

Outlook for International Oil Market in 2022

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Key Points of the Report

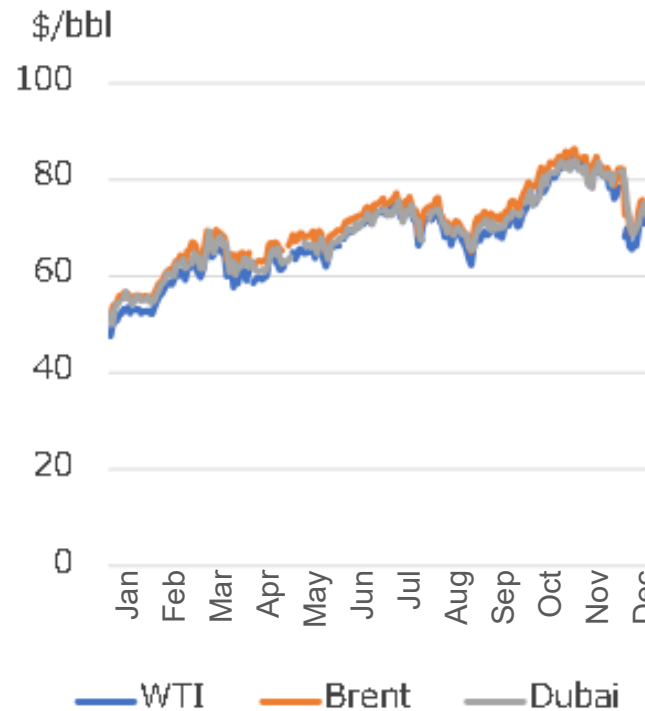
- ✓ Crude oil prices continued to rise in 2021 as crude oil demand growth amid an economic recovery from the COVID-19 crisis was coupled with production cuts by the OPEC-plus group of oil-producing countries and stagnant U.S. production to tighten the supply-demand balance. In the face of rising oil prices, such countries as the United States and Japan decided to release oil reserves. In late November, oil prices soared substantially as concern about the escalation of the COVID-19 pandemic grew due to increasing Omicron variant infections. In early December, the OPEC-plus group decided to retain its plan to increase oil production by 0.4 million b/d every month.
- ✓ Oil demand in 2022 is projected to increase by 4.3 million bpd or 4.4% from 2021 to 100.6 million b/d on the premise that the COVID-19 pandemic would not escalate so much. Oil supply is projected to rise by 5.1 million b/d or 5.4% to 100.7 million b/d on the premise that the OPEC-plus group will retain the gradual production expansion plan.
- ✓ The average Brent crude price in 2022 is projected at \$70/bbl. Great uncertainties include the escalation of the COVID-19 pandemic and the OPEC-plus group's resumption of production cuts. If oil demand stagnates due to the escalation, the average may fall by \$10/bbl from the projected level. If the supply-demand balance tightens due to the resumption of production cuts, the average may rise by \$10/bbl.
- ✓ As decarbonisation accelerates further, the oil industry is required to restructure business infrastructure while maintaining stable supply arrangements including those for gas stations during disasters and in depopulated areas.

