Covid-19 Pandemic: Impact on the Oil and Gas Industry

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Introduction and Context

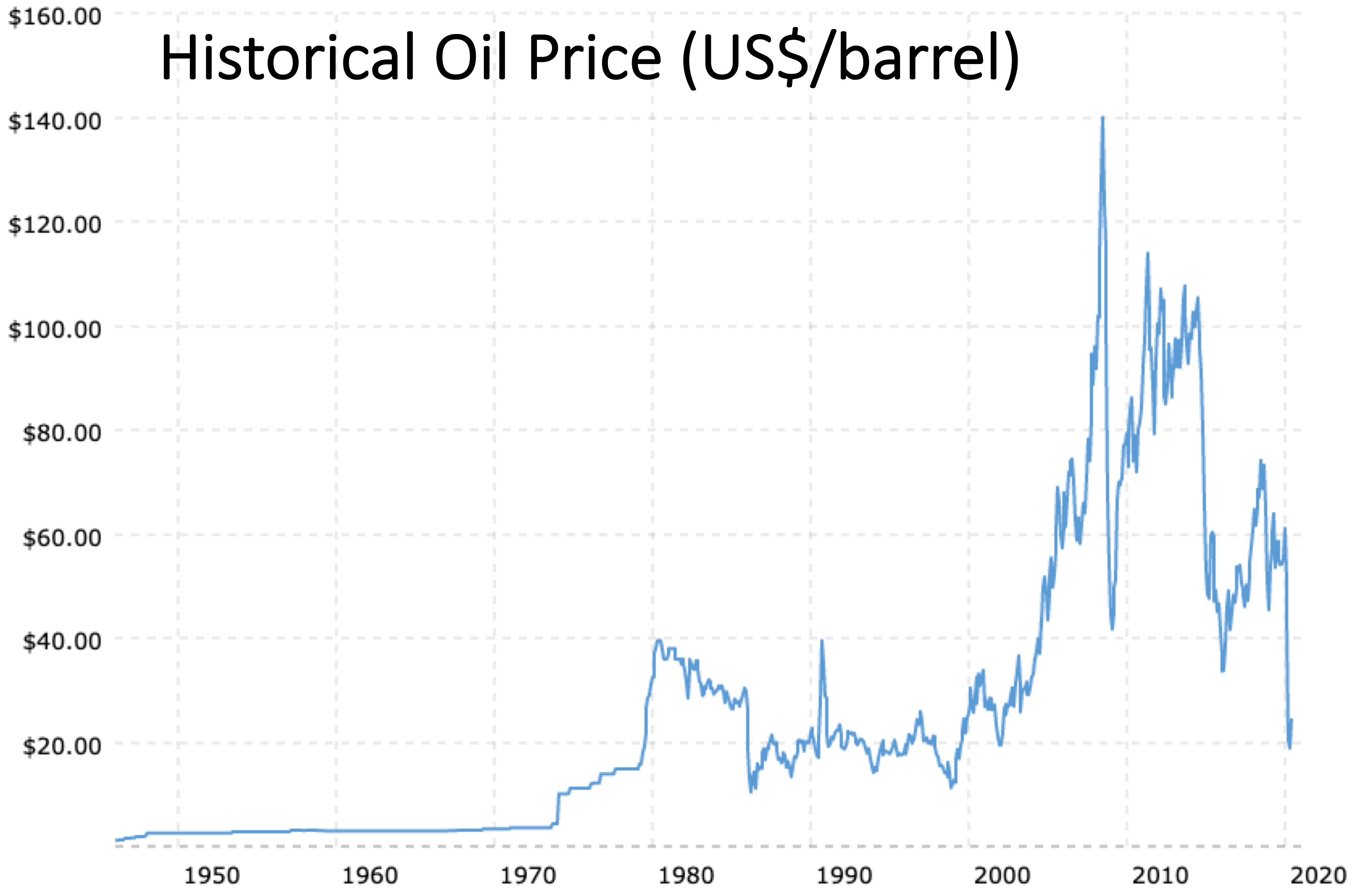
- We are aware that the impact of the Covid19 pandemic on each industry will vary; most industries will be negatively impacted simply because of the severe reduction of economic activities, hence demand destruction on the products and/or services they used to offer/sell. The key question that most are still grappling with is: “how long will this pandemic impact last?”
- In oil and gas industry, however, there is a tendency to overly generalize and as such, it would warrant our thoughts and analysis on the impact on the various aspect within the industry that includes: upstream, midstream, and downstream segments for the business; as well as its supporting businesses such as: services, infrastructure, shipping, and others. Hence the impact will vary depending on how integrated the companies are. “Independents” will then experience different degree of impact.

