



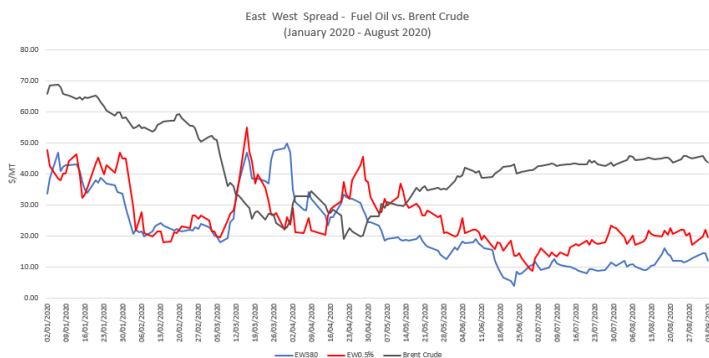
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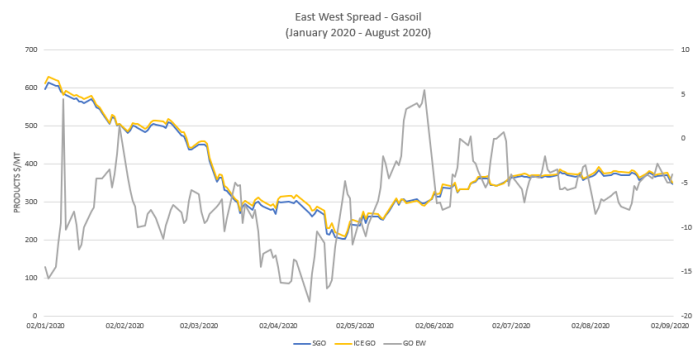
SUMMARY

- Fears about a second wave of Covid-19 dampened the bullish sentiment arising from positive economic data during the third quarter.
- Global oil supply rose by 2.5 mb/d to 90 mb/d in July after Saudi Arabia ended its voluntary 1 mb/d cut, the UAE exceeded its OPEC+ target and US production started to recover.
- The IEA expects global oil demand to be 91.9 mb/d in 2020, down 8.1 mb/d y-o-y. This forecast reflects growing concern about rising Covid-19 cases translating into weakness in the transportation sector, and aviation in particular.
- Global refinery margins trended upwards last month, as a continued increase in mobility activities, amid the peak summer season, provided stimulus to product markets. Improvements were registered across almost the entire barrel, with Asian refining margins returning to positive territory. Future runs and gains are expected to be capped by hesitation about a second coronavirus outbreak.
- Oil prices remained in a narrow ~\$3.0/bbl range in July, averaging \$40.77/bbl for WTI and \$43.22/bbl for Brent. The forward price curve contango deepened again in July after flattening in June, as forward prices (anticipating a tighter market) rose faster than prompt prices. Middle distillate and naphtha cracks made modest gains. Freight rates fell to levels not seen in months or even years.
- Refineries and power generators have been the main drivers of rising HSFO prices in both Europe and Asia since June.
- High inventories and refining capacity in preparation for the IMO sulphur regulation capped any major increase in VLSFO prices in Rotterdam and Singapore, allowing two major East-West arbitrage opportunities in January and at the beginning of August.
- Global marine fuel 0.5% prices are expected to be capped by increasing supply and depressed demand from the retail sector in September as refiners continue to grapple with weak low sulphur fuel oil margins.

EAST WEST SPREAD: A POEM IN THREE ACTS



As 2020 enters its last quarter, the shocks brought by the IMO sulphur cap and by COVID-19 are still reverberating in the marine fuel market, effectively dividing trifold the first seven months of the year, like the three acts of a Dante's Divine Comedy.



In our case, the three marine fuels East-West spread will be following the footsteps of the Sommo Poeta in his allegoric journey across Hell, Paradise and Purgatory. During their adventure, our protagonists met the IMO Sulphur cap aka Cerberus, the proverbial (and infernal) dog who barks but doesn't bite. After the initial relief, the three came across another much worse Hellish, depressing (literally) and volatile figure, a pandemic which showed them the depths of Hell before releasing them to briefly savour the heavenly life up in the skies of Paradise. Yet, in the last chapter of the journey our traveller wandered across the desolated and hilly lands of Purgatory, in the middle between Hell and Heaven, where the constant fear of the mighty pandemic prevents the trio to move permanently up or down, like in an eternal Limbo.