Crude Oil Market in 2021

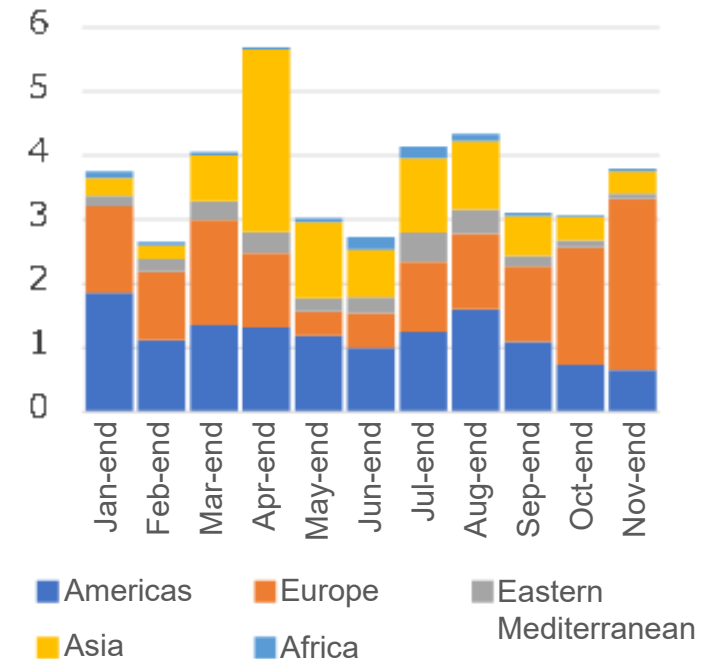
Supply-demand balance



Price trend



New COVID-19 infections

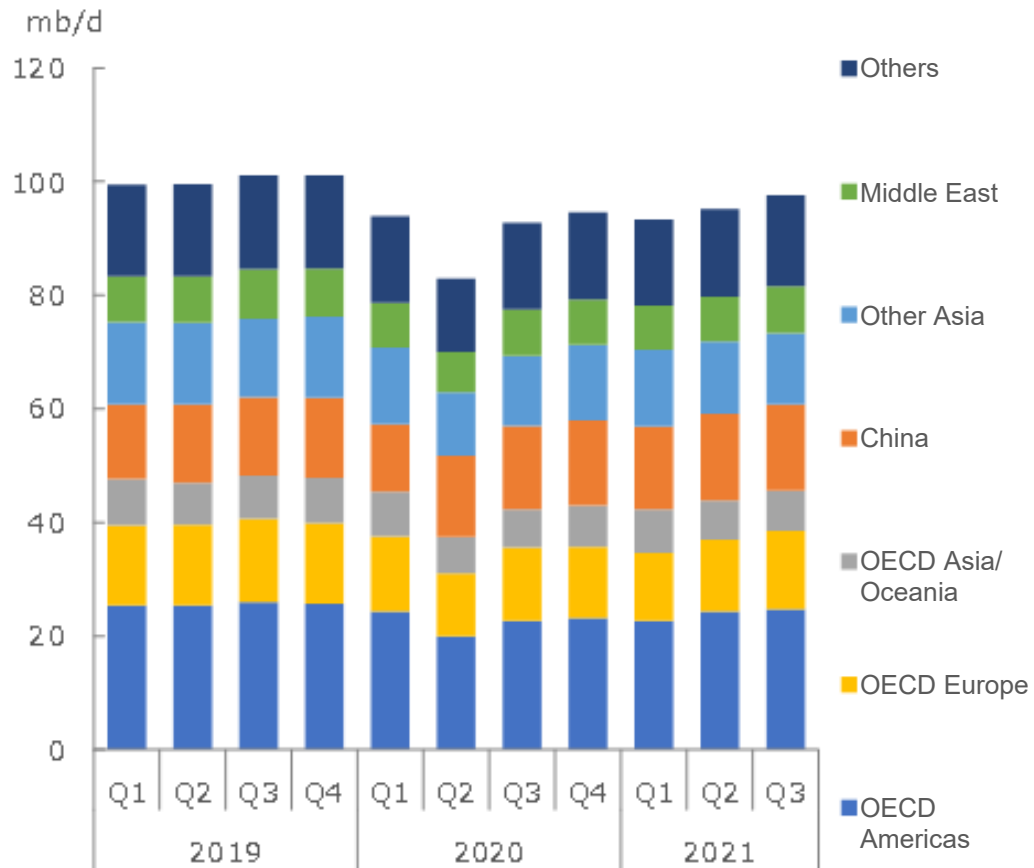


Sources: IEA, CME, ICE, WHO

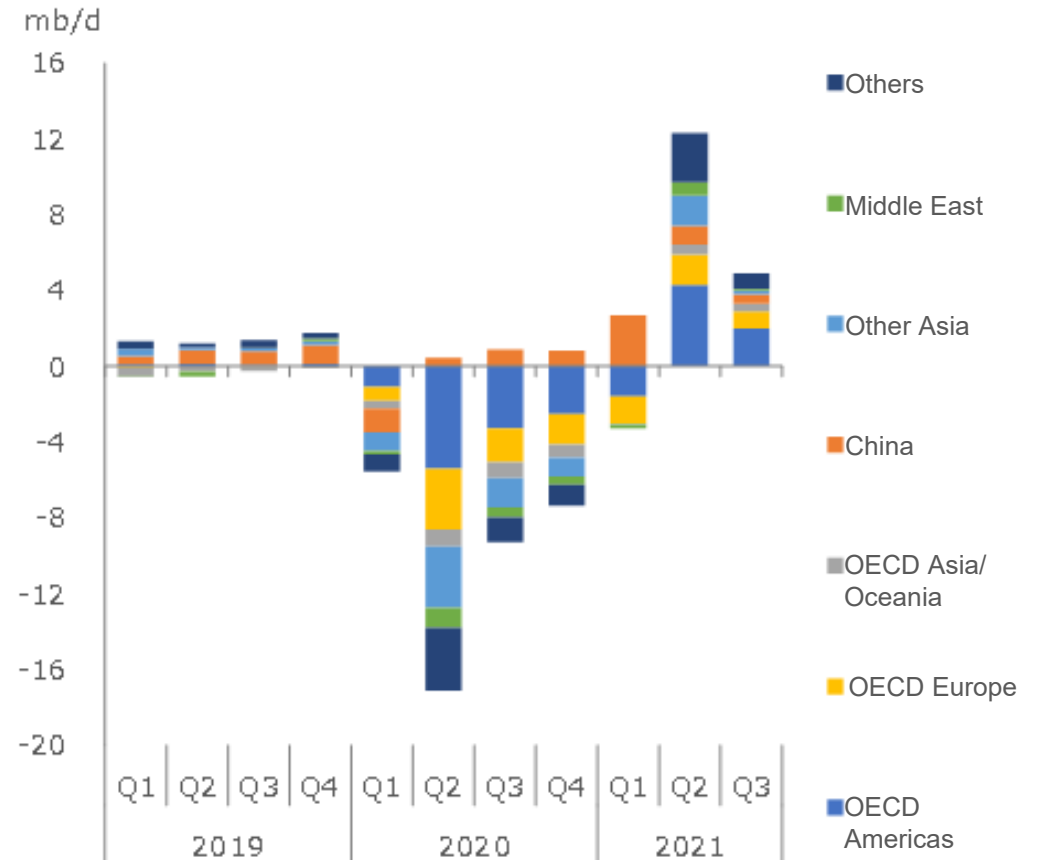
- As the oil supply-demand balance tightened due to oil demand growth amid economic reopening, OPEC-plus production cuts and stagnant U.S. production, inventories declined, pushing up prices.
- Crude oil price hikes pushed up other prices, becoming a matter of concern regarding a macroeconomic recovery.
- The United States led decisions on unusual oil reserve releases in November.
- While the COVID-19 pandemic failed to calm down, crude oil prices declined rapidly on growing concern over spreading Omicron variant infections in late November 2021.
- The OPEC-plus group decided to continue a gradual production expansion plan in January 2022 but is widely expected to halt the plan in 2022.

Oil Demand

Demand



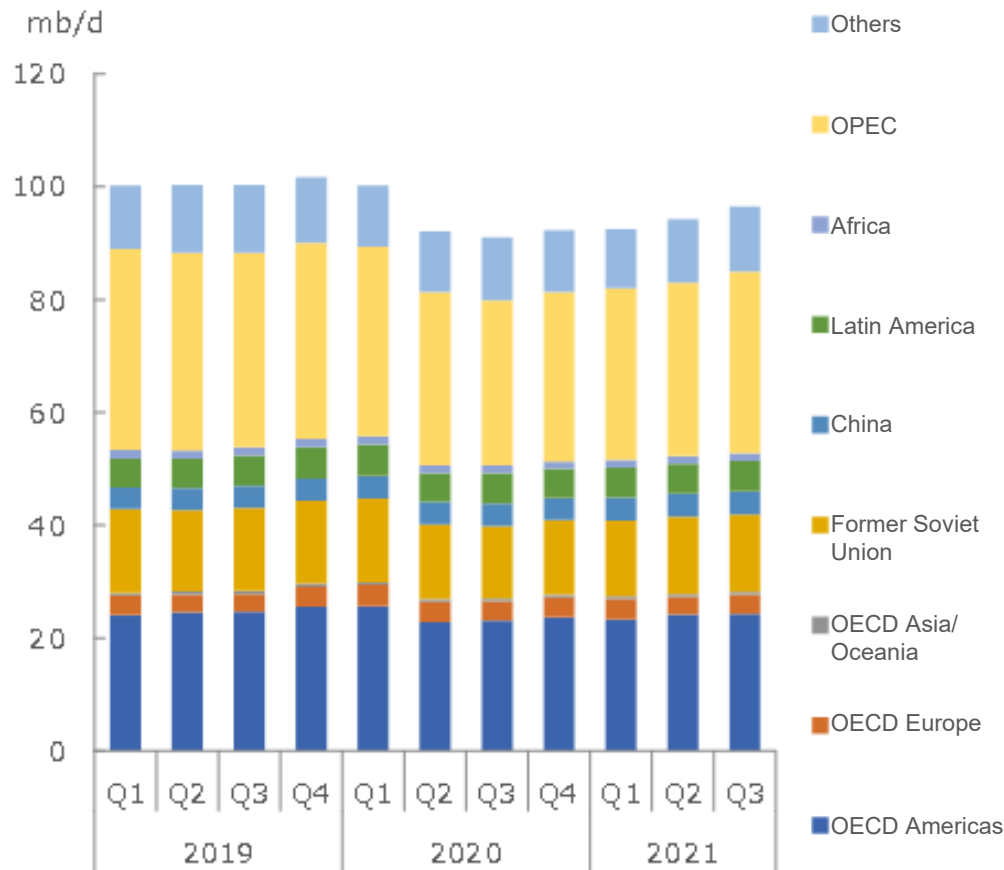
Demand changes (year on year)



