MARSH JLT SPECIALTY

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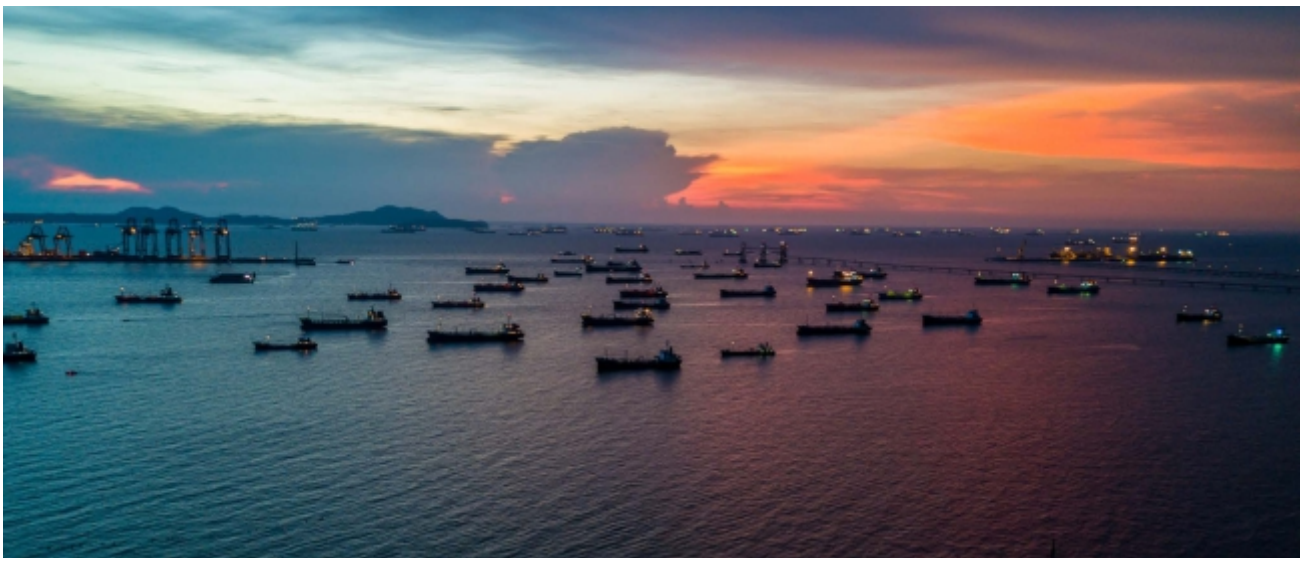
How Volatility in Oil Prices Following Coronavirus Could Affect Shipping and Insurance



The spread of coronavirus and its impact on global oil prices could create additional risks throughout the marine transport industry.

The novel coronavirus (Covid-19) is already threatening oil markets, having greatly affected China's industrial production levels and, consequently, its oil importing requirements.

The fear of less demand — from China and eventually globally as the economic impact widens — has sent crude oil to its lowest price in more than a year.

China is the largest oil importer in the world by far. In December it imported nearly 11 million barrels per day — about 10% of total global oil production — according to China's General Administration of Customs.

Its oil demand has since dropped by about three million barrels a day, or 20% of total consumption, reported Bloomberg.

This is affecting the global energy market, with sales of some crudes slowing to a crawl and benchmark prices in free fall. Sales of Latin American oil cargoes to China recently halted, while sales of West African crude, a traditional source for Chinese refineries, have also slowed down.

These changes are increasingly reflected in the oil trading markets, with the futures market once again moving into a "contango" state, raising concerns in the marine insurance market.

