AlixPartners

MARCH 2020

2020 GLOBAL CONTAINER SHIPPING OUTLOOK

As a new era of fuel regulation dawns, carriers' pricing discipline is in the spotlight

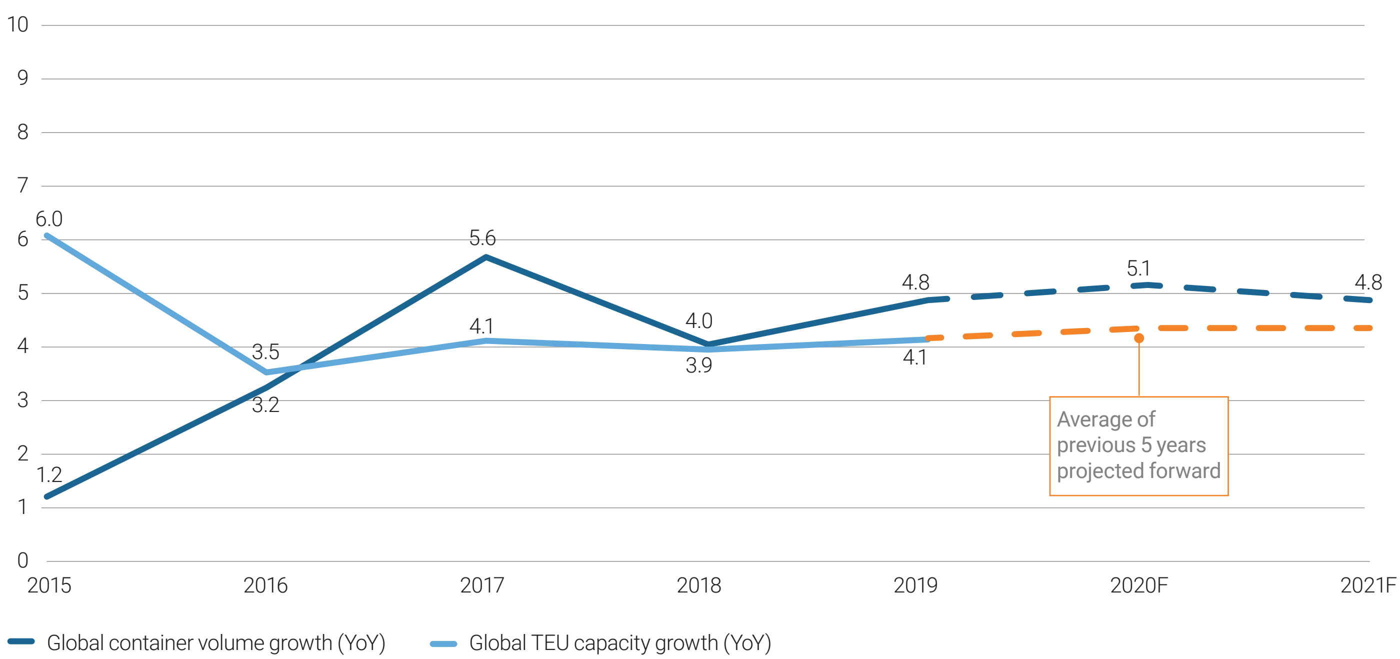
2020 MARKS THE BEGINNING OF A NEW ERA FOR THE CONTAINER SHIPPING INDUSTRY.

January 1 brought with it the implementation of a regulation issued by the International Maritime Organization known as IMO 2020, which requires carriers to limit the sulfur content of the fuel they burn to 0.5%—a drastic reduction from the previous cap of 3.5%. The aim of the mandate, one of the most substantial and far-reaching regulatory changes in the marine shipping industry's history, is to sharply reduce the sulfur emissions of the sector, which, according to the United Nations, transports some 90% of the world's trade. But the regulation's impact will be felt across a whole range of fuel-consuming businesses, as carriers compete for supplies against other industrial users. The competition will likely lead to a spike in demand—and prices—for low-sulfur fuel oil (LSFO). Carriers, shippers, and forwarders are all waiting to learn how well the industry will withstand the shock—and whether carriers can maintain pricing discipline, which has historically eluded the sector.

THERE IS CAUSE FOR CONCERN.

