

September 2017

moving energy to build a better world

MISC Financial Calendar

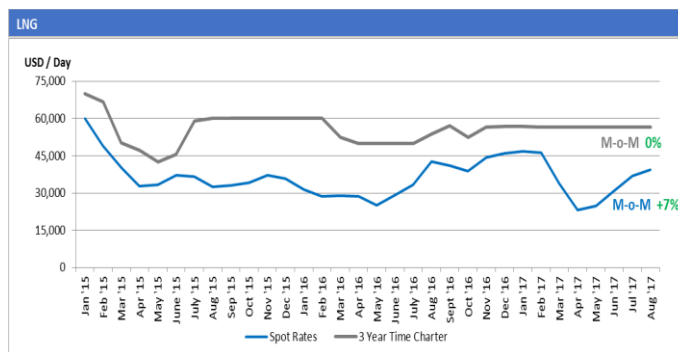
3Q FY2017 Quarterly Results

Friday, 3 November 2017

MISC Announcements

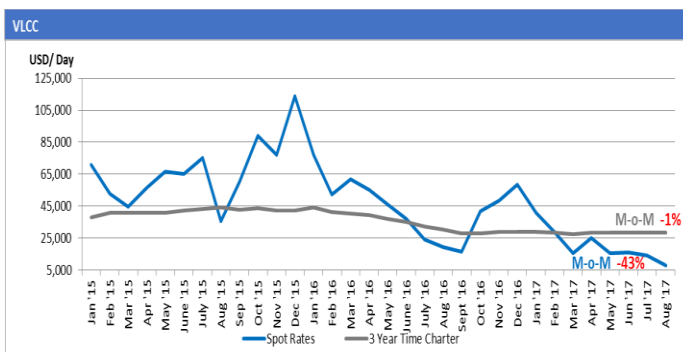
Integration of MISC Fleet Management Services and AET Shipmanagement.

Incorporation of new subsidiaries, Thailand Offshore Floating Terminals (L) Limited

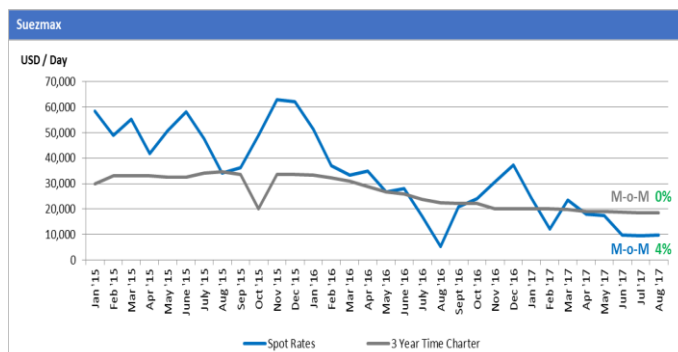


- Spot rates improved further in August on the back of healthy vessel demand due to beginning of the seasonal stock piling period.
- Ship owners are also eyeing future LNG supply from new trains mainly at Wheatstone LNG, Yamal LNG and Sabine Pass.

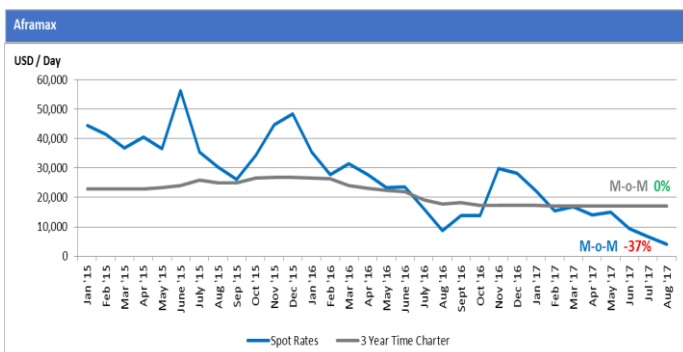
FREIGHT MARKET



- The VLCC market remained suppressed, with relatively low volumes out of the Middle East and the position list in the Middle East region remained lengthy.
- Scrapping picked up pace and was highest in the year with four vessels.
- The VLCC fleet grew by two new deliveries in the month making it 37 vessels for the first eight months of the year.



