ASEAN

Neutral *(no change)*

Highlighted Companies

MISC Bhd
HOLD, TP RM7.64, RM7.35 close

Rising crude tanker freight rates from the Red Sea crisis and low water levels at the Panama Canal will benefit MISC. A successful sail-away of FPSO Mero from the Chinese yard in 1Q24F could give investors assurance that the project is on-track.

Singapore Airlines
ADD, TP S$6.91, S$6.53 close

SIA continues to see robust passenger demand while cargo yields also exceeded our expectations in Oct-Dec 2023. We think that SIA may pay a bumper final DPS of 40 Scts in May 2024F, in conjunction with the release of its full-year results for the year ending Mar 2024F.

Summary Valuation Metrics

P/E (x)	Dec-23F	Dec-24F	Dec-25F
MISC Bhd	14.61	16.44	17.04
Singapore Airlines	7.09	8.63	11.57

P/BV (x)	Dec-23F	Dec-24F	Dec-25F
MISC Bhd	0.81	0.80	0.80
Singapore Airlines	1.12	1.14	1.11

Dividend Yield	Dec-23F	Dec-24F	Dec-25F
MISC Bhd	5.23%	4.79%	4.79%
Singapore Airlines	7.19%	5.94%	4.44%

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Transport

MISC & SIA may benefit from Red Sea attacks

- Container shipping freight rates have risen the most since the Houthi attacks on commercial ships in the Red Sea began in mid-Nov 2023.
- MISC could benefit as aframax tanker rates have increased due to Suez Canal and Panama Canal issues, although the benefit is likely to be modest.
- SIA may benefit from any spillover to airfreight, as Asia-Europe shipping has more than tripled in cost and also takes longer via the Cape of Good Hope.

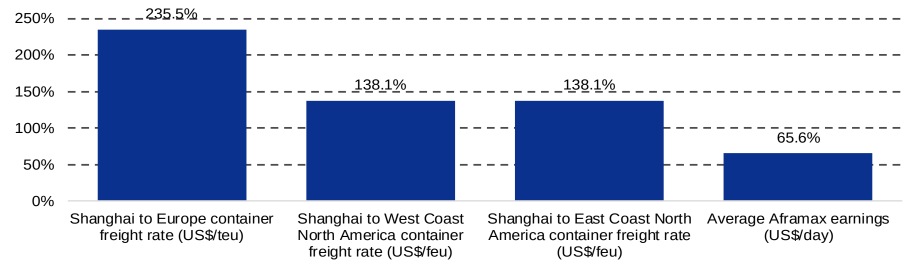
Houthi militant attacks caused container freight rates to spike…

Houthi militant attacks on marine traffic through the Red Sea have had the effect of curtailing shipping traffic through the Suez Canal, forcing many ships to take the longer route via the Cape of Good Hope (COGH). The impact has been the most apparent on the container shipping sector, as all Asia-Europe services and some Asia-East Coast North America (ECNA) services use the Suez Canal, through which about 20% of containerships in gross tonnage (GT) terms transit in a normal year. About 80-90% of containerships have rerouted via the COGH in order to avoid the Gulf of Aden, which caused Asia-Europe container shipping services to lengthen by some eight days (30%) at the minimum, and for Asia-Europe container freight rates to more than triple. Asia-ECNA services would add an extra four days (15%) via the COGH vs. the Suez Canal, or an extra 10 days (34%) via the COGH vs. the Panama Canal, which is facing issues related to low water levels. Asia-ECNA and Asia-West Coast North America services have seen their freight rates more than double over the past five weeks since 8 Dec 2023.