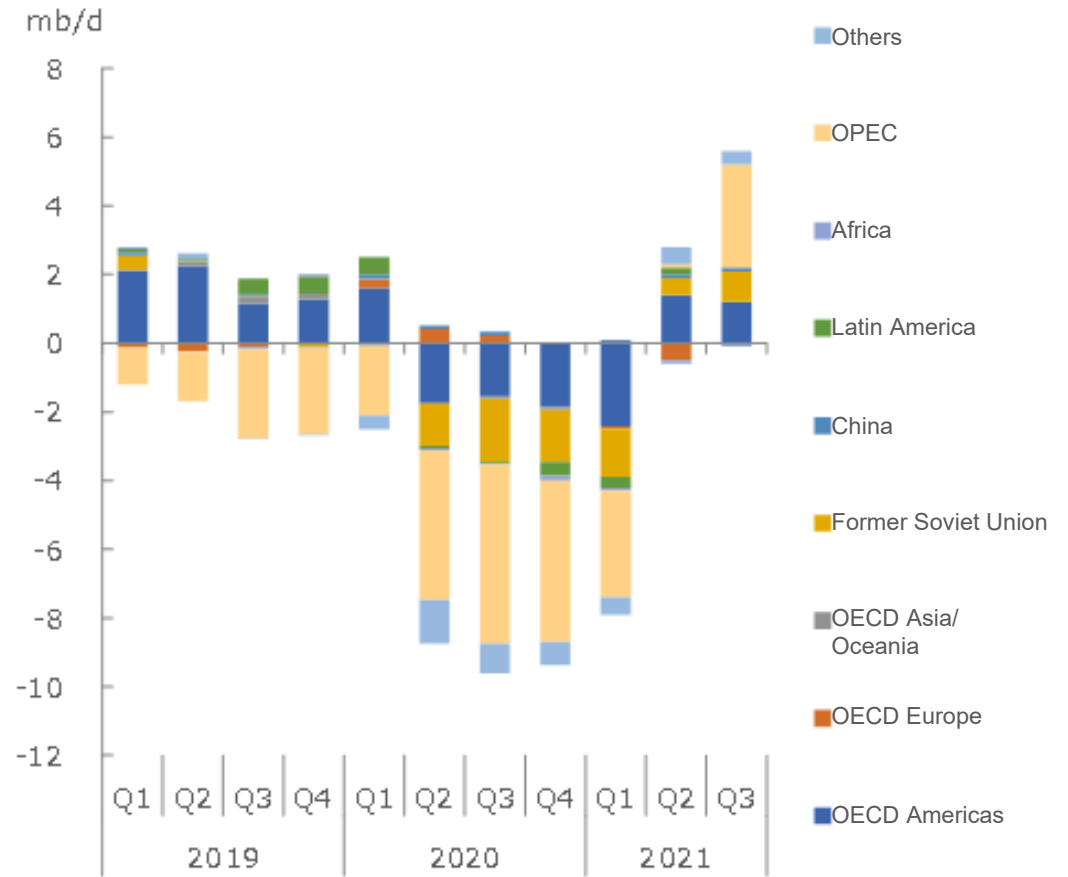
Source: IEA “Oil Market Report”

- Global oil demand in the third quarter of 2021 increased by 5.5 million b/d or 6.0% year on year to 97.6 million b/d. While the global COVID-19 pandemic has yet to calm down, oil demand is picking up on economic reopening.
- On the premise that the pandemic would not escalate extremely, global oil demand in 2022 is projected to expand by 4.3 million b/d or 4.4% from the previous year to 100.6 million b/d.

Production



Production changes (year on year)

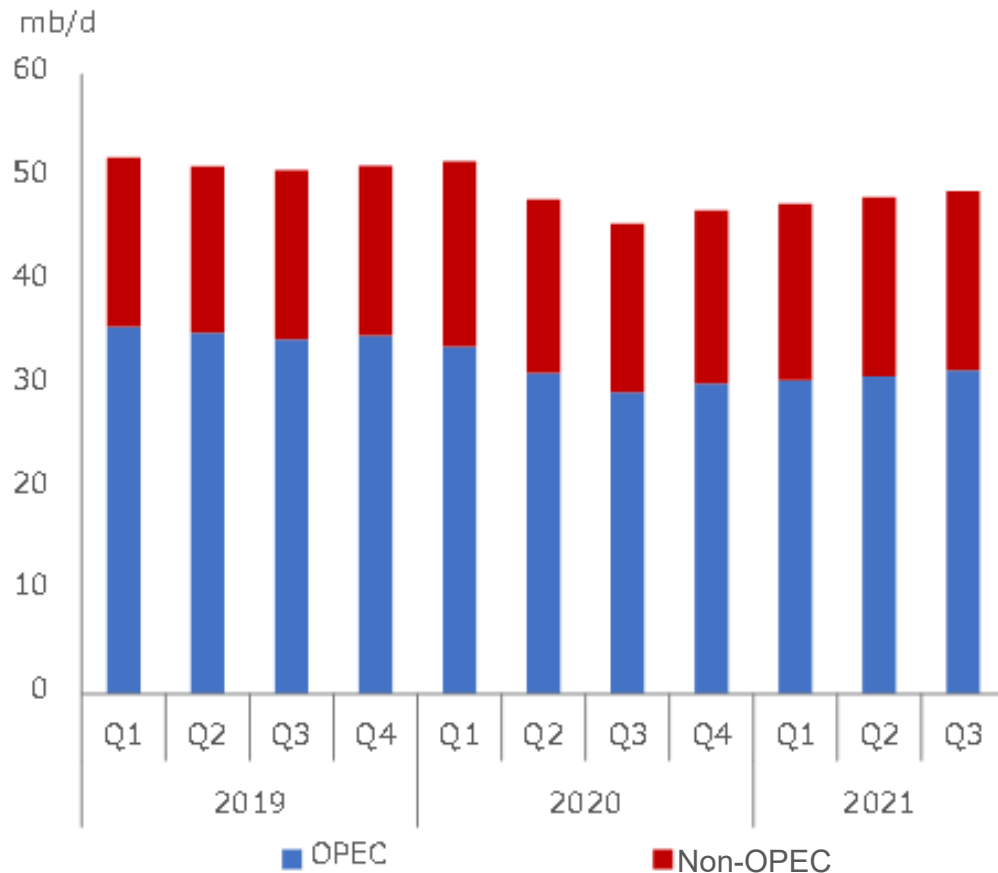


Source: IEA “Oil Market Report”

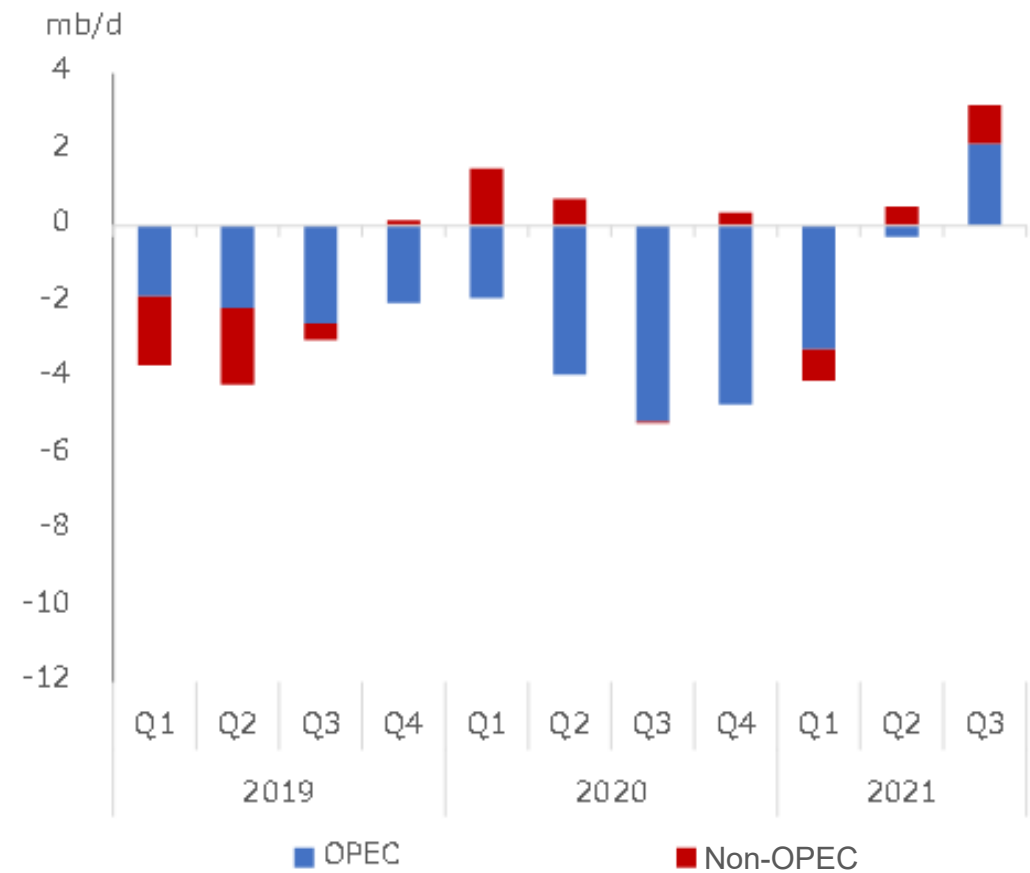
- Global oil production in the third quarter of 2021 increased by 5.4 million b/d or 5.9% year on year to 96.4 million b/d.
- The OPEC-plus group’s production expansion and a U.S. production recovery have yet to catch up with demand growth.
- On the premise that the OPEC-plus group will continue to increase production though at a slower pace, global oil production in 2022 is projected to rise by 5.1 million b/d or 5.4% from the previous year to 100.7 million b/d.