Example of Generalization of “Oil and Gas”

Oil Market Dynamics

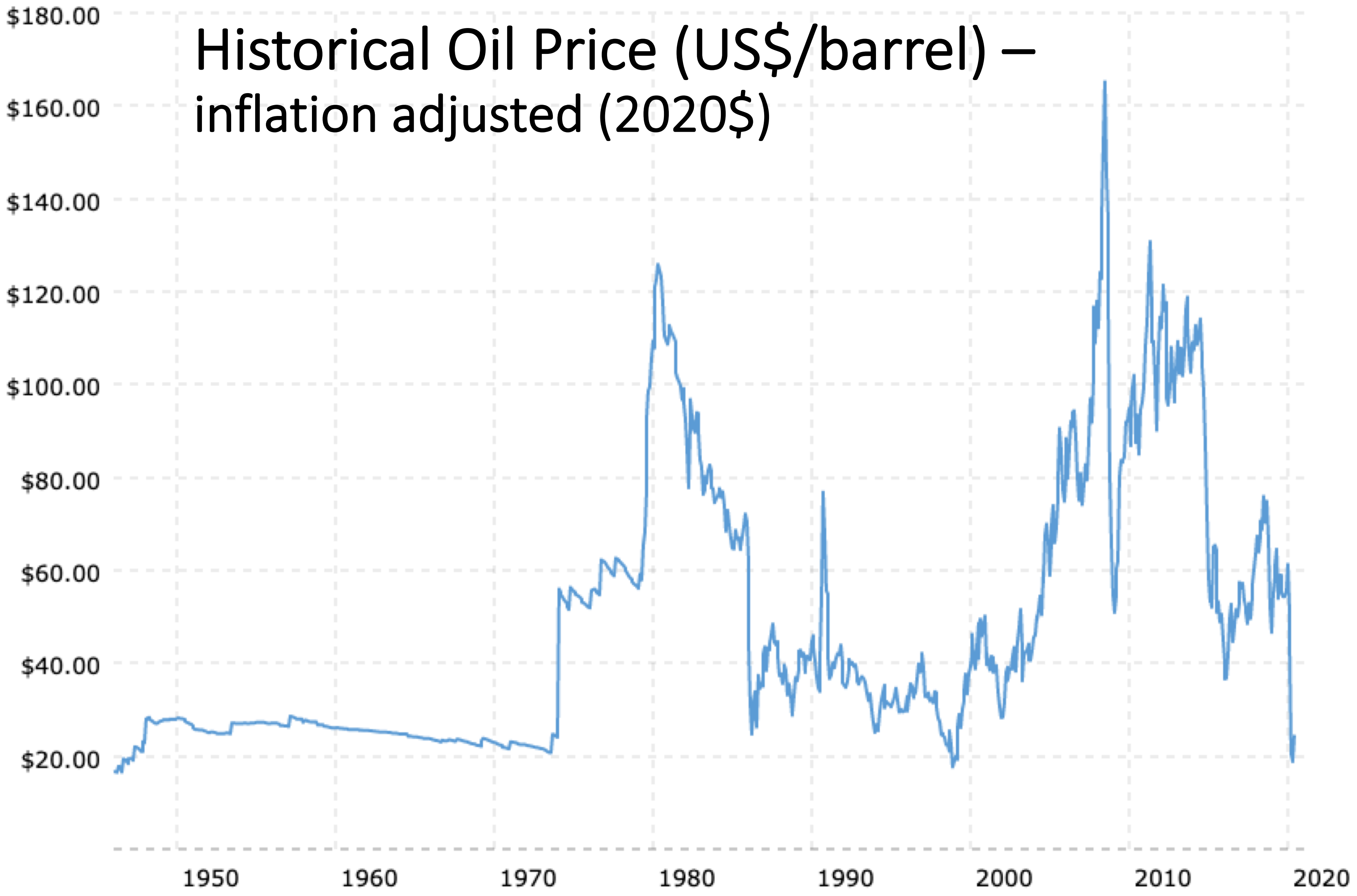
- World’s largest commodity as far as values are concerned, where massive trading results in price movements like no other
- A strategic commodity, influenced not only by supply-demand fundamentals but also by “non-technical” aspects such as geopolitical, exacerbating the price gyration
- Has not experienced a demand destruction such as what has been impacted by the current covid19 pandemic, resulted in oil price collapse that has not been seen, including the first ever negative territory of WTI futures prices (happened on Monday, April 20, 2020, for May prices)
- Global situation impact on each country will vary, not only whether the country is a net oil exporter/importer of oil, but also on respective energy/oil policy, as well as the prevailing socio-political condition.