Many of the readers might have already met the protagonist of this poem/report, but for those

who haven't yet, the East-West spread is the differential between 380 CST Singapore fuel oil cargoes and 3.5% sulphur FOB Rotterdam barges, and it indicates the openness of the arbitrage east. However, the East-West spread measures also the difference between the 0.5% FOB Singapore Marine Fuel and the 0.5% FOB Rotterdam Barges Marine Fuel. The last form under which the EW spread can present itself is as the differential between Singapore Marine Gasoil and Rotterdam Marine Gasoil.

Hell: January – March

At its beginning, 2020 looked like it was going to be a relatively calm and predictable year for the East-West spreads, with the IMO regulation coming into effect on January 1, and prior to that market participants stocking up VLSFO with the expectation of prices going through the roof. On the other hand, HSFO was thought to be bound to drop, unwanted by most shipowners and banned by maritime regulators worldwide for non scrubbered vessels.

The 380 EW spread was widening reaching a peak of 47 \$/MT, thus indicating an openness of the arbitrage east. The 0.5% EW spread was peaking too at about the same level of its high sulphur peer, riding the wave of fear and anticipation of the IMO rule.

The VLSFO differential was doomed from the beginning, as refineries in both Europe and Asia were well prepared ahead of the start IMO regulations due to the flurry of pre-orders from worried shipowners by adjusting to the changes.

In NW Europe the completion of several refinery upgrades and the increase of refinery runs raised the output of 0.5% fuel, placing the region in a net long position.

Demand for light sweet crude grades across Europe rose as refineries adjusted their slates for lower sulphur oil production ahead of the regulation, with Platts noting that demand for Algeria's premier grade has particularly benefited as it is an ideal grade to blend with heavier and sourer barrels.

In December 2019 approximately 400,000 mt of LSSR has been exported from the 335,000 b/d refinery complex at Skikda, with the US

traditionally having been a key buyer, particularly during the summer months to produce gasoline.

At the same time, Asian refiners took advantage of the plummeting HSFO prices to ramp up VLSFO production in order to capture the currently rising demand for the product.

The top four state-owned refiners in China upgraded their capacity to 18 million mt/year according to data from the Marine Bunker Exchange. Previously, China was a small player in fuel oil production despite its large refining sector due to its use of the product for domestic consumption and being hit by value-added taxes.

Additionally, Brazil's state oil giant Petrobras said in its 2019 Q3 sales report that IMO 2020 had created export opportunities for low-sulphur fuel oil, particularly in the Singapore market, thus adding more to a fast-rising supply of VLSFO.

Despite strong values, in the 380 EW spread, in the physical market there wasn't any increase in the number of vessels heading eastwards. Dropping demand for higher sulphur fuel oil probably made traders increasingly less likely to try and work the arbitrage for fear of being stranded with product and no buyer.

NW Europe, a traditionally long HSFO hub, was posed to reduce significantly its 3.5% fuel stockpiles following the refinery upgrades and the increase in further refinery runs. The increasing EW spread also contributed to the reduction of stocks as refineries in Asia and the Med absorbed the surplus HSFO.

On the other hand, the Mediterranean, known for its complex refining capacity reversed its position from being net-short HSFO, to net-long, as companies looked to use high sulphur straight run fuels in their refining and bunker pools.

Elsewhere, shipowners choosing to not use the then-expensive VLSFO were left with the option of installing scrubbers.

The Scrubber Factor

Scrubber technology works by spraying alkaline water into the vessel's exhaust, capturing

sulphur and other unwanted emissions as they are produced. The systems require an upfront capital investment of about \$2 million-\$6 million per vessel, as well as a running cost, and the shipowner hopes to see this paid back over time by the savings made from buying high sulphur fuel oil instead of more expensive alternatives.

However, there are three main types of scrubbers:

Open-loop scrubbers take in naturally alkaline seawater and then flush the discharge out to sea. Some have argued that this simply moves the pollution from the air to the sea.

Closed-loop systems have the option of the discharge being retained to dispose of at port but the systems use caustic soda to raise the alkalinity of the water being used. There may be difficulties involved in purchasing it due to restricted usage at many ports. Availability of shore reception and sludge landing facilities at ports also remains limited.

Hybrid systems with the option to work in either open- or closed-loop modes are available, but they are usually more expensive.

The decision to ban the use of open-loop scrubbers in the major shipping ports towards the end of 2019 prompted shipowners to use low sulphur marine gasoil while the vessel was in the port, and switch to fuel oil when at sea.

