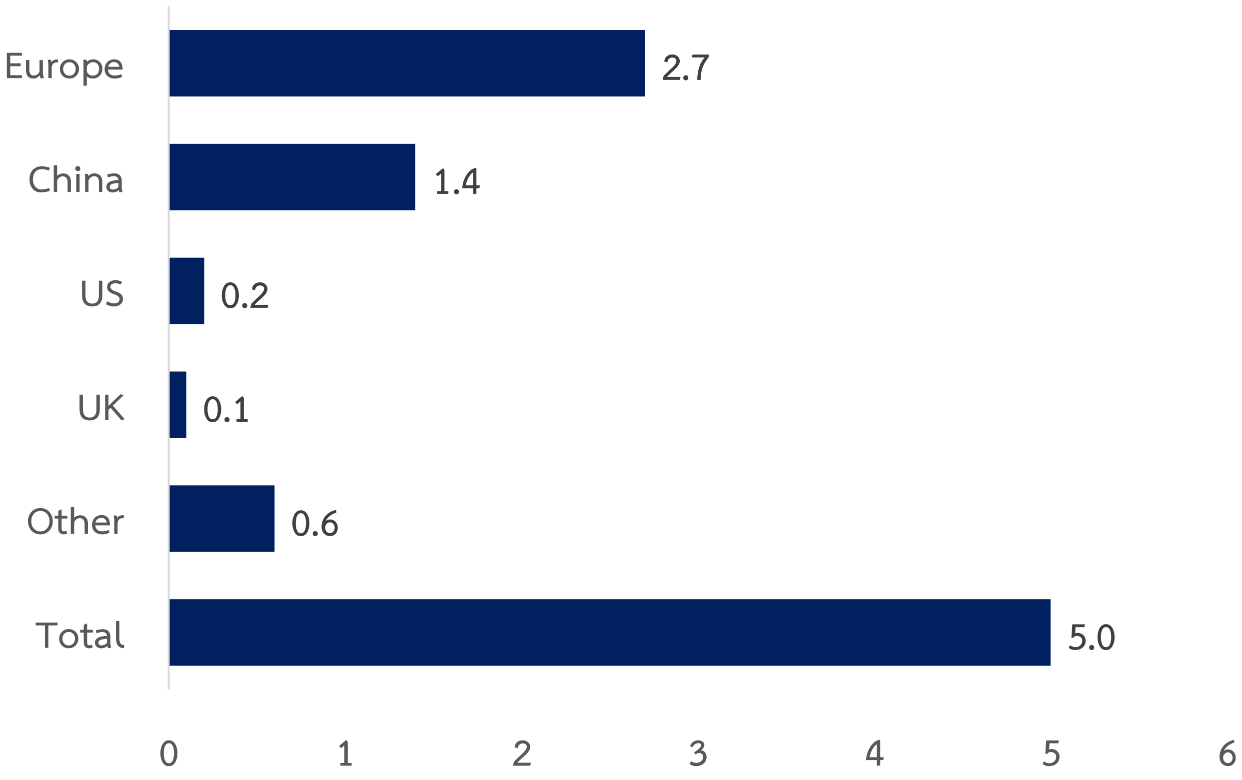
Dubai crude oil prices reached an eight-year high in March 2022 at over 100 U.S. dollar per barrel. This was driven by concerns that the Russia-Ukraine conflict and the economic and financial sanctions against Russia would result in a significant decrease in crude oil supply from Russia. Oil supply from other producers such as OPEC and the US might not be able to offset the decline in crude oil from Russia, while the demand for oil is still on the rise. As a result, the already tight oil market is likely to tighten further and become more fragile, leading to greater volatility in crude oil prices going forward.

Russia is the world's second largest producer and exporter of oil and natural gas. Russia produces up to 10-11 million barrels of crude oil per day, which is about 10 percent of global crude oil production. About half of Russia's crude oil production are exported, with the main destinations being Europe (3 million barrels per day) and China (1.4 million barrels per day) (Chart 1). It is likely that Europe, a major export market for Russian energy commodities, would avoid directly imposing energy-related sanctions against Russia given its dependence on energy from Russia, especially natural gas which could not be easily substituted by other exporters. However, it is expected that sanctions imposed by other countries would indirectly impact Russian energy exports especially (1) the removal of selected Russian banks from SWIFT[1] which would pose an obstacle to trade settlements with Russia; and (2) sanctions imposed by the private sector such as a large oil transport company announcing that it would not transport oil to and from Russia.

Chart 1: Russia's crude oil exports
(Nov 21 – Jan 22 average) (mn barrels per day)