Historical Oil Price (US$/barrel)



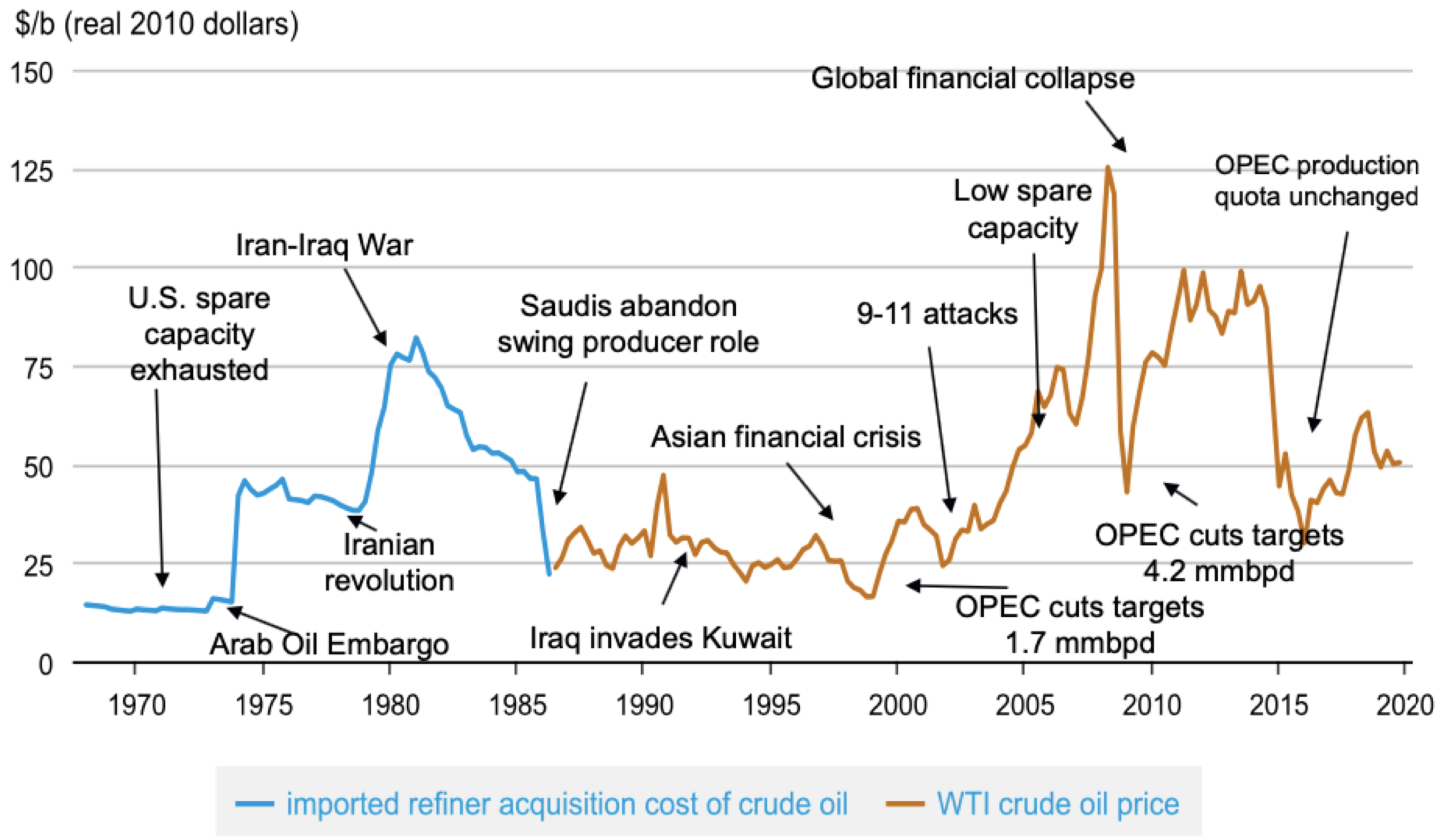
Source: https://www.macrotrends.net/1369/crude-oil-price-history-chart

Historical Oil Price (US$/barrel) – inflation adjusted (2020$)