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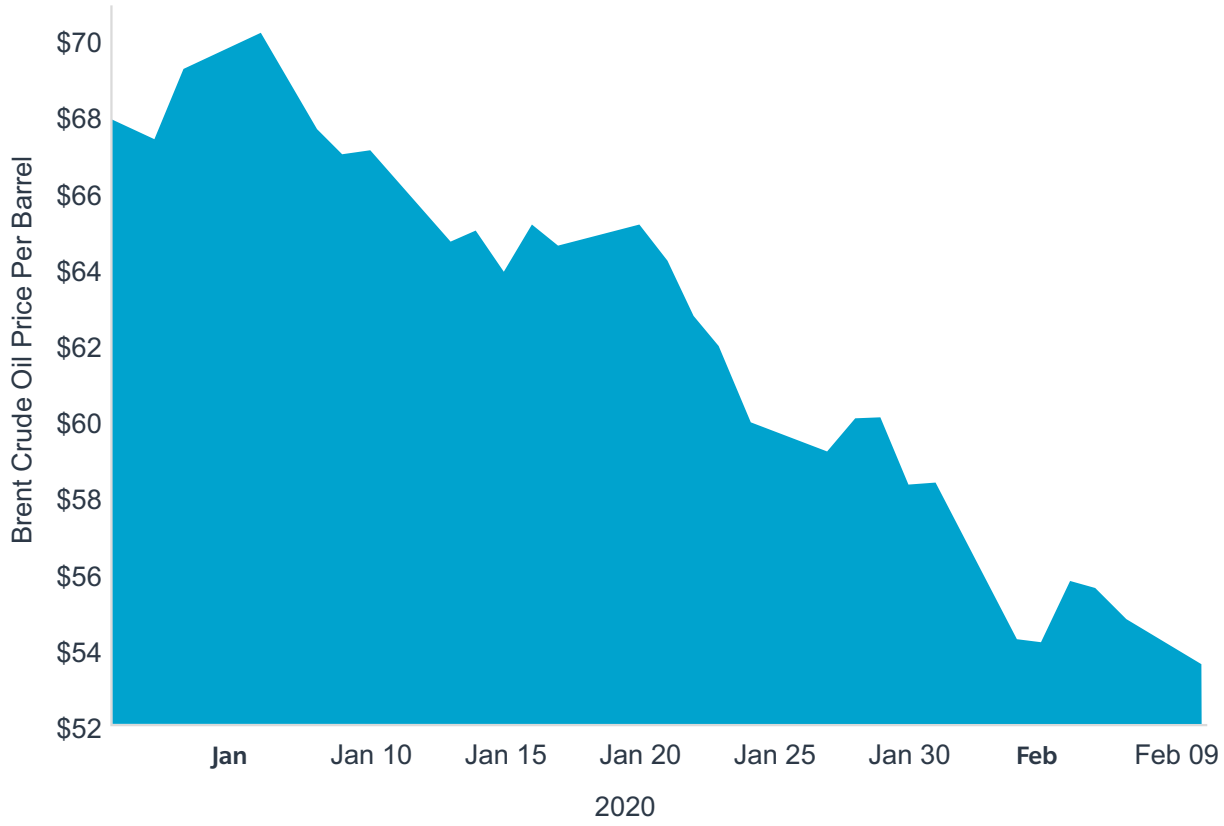
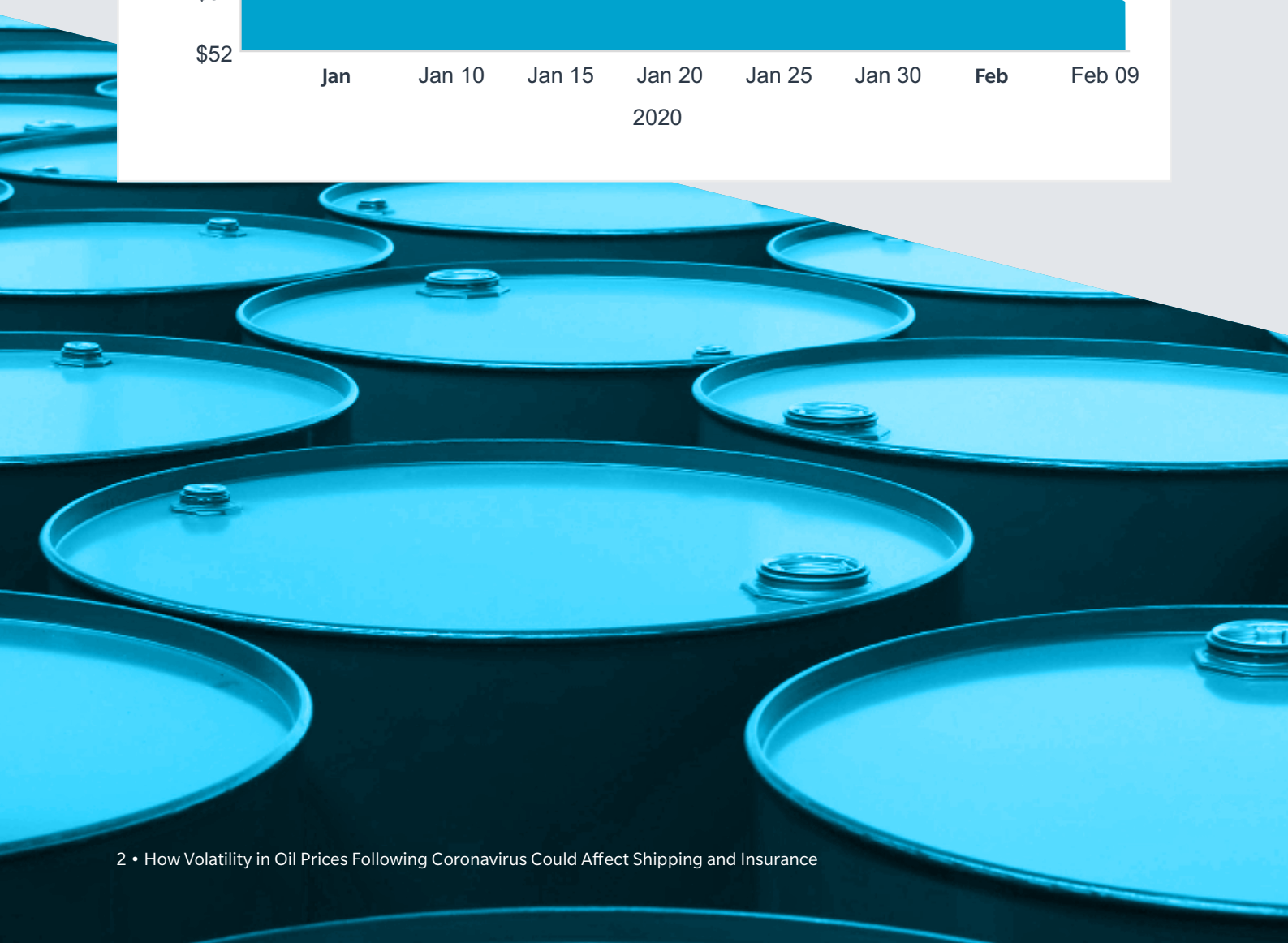
FIGURE 1