- The situation in Nigeria was stable with crude production gradually being restored, providing more cargoes into the market.
- Scrapping was highest in the year at three vessels, bringing the total number of scrapping to date to eight.
- Additional three vessels were delivered within the month making it 43 vessels for the January to August 2017 period.



- The Aframax tanker segment has benefitted the most from disruptions caused by Hurricane Harvey with rates rebounding towards the end of the month. The rates on TD9 Caribbean to US Gulf route spiked in response to the rush by charterers ahead of the storm to fill in their positions and in anticipation for crude exports to resume.
- Scrapping activity has been the highest for Aframax with six scrappings recorded in the month.
- Four newbuilds were delivered in August, raising deliveries to date to 48.

FREIGHT MARKET

USD/Day	July 2017 Avg	Aug 2017 Avg	1-Month +/-%	YTD 2017	2016 Avg	2015 Avg
LNG						
Spot Rates	36,750	39,375	7%	35,245	34,796	38,430
1 Year Time Charter	33,875	37,500	11%	34,758	32,639	36,119
3 Year Time Charter	56,500	56,500	-	56,531	54,079	56,750
PETROLEUM						
VLCC						
Spot Rates	14,143	8,116	-43%	20,527	44,900	67,279
1 Year Time Charter	26,625	25,625	-4%	27,900	38,367	45,805
3 Year Time Charter	28,500	28,250	-1%	28,377	34,496	41,869
Suezmax						
Spot Rates	9,521	9,894	4%	15,581	28,897	50,411
1 Year Time Charter	17,563	17,188	-2%	19,181	27,381	35,024
3 Year Time Charter	18,500	18,500	-	19,275	25,785	31,956
Aframax						
Spot Rates	6,583	4,132	-37%	12,966	23,368	39,614
1 Year Time Charter	15,000	14,813	-1%	16,000	22,335	26,577
3 Year Time Charter	17,000	17,000	-	17,047	20,957	24,619
MR2						
1 Year Time Charter	13,250	13,125	-1%	13,041	15,078	17,754
CHEMICAL						
Spot Rates (USD/Tonne)						
Rotterdam - Far East	104	109	4%	107	107	105
Rotterdam-Taiwan	87	86	-1%	82	80	85
Gulf-Far East	34	34	-	35	38	46
Singapore-Rotterdam	75	75	-1%	75	76	91
Time Charter (USD/Day)						
1 Year Time Charter 19,000 dwt	13,000	13,000	-	13,313	15,513	15,233
1 Year Time Charter 37,000 dwt	10,844	10,750	-1%	11,134	13,995	15,877

September 2017

ASSET VALUE

USD 'Million	July 2017 Avg		Aug 2017 Avg		1-Month +/- %		YTD 2017		2016 Avg		2015 Avg	
LNG												
Newbuild (DFDE, Atlantic Max)	179		183		2%		184		196		200	
PETROLEUM												
VLCC												
Newbuild	80		81		1%		80		89		96	
5-Year	62		62		-		61		66		81	
Suezmax												
Newbuild	53		54		1%		53		57		64	
5-Year	41		41		-		41		47		60	
Aframax												
Newbuild	43		43		-		43		46		53	
5-Year	30		30		-		29		35		46	
CHEMICAL												
IMO II 37,000 dwt	S/S	Coated	S/S	Coated	S/S	Coated	S/S	Coated	S/S	Coated	S/S	Coated
Newbuild Prices	47	29	47	29	-	-	48	29	49	30	59	31
Secondhand Prices - 10 years	34	14	34	14	-	-	34	15	36	17	37	16