Source: https://www.macrotrends.net/1369/crude-oil-price-history-chart

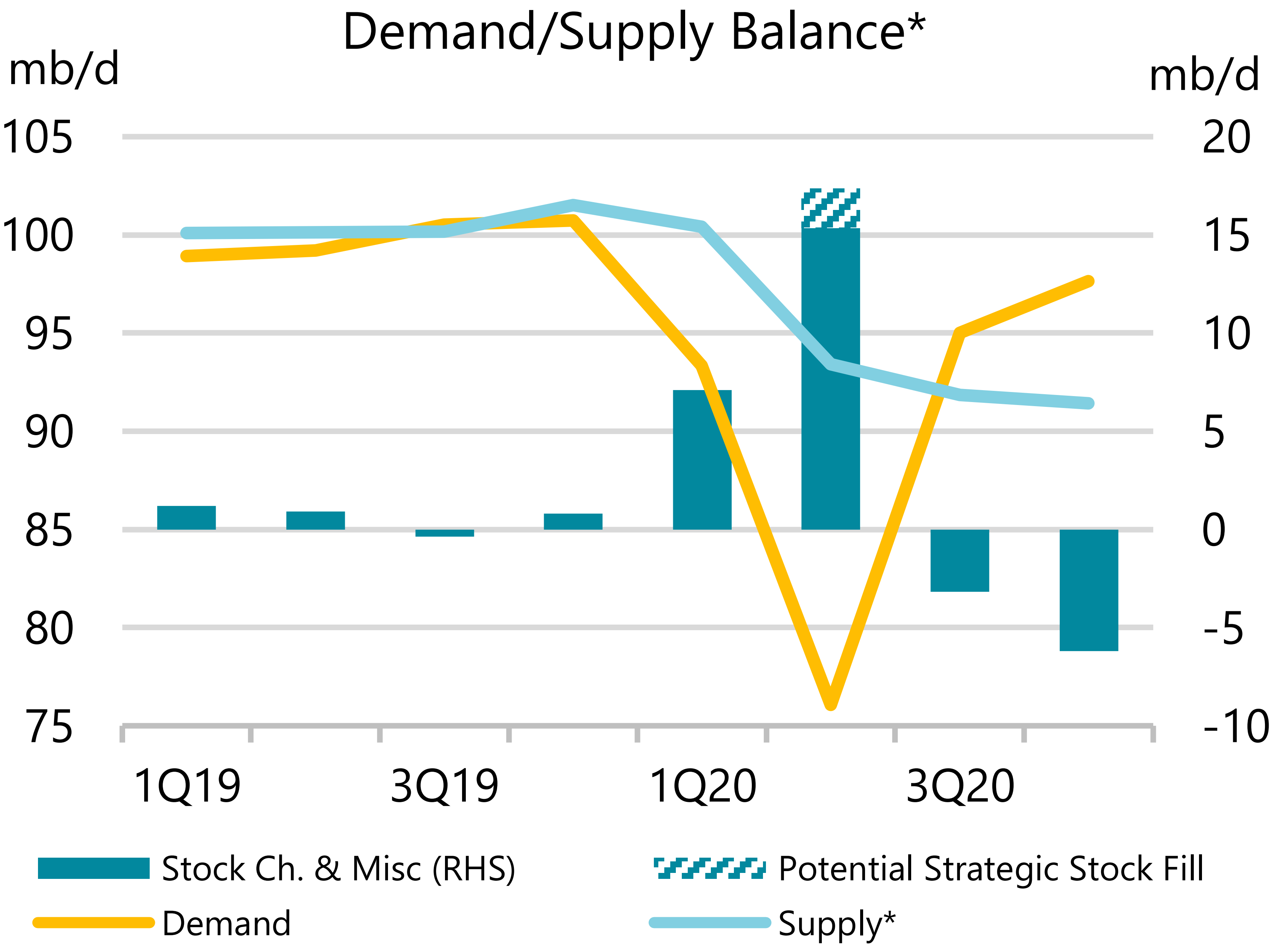
Crude oil prices react to a variety of geopolitical and economic events



Sources: U.S. Energy Information Administration, Refinitiv

Oil Demand Fundamentals

- Oil is consumed in the form of petroleum products, supplied from petroleum refineries
- Crude oil (incurred costs) is fed to refineries to yield petroleum products (to generate revenues). Each product (e.g., naphtha, gasoline, gasoil/diesel, jetfuel/avtur, fuel oil, etc.) has its own supply demand dynamics and hence price formation in the global/regional market; the differentials between crude oil and product prices determine the refining margins, i.e., the economics of oil refining
- Crude oil and petroleum products are valued in US dollars; despite (global/regional) market condition, the selling price of petroleum product in each country (in local currency) differs, depends on respective Government policy; some impose (high) taxation, whereas others adopt subsidies. The pricing policy will impact each country’s oil demand pattern, as well as the role of oil in the primary energy mix.