As refineries were reconfigured to maximise their output of VLSFO, the increase in 0.5% marine gasoil was relatively easy and effortless, and definitely not the catastrophe some people predicted, as middle distillates and fuel oil usually yield the majority of refined product slates from a barrel of oil.

Immediately after the sulphur cap came into action the higher prices of European gasoil plunged the EW spread to negative levels. However, as supplies became more available prices started to converge into an almost identical pattern, with the spread highlighting the differences in production and consumption of the two fuels.

As the first quarter progressed, weaknesses in the fuel oil market started to emerge, with HSFO

prices converging downwards, along with the VLSFO.

As the three spreads thought it could not get worse, they saw a mythical beast who hasn't been seen for over a century: a pandemic called Covid-19.

Covid-19 swept the world leaving a trail of death, triggering lockdowns worldwide and freezing land and air transportation for months.

As the global economy ground to a halt, oil demand fell by 16.4 million bpd year-on-year during peak lockdown. Refiners struggled to adjust production as markets were flooded with Saudi Crude in an escalation of its fight with Moscow for market share.

While the shipping sector wasn't as affected as aviation and land transportation, panic reigned in the market as product prices plummeted and the East-West spreads for HSFO, VLSFO and gasoil descended in at lows unseen in years.

Paradise: March – May

After a torrid March, April brought a little respite for Asian refiners which produce 0.5% sulfur marine fuel with a slight uptick in demand, although bearish factors on the supply side due to the coronavirus pandemic still weighed heavily on the market.

However, volumes from India continued to flow while Chinese refineries also ramped up operating rates in April, largely offsetting any major tightening in supply in the Asian market. Furthermore, India's extension of a lockdown that began on March 25 by an additional three weeks forced at least two refineries to postpone their late-March/April turnarounds by a month.

Cash differentials for Singapore Marine Fuel 0.5% sank to minus \$11.80/b on April 16, just days after the city-state reported a near 12% month-on-month increase in bunker sales for March to 3.08 million mt.

Floating inventory of LSFO around Singapore also decreased by about 1 million mt in April to approximately 4.2 million mt, although interest in storage space, both landed and floating, also picked up as the front-month contango between May/June Marine Fuel 0.5%S swaps widened to

a monthly average of minus \$9.56/mt, compared with the minus \$5.11/mt contango in March.

Meanwhile, the ongoing impact of the pandemic put downward pressure on European fuel oil markets in April, with traders looking to store product amid sluggish demand.

FOB Rotterdam 0.5% sulphur fuel oil barges assessed at \$135.25/mt, the lowest since Platts started assessing the product in January 2019.

The profitability of producing the product, known as the crack, also dropped sharply. On February 6, the VLSFO crack - the difference between the price of crude oil and the product derived from it - was assessed at \$15.556/b for 0.5%S marine fuel FOB Rotterdam. On April 27 the assessment valued it at 31.2 cents/b, the lowest since Platts began assessing it.

On the same day HSFO was especially affected, with 3.5%S FOB Rotterdam barges reaching a two-decade low at \$79.75/mt, the lowest since \$77.50/mt on June 11, 1999.

As an indicator of the investment payback for scrubber installations, some shipowners continued to have second thoughts about payback economics as the pressure on marine fuel prices raises the stakes.

As Europe was still in peak lockdown, demand started to pickup in Asia as China lifted lockdowns and government stimulus set the economy in motion.

As shipping activity recovered, Singapore marine fuel prices spiked up to eight-week highs, prompting shipowners to look for bargains in Hong Kong and Shanghai.

This recovery in demand put a floor to the free fall of marine gasoil prices and boosted the East-West spread to levels unseen since 2019. The EW trio finally reached Paradise.

Purgatory: June – Present

Like all things that are too good to be true, the stay in Paradise was sweet but short lived.

Starved refiners in the USGC and increase in storage demand within Europe alongside use from vessels fitted with scrubbers boosted

demand for European HSFO, closing the pricing gap with Singapore, thus lowering significantly the 380 East-West spread.

On June 4 FOB Rotterdam 3.5%S fuel oil barges were at \$212.25/mt from a twenty one years low of \$79.75/m at the end of April.

However, all that has come after a significant reduction in supply from refiners, who reduced their HSFO output following IMO 2020 ahead of the expected loss of bunker demand.

Compounding that was the reduction in global demand for oil following the coronavirus pandemic. Refiners reducing their utilization rates affected the amount of fuel oil produced.