FLEET DEVELOPMENT

No. of Vessels	Current Fleet	2017	2018	2019+	2020+	Total Orderbook	Orderbook as % of Fleet
LNG							
LNG Carriers	451	24	40	35	8	107	24%
PETROLEUM							
VLCC	675	20	39	18	0	77	11%
Suezmax	502	28	28	8	0	64	13%
Aframax	674	25	43	15	4	87	13%

INDUSTRY HEADLINES

SHIPPING: New low-sulphur requirements for marine bunker fuels causing scramble for refiners and shippers, IHS Markit says

The International Maritime Organization (IMO) recently confirmed that global refiners and shippers must comply with new regulations to reduce the sulphur content in marine bunker fuels by January 2020—five years earlier than many expected. As a result, both the global refining and shipping industries will experience rapid change and significant cost and operational impacts, according to new analysis from IHS Markit, the leading global source of critical information and insight. “While the IMO is taking positive action to address the environmental impacts of air pollution from ships, the rapid change creates significant disruption for both the refining and shipping industries,” said Kurt Barrow, vice president of downstream research at IHS Markit.

Source: IHS Markit

SHIPPING: Ballast water management rules to impact the tanker market

Tanker owners are faced with some very important decisions moving forward, as they will be faced with the dilemma of whether it makes financial sense to retrofit their older vessels or just sell them for demolition. This in turn will likely alter the balance between demand and supply, creating a new dynamic in terms of freight rates. In a recent report, shipbroker Gibson said that “the impact of the Ballast Water Management (BWM) Convention on future levels of demolition has been a hot topic for quite some time. The convention, held in September 2016, required all existing tonnage to install an approved BWT system at 1st renewal of the International Oil Pollution Prevention (IOPP) certificate from 8.09.2017, which has been done alongside special survey every 5 years.

Source: Hellenic Shipping News Worldwide

PETROLEUM: Tankers to feel the heat of Hurricane Harvey aftermath

Hurricane Harvey and its impact on US energy infrastructure is likely to reverberate across the shipping sector as oil refineries and ports remain closed and widespread flooding threatens a quick recovery. The potential for further disruption to inland gasoline and diesel supplies, and onshore oil production due to the floods could affect trade flows for several weeks, even though port operations themselves are less impacted. The US Gulf of Mexico provides 16% of the oil and about 5% of the natural gas produced in the US, according to the American Petroleum Institute. Around 84% of the Gulf oil supply comes from deepwater facilities and the Gulf Coast region accounts for over 45% of total US refining capacity.

Source: Lloyd's List

PETROLEUM: Asia VLCC rates fall to four-year low

Freight rates for very large crude carriers (VLCCs) on Asian routes show little sign of reviving although Hurricane Harvey, which threatens to ravage the U.S. Gulf coast oil refining industry over the weekend, could provide a fillip, brokers said. That came as average weighted VLCC freight rates on all routes sank to their lowest in four years this week to around \$9,000 per day. Rates are even lower on some routes after CPC fixed a VLCC late Thursday for a trip from the Middle East to Taiwan at 36.75 on the Worldscale measure and S-Oil fixed a VLCC to South Korea at W36. That is equivalent to rates of \$6,000-\$7,000 per day. That compares with around VLCC operating expenses of about \$10,000 and vessel break-even levels of about \$22,000 per day, brokers said.

Source: Reuters

PETROLEUM: Tanker demolition could pick up on market-based conditions, rather than legislation

The tanker market isn't in its best during this year, with rates subdued and oversupply concerns being the main hindering factor to a rebound. As such, many market analysts expected that a higher demolition rate could be the solution and this development could be triggered by new legislation measures, most notably the Ballast Water Management Convention. In its latest weekly report, shipbroker Gibson said that “last September one of our reports focused on the prospects for higher demolition activity for tankers on the back of impending environmental regulation which at that time provided the market with some optimism. The main case for our optimism was the introduction of the Ballast Water Management Convention due to enter into force this September. However, owners were successful in

September 2017

INDUSTRY HEADLINES

lobbying Flag States to provide a loophole mitigating their exposure to an unpopular act. Analysts were forced to revise the impact of this piece of legislation".

