the conditions for drawing down these reserves are very stringent (Peterson, 2022).

Figure 5. Global Share of Key Oil Producers
(Percent of global production)



Sources: Bloomberg Finance L.P.; and author's calculations.

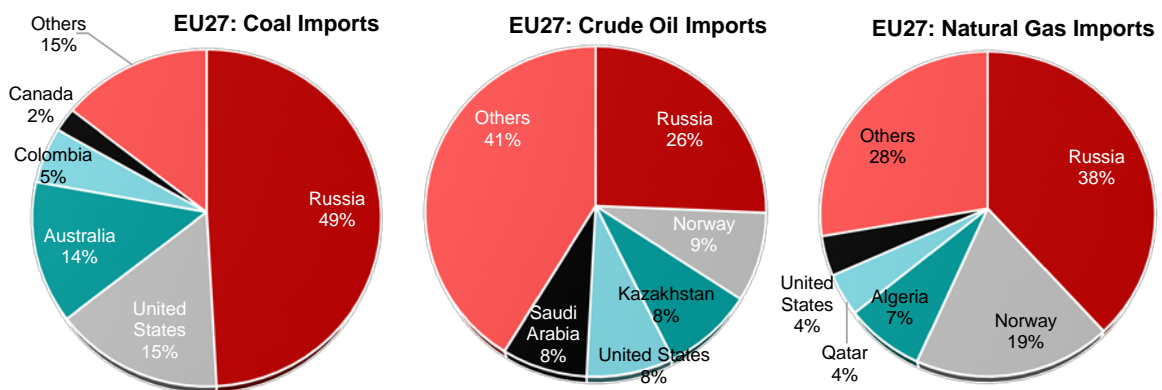
Figure 6. Russia: Estimates and Forecasts of Oil Exports
(Million barrels per day)



Sources: Bloomberg Finance L.P.; and author's calculations.
Note: Net exports are assumed to be production less domestic demand. EIA data are available on a monthly basis. They are converted to annual frequency by taking a simple average of the monthly data. OPEC forecasts are as of February 15 (before Russia attacked Ukraine) and EIA forecasts are as of March 8 (after the attack).

5. **In reality, Russian oil may not be completely taken off international markets.** Despite the sabre rattling, the United States and its allies are aware of the importance of Russian oil for global markets and economy. The United States and United Kingdom have banned the import of oil from Russia but have not announced any sanction on countries or companies that trade with Russian oil producers. Similarly, the EU has not yet imposed any ban as it relies heavily on Russian energy exports (Figure 7), but it has announced that it will work on a medium- to long-term plan to reduce its dependence on energy imports from Russia (European Commission 2022). Meanwhile, the United States, United Kingdom, and EU are working on importing oil from other producers, and negotiations to lift sanctions on Iran and Venezuela are underway.

Figure 7. Europe: Energy Imports by Source, 2020
(Percent of total)



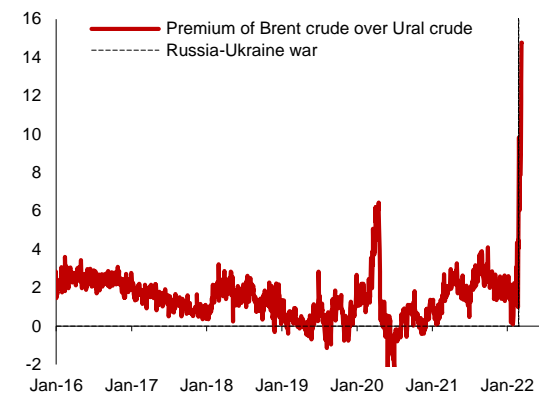
Sources: Eurostat; and author's calculations.

6. Import bans by the advanced economies (AEs), in the absence of sanctions, may only reroute Russian oil to other regions while AEs import from elsewhere.

Recent anecdotal evidence from late-February suggests that India bought Russian seaborne oil as European refineries self-sanctioned against importing from Russia (Su and Longley 2022). Although there are additional costs involved in realigning the supply chains and additional refining requirements (Jaffe 2022), the relative cheapness of Russian oil may keep some buyers interested (Figure 8). However, such purchases would likely come at the cost of incurring reputational risk associated with doing business with Russia, as evidenced by the backlash experienced by Shell when it purchased 100,000 metric tons of heavily discounted crude oil from Russia on March 4 to meet contractual obligations (BBC 2022).