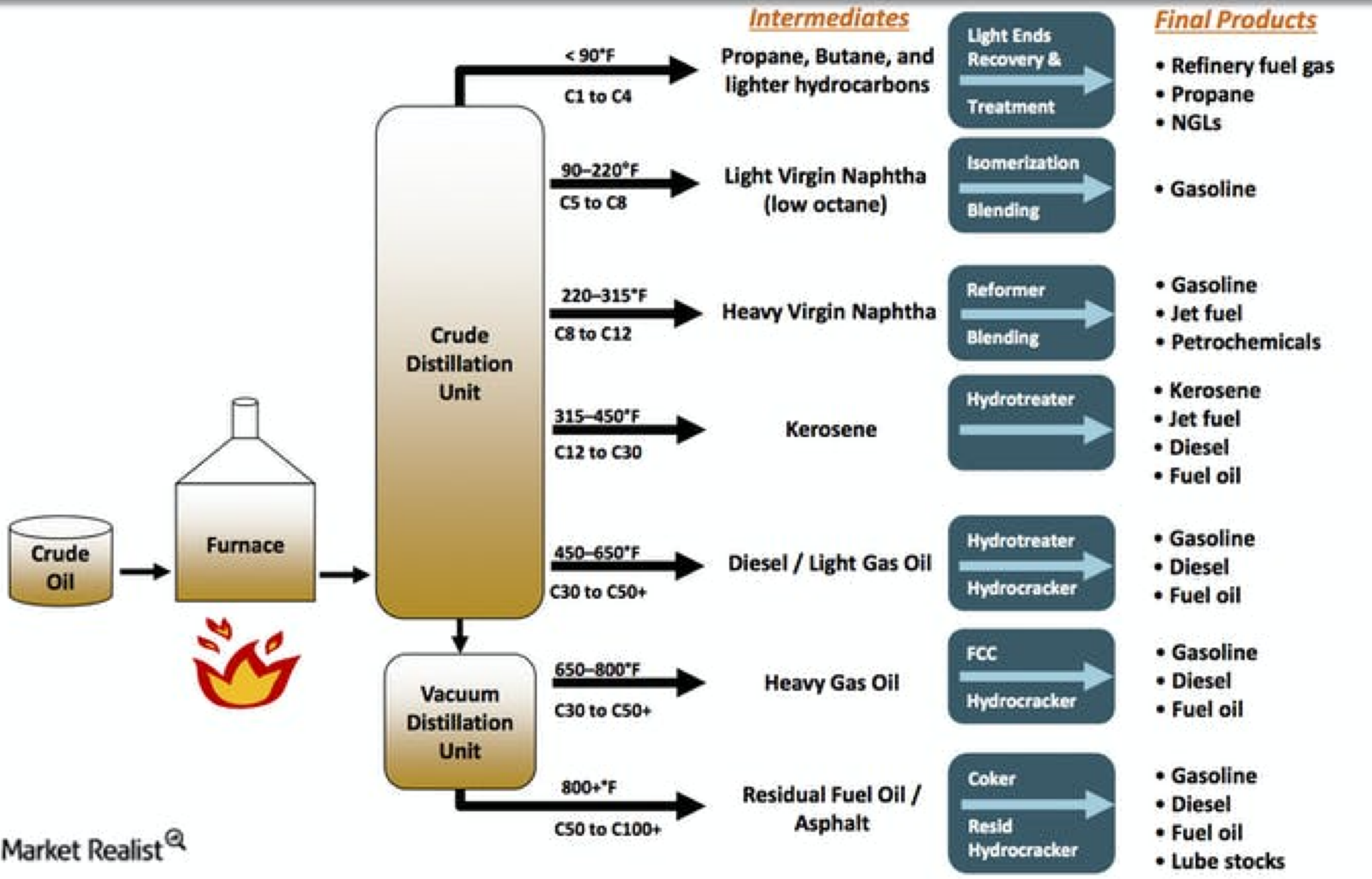


* Assumes 100% compliance with OPEC+ deal

Source: IEA Oil Market Report, April 2020

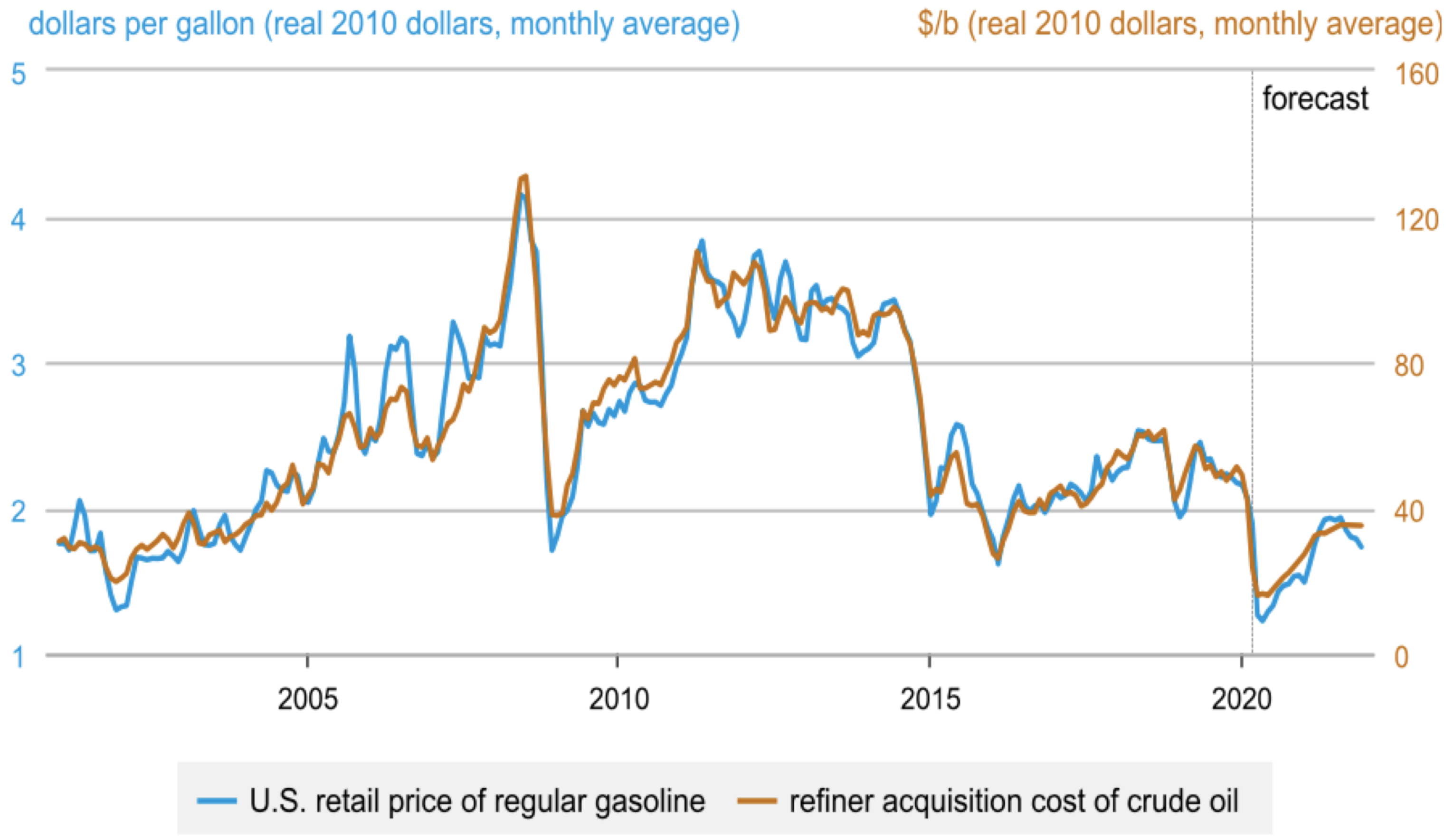
Source : Valero

Basic Refining Concepts



Market Realist

Crude oil prices are the primary driver of petroleum product prices



Sources: EIA Short Term Energy Outlook, Refinitiv

Explaining the (crude) oil price collapse

- Until very recently, supply stubbornly stayed the same; on March 6, 2020, no agreement among OPEC+ despite only 1.5 million barrels per day production cut sought. Subsequently, they agreed to cut by some 9.7 million barrels per day starting in May 2020, much too late in adapting to the heavy demand destruction
- Demand destruction of more than 20 million barrels per day in Q2 2020, the rebound of which really depends on how the Covid19 pandemic would pan out
- Despite massive contango that could yield (potential) enormous future gains, there was simply just not enough storage capacity to store the oil; some of the oils are currently stored in floating storage resulting in steep increase in charter rates. Prices consequently had to give in. Once again, “non-technical” issues would result in the amplitude swing beyond what supply vs demand would suggest. We just simply don’t have the ability to predict it; hence to live with the “surprises” from time to time.