OPEC-plus Coordinated Production Cut

Production



Production changes (year on year)

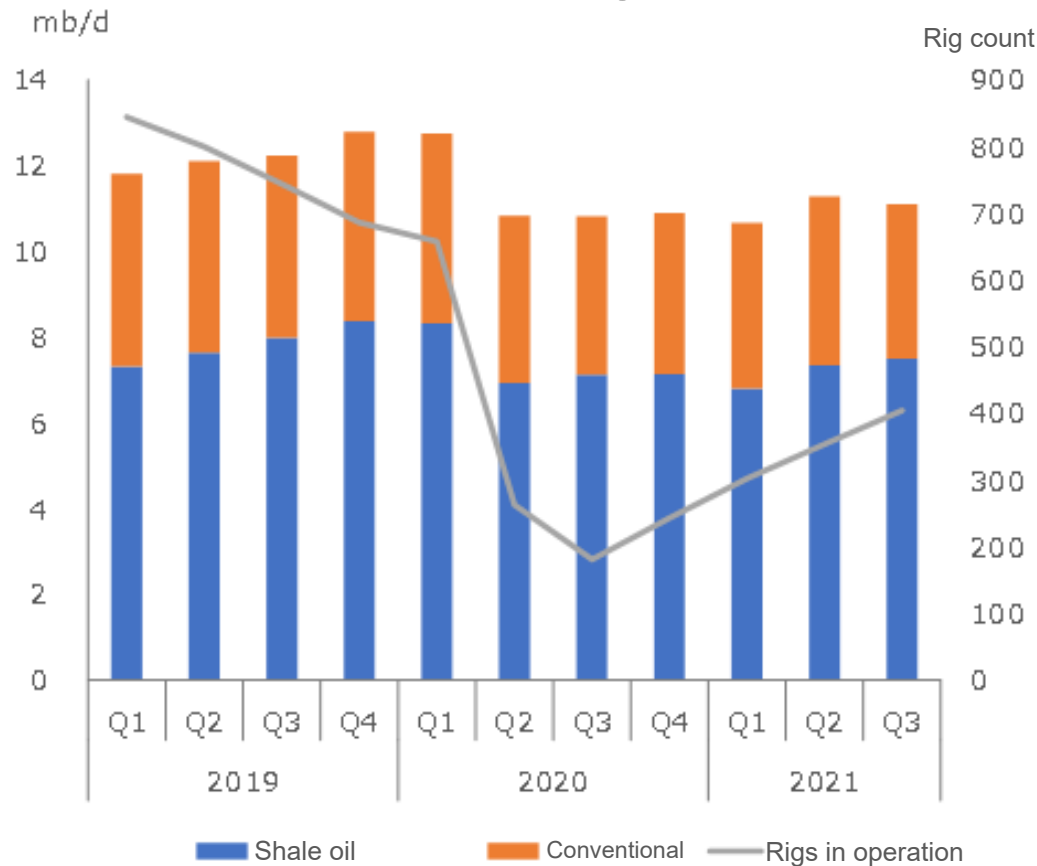


Sources: IEA “Oil Market Report,” OPEC “Monthly Oil Market Report”

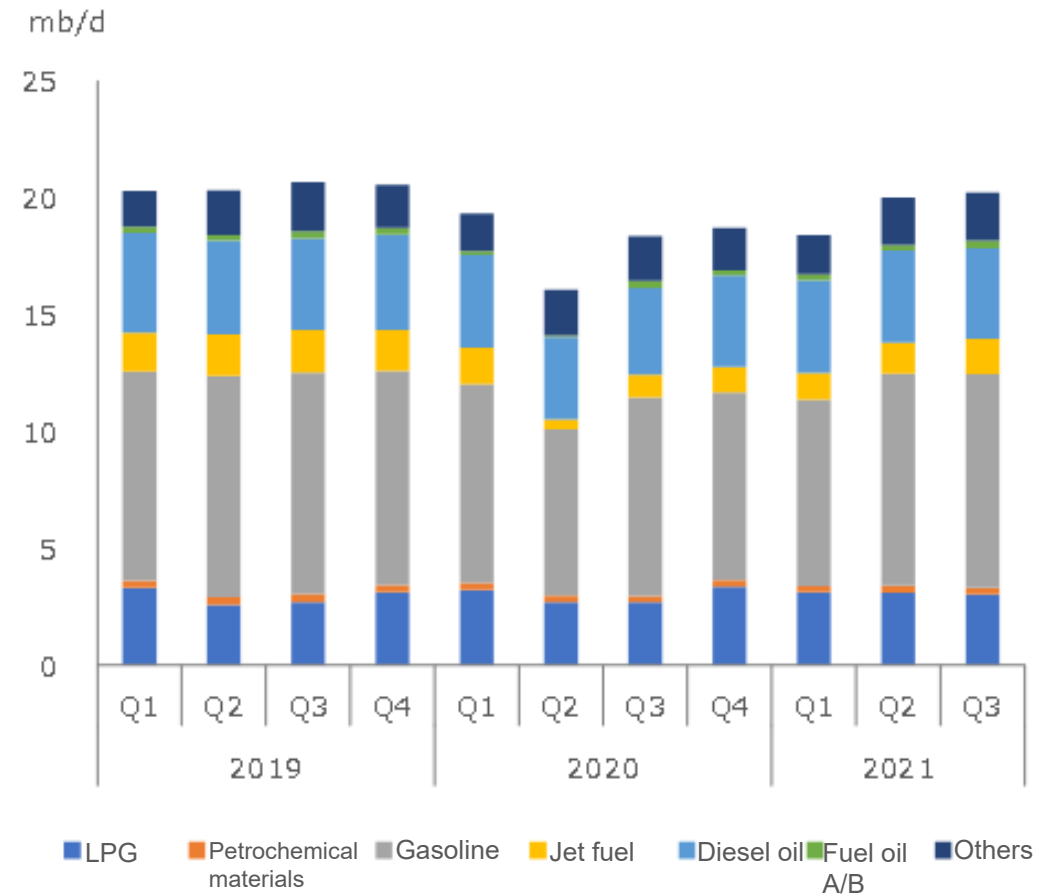
- The OPEC-plus group produced 49.4 million b/d in the third quarter of 2021.
- The group at its meeting on December 2 decided to increase production in January, while being concerned about the escalation of the COVID-19 pandemic and other factors that would push down oil demand.