Amid signs that container shipping revenues will remain flat or increase only slightly in 2020 as demand growth sags below the peaks of earlier years (figure 1), the industry's financial condition remains perilous, with many carriers laboring under heavy debt burdens. Chronic overcapacity has afforded carriers little leverage in price negotiations for much of the past decade. And now comes a regulatory mandate that will drive a sudden and massive increase to the industry's cost base. There is evidence that some carriers have for years used fuel-price surcharges to supplement profits and that they continue to do so as fuel prices reset during the implementation of IMO 2020. Whether carriers can continue that practice as fuel-market volatility subsides is an open question.

FIGURE 1: CONTAINER SHIPPING VOLUME VERSUS CELLULAR FLEET (GLOBAL, YEAR OVER YEAR % GROWTH)



Source: Alphaliner, Statista, AlixPartners analysis

We estimated in last year's report that the spread between LSFO and intermediate-fuel-oil (IFO) bunker costs could drive up carriers' fuel bill by at least $10 billion globally—including some $3 billion on the eastbound transpacific (EBTP) and Asia–Europe lanes, which account for about 20% of global trade (figure 2). That estimate appears to be substantially correct, although if anything, it may understate the magnitude of the increase, which would dwarf the industry's profitability. The very survival of some carriers will depend on their ability to pass their higher fuel costs along to their customers. In that context, carriers face a vital strategic choice: whether to burn LSFO or to invest in scrubbers that would enable them to continue to burn IFO.

THE VERY SURVIVAL OF SOME CARRIERS WILL DEPEND ON THEIR ABILITY TO PASS THEIR HIGHER FUEL COSTS ALONG TO THEIR CUSTOMERS.

FIGURE 2: ROTTERDAM IFO VERSUS LSFO BUNKER PRICING ($/TON)

Source: Bunkerworld

Complicating matters is widespread dissatisfaction with the variety of formulas that carriers use to calculate the energy-cost burden that shippers should bear—known as the bunker adjustment factor (BAF). Every carrier has its own variation on the basic formula, which relies on assumptions about prevailing bunker prices, the size and fuel consumption of a typical container vessel on a given route, capacity utilization, distance traveled, and difference in tonnage between head-haul and back-haul cargoes, among other variables. The lack of transparency and standardization of those variables is a constant irritant to shippers, freight forwarders, and nonvessel-operating common carriers (NVOCCs) and gives rise to the suspicion that some carriers are using the BAF as a revenue-raising tool as well as a cost-recovery and risk-sharing mechanism. The uncertainty can lead to fraught negotiations and frayed relationships that take a toll on both sides and add to the headwinds the container shipping industry faces as it sails into what could be one of the most complex and consequential years in its history.

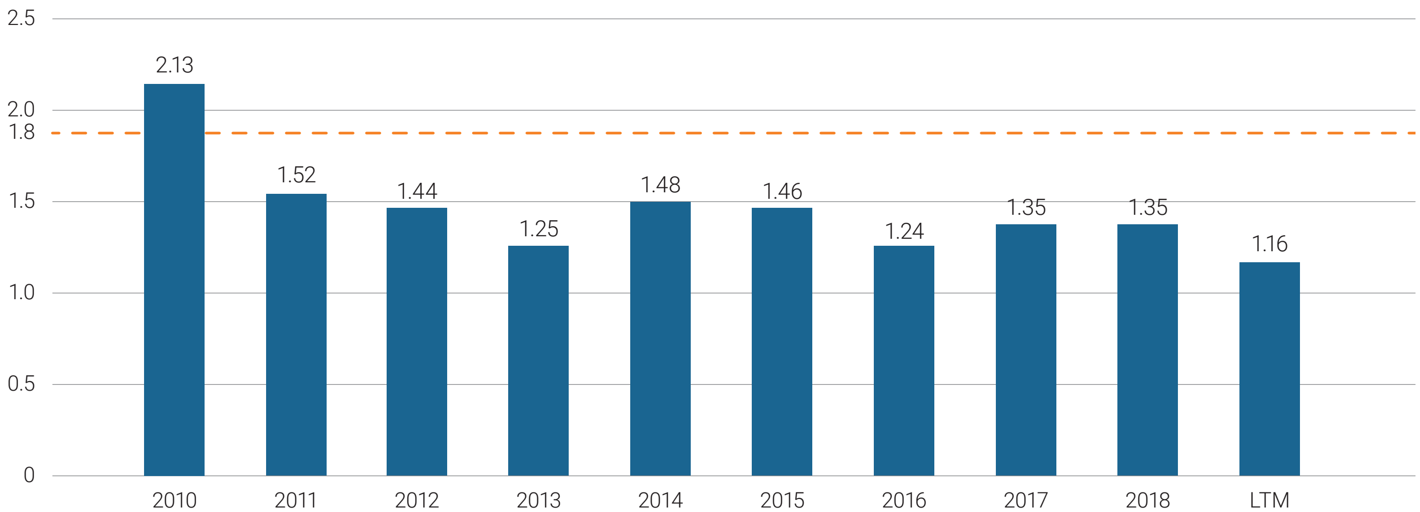
If there's an upside to the fuel-market turmoil for carriers, it's the opportunity to reprice fuel while uncertainty still prevails. The terms they set now will be difficult to unwind even if surcharge formulas are eventually standardized.