Source: Hellenic Shipping News Worldwide

PETROLEUM: Tanker market: VLCC Middle East fixtures drop by 35 percent

The Middle East VLCC market was in for a negative pattern over the course of the past week, not being able to follow suit, after the strong pace of fixtures of the week before. In its latest weekly report, shipbroker Charles R. Weber said that "after last week's strong pace, fixture activity across all VLCC markets moderated while availability levels inched up, leading to a weakening of sentiment and rates. There were 23 fixtures reported in the Middle East market, marking a 35% w/w decline. In the West Africa market, the tally of reported fixtures fell to a three-month low of just three fixtures, or eight fewer than last week. The souring sentiment deflated rates to levels just north of YTD lows observed briefly in late-March, before a surge in demand in the West Africa market boosted ton-miles and tightened the supply/demand balance as the market progressed into Q2. Given that West Africa cargoes sourced onto ballasters from Asia can occupy units for up to three months, the impact of units returning from those trades – and, similarly, due to a lull in West Africa demand during early August has been apparent".

Source: Hellenic Shipping News Worldwide

PETROLEUM: Libya's El Sharara woes hit suezmax and aframax owners

The closure of Libya's largest oil field, the El Sharara oil field, has rubbed salt into the wounds of aframax and suezmax tanker owners, while spot earnings remain at dismal levels due to oversupplied tonnage in recent weeks. Libya's National Oil Corp on Sunday declared force majeure on exports of Sharara crude from the Zawiya terminal, according to media reports and Arctic Securities, caused by a blockade on its pipeline by militants. The development has dealt a blow to the North African nation, whose oil production, reached 1m barrels a day in July compared with the 2016 average of 390,000 bpd, according to OPEC. The El Sharara field, which reopened in December 2016 after a two-year closure, was key to Libya's oil production revival even as it was shut down several times this year due to local protests, Arctic Securities said. It was producing 280,000 bpd until last week, the brokerage added. Libya has been exporting 72.1% of its crude on aframax and 27.6% on suezmaxes this year, according to Lloyd's List Intelligence, and shipowners are already feeling the chill from this latest outage.

Source: Lloyd's List

PETROLEUM: Crude tanker flotilla worth \$1bn has sunk to scrap value

VLCC and suezmax tankers worth more than \$1bn remain in the market despite slipping to their scrap price or lower. A total of 47 vintage VLCCs and 36 suezmaxes of a combined 19,336,100-dwt fall into the category at a time when rates have come down to what some view as the bottom on the present cycle. Data compiled for TradeWinds by VesselsValue shows that the vintage tankers are worth a combined \$1.05bn. Of the 47 VLCCs that are today worth their weight in steel or less, 17 of the vessels, worth a combined \$262m, are in the 15 to 19 year age range. A further 30, worth a collective \$474m, have reached their 20th birthday, VesselsValue's figures show. It comes with VLCC rates at \$14,522 per day globally right now and averaging \$26,495 per day in the year to date, according to Howe Robinson Partners. Amid strong newbuilding deliveries and OPEC keeping a tight hand on its oil taps, analysts at some major shipping banks have suggested that the timing of the crude tanker upturn has moved back. In such situations, scrapping seems like an obvious option. However, older ships often offer the best return on capital.