U.S. Supply and Demand

Production and rigs in operation



Demand by product

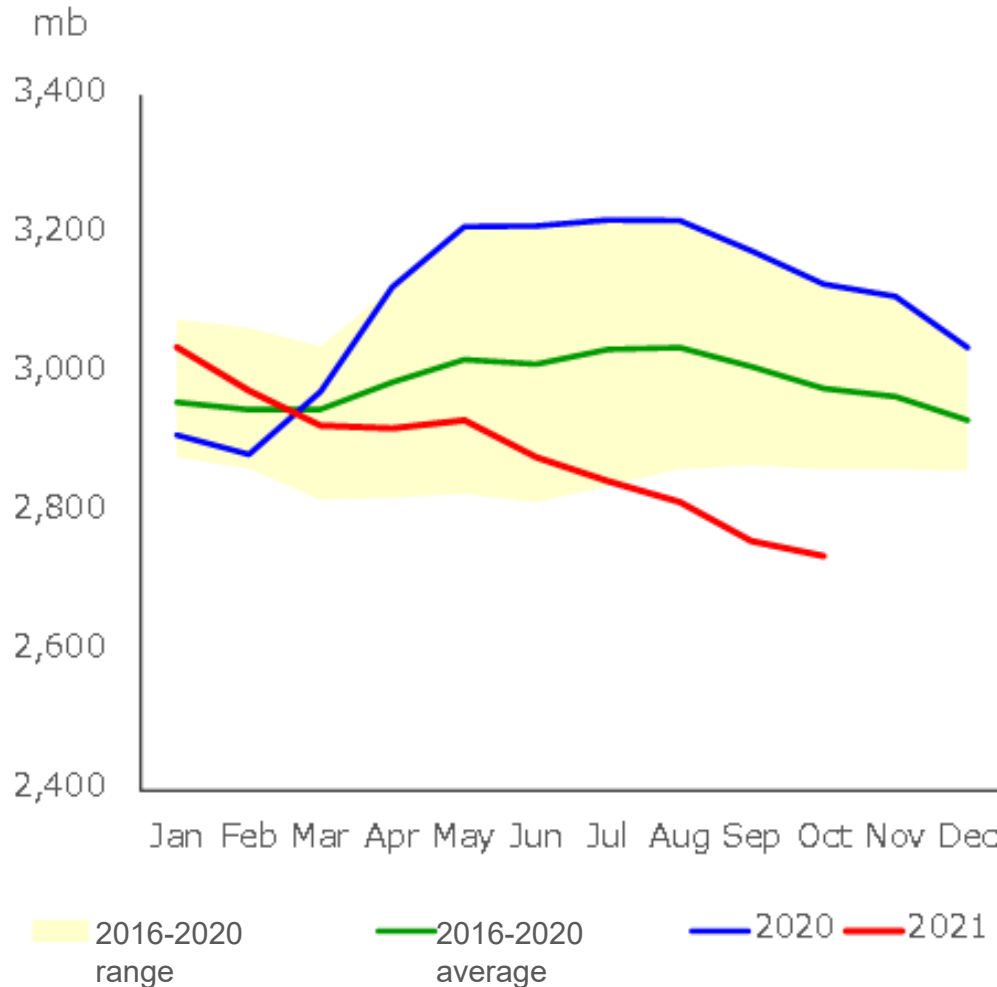


Sources: EIA, Baker Hughes

- U.S. oil production in the third quarter of 2021 remained unchanged from a year earlier at 10.8 million b/d, while U.S. oil demand increased by 1.8 million b/d or 9.8% to 20.2 million b/d.
- U.S. production has begun to rise at last in line with price hikes.
- In 2022, U.S. production is assumed to increase by about 1 million b/d, topping the 2019 level.

Inventories and Reserve Releases

OECD commercial inventories

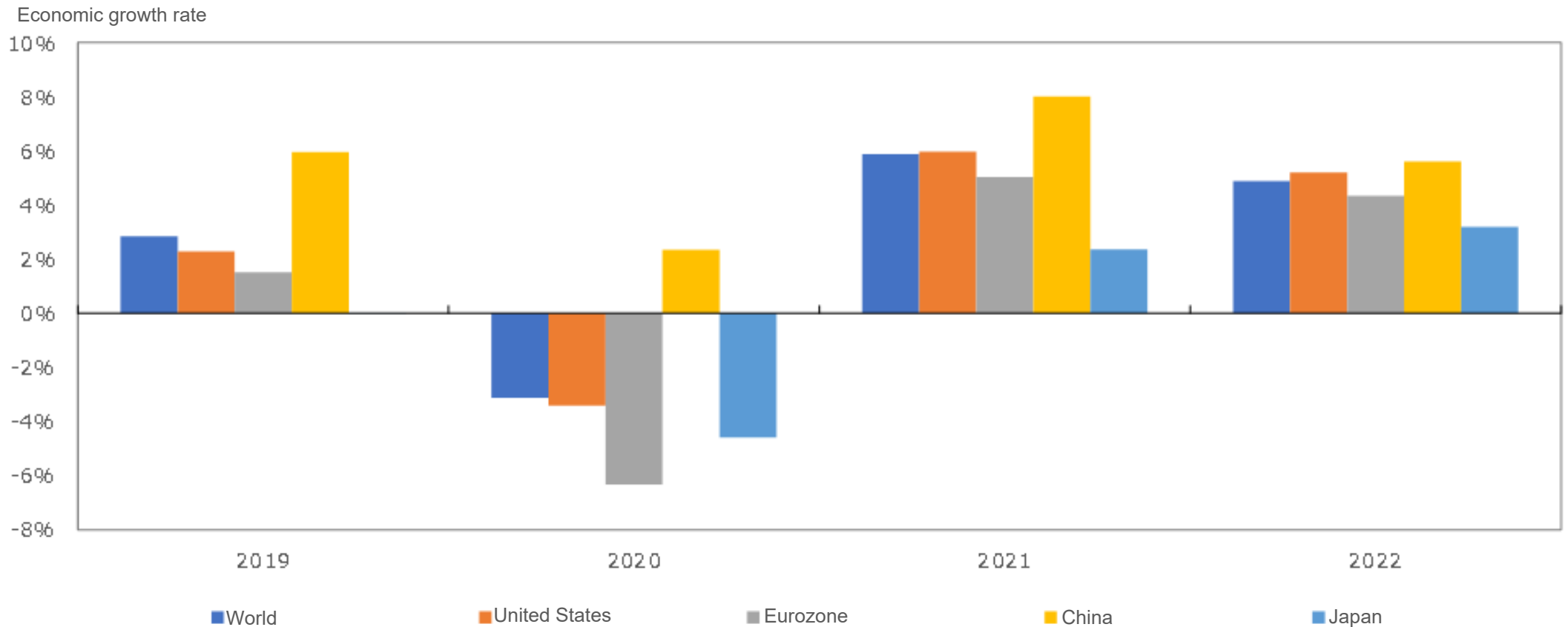


Coordinated reserve releases

Country	Release volume (mb)
United States	50
Japan	4.2
China	7-15?
India	5?
Korea	3.5?
United Kingdom	1.5?
Total	71.2-79.2?