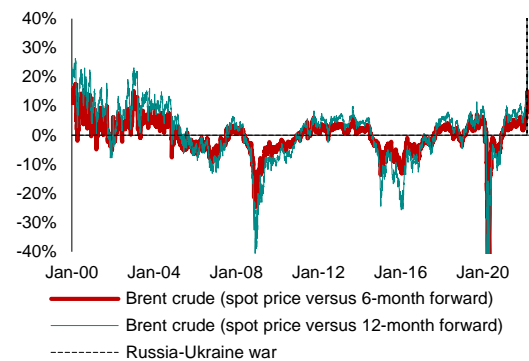
7. Markets continue to price in high spot premium but the buildup of speculative long positions has been very gradual. Six-month and one-year forwards are trading at a discount of 14 and 22 percent to spot prices, respectively, which is the largest since 2003. The forward discount, or conversely, spot premium rises in times of tighter supply (Figure 9). In addition, this development also discourages hoarding supplies of crude oil as there is no incentive in locking its future price while physically storing it. The speculative positioning in oil markets also indicates that markets are not overly optimistic of oil prices continuing their rally. Despite the strength in oil prices, speculative long positions has been muted (Figure 10). Taken together, the spot premium and the muted positioning indicate that market expects oil prices to at least lose momentum if not fall.

Figure 8. Premium of Brent Crude over Ural (Russian) Crude (US dollars per barrel)



Sources: Bloomberg Finance L.P.; and author's calculations.

Figure 9. Spot Premium in Brent Crude Forward Curve (Percent)



Sources: Bloomberg Finance L.P.; and author's calculations.

8. Regional assets have become more negatively correlated with oil prices since the onset of the Russia-Ukraine conflict. Most regional currencies and equity markets were positively correlated with oil prices in 2021 before the geopolitical tensions picked up in November 2021 (Appendix Figure 1). It was likely a result of broadly positive outlook as regional economies recovered from the pandemic. However, the correlations have reversed recently, suggesting that the recent rise in oil prices is not considered favorable for regional assets. The correlation of most regional bond yields has remained positive to changes in oil prices.

III. Risks of Stagflation and Recession

9. **The war's impact on commodity prices is much broader and has increased risks of stagflation.** The rise in commodity prices has continued to push market expectations of inflation higher. The inflation risks priced in are much higher in the shorter term, where US 1-year inflation expectations have reached 6 percent, the highest in almost two decades. The 10-year inflation expectations are also at multi-year highs. Inflation expectations have been rising since the recovery from pandemic started but has accelerated much more in recent weeks (Figure 11). In response, the market has also brought forward its US Fed hike expectations and, despite some risks to growth from the Russia-Ukraine conflict, is not pricing out near-term rate hikes. The pricing suggests hikes of more than 150 basis points in 2022. On the other hand, the expectations of the terminal rate (proxied by US Fed Fund expectations by end-2025) have remained largely stable. Real yields have eased (Figure 12) indicating that markets expect the US Fed to maintain easier financial conditions in the longer-term to support growth.

Figure 10. Speculative Positioning in Crude Oil
(US dollars per barrel)

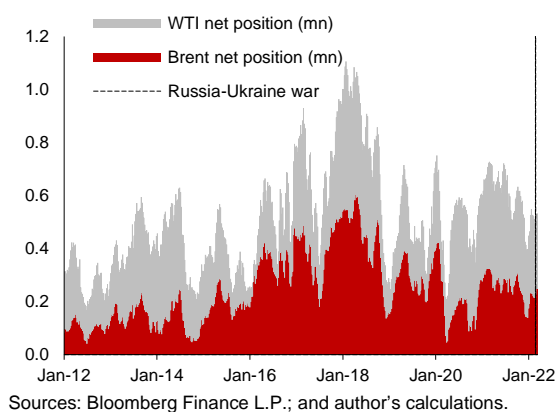
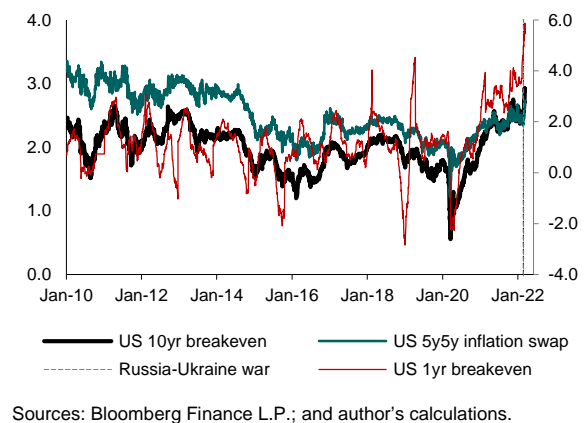