NEW YEAR, SAME OLD WORRIES

2019 offered carriers little relief from the financial anxiety that has been a constant in the industry since at least 2010. The collective Altman Z-score[1] of the 14 container shipping companies that publish their financials deteriorated markedly in the 12 months ending September 30, 2019, falling to 1.16 from 1.35 in all of 2018 and thereby signifying a rising probability of bankruptcy (figure 3). Reductions in asset turnover and market equity versus debt ratios drove the Z-score down versus the previous year. The score—the lowest in the 10 years we have tracked the number—is a worrisome indicator for both carriers and shippers, whose memories of Hanjin Shipping's 2016 collapse are still fresh.

As that stubbornly low Altman Z-score would suggest, the industry's total debt grew by $21 billion in the 12 months ending September 30, 2019. A full $15 billion of the increase is attributable to two large carriers that increased the debt on their books by a total of $13 billion to comply with a new accounting rule—International Financial Reporting Standards (IFRS) 16, which governs the treatment of leases. In other words, most of the increase in debt is accounting driven and not reflective of any change in the operating environment.

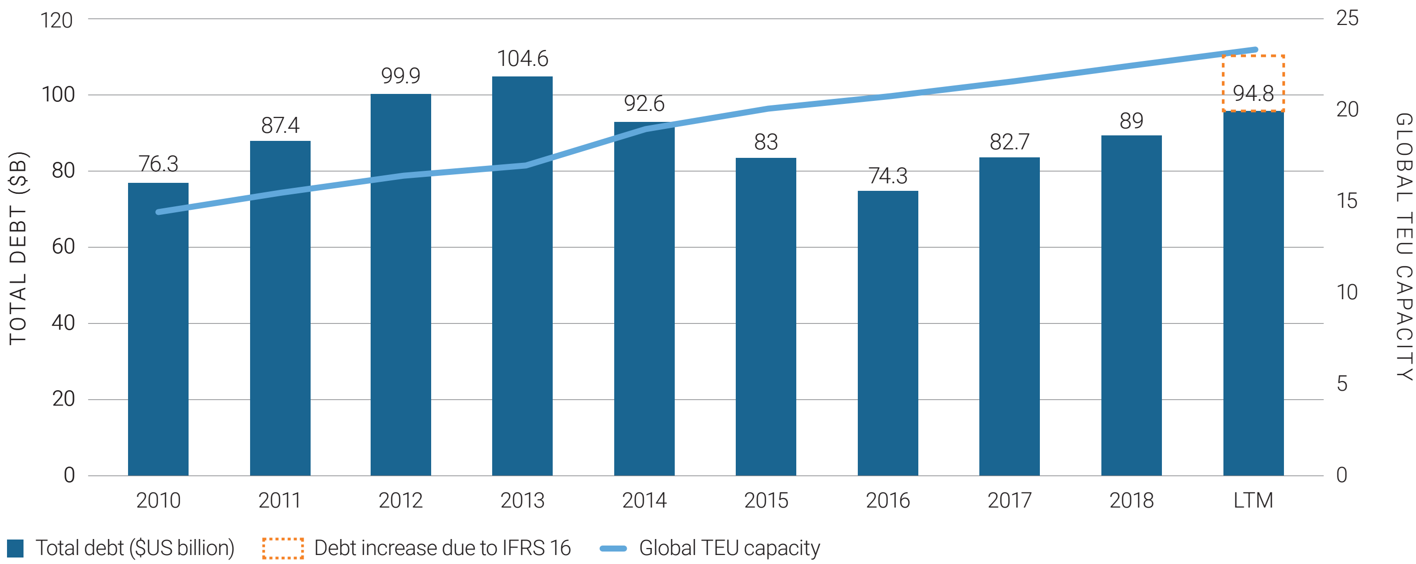
FIGURE 3: AVERAGE ALTMAN Z-SCORE



Source: CapIQ, company reports, AlixPartners analysis

1. The Altman Z-score is a metric that gauges a company's credit strength and the likelihood that the company will seek bankruptcy protection within the coming 24 months; a score of 1.8 or lower signals a high risk of bankruptcy.