Sources: IEA “Oil Market Report,” White House, Nikkei Shimbun

- OECD commercial oil inventories stood at a low level of 2,737.2 million barrels in September.
- In November, the United States orchestrated decisions to release oil reserves. The U.S. release was expected to start within 2021.
- The impact of the oil reserve release on prices is now expected to be limited.

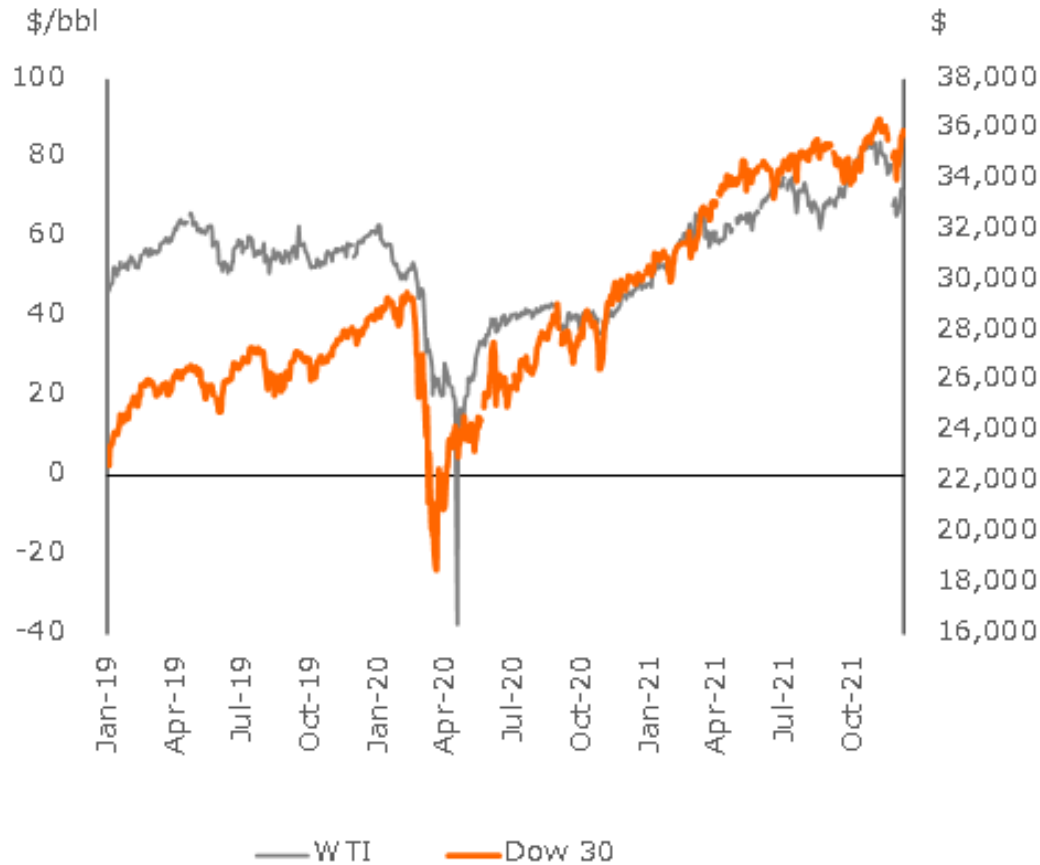


Source: IMF “World Economic Outlook”

- In its World Economic Outlook released in October 2021, the IMF forecast global economic growth at 5.9% for 2021 and at 4.9% for 2022. It slightly revised the 2021 growth forecast downward from its July outlook.
- The escalation of the COVID-19 pandemic through Omicron variant infections would be a great downside risk for global economic growth.

Financial Markets

Oil and stock prices



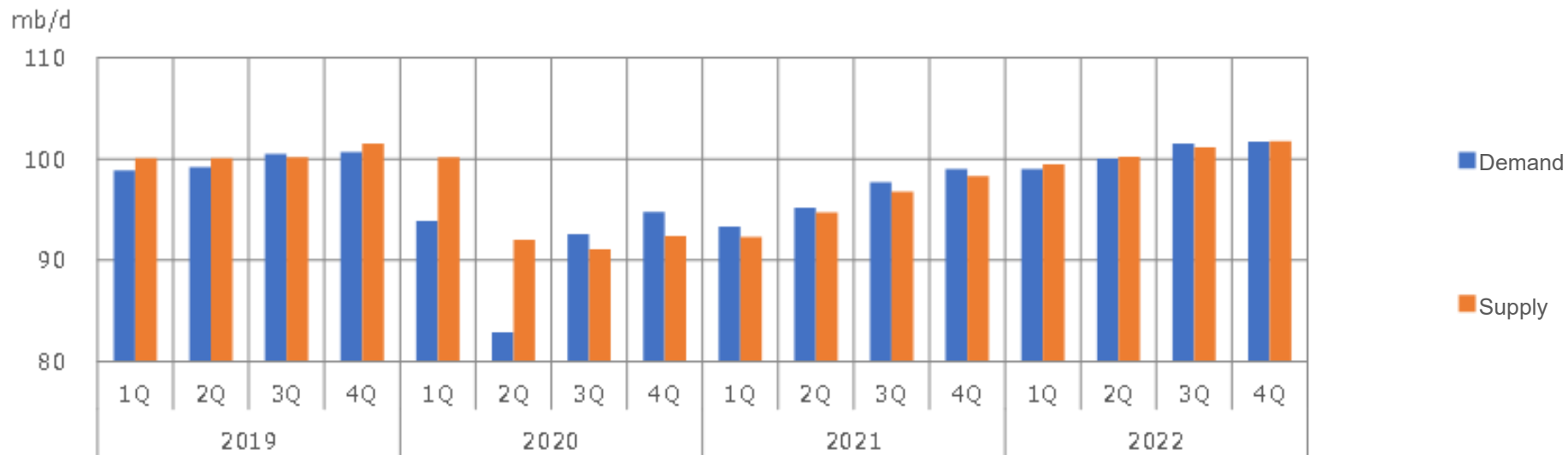
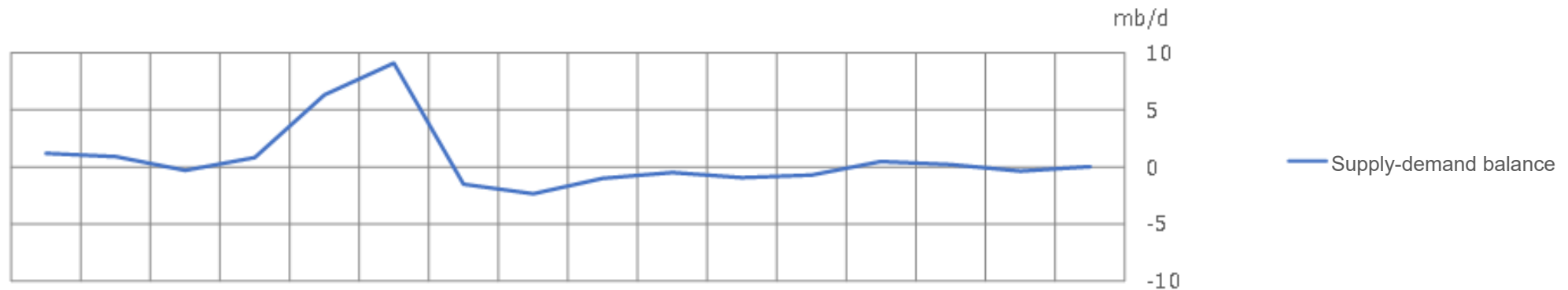
Oil prices and exchange rates