The volatility of Brent crude oil prices in January and early February, 2020.

SOURCE: MACROTRENDS





What Is Contango?

Investors buy futures contracts when the future open market, or "spot" price, is expected to be higher at the time of delivery than the price agreed under the futures contract — thereby usually enabling the investor to make a profit when the goods are sold on.

A gradual, long-term increase in prices is the market norm — a state often described as "backwardation." However, when events occur that threaten to reduce demand, there is no guarantee that the future spot price will be higher at the time of delivery.

When a market has unexpectedly weakened — to the point that the commodity's market price is expected to be lower on delivery than when agreed within futures contracts — the market is said to be in "contango."

Crude oil is a commodity widely traded on the global futures markets. A major contango market was last seen in January 2015, when the price of Brent crude oil plummeted to below US$50, having been around US$100 just a few months earlier.

In 2020, oil prices have been in a severe downtrend since the second week of January. The West Texas Intermediate benchmark for US crude prices fell nearly 2% to $49.42 a barrel on the New York Mercantile Exchange, its lowest in around 13 months. The futures contract is coming off its fifth straight weekly decline. Brent crude, the international futures benchmark, declined 2% to $49.42 a barrel on London's ICE futures exchange.

As a result, investors, traders, and/or their financiers who have bought "long" may suddenly find their market in contango. When the delivery date arrives, if they try to sell the oil they purchased, they may face a substantial loss.