FIGURE 4: TOTAL DEBT VERSUS GLOBAL CELLULAR FLEET CAPACITY

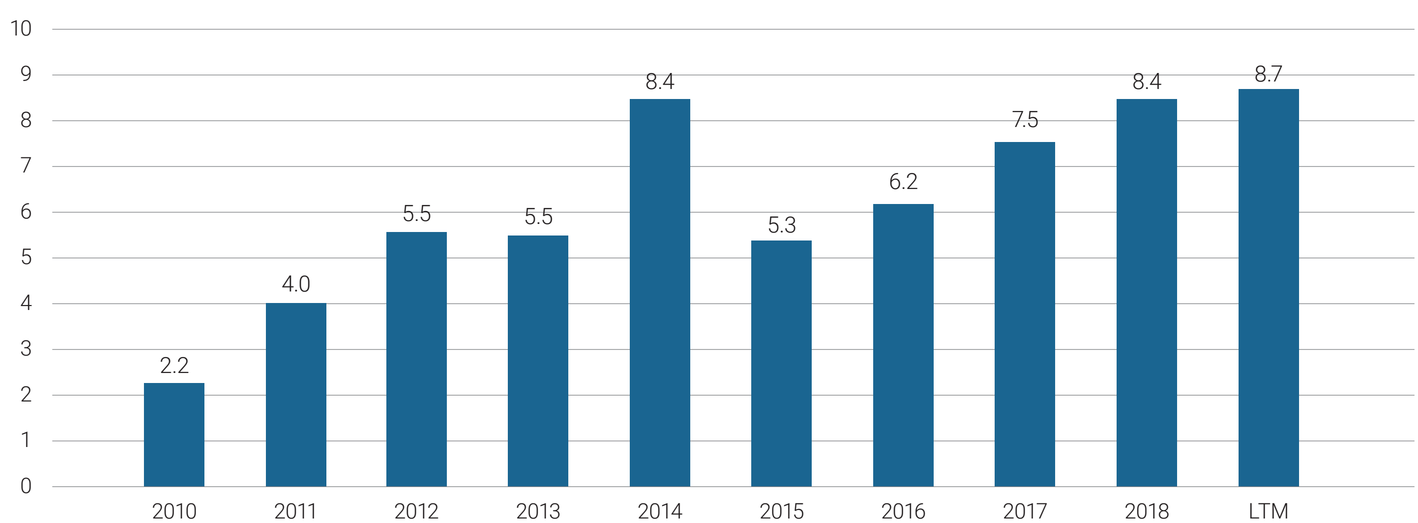


Source: Alphaliner, CapIQ, company reports, AlixPartners analysis

The relatively subdued expansion of debt suggests that the overcapacity that has plagued the industry for years may be easing. Total capacity, measured in twenty-foot-equivalent units (TEUs), rose a modest 4% in the last 12 months, which explains the industry's lower capital expenditures in 2019 and indicates that supply and demand may be approaching equilibrium (figure 4).

