

Market Insights:
Maritime fuels and the
freight market – status
quo and looking to 2020

Erlend Engelstad

London / Singapore

› eex

› pxe

› ecc

› cltx

› epexspot

› nodal

› powernext

› nodalclear

› pegas

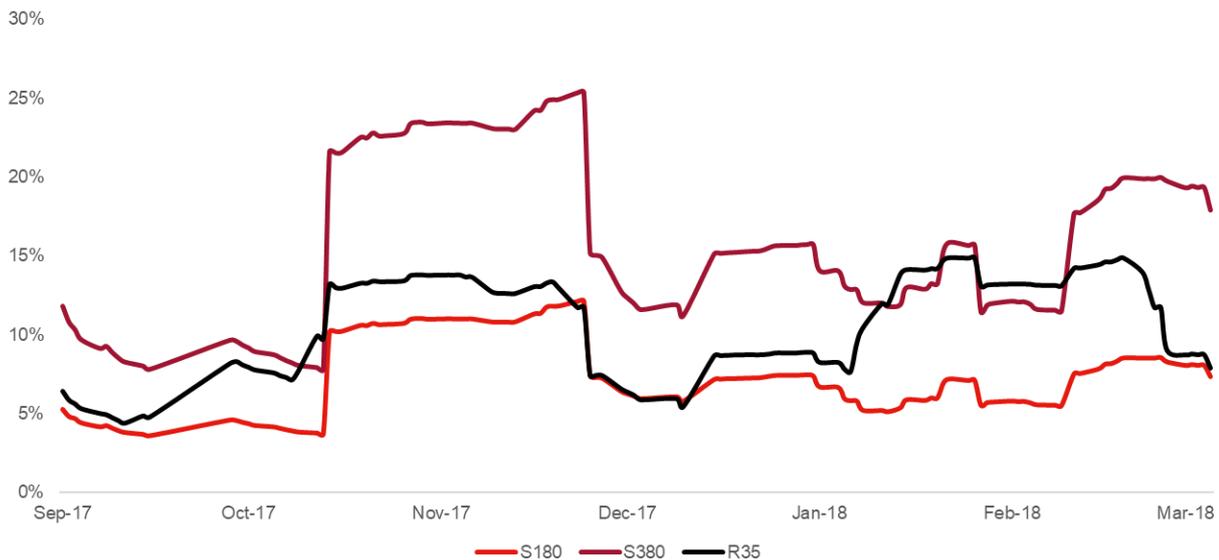
› gaspoint
nordic

Maritime fuels and the freight market – status quo and looking to 2020

From its inception in the late 1990s, the freight derivatives (FFA) market has offered increasingly precise and liquid instruments to hedge against adverse price movements in a volatile shipping industry. Most major charterers and ship owners now actively use freight derivatives to lock in freight costs and revenues respectively, allowing them to secure predictable cash flows and easier access to trade and asset financing. As market participants have grown familiar with hedging freight rates over the last two decades, companies have also gradually engaged with other large costs associated with maritime transport, in particular bunker fuel prices.

In 2018, two topics could form a watershed moment for the market; 1) the imminent emissions regulations that will hit the shipping industry in 2020, and 2) the emergence of indices specifically assessing maritime fuels. Combined, these factors could form an inflection point where exchanges need to treat maritime fuels not only as part of the larger oil market, but as a segment in its own right. Currently, the largest variable cost in the shipping industry is bunker fuel. With fuel consumption of around 45 metric tonnes per day for a Capesize vessel, a ship at full employment can incur a bill of close to USD 7 million per year at current price levels, payable by the owner or charterer depending on the terms of the freight contract. Accounting for as much as 70% of total variable costs, fuel oil price risk can make or break the P&L for a cargo shipment, and therefore needs close attention from a risk management perspective.

30-day annualized volatility – fuel oil



While long term charter rates incorporate an expectation of future fuel costs, the correlation between short term freight rates and fuel oil is unstable, driven by the exposure all petroleum products have to the broader oil complex. Inelastic supply of ships in the short term also contributes to price spikes in freight rates that do not necessarily reflect higher operational costs. Inversely, poor freight demand in certain regions may force ship owners to charter out ships at negative net income, to reposition the vessel in more attractive markets. This situation could easily be exacerbated by a booming oil

market, and further put downward pressure on earnings. All these market idiosyncrasies contribute to a wobbly equilibrium that can periodically detach from fundamentals.

The emergence of Emissions Control Areas (ECA) once and for all put maritime fuels on the regulatory map, and forced the industry to address sulphur emissions emanating from burning high sulphur fuel oils (HSFO). Global IMO regulations coming into effect in 2020 will dramatically decrease the maximum emissions allowed, also in international waters. To mitigate the impact of these new regulations, the industry has three key options; install technology onboard vessels that removes sulphur from the exhaust gas, use low sulphur fuels (low sulphur fuel oil or gasoil), or look to alternative fuels like LNG and methanol. The economics of each alternative depends heavily on the adoption rate, since all the options require scale and appropriate infrastructure.

To manage price risks in fuel oil, participants have a range of options, from contractual (bunker escalation/de-escalation clauses) to forward purchases of physical bunkers. In recent years, many also look to exchanges offering derivatives such as options and futures contracts. Traditionally, the underlying indices used for derivatives settlement have been wholesale (cargo) assessments. For the maritime industry, this translates into challenges in matching location and volume typically seen in the downstream bunkering market. Despite more than 40% of fuel oil being utilised in the maritime industry, standard trade size is typically in increments of 5000 metric tonnes, which creates liquidity and size challenges given the smaller volume typically required to hedge individual vessels' bunker stems. This mis-match, or 'basis', risk has so far been accepted by ship owners and charterers, however companies like CLTX has made efforts to offer tailored solutions that correspond to the requirements of the maritime industry.

Over the last two years, a range of new maritime fuels indices have emerged, reflecting the need for more specific benchmarks both further down the value chain (i.e. ex-wharf and delivered basis), and for additional delivery locations. Further, new assessments address the breadth of alternatives needed to reflect a more diverse fuel mix post-2020, including low sulphur alternatives. Although HSFO cargo assessments for the ports of Singapore and Rotterdam still serve as key price discovery hubs both for the physical and derivatives markets, the prospect of even higher basis risks and new fuels may prompt the industry to seek better fitting replacements.

Analysts predict average fuel costs in the shipping industry to rise by at least 25% when new regulations on sulphur content are in force from 2020. The million-dollar question for the derivatives market is what the fuel mix will look like, and how to cater to these new requirements. Currently, the market has reacted by pricing low sulphur fuel oil at increasingly large premiums from 2019 onwards. Whether the industry lands on LNG bunkering, HSFO for ships with scrubbers, economically viable LSFO production and distribution, or a switch to gasoil blends, one thing is certain; the maritime industry could see dramatic changes both in the products they procure, and the instruments they use to hedge their price exposures.

CLTX is working closely with industry players and stakeholders to cater to the needs of the maritime industry. The CLTX Portal offers an electronic marketplace for companies wishing to hedge their forward exposure to fuel prices.