Meanwhile, Asian HSFO market has been experiencing strong demand for straight run fuel oil from refineries, following Saudi Arabia's decision to raise its official selling prices for July-loading crude oil. Saudi Arabia's move made straight run fuel oil more competitive than crude oil as refinery feedstock.

Furthermore, high sulphur fuel oil buying interest from Asian and Middle Eastern power sector was on the rise to meet air-conditioning demand, enhancing the convergence between the Singapore and Rotterdam benchmarks and effectively putting a ceiling to the 380 EW spread.

At the same time, the 0.5% sulfur fuel oil market at the Northwest European bunker hub at Rotterdam rose to its highest point since early March, mainly on the back of strength in the broader oil complex but helped by a pick-up in activity with COVID-19 lockdowns being eased.

0.5%S delivered fuel oil at Rotterdam was at \$298.00/mt on June 19, with 0.5%S fuel oil barges at \$289.50/mt. That was the highest point for the bunker assessment since March 10 and since March 6 for barges Reuters data showed.

Despite the rise in bunker prices, demand at Europe's largest bunker hub in Rotterdam was moderate at best, according to suppliers, as fundamentals continued to weigh on demand.

Combined stocks of fuel oil in the Amsterdam-Rotterdam-Antwerp hub fell 11% to 1.521 million

mt in the seven days to June 17, the second week of declines and its biggest drop in two months, according to data from Insights Global.

Platts analysts pinned such decline on the softening 0.5%S marine fuel contango rather than any uptick in demand, with weakening storage economics causing many to release barrels from storage.

On the other hand, the initial differential between higher VLSFO Singapore prices and lower Rotterdam prices started to disappear. The inflow of arbitrage cargoes into Singapore declined to 2 million mt/month in June while Singapore used to receive more than 3 million mt/month in the first quarter.

Yet, the Spread trio was neither bound to plunge to the depths of hell, nor to rise again to the Heavens. In fact, since July there has been an alternation of excess supply and poor demand, then positive signs of economic growth boosting consumption and lowering reserves, and then again bearish signals dampening prices and keeping the EW spread in a perennial, volatile limbo.

Most notably, after a brief arbitrage window at the beginning of August, not even weakening freight rates justified the economics of shipping cargo from West amid a contango since February 14 for the 0.5% fuel, due to a supply glut in Singapore.

At the beginning of September weak demand and ample supply were weighing on fundamentals in Europe as fears of a second wave of the coronavirus pandemic dampened macroeconomic prospects.

Storage economics weakened significantly in August compared with April and May, during the major demand fallout from the pandemic.

The contango between front and second month 0.5%S FOB Rotterdam barge swaps was assessed Aug. 28 at minus \$1.50/mt. The average contango structure seen through August was minus \$3.53/mt, compared with minus \$11.34/mt in April and minus \$9.36/mt in May, which allowed traders to store and roll oil forward amid a lack of incremental demand.

In Asia the LSFO market lost its gains by end August from the first half of the month as bearish supply and demand factors weighed on margins as trading picked up for H2 September loading.

THE FUTURE: PARADISE LOST OR REGAINED?

In the short term, marine fuel 0.5% prices are expected to be capped by increasing supply and depressed demand from the retail as refiners continue to grapple with weak low sulphur fuel oil margins.

Inventory levels in Asia are expected to rise as an arbitrage window from the West that opened in early August closes Platts analysts expect at least 2.5 million - 3 million mt landing in Singapore later this month compared to 2 million - 2.5 million mt estimated for August.

Furthermore, Platts reported on September 2 that Singapore bunker suppliers have reported fewer inquiries for 0.5% bunker fuel in recent days than in H1 August, further tempering sales estimates for the month.

On the other hand, rising Covid-19 cases in Europe keep market participants as to when demand will recover to tackle the supply length.

In this uncertain scenario where demand and supply may or may not pickup, the expectation is that the East-West spread might continue to linger in this hilly limbo for the foreseeable future.

In the longer term however, the saga may take a turn. The oil picture (or painting if you will), is an ever-changing landscape, and slowing purchases from China paired with increased supply of OPEC+ sour crudes towards the beginning of 2021 might help ease the glut of 0.5% fuel oil, and increase the supply of HSFO, reintroducing the differences production and refining smoothed out by IMO 2020.

On the demand side, the biggest table turner is expected to be the commercialisation of a viable Covid-19 vaccine, thus allowing the full reopening of the global economy. Either way, while paradise may be temporarily lost or regained, eventually "thus issuing we again beheld the stars".