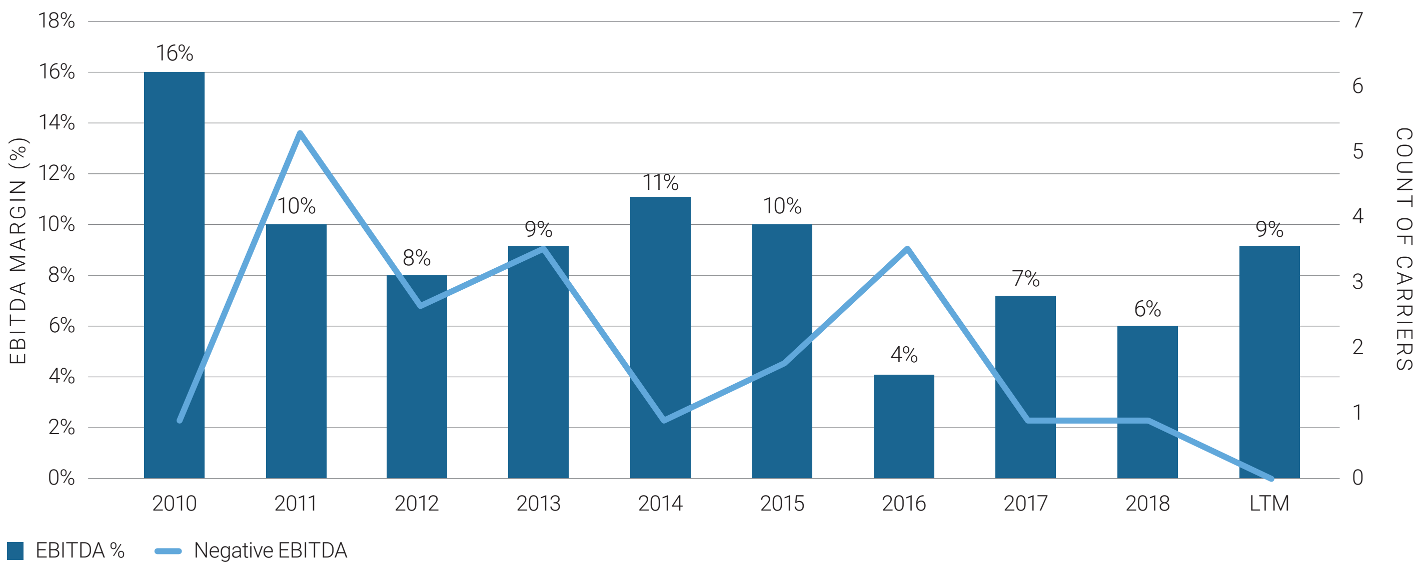
Such relief could not come too soon for carriers, whose leverage ratio rose 3% in the past 12 months, to 8.7x. That increase, though modest compared with earlier years, suggests that any financial shocks in the coming months could shift some carriers' finances from worrisome to downright distressed (figure 5). In light of the carriers' heightened vulnerability, industry stakeholders should be alert to any potential disruption caused by efforts to contain the spread of the coronavirus. Container volumes at Chinese ports have fallen off sharply since the outbreak began. Carriers risk undermining their own efforts to recover profits if they fall back on old habits of chasing volume for the balance of the year.

FIGURE 5: LEVERAGE RATIO (DEBT TO EBITDA)



Source: CapIQ, company reports, AlixPartners analysis

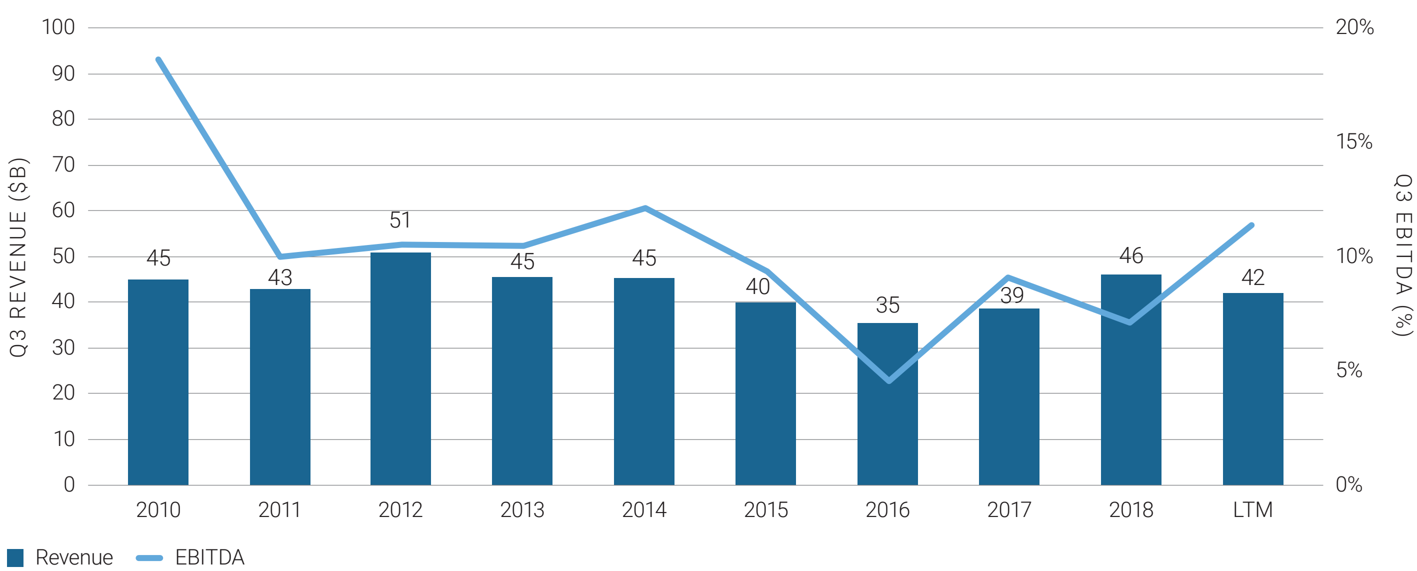
FIGURE 6: EBITDA VERSUS CARRIERS REPORTING NEGATING EBITDA (FULL YEAR)