Summary of Impact – Upstream (E&P)

- Upstream is severely impacted negatively; steep decline in revenues, which in some cases may not cover relatively higher-cost producers' operating expenditures. In the meantime, stopping oil production could technically be difficult and very risky as it could jeopardize the extraction of the reserves in the future
- In certain fields, negative prices could actually occur because of the heavy discount to avoid stoppage although production will be squeezed to the minimum flow that is technically acceptable. The question is how long can they survive?
- Investment in exploration and development will be drastically cut, which will have an impact over the production capacity in the long-run; a recipe of oil price shock if demand rebounds rapidly. The reduction in activities will in turn have negative impact on the service companies
- Companies with strong cash position have the opportunity to acquire distressed good assets.

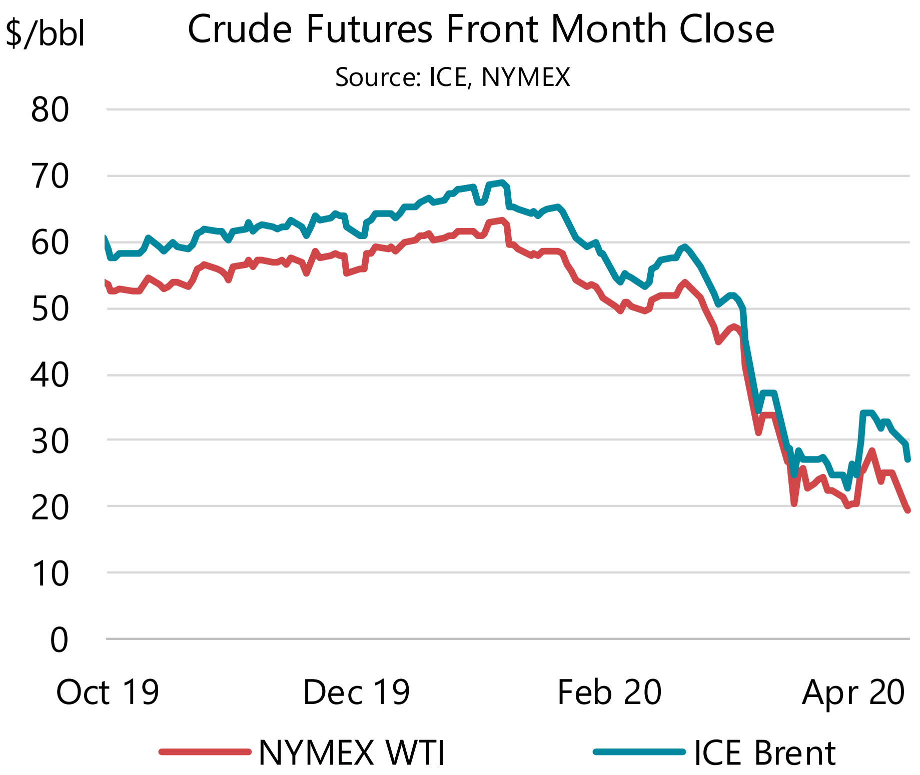
Summary of Impact – Downstream and others

