POTEN TANKER OPINION

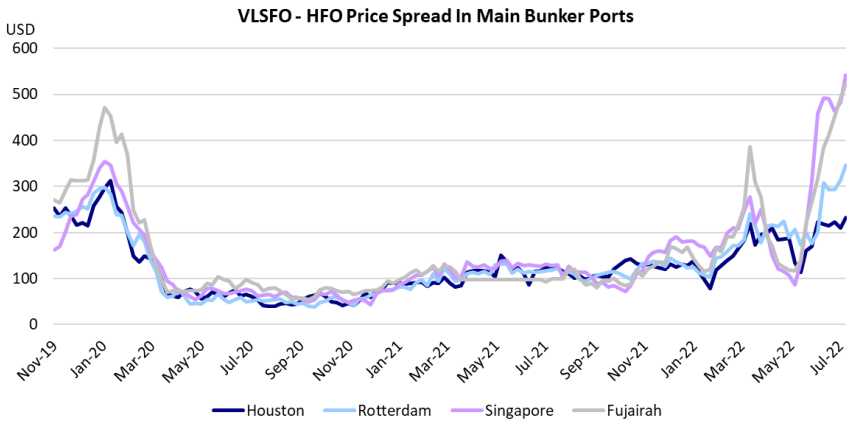
Scrubbers Are Delivering Profits

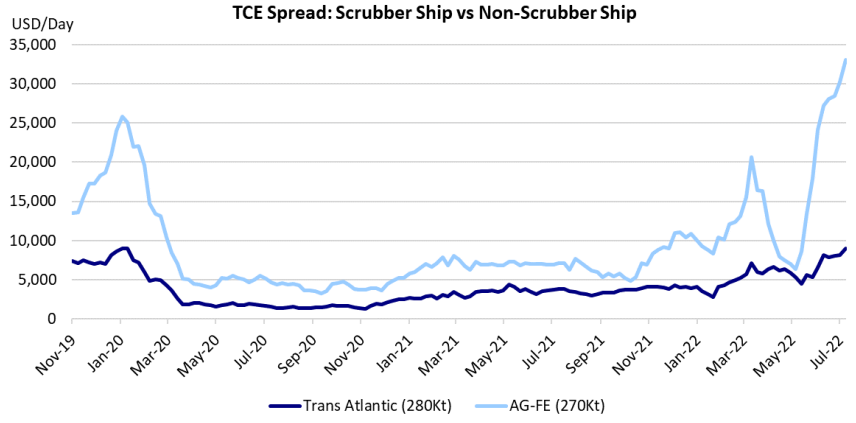
The Delayed Impact Of IMO 2020

In late 2019, during the runup towards the implementation of IMO 2020, there was a genuine concern that there may not be enough Very Low Sulphur Fuel Oil (VLSFO) available for the global shipping fleet, and the price spread between 0.5% sulphur VLSFO and 3.5% sulphur HFO (the "Hi-5 spread") increased to well above $300 per MT in important bunker ports like Fujairah and Singapore. When 2020 came around, these fears proved to be unfounded. There was enough low sulphur bunker fuel available, and the Hi-5 spread rapidly declined. Starting early in 2022 the Hi-5 spread increased again, driven by a combination of factors, including the Russian invasion of Ukraine, and the general recovery of oil demand as the world is coming out of the pandemic. Global refining capacity is tight, and the crack spread is very high. This has created a significant gap in the earnings between vessels that need to burn VLSFO and those that can use HFO.

Vessels with scrubbers are able to continue using HFO. An increasing number of vessels installed this exhaust cleaning technology to be able to continue to burn the cheaper fuel. The rapid uptake of scrubber systems played a role in maintaining demand for the 3.5% HFO. After the outbreak of the Covid-19 pandemic, global oil demand collapsed, oil prices dropped to record lows and IMO 2020 largely became a non-issue as refiners could use surplus low sulphur products to produce VLSFO. However, even during Covid, when tanker rates collapsed and the TCE benefit of scrubber ship versus a non-scrubber ship was relatively small, owners continued to install scrubbers on their vessels. Not surprisingly, given their fuel consumptions and employment on long-haul routes, VLCCs have quickest payback and therefore the highest penetration of scrubbers. We estimate that 43% of VLCCs currently have such an exhaust cleaning system installed.

The introduction of scrubbers and the significant Hi-5 margin have made assessing VLCC earnings more complicated. In addition to the difference between scrubber and non-scrubber vessels, there is also a distinction between non-Eco and Eco-vessels. Eco vessels are generally built after 2014 and have a more fuel-efficient engine, giving them a higher TCE. These distinctions effectively create four categories of tankers: the least efficient vessels are the Non-Eco vessels without a scrubber and the most efficient ones are the Eco vessels with a scrubber. During most of the pandemic, when tanker earnings and oil prices were low, the earnings differential between these vessel categories was between $2,000 and $5,000/day. However, since the Russian invasion of Ukraine, oil prices have skyrocketed and the TCE differentials have increased dramatically as well.





Source: Poten & Partners

In addition to the difference in vessel specifications, TCE's are also influenced by the likely bunkering location of the vessels. As can be seen in chart 1, the Hi-5 spread is much higher in Fujairah and Singapore than in Rotterdam and Houston. That means that the benefit of having a scrubber in the Pacific is much higher than it is in the Atlantic. The main driver is the high price of VLSFO in Fujairah and Singapore. Prices for HFO are more similar around the world.

Many ship brokers (and the Baltic) still report VLCC TCE's on the basis of a non-scrubber ship. However, this could be slightly misleading, since 43% of the VLCC fleet is equipped with scrubbers. The age group that the fewest scrubbers is the fleet of vessels of 20 years old and older. Out of the 117 VLCCs built in 2002 or earlier, only 27 have a scrubber installed (only one prior to 2000). However, most of these vessels are no longer competing in the regular spot market. They are either used for floating storage or employed in the sanctioned trades involving Iran and Venezuela.

Charterers do not prefer one vessel type over another. They just want the cheapest ship that is suitable for their voyage. The Worldscale rates are the same for each vessel, regardless of their fuel consumption. Fortunately, owners with modern VLCCs that are equipped with scrubbers do much better than the benchmark rates suggest. That is also reflected in the quarterly reports of the publicly listed tanker owners. They typically outperform the benchmark by a significant margin, partly due to higher utilization and partly as a result of better fuel economy.