Rather than sell it immediately, oil traders might (quite understandably) opt to keep the oil and wait for the price to rise before selling it. But there are problems with this approach:

1. Where do traders keep the oil in the meantime?
2. If purchasing the oil under the futures contract requires the trader to obtain finance from banks or other institutions, are those financiers aware of the risks associated with the long-term storage of crude oil at sea? One of the attractions of a futures contract is that until the delivery date, the buyer does not possess the commodity and does not have to worry about its storage. Once that delivery date arrives, however, it becomes their property and will remain so until sold.

It is no coincidence that, when crude oil prices are volatile, maritime freight prices for the carriage of oil also often follow (as has been seen over the past few weeks). Oil tanker operators often find it difficult to obtain good charters for their vessels when oil traders are looking for somewhere to keep their newly delivered (or about to be delivered) oil.

This often creates a maritime contango "marriage of convenience": Oil traders charter idle oil tankers to store their oil, and ship owners find a cheap way of employing their tankers, simply anchoring the vessels and offering the otherwise idle ships for use as floating storage units.

These recent developments may have implications for the marine insurance market, including for marine cargo insurance, marine hull insurance, oil traders' liability insurance, charterer's legal liability, and protection and indemnity cover.

Marine Cargo Insurance

Crude oil is not a liquid — it is a suspension of numerous hydrocarbon compounds, among other things. If stored for a long time, undisturbed crude oil will begin to settle.

The heavier hydrocarbons (such as bitumen) sink and coalesce at the bottom, while lighter hydrocarbons (such as methane and ethane) rise to the top and, if permitted, escape the crude oil as vapor. As such, the crude oil starts to degrade. This can lead to both quality claims and shortage claims, due to excessive sediment (or sludge) forming at the bottom of the cargo, which becomes unpumpable, leading to residues remaining-on-board issues.

Oil tankers used as storage units are exposed to climatic conditions where they are anchored. In many locations there can be considerable variations between daytime and night-time temperatures, which may lead to loss of cargo due to venting (the release of gases into the atmosphere). This may lead to cargo "shortages," as the volume of the cargo on board slowly reduces due to constant temperature change. The longer the oil is stored on the vessel, the greater the possible loss.

Owners of the oil, or those responsible for it, should examine whether shortage or product degradation risks are covered under their marine cargo insurance conditions, as often they are not.

The mixing or "blending" of cargoes at sea is not permitted under the International Convention for the Safety of Life at Sea, but it may occur accidentally, leading to claims of the cargo being "off-spec" when eventually discharged.

With international concerns over the origin of oil cargoes due to international sanctions, any blending will make it increasingly difficult to prove that a cargo's origin remains legally compliant, especially in regions where sanctioned oil cargoes may be present. With any ship-to-ship transfers of the cargo, this risk of blending and contamination increases. Marine insurance policies usually have specific exclusions regarding sanctioned counties, persons, or activities, which should be examined and understood, as they are unlikely to be amendable.

Traders and their Financiers

Although it may generally be true that liability following a pollution event at sea would fall on the vessel operator (often strictly so — for example, under the Civil Liability Convention), under some jurisdictions it is not certain that clear-cut responsibility on the vessel operator would always apply.

This is especially true in countries such as the US, where laws on responsibility for marine oil spillage are somewhat different.

If a major oil spill were to occur from a vessel engaged in oil-storage, oil traders and/or their financiers seen as owning the oil might not escape legal action. They could at least incur defense costs, maybe even liability in some jurisdictions. Unsurprisingly, more traders and their financing banks are seeking oil traders' liability insurance cover.

Marine Hull Insurance

During earlier economic downturns and shipping slumps in the 1970s and 1980s — where a lot of unemployed tankers were often moored together for months, sometimes years — many problems occurred when the vessels were finally reactivated.

There was damage to both the ships' hull (due to the excessive fouling and degradation), and the machinery (never designed for long periods of idleness). Main engines and auxiliaries often developed problems only apparent when the vessels started to work again.

Cargoes of oil, carried for a long time, can also cause considerable harm to the steel of the tanks they are carried in. Some naturally occurring constituents of crude oil, such as hydrogen sulphide, can be particularly harmful as their corrosive effects, over long sustained periods, can also damage pipes and pumps they interact with.