Source: CapIQ, company reports, AlixPartners analysis

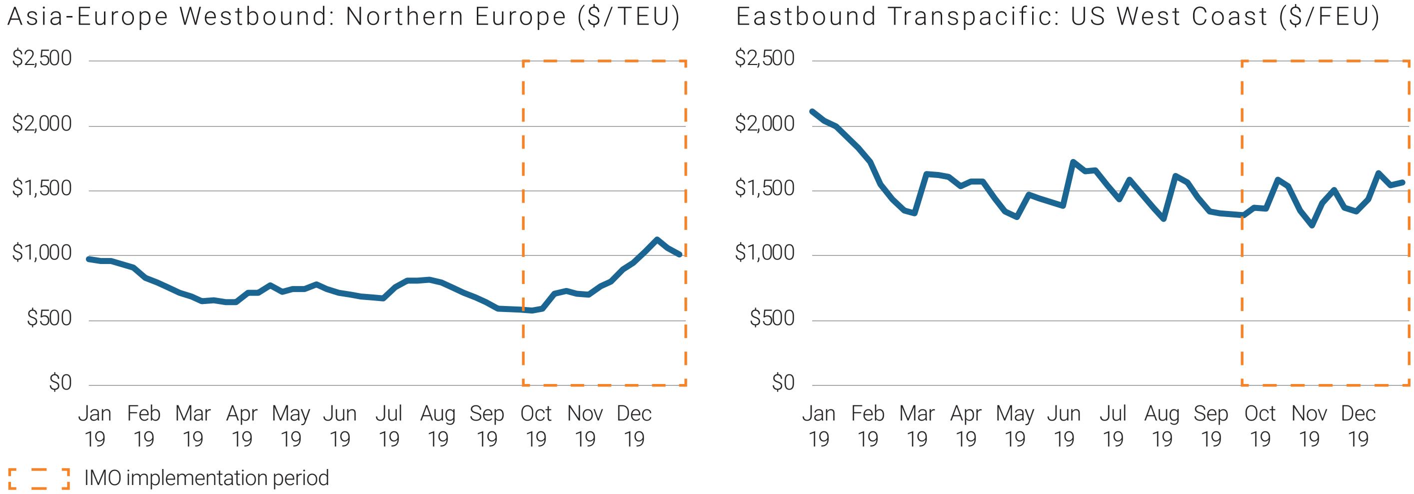
There is some good news to offset the more-downbeat data, however. The EBITDA margin of the carriers that report their financials rose to 9% in the last 12 months from 6% in all of 2018, whereas no carriers reported negative EBITDA (figure 6). Profitability was stronger in the third quarter of 2019, with EBITDA margin rising to 11% (figure 7). But profitability remains well below its historical peak.