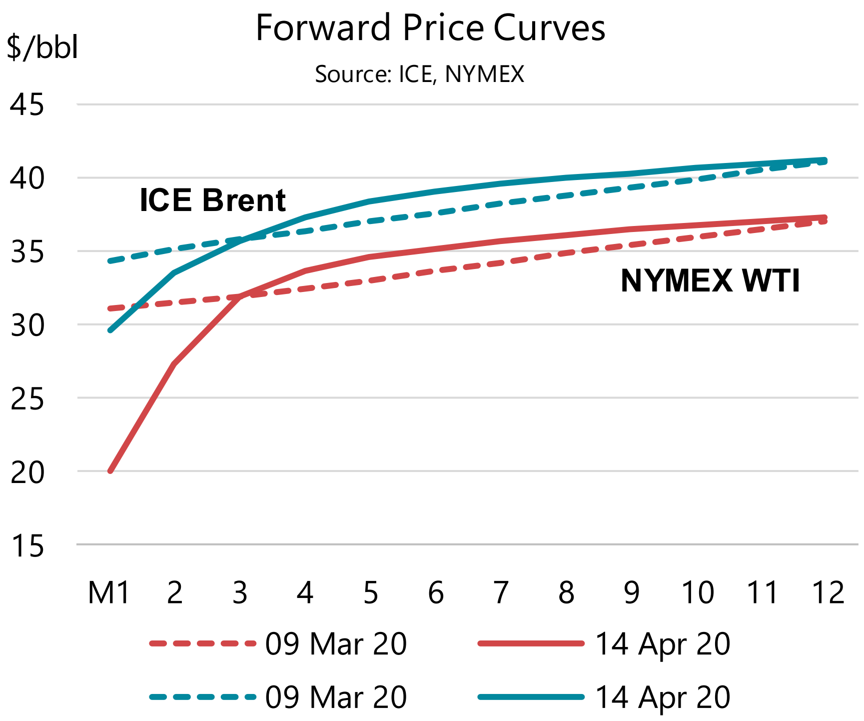
- Lack of demand will result in the contraction of refining margins, deteriorating refining economics
- Pipeline gas will be relatively uncompetitive when compared to oil-linked LNG during lower oil prices regime, but contract rigidity limits switching potential
- Under-utilized infrastructure results in higher unit costs charged within integrated companies; whereas independents will be directly hit, jeopardizing their financial situation that require massive restructuring
- The use of ships as floating storage has resulted in steep increase in charter rates; here’s obviously a winner caused by the oversupply of oil in the market
- All services companies related to the oil sector will certainly feel the pain and ultimately need to make drastic adjustments
- The ultimate question is whether all of these businesses will be able to make the necessary adjustment. In the case of the ones badly impacted, their survival may actually depend on how Governments are willing to lend a hand to help.

Summary of Impact – Oil market

- Currently still in contango (i.e., upside trend), hence futures prices are much higher, with a caution that it may change depending on how Covid19 situation would pan out; the experience of negative prices may not deter traders – and even speculators, especially the ones that have access to storage facility, and thus volatility could still be name of the game
- OPEC+ has already got the commitment to the supply cut, while outside of this group's production will depend on the market situation, i.e., price expectation. Not many can survive over a prolonged US$30/b oil.
- The escalation of USA–China altercation (i.e., blaming games) over covid19 could further deteriorate global commodity market – not only on oil per se; and could potentially add to the non-technical driver of the oil price