Source: TradeWinds

September 2017

INDUSTRY HEADLINES

LNG: Asian gas demand supports LNG vessel spot rates

Spot rates for liquefied natural gas carriers edged higher, to \$43,000 per day, supported by strong LNG demand in Asia and healthy chartering activity across most regions. LNG prices for September delivery in North Asia rose above the \$6 per million British thermal units' level, which helped widen the arbitrage for sending US cargoes to Asia at a time when European gas prices are under pressure from strong pipeline and seaborne supplies. LNG traders said the US-Asia LNG arbitrage is around \$3.25 per mmBtu. Shipbrokers reported LNG vessel fixtures in Australia, Southeast Asia, the Middle East and the US Gulf that have thinned the spot LNG carrier tonnage list to under 15 vessels and is helping keep a floor under freight rates.

Source: Lloyd's List

LNG: Strong growth forecast for FSRU sector, more shipowners expected to enter the market

The FSRU market is set for major growth in the next few years with quite a number of new players "knocking on the door" according to DNV GL. With the demand for clean energy growing, resulting in a decline for oil and coal, LNG is moving to fill the gap with the global LNG trade growing by four times in the last 20 years. The move by oil major Shell to buy BG Group underscores this shift. Floating solutions provide both a cost effective and quick solution to importing LNG versus building an onshore terminal. According to Johan Petter, business director gas carriers for DNV GL Maritime, a conversion of an existing LNG carrier to an FSRU costs in the range of \$75m - \$100m, a newbuilding \$250m, while building an onshore terminal costs \$800m upwards to develop.

Source: Seatrade Maritime

OFFSHORE: Plan to expand crude oil exploration in South Pars

After years of waiting and speculation, Iran drew its first barrel of crude oil from the giant South Pars Gas Field in the Persian Gulf nearly five months ago. Now the country plans to expand oil exploration in the world's largest gas field. Fardin As'adi, who oversees the development of the South Pars oil layer, said the layer is estimated to contain up to 12 billion barrels of light crude, but new explorations could potentially increase the in-place reserves. "Qatar is drawing crude from the gas field from six layers. Therefore, it is also possible for us to find more amounts of crude by tapping into deeper layers of South Pars, but it requires further explorations and assessments," the official was quoted as saying by the National Iranian Oil Company's.

Source: Financial Tribune

HEAVY ENGINEERING: Supply / demand improving but shipyards must still fight for survival, says MSI

After a painful decade in which the shipping industry has suffered from an unhealthy supply position, a sustained reduction in contracting has at last begun to move fleet orderbook into closer balance with an improving demand picture, according to analyst Maritime Strategies International. But despite the positive news, shipyard prices may still fall according to the latest MSI analysis. Too many yards still have too little forward cover and even those considered high quality facilities must be considered at risk of closure. Comparing the situation of mid-2015 with today's orderbook, MSI analysis shows that orderbook levels across all the main sectors have come down significantly. Even so, several factors weigh on the yards' ability to compete until demand and earnings pick up towards the end of the decade, says MSI Director Dr Adam Kent. "On an annual average basis, MSI believes there is around another 5% for newbuilding prices to fall in 2018. Obviously this will be partly dependent on shipyard and the vessel type, but we think that shipyard forward cover will fall further in 2018, as deliveries outstrip contracting. What this means for newbuild prices as a whole, is that we don't believe the bottom of the price cycle has been reached yet," he says.

Source: MSI (Maritime Strategies International)

Disclaimer. All the information contained in this newsletter is published in good faith and for general information purpose only based on the sources stated therein. MISC Berhad (8178-H) shall not be responsible for, and expressly disclaims any and all warranties including without limitation warranties of merchantability and/or fitness for a particular purpose, warranties against infringement and title, warranties the information is timely and free of errors. MISC Berhad is not in any manner responsible for the completeness, reliability, accuracy, and correctness of this information or otherwise.

Limitation of Liability. In no event shall MISC Berhad and/or any of its officers, directors, employees, or agents be liable for any loss and/or damage, whether in contract, tort, strict liability or otherwise, for any direct, indirect, punitive, special, or consequential damages (including without limitation lost profits, cost of procuring substitute service or lost opportunity) arising out of or in connection with the use of, reference to, or reliance on any information contained in this newsletter.