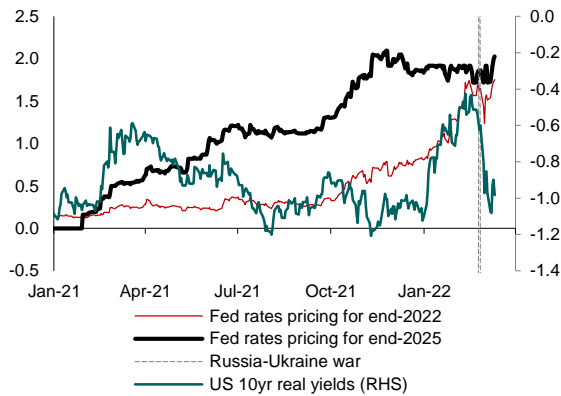
Figure 11. United States: Inflation Expectations as Reflected in US Rates
(Percent)



10. **Markets have started to price in some probability of a US recession in the coming quarters.** One of the tail risks that the US rate curve has started to price in is that of a recession. Historically, recessions have followed periods of negative US Treasury spreads (10-year vs. 2-year, 10-year vs. 3-months). The recent sharp drop in 10-year vs. 2-year spreads has ignited market concerns (Figure 13). The tail risk in the current backdrop is that stubbornly high inflation leads to demand destruction and also does not provide any room for central banks to support growth, causing the economy to spiral down into a recession.

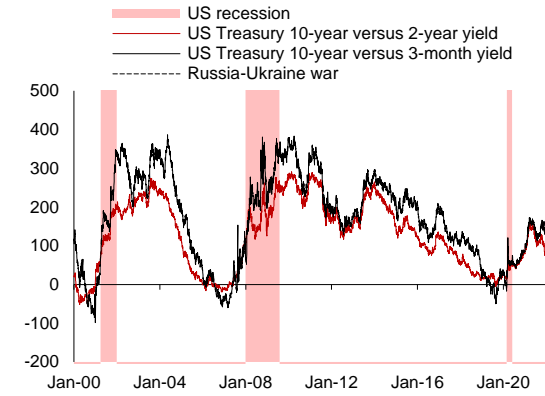
11. **The spillovers from the Russia-Ukraine conflict to the ASEAN+3 region have thus far been limited, but rising commodity price pressures and indirect effects may become significant.** Inflationary pressures in the region have largely been subdued for most of 2021 and have only ticked up in a few economies over the past couple of months. That said, the rise in commodity prices poses risks to regional inflation. The war has further disrupted already-congested supply chain networks, which will add to price pressures. Higher inflation, driven by supply-side factors, may derail the recovery from the pandemic. Spillovers could also manifest if growth in Europe and the United States is negatively affected by any fallout from the war. On the other hand, some regional commodity exporters may benefit through better terms of trade as a result of higher commodity prices (Figure 14).

Figure 12. United States: Market Expectations around US Fed policy (Percent)



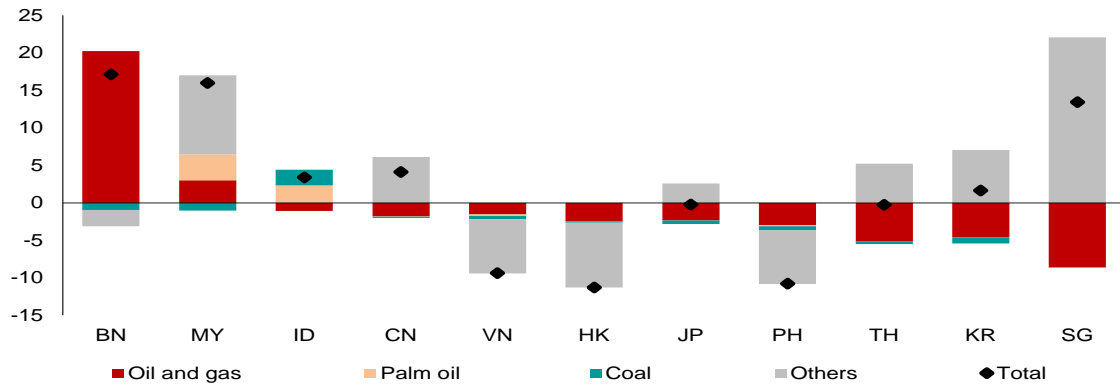
Sources: Bloomberg Finance L.P.; and author's calculations.

Figure 13. United States: Treasury Spreads and Recession Risks (Basis points)



Sources: Bloomberg Finance L.P.; and author's calculations.

Figure 14. ASEAN+3: Breakdown of Trade Balances, 2021 (Percent of GDP)



Sources: S&P Global; and author's calculations.