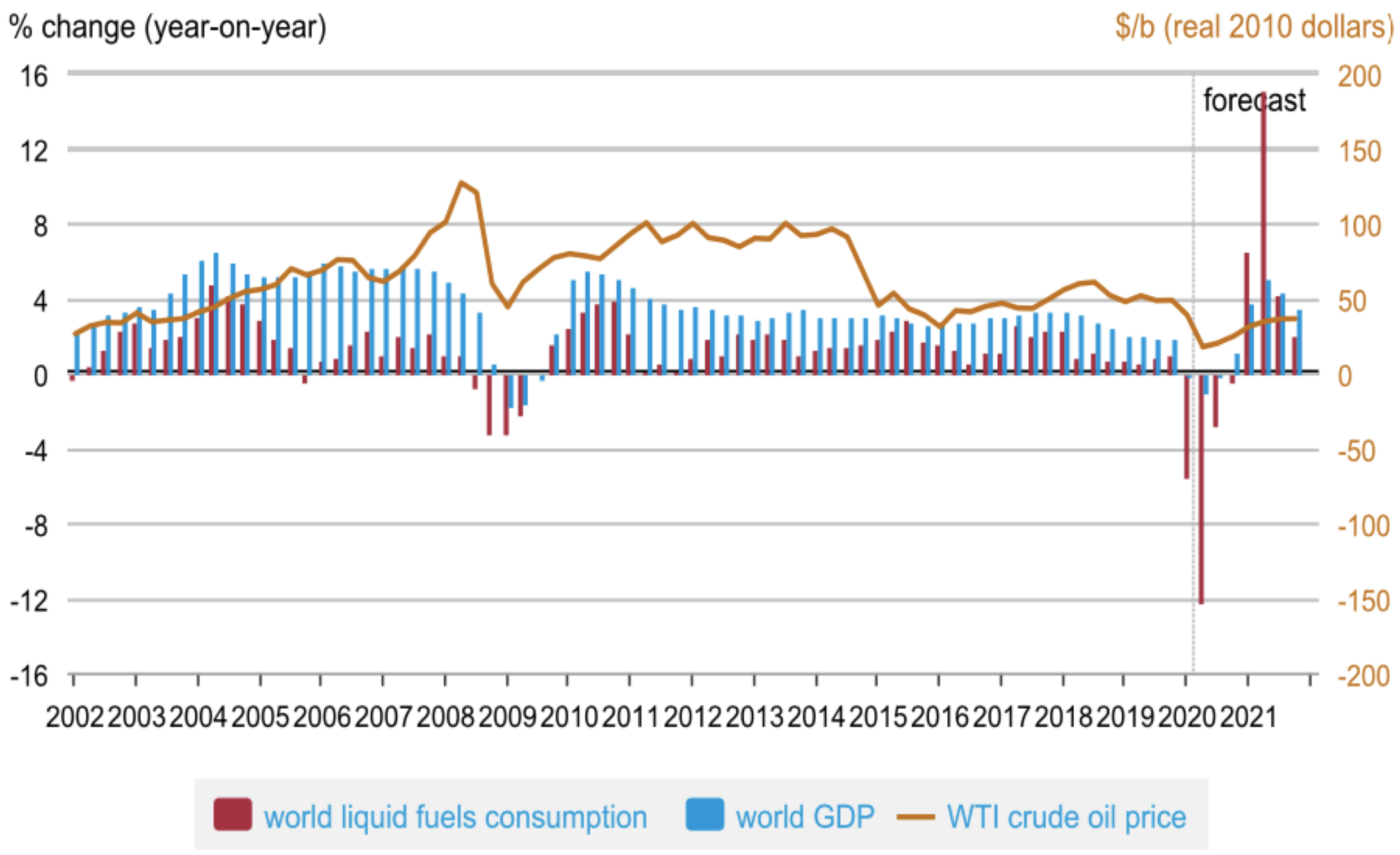
Brent & WTI crude futures





Prices down to 18-year lows. Forward curve shows massive contango – indicative of glutted market.

Rising oil prices held down global oil consumption growth from 2005-2008, despite high economic growth



Sources: EIA Short Term Energy Outlook, Refinitiv

Impact on Indonesia

- As a net oil importer, the low oil prices will benefit the economy in general, but will impact negatively on the upstream oil and gas sector, which will be in need of Government intervention to survive. This is also the time to reconsider some of the policies that actually add to the burden of the economy in the name of energy security
- Government revenues from the oil sector will no doubt decrease but if low prices persist, subsidy will also subside. However, rushing to adjust the administered petroleum product prices downward may not be a wise move amidst Government's needs to cope with the negative impact of Covid19 pandemic on the economy, especially to provide the social safety net to the most in need directly
- This is due to the uncertainties brought about by the Covid19 pandemic on the oil market, as well as its effect on factors such as exchange rates and other related costs. When prices are low enough, downward adjustments usually do not bring deflation to general prices; but once prices spike, it will be difficult to adjust, and likely cause inflation if implemented. Once Covid19 pandemic ends, we may want to implement a more consistent administered pricing mechanism that reflects the "new normal" of the oil market
- There is a direct and indirect relationship between administered and non-administered BBM prices, and the final outcome will depend the on the policy of the government not only in the oil/energy sector but also in its effort to address the covid19 pandemic situation.

Thank you for your attention