…with spillover into oil tanker rates, and potentially airfreight

Higher container shipping freight rates to both Europe and the Americas from Asia may spill over into airfreight cargo rates, in our view, or at the very least, help moderate the sequential decline in 1Q24F from the seasonal peak in 4Q23. Our Add rating on SIA is premised primarily on the strong passenger airline business, where load factors and yields will likely be very strong between Oct 2023 and Mar 2024, and we also expect SIA to reward shareholders with a bumper 40 Scts final DPS in May 2024F. Positive surprises in airfreight rates arising from the Red Sea crisis may add a further tailwind to an already strong story. The impact of rerouting via the COGH is less significant for the oil trade, as only 9% of the global oil tanker fleet transit through the Suez Canal in normal times. Also, 72% of the oil tanker transits are of Russian oil exports to Asia, and we think Russia may not reroute these ships because of its close relationship with Iran. As a result, VLCC rates have fallen since 8 Dec 2023, suezmax rates only rose slightly, although aframax rates have risen by a more significant 66%. Nevertheless, MISC's high term coverage for its aframax fleet means that it will only partly benefit from the aframax rate rally. While we have a Hold call on MISC, a successful delivery of the FPSO Mero-3 in 1Q24F could improve sentiment on the stock. Sector upside risks include the potential Houthi retaliation against US/UK attacks that would force more ships to reroute through the COGH, and cause freight rates to rally further. Sector downside risks include a resolution of the Israel-Hamas war that could reduce political risk in the Middle East and result in a downward normalisation of freight rates.

Figure 1: Increase in freight rates between 8 Dec 2023 (before the Houthi attacks in the Red Sea) and 12 Jan 2024



SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 2: Shipping and FPSO sector comparisons

Company	Bloomberg Ticker	Recom.	Price	Target Price	Market Cap (US$ m)	Core P/E (x)		3-year EPS CAGR (%)	P/BV (x)		Recurring ROE (%)		EV/EBITDA (x)		Dividend Yield (%)	
						CY23F	CY24F		CY23F	CY24F	CY23F	CY24F	CY23F	CY24F	CY23F	CY24F
MISC Bhd	MISC MK	Hold	RM7.35	RM7.64	6,989	14.2	16.4	-7.3%	0.8	0.8	5.7%	4.9%	9.2	9.1	5.2%	4.8%
Crude tanker stocks																
Euronav	EURN US	Not Rated	US$17.56	n.a.	3,864	6.8	8.0	na	1.7	1.5	25.6%	19.6%	5.8	5.2	11.2%	11.2%
DHT Holdings	DHT US	Not Rated	US$11.02	n.a.	1,774	10.8	6.2	na	1.7	1.7	16.1%	27.5%	6.9	4.7	10.3%	10.3%
Frontline	FRO US	Not Rated	US$22.27	n.a.	4,958	8.0	6.3	83.0%	2.2	2.0	29.6%	32.9%	8.2	6.2	12.1%	12.1%