Source: FRB

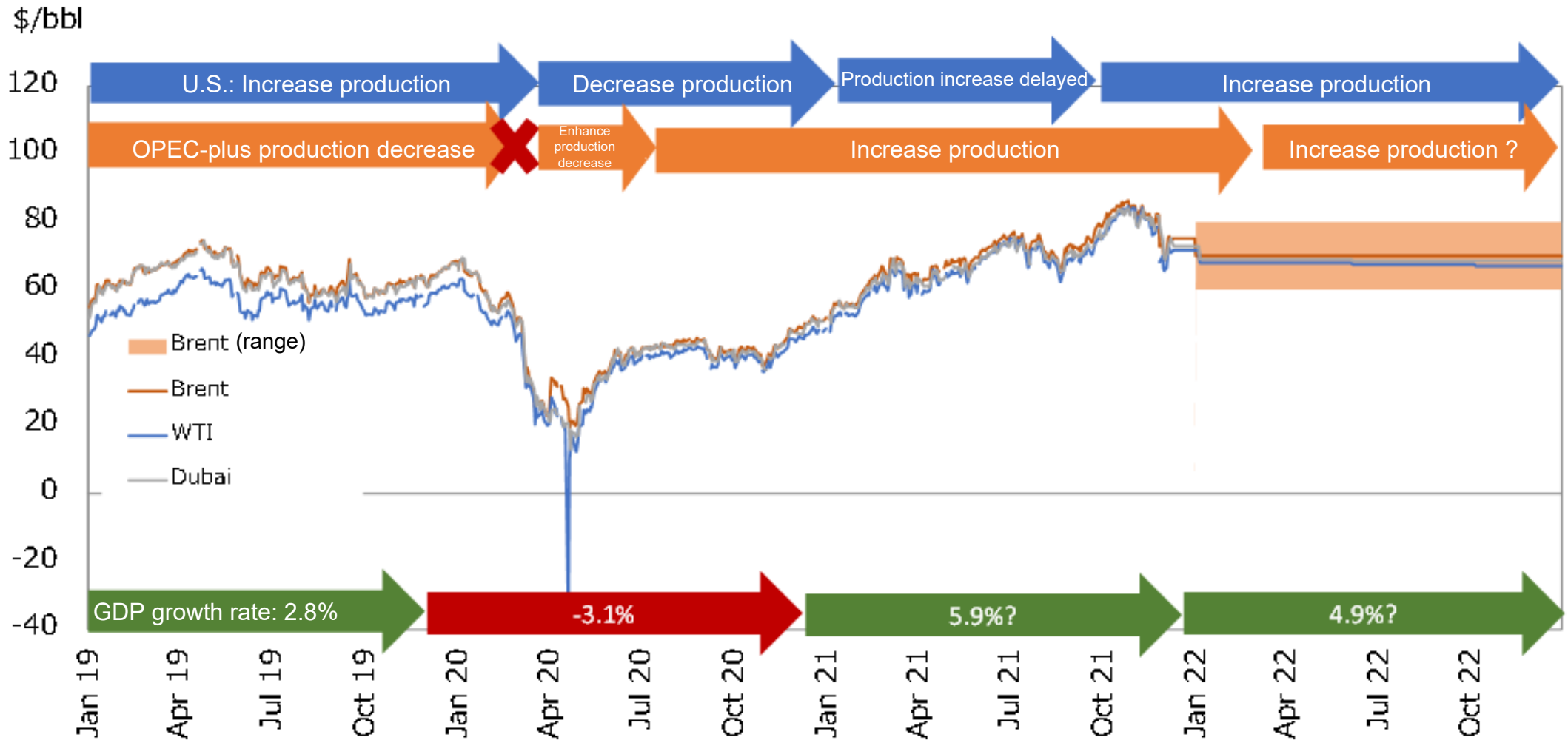
- Crude oil price hikes amid an economic recovery from the COVID-19 crisis have coincided with a U.S. stock market upsurge.
- U.S. interest rate hikes and the pandemic escalation expected in 2022 would affect stock prices, leading to a capital flight from risky assets.

Supply-Demand Balance Outlook



- The COVID-19 pandemic would not escalate so much, while the OPEC-plus group continues to gradually increase production though at a slower pace. Oil demand in 2022 is projected to increase by 4.3 million bpd or 4.4% from 2021 to 100.6 million b/d, with supply rising by 5.1 million b/d or 5.4% to 100.7 million b/d, indicating a supply-demand balance close to equilibrium.
- However, the escalation of the COVID-19 pandemic and the OPEC-plus group's resumption of production cuts are great uncertainties.