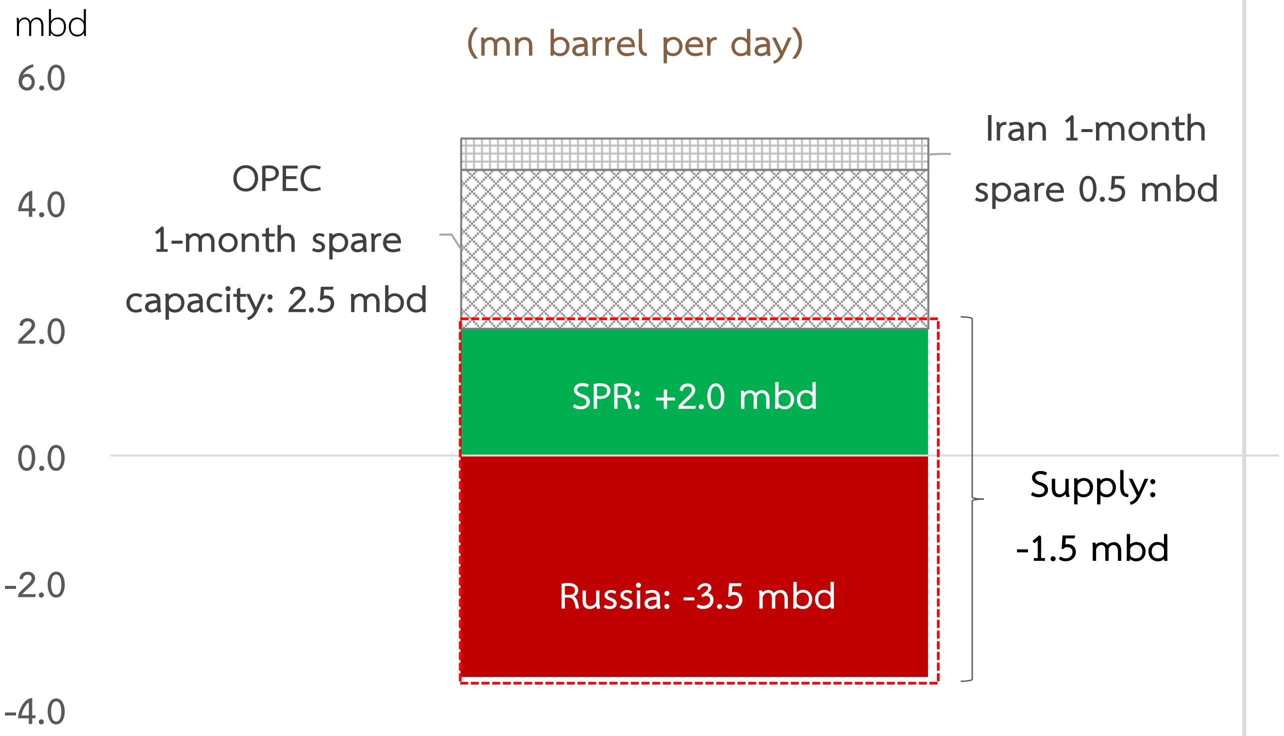


Source: Goldman Sachs Global Research

As a result, many oil importers delayed buying oil from Russia. It is expected that Russian oil exports would decline by about 2.5 million barrels per day. **Currently, there are still uncertainties whether those sanctions would escalate further, particularly whether the EU would prohibit energy imports from Russia. In such case, Russian oil export would decline as much as 3.5 million barrels per day.** Nevertheless, it is expected that Russia would still be able to export oil to China because China would continue to trade with Russia and utilizes its own cross-border payment system. **If one also takes into consideration the impact on Kazakhstan's oil exports of 1.6 million barrels per day** that normally has to transits through Russia due to the country's land-locked nature, **the global oil supply might decline as much as 5 million barrel per day.**

Oil supply from other producers cannot fully offset the decline in Russian oil exports (Chart 2) due to lack of capacity to increase production both cyclically and structurally. **With regard to OPEC countries who are the world's top oil producers with sufficiently large oil output to offset the gap left by Russia, while they may have spare capacity to immediately scale up production by 2-3 million barrel per day within a month, it is ultimately up to the OPEC's decision whether they are willing to increase production beyond the agreed amount.** Since 2021, the actual output from OPEC producers has been below the agreed amount because some countries faced political conflict on both domestic and international fronts, while fuel transport pipes were also damaged and often had to be shut down for unscheduled maintenance.

Chart 2: Expected decline in Russia's crude oil supply and spare capacity that could potentially offset it (mn barrel per day)



Note: SPR: The US and its allies' strategic petroleum reserve

Sources: Wood Mackenzie (Mar 4, 2022) and BOT's calculation

Iranian oil producers might be able to increase production by around 1 million barrel per day if sanctions imposed by the US were lifted. This could help partially offset the supply of Russian oil although negotiations are still ongoing and highly uncertain. The US Oil production is still increasing slowly and remains well below pre-COVID levels even though oil prices have risen sharply and are now above pre-COVID levels. The slow ramp up in US oil production is due to many US oil producers upholding their financial discipline by paying out dividends to their investors before investing in more production capacity. This is reflected in the reinvestment rate being much lower than in the past. US oil producers are also likely to delay investment in fossil fuel energy over the longer term as a result of President Joe Biden's climate policies. Meanwhile, the release of the strategic petroleum reserve (SPR) by the US and its allies in the amount of 60 million barrel (around 2 million barrel per day) might be able to offset just 1 month worth of Russian oil. The limited increase in oil from both OPEC and US have tightened the global oil market as reflected in crude oil inventory among OECD countries which have continued to decline and has been below the 5-year average since 2021.

In addition, oil demand is expected to continue recovering as reflected in the improving economic activities of major oil importers such as the US, India, and Germany. The growth outlook of these economies is looking more upbeat as the public grow less concerned over the Omicron outbreak. Likewise, the demand for oil for transportation purposes have also recovered as reflected in the higher number of commercial flights in operation. Many countries such as Norway, Sweden, and Japan are also preparing to lift international travel restrictions and re-open its borders to foreign tourists.

Looking ahead, crude oil prices are likely to be more volatile and unpredictable amidst tightening global oil market conditions that are more susceptible to both demand and supply factors, as well as the highly fluid situation surrounding the Russia-Ukraine conflict and sanctions against Russia. This presents an important challenge for macroeconomic policymakers in many countries, including Thailand, who must ensure that it would not have a significant impact on economic growth and inflation.

[1] *Society for Worldwide Interbank Financial Telecommunication (SWIFT) is a secure financial messaging service. More details can be found in the BOT's Payment Insight Vol.13 (Feb 2022) "SWIFT: cross-border financial messaging"*