Okeasnis Eco Tankers	OET NO	Not Rated	Nok302.50	n.a.	950	6.7	5.7	90.1%	2.3	2.1	36.7%	38.6%	6.4	5.8	15.6%	16.0%
Product tanker stocks																
Scorpio Tankers	STNG US	Not Rated	US$62.92	n.a.	3,367	6.2	5.8	14.7%	1.3	1.0	23.9%	19.8%	4.9	4.6	1.3%	1.3%
Ardmore Shipping Corp	ASC US	Not Rated	US$14.85	n.a.	609	5.3	5.2	1.5%	1.1	1.0	23.7%	19.5%	4.0	3.8	5.9%	5.9%
d'Amico International Shipping	DIS IM	Not Rated	€5.98	n.a.	807	3.6	6.2	12.7%	1.0	0.9	36.6%	15.4%	3.3	4.1	3.2%	3.2%
TORM Plc	TRMD US	Not Rated	US$32.30	n.a.	2,950	4.5	4.8	19.5%	1.8	1.6	40.7%	35.1%	4.2	3.8	20.3%	20.3%
Chemical tanker stocks																
Odfjell	ODF NO	Not Rated	Nok124.00	n.a.	938	4.7	4.1	33.2%	1.2	1.0	28.2%	26.9%	4.1	3.5	9.8%	9.8%
Stolt-Nielsen	SNI NO	Not Rated	Nok357.00	n.a.	1,995	6.1	5.1	19.7%	1.1	0.9	18.4%	18.9%	5.5	4.2	6.0%	6.2%
LNG tanker stocks																
Golar LNG	GLNG US	Not Rated	US$22.27	n.a.	2,358	10.4	10.7	38.8%	1.1	1.0	9.8%	9.5%	8.4	7.6	3.4%	3.4%
Awilco LNG	ALNG NO	Not Rated	US$7.83	n.a.	99	2.9	3.6	30.9%	0.7	0.7	27.7%	19.4%	4.1	4.0	18.8%	19.4%
Qatar Gas Transport (Nakilat)	QGTS QD	Not Rated	QAR3.65	n.a.	5,546	12.8	11.9	7.6%	1.7	1.5	16.5%	13.5%	12.3	11.9	3.8%	3.8%
Average of tanker group						**7.9**	**7.6**	**30.5%**	**1.3**	**1.2**	**17.5%**	**16.3%**	**6.8**	**6.1**	**7.9%**	**7.8%**
Diversified shipping stocks																
Kawasaki Kisen Kaisha	9107 JP	Not Rated	¥7,440	n.a.	12,029	2.9	13.9	-53.4%	1.2	1.1	47.6%	8.4%	13.6	13.6	3.6%	3.8%
Mitsui OSK Lines	9104 JP	Not Rated	¥5,244	n.a.	12,887	2.3	8.9	-47.4%	0.9	0.9	44.5%	10.6%	13.6	14.5	6.6%	6.9%
Nippon Yusen KK	9101 JP	Not Rated	¥5,094	n.a.	17,637	2.6	10.8	-48.8%	1.0	0.9	42.2%	9.1%	6.8	9.6	6.0%	6.3%
COSCO Shipping Energy Transpo	1138 HK	Not Rated	HK$7.95	n.a.	7,908	7.2	5.4	na	1.0	0.9	14.5%	16.8%	5.8	4.6	4.5%	4.5%
Average of diversified group						**2.8**	**9.8**	**-45.2%**	**1.0**	**1.0**	**41.3%**	**10.2%**	**9.0**	**10.0**	**5.4%**	**5.6%**
FPSO stocks																
Bumi Armada	BAB MK	Add	RM0.54	RM0.73	675	5.4	4.1	-20.2%	0.5	0.5	10.8%	12.4%	5.9	4.9	0.0%	0.0%
Yinson Holdings Bhd	YNS MK	Add	RM2.57	RM3.18	1,591	9.6	9.7	3.1%	1.1	1.0	12.6%	10.9%	8.3	8.3	0.7%	0.7%
SBM Offshore	SBMO NA	Not Rated	€12.48	n.a.	2,451	8.9	13.1	-17.7%	2.0	1.4	13.1%	12.4%	8.1	7.8	8.2%	8.1%
BW Offshore	BWO NO	Not Rated	Nok22.24	n.a.	393	6.6	3.7	-9.0%	0.4	0.3	6.5%	9.8%	2.0	1.3	12.6%	13.0%
MODEC Inc	6269 JT	Not Rated	¥2,238	n.a.	1,038	21.5	20.3	na	1.4	1.3	6.2%	6.8%	5.8	4.7	0.5%	0.5%
Average of FPSO group						**9.1**	**9.1**	**5.2%**	**1.1**	**0.9**	**10.8%**	**10.9%**	**6.9**	**6.6**	**4.1%**	**4.2%**
Average (all)						**3.9**	**8.7**	**-30.0%**	**1.1**	**1.0**	**30.7%**	**12.4%**	**7.7**	**7.6**	**6.3%**	**6.4%**