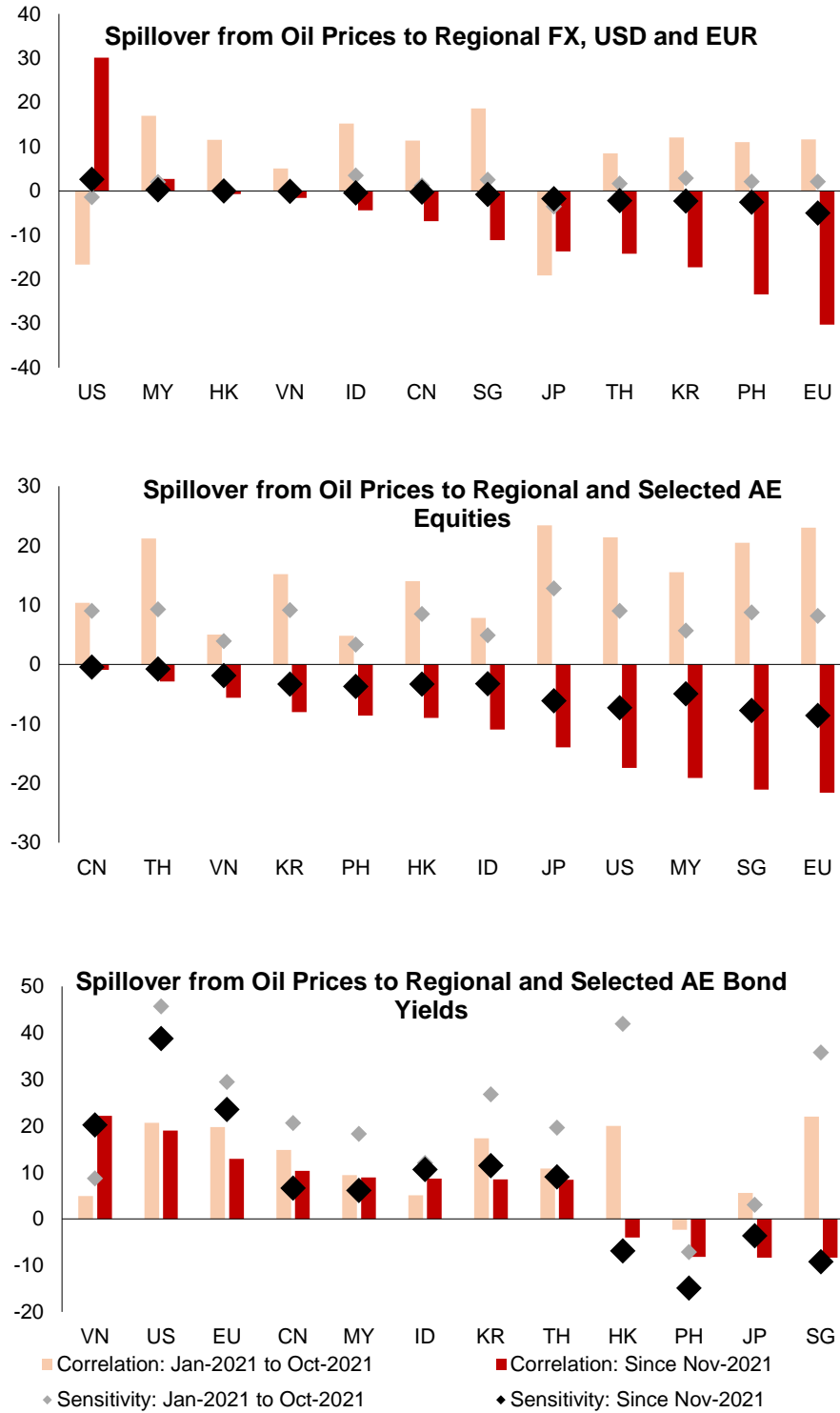
Note: Despite their sizeable trade surplus, Korea and Singapore are net oil importers.

IV. Conclusion

12. Overall, the situation remains fluid but the spillovers to regional markets will depend on three important factors. First, the trajectory of the conflict going forward: A quick end to the war will lead to the stabilization of commodity prices at lower-than-current levels. However, it may not necessarily fall to pre-conflict levels, given that ongoing aversion to Russian exports, and continuing sanctions, if any, would likely create long-term price distortions. Conversely, a long, drawn-out war will keep prices volatile and commodity prices elevated. Second, selective sanctions, embargos, and bans on Russian products would pressure prices but stringent, encompassing ones would likely push commodity prices to levels where demand is acutely disrupted and the global recovery from the pandemic is severely hampered. Finally, policy responses from AE policymakers will be crucial in managing market sentiment—they will have to walk a tightrope in balancing surging inflation while supporting growth.

Appendix I. Spillovers from Oil Price Changes to Selected ASEAN+3 and AE Assets

Appendix Figure 1. Selected ASEAN+3 and AEs: Selected Correlation and Sensitivity to Oil Prices (Percent)



Sources: Bloomberg Finance L.P.; and author's calculations.

Note: The correlations and sensitivities are calculated using daily changes in oil prices and asset prices (FX, equity) and yields (bonds).

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