FIGURE 7: Q3 REVENUE VERSUS EBITDA MARGIN



Source: CapIQ, company reports, AlixPartners analysis

FIGURE 8: ALL-IN SPOT RATES



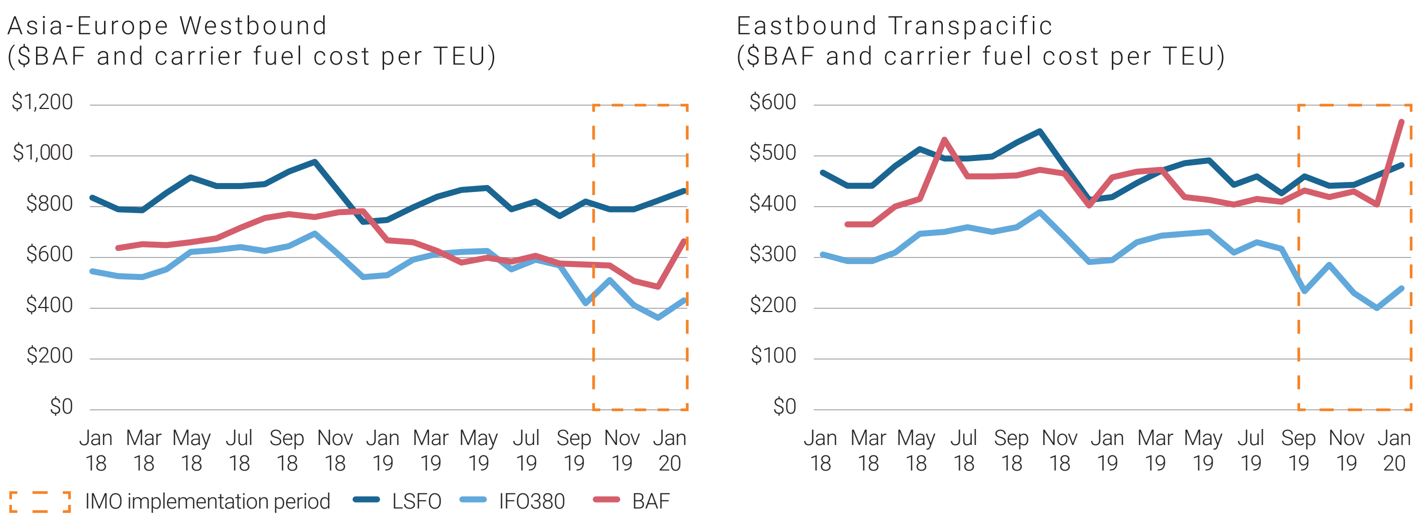
Source: Shanghai Container Freight Index

Lower fuel costs appear to have accounted for some of the improved profitability, indicating that carriers' pricing discipline has improved—or that they're using the BAF to prop up their revenues, or both. The data also suggests that carriers are starting to take a firmer grip on their operating expenses, which will stand them in good stead in what will likely be volatile fuel markets in 2020 (figure 8).

The fourth quarter of 2019 may provide a better indication of the success of carriers' cost recovery efforts, on which their future depends. We see two signs that carriers' initial attempts to recover larger fuel costs driven by IMO 2020 have been successful. First, carriers have successfully boosted all-in rates along the Asia–Europe lanes, where spot rates negotiated by freight forwarders and NVOCCs are the prevailing pricing mechanisms. Similarly, we see BAF charges increasing on the shorter, eastbound transpacific routes, where shippers typically negotiate contracts that break out the BAF as a separate charge. As carriers' uptake of LSFO has accelerated, BAF rates along the eastbound transpacific lane have kept pace, increasing to levels comparable to historical IFO recovery premiums (figure 9). However, carriers may struggle to maintain surcharges at their current level as shippers push for more-transparent BAF calculations and as other powerful forces converge to drag down rates.

WE SEE TWO SIGNS THAT CARRIERS' INITIAL ATTEMPTS TO RECOVER LARGER FUEL COSTS DRIVEN BY IMO 2020 HAVE BEEN SUCCESSFUL

FIGURE 9: CARRIER FUEL COST COVERAGE



Source: Drewry, Bunkerworld, AlixPartners analysis

As figure 10 makes clear, there is no standard BAF formula in use across the board, nor is there any widely recognized mechanism to account for the effects of the various sulfur reduction methods—such as use of low-sulfur fuel oil, scrubbers, and liquefied natural gas—on the type of fuel used and the amount consumed. Frustration with the opacity around BAF charges will likely cause some of the megashippers, freight forwarders, and NVOCCs to propose their own formulas and press for adoption. Those same megashippers using the eastbound transpacific route have historically represented the driving force for changes in the way carriers do business, and it seems likely that they will play that role again in the case of BAF calculations, wherein the contracting process will drive movement toward transparency and standardization.