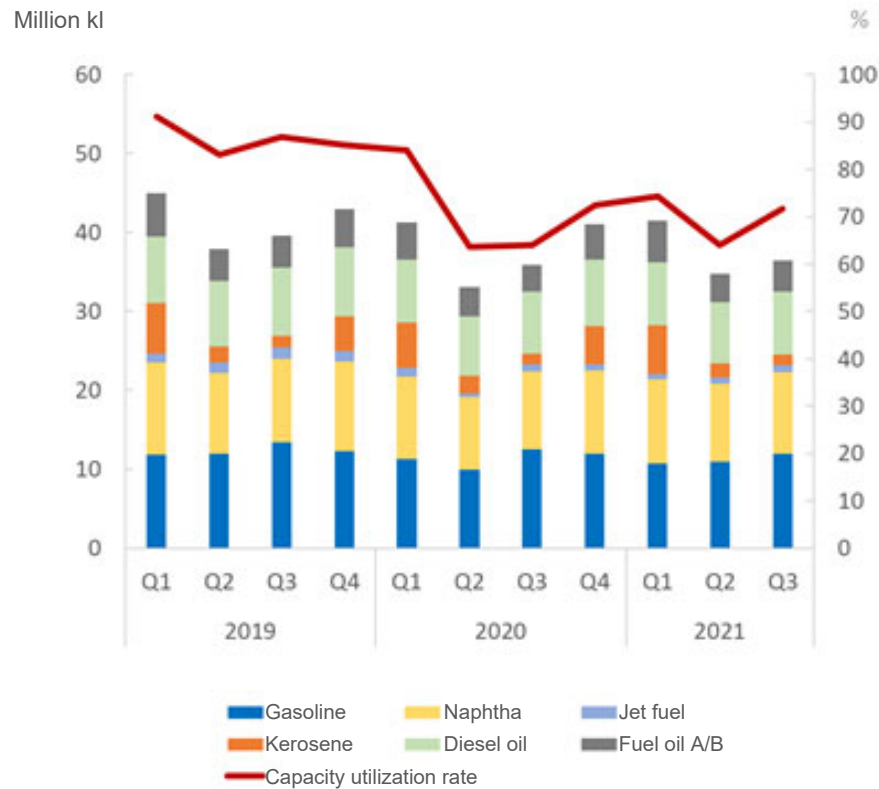
Oil Price Outlook



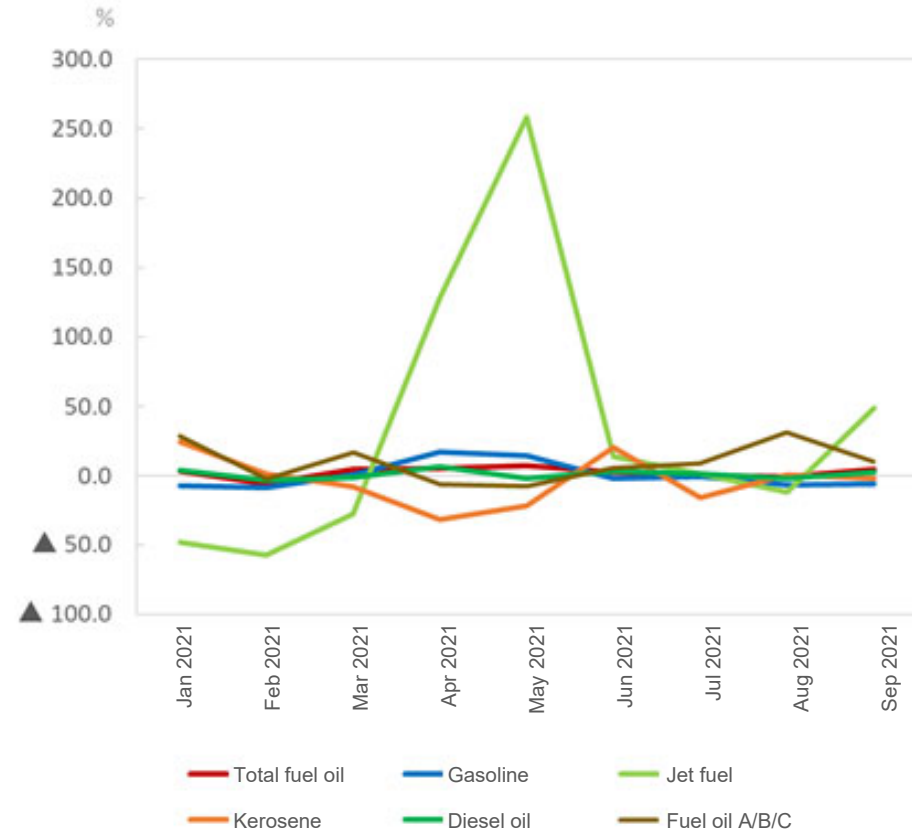
- Reference scenario: As the oil supply-demand balance comes close to equilibrium in 2022, Brent prices will be relatively stable, averaging \$70/bbl.
- Lower price case: The Brent average will fall to \$60/bbl as oversupply emerges on the escalation of the pandemic.
- Higher price case: The Brent average will rise to \$70/bbl as the supply-demand balance tightens on the resumption of OPEC-plus production cuts.

Japanese Market

Fuel oil sales volume and refinery capacity utilization rate



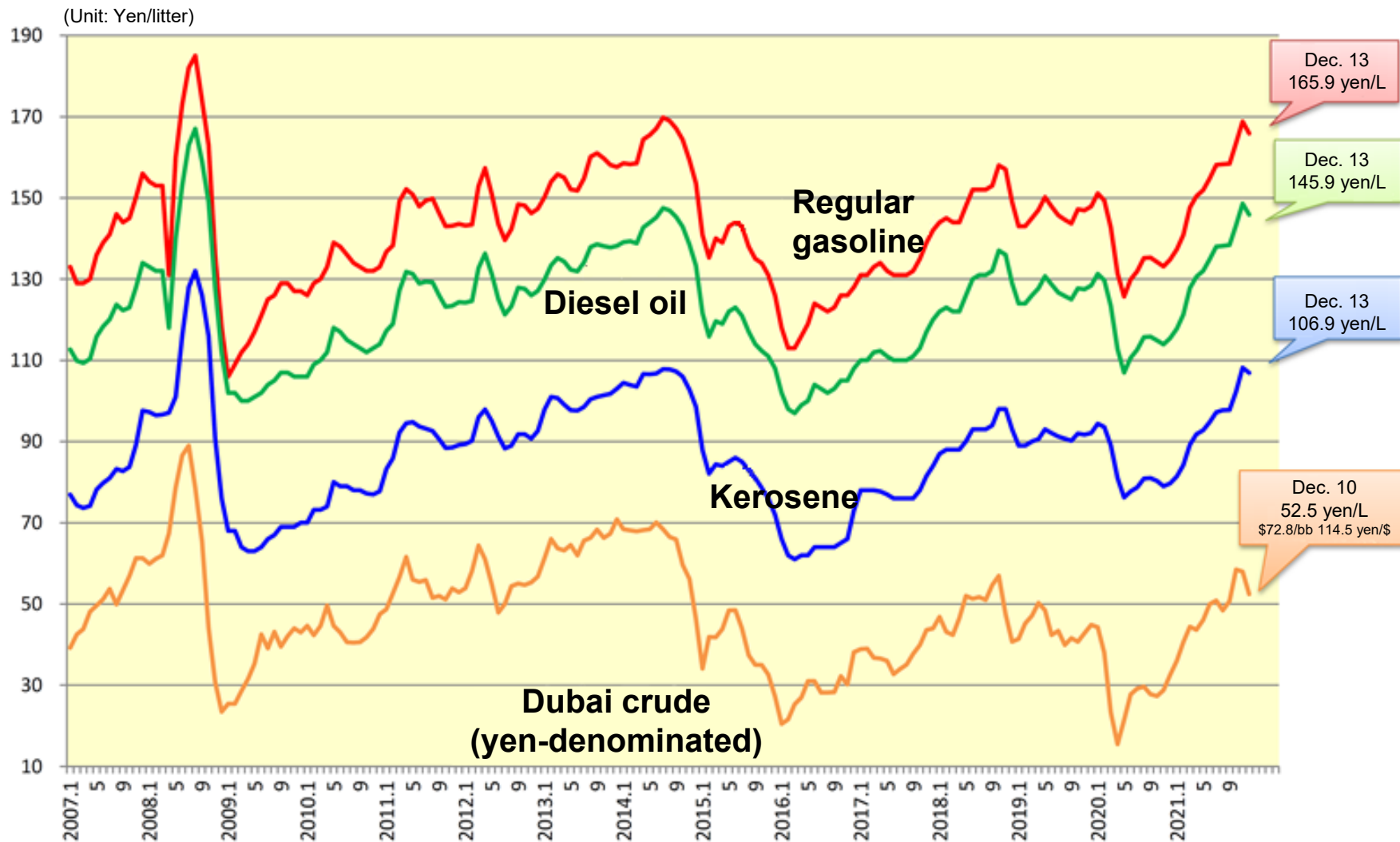
Fuel oil sales volume changes (year on year)



Source: Ministry of Economy, Trade and Industry

- Japan's oil (fuel oil) demand in the third quarter of 2021 was 12.14 million kl per month on average (2.49 million b/d), up 0.16 million kl or 1.3% from a year earlier and up 4.5% from 11.59 million kl (2.4 million b/d) in the previous quarter.
- The oil refinery capacity utilization rate stood at 72% in the third quarter of 2021.

Petroleum Products Prices in Japan



(Sources) Regular gasoline, diesel oil and kerosene prices (retail): "Petroleum products price monitoring survey"
Dubai crude: Nikkei Shimbun, etc.

- Domestic petroleum products prices reflect crude oil procurement costs two to three weeks ago.
- As decarbonisation accelerates further, the oil industry is required to transform its business structure while maintaining stable supply arrangements including those for gas stations during disasters and in depopulated areas.