The proportion of hydrogen sulphide within stored crude oil varies considerably, depending on where it was drilled. In most places it is relatively low (between 2%-4%), but oil and gas extracted from wells in Kazakhstan, for example, contains much more hydrogen sulphide (sometimes in excess of 10%).

The build-up of cargo "sludge" at the bottom of cargo tanks, sustained during long periods of offshore oil storage, can cause issues when tankers are then reactivated for normal use — necessitating considerable and expensive cleaning. Hull underwriters learned during previous shipping downturns that crude oil washing operations, and inert gas systems, are vulnerable to failure after lengthy inactivity, and extensive tank cleaning can actually damage the tanks.

As mentioned already, temperature changes in and around the vessel may lead to vacuums in the tanks or, conversely, pressure build-up. Unless strict adherence to approved venting procedures is undertaken, the risk of explosion will increase, as external air mixing with fumes from the cargo could produce a highly explosive cocktail.

A more traditionally understood risk to hull involves the ship-to-ship transfer of stored oil between tankers. Such operations, involving two or more vessels very close together, can be hazardous in certain weather and sea conditions and risk collision — consequently increasing the risk of damage to the insured vessel's hull and a possible liability to the other vessel (assuming primary collision liability is insured under the hull policy).

Mooring arrangements of a long-term lay-up of a tanker with cargo on board are another concern, as periodical weather and sea conditions may expose the vessel to unusual strains on its anchoring systems. Should the vessel go adrift, the perils occasioned by long periods of inactivity of its machinery may cause additional problems. Where storage vessels are anchored is another important factor, as quiet locations that might pose less collision risk may lack nearby adequate salvage and rescue services.

Protection and Indemnity (P&I)

Employing tankers as floating storage units would usually represent a material change in information, so the P&I club ought to be promptly informed of any such plans.

Underwriters could regard this as a material change in information and may, under the "Rules," seek to impose new premiums, terms, or deductibles. There may also be risk management concerns that need to be discussed with the club. In extreme circumstances, club managers could cancel the entry. On the face of it, fewer voyages might appear to reduce the P&I risk. To some extent, this argument is persuasive but there are other factors to consider.

Liability-to-cargo interests due to shortage would be a major concern and the exposure would only increase with the length of the storage period. As well as the potential liability, under some jurisdictions the vessel operator may be fined for cargo shortage.

Possible liability for contamination of cargo is another risk shipowners (and their P&I clubs) may face. Pollution liability poses a constant threat for laden tankers, and the long-term use of vessels for oil-storage can only increase the risk of a pollution event occurring or resulting from other events (such as a collision or breaking adrift in bad weather and grounding). And if ship-to-ship transfers are involved, pollution liability risks increase further.

Long-term employment of oil tankers as floating storage units may also lead to disputes under the charterparty agreements. Charterers may seek to extend the originally agreed charter period if the market's contango state continues, or even worsens, during the period of the charter, but vessel owners may not agree — in which case a new home for the stored oil would have to be found. Even if the shipowner agrees to extend the charter period, increased risks associated with long-term oil storage may be exacerbated, such that freight, demurrage, and defense cover may need to be used, if purchased.

Vessel charterers may often own the oil, but sometimes they might be professional vessel charterers with no proprietary rights over the oil stored on the vessels they fix. In such situations the charterer (acting as a "middle-man" between the ship owner and cargo owner), may find potential liabilities to both vessel owner and cargo owners, if the stored oil suffers or if the vessel is damaged by it. Vessel charterers therefore need to seriously consider purchasing charterer's legal liability insurance and, where possible, ensure such insurance covers their liabilities in these situations.

The novel coronavirus (Covid-19) is a major global public health emergency, the impact of which is still unfolding. Global oil demand is expected to contract by 435 thousands of barrels per day (kb/d) in the first quarter of 2020, the first quarterly decrease in more than a decade, according to the "Oil Market Report — February 2020", published by the International Energy Agency (IEA).

For 2020 as a whole, the IEA has reduced its global growth forecast by 365 kb/d to 825 kb/d, the lowest since 2011.

The marine transport and oil-trading industries should prepare for the knock-on effects, and check that their insurance cover is as effective as practicable in this contango market — which may deepen over the coming months.

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For further information, please contact your local Marsh office or visit our website at marsh.com.