Such calculations will have to take into account the various means of reducing sulfur content. Most carriers will likely opt to burn LSFO, and only a few carriers serving certain niche ports and markets will undertake costly refits of their vessels to burn liquefied natural gas. A larger minority of carriers will opt to install scrubbers—filters that capture sulfur emissions as IFO gets burned. Most carriers will use a combination of solutions across their fleets, making a clear view of fuel consumption nearly impossible. With the current cost spread between IFO and LSFO fuels hovering in the $200 to $300 range globally, the case for investing in scrubbers is, for the moment, highly compelling. Each different type of scrubber, however, comes with its own pros and cons, and any boost to revenue or earnings that comes from investing in scrubbers could be short-lived if the fuel-price spread collapses. Moreover, we believe that the regulatory framework governing the use of this technology will continue to evolve and may ultimately reduce returns on scrubber investments.

FIGURE 10: CONTAINER LINES PUSH LOW-SULFUR FEES

MAERSK LINE

Fuel price per ton
X Trade factor
(average fuel consumption on a trade lane, accommodating variables like transit time, fuel efficiency, headhaul-backhaul imbalance)

BUNKER ADJUSTMENT FACTOR (BAF)

To be applied: **Jan 1, 2019** Cost to annual fuel bill: **$2 billion**

Hapag-Lloyd

Fuel price per ton
X (fuel consumption + TEU carried)

MARINE FUEL RECOVERY (MFR)

To be applied: **Jan 1, 2019** Cost to annual fuel bill: **$1 billion**

msc

Fuel price per ton
X Trade factor
(fuel consumption per round trip + TEU carried)

BUNKER CHARGE MECHANISM (BRC)

To be applied: **Jan 1, 2019** Cost to annual fuel bill: **$2 billion**

OOCL

Fuel consumption
X (Current bunker price minus base bunker price) + cargo loaded onboard
X Trade factor

FUEL COST RECOVERY CHARGE (FCR)

To be applied: **Mar 1, 2019** Cost to annual fuel bill: **Not specified**

APL / CMA CGM

Fuel price per ton
X Trade coefficient

BUNKER ADJUSTMENT FACTOR (BAF)

To be applied: **Jan 1, 2019**
(all contracts with a minimum validity of three months)

Cost to annual fuel bill: **$160/TEU**
(which works out to $3 billion with 19 million TEU handled in 2017)

ONE OCEAN NETWORK EXPRESS

Fuel price per ton
X Trade wise loading factor
X Trade imbalance

ONE BUNKER SURCHARGE (OBS)

To be applied: **Jan 1, 2019**
(applies to all new contracts starting on or after Jan 1, 2019 and valid until further notice. Existing contracts subject to previous BAF until contracts expire)

Cost to annual fuel bill: **Not specified**

Source: JOC.com

KEY TAKEAWAYS

The coming year presents players in the container shipping industry with a host of stiff challenges and difficult trade-offs that will vary by their roles in the industry's ecosystem.

Specifically:

01 Carriers enjoyed a recovery in profitability in 2019. But they could see those gains evaporate if they fail to control costs—above all, their fuel costs. The long-term benefits of scrubbers remain to be seen but initial returns could be strong based on the fuel cost spread. Carriers will need to carefully consider if and how they will go about converting more vessels. In addition, some of the smaller and more-remote ports may be challenged to secure adequate LSFO supplies, which could influence carriers' deployment strategies.

02 Freight forwarders may see an uptick in profitability, as they historically have prospered from increases in shipping rates and complexity.

03 Shippers will likely take the lead in determining how carriers will recover their higher fuel costs, but they should expect increases in their fuel adjustment charges or all-in rates. They should also be mindful of the rising risk of carrier bankruptcies. Four years on from Hanjin's costly and disruptive collapse, the industry's finances remain precarious; and shippers, freight forwarders, and NVOCCs should assess the viability of individual carriers and consider spreading their business among several lines.

04 Investors should keep close tabs on carriers' debt levels, cost management, and profitability and be alert to any unforeseen declines in shipping volumes or rates—especially on the Asia–Europe and transpacific lanes.

AS CONTAINER SHIPPING ENTERS A NEW ERA, PREPARING FOR THE WORST MAY BE THE BEST WAY TO AVOID IT.

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ABOUT US

For nearly forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.