SOURCES: CGS-CIMB RESEARCH ESTIMATES, BLOOMBERG, COMPANY REPORTS; DATA AS AT 16 JAN 2024; NON-RATED COMPANIES' ESTIMATES ARE BASED ON BLOOMBERG CONSENSUS ESTIMATES (NR COMPANIES SHOW REPORTED NET PROFIT)

Figure 3: Aviation sector comparisons

Company	Bloomberg Ticker	Recom.	Price	Target Price	Market Cap (US$ m)	Core P/E (x) CY23F	Core P/E (x) CY24F	3-year EPS CAGR (%)	P/BV (x) CY23F	P/BV (x) CY24F	Recurring ROE (%) CY23F	Recurring ROE (%) CY24F	EV/EBITDA (x) CY23F	EV/EBITDA (x) CY24F	Dividend Yield (%) CY23F	Dividend Yield (%) CY24F
Capital A	CAPITALA MK	Not Rated	RM0.69	na	618	na	7.7	na	1.37	1.27	1.6%	17.3%	5.5	4.8	0.0%	0.0%
InterGlobe Aviation Ltd	INDIGO IN	Not Rated	Rs3,072.75	na	14,269	na	19.2	na	-16.81	-151.53	3.6%	-157.4%	21.8	9.0	0.7%	0.7%
Asia Aviation PCL	AAV TB	Not Rated	THB2.02	na	729	na	19.3	na	3.55	2.99	-8.0%	17.3%	4.2	3.4	0.0%	0.0%
Cebu Air	CEB PM	Not Rated	Php32.20	na	357	3.8	2.7	na	14.71	2.87	3212.2%	177.5%	3.2	2.2	0.0%	0.0%
Air Arabia	AIRARABI UH	Not Rated	AED2.87	na	3,646	8.2	8.9	5.7%	1.83	1.67	23.1%	19.7%	5.4	5.3	6.0%	6.0%
Ryanair	RYA ID	Not Rated	€17.98	na	22,273	14.7	10.4	21.8%	3.06	2.73	22.1%	27.7%	8.5	5.9	0.5%	0.5%
easyJet	EZJ LN	Not Rated	£4.95	na	4,737	10.7	8.5	na	1.34	1.18	14.3%	14.8%	3.5	2.7	0.7%	0.7%
Southwest	LUV US	Not Rated	US$28.72	na	17,120	20.9	18.7	8.0%	1.55	1.27	7.5%	7.5%	6.4	5.8	1.9%	1.9%
JetBlue	JBLU US	Not Rated	US$5.13	na	1,710	na	na	na	0.52	0.56	-5.4%	-6.2%	9.7	12.0	0.0%	0.0%
Pegasus	PGSUS TI	Not Rated	TRY723.00	na	2,456	8.2	4.9	69.1%	1.66	1.01	34.8%	25.9%	5.6	4.1	0.0%	0.0%
Low-Cost Carriers - average						**20.4**	**13.2**	**na**	**2.45**	**2.04**	**13.2%**	**16.9%**	**8.1**	**6.1**	**1.1%**	**1.1%**
Singapore Airlines	SIA SP	Add	S$6.53	S$6.91	14,491	7.5	8.9	11.0%	1.12	1.14	13.7%	12.7%	9.4	6.3	7.2%	5.9%
Cathay Pacific Airways	293 HK	Not Rated	HK$7.87	na	6,475	6.1	7.5	na	0.93	0.83	16.1%	11.6%	3.8	4.3	0.8%	0.8%
Bangkok Airways	BA TB	Not Rated	THB15.10	na	891	13.7	16.6	na	1.66	1.45	13.4%	9.3%	10.1	13.6	0.5%	0.5%
China Eastern	670 HK	Not Rated	HK$2.08	na	10,510	na	7.4	na	1.53	1.12	-12.1%	17.5%	9.4	7.2	0.0%	0.0%
China Southern	1055 HK	Not Rated	HK$3.06	na	12,998	43.6	5.9	na	1.18	0.93	2.4%	17.6%	7.7	6.2	0.0%	0.0%
Air China	753 HK	Not Rated	HK$4.65	na	14,713	74.5	7.1	na	1.91	1.44	2.2%	23.2%	8.6	7.1	0.1%	0.1%
Qantas Airways	QAN AU	Not Rated	A$5.18	na	5,861	12.3	12.6	na	62.27	28.14	3085.4%	306.5%	5.3	5.5	0.0%	0.0%
Turkish Airlines	THYAO TI	Not Rated	TRY249.80	na	11,445	5.3	4.7	-1.5%	1.00	0.68	25.2%	17.4%	5.1	4.0	0.5%	0.5%
Full-Service Carriers - average						**10.6**	**7.3**	**na**	**1.46**	**1.20**	**14.1%**	**17.9%**	**6.4**	**5.8**	**1.7%**	**1.4%**
Malaysia Airports Holdings	MAHB MK	Add	RM7.60	RM8.05	2,701	23.8	10.5	na	1.64	1.66	7.0%	15.8%	9.4	6.3	1.3%	4.0%
SATS Ltd	SATS SP	Add	S$2.89	S$3.44	3,214	142.0	44.6	na	2.00	2.02	1.3%	4.5%	9.2	9.1	0.4%	1.1%
Airports of Thailand	AOT TB	Hold	THB63.00	THB69.00	25,437	72.2	38.6	na	7.86	6.92	11.7%	18.7%	32.3	20.5	0.8%	1.5%
Beijing Capital International	694 HK	Not Rated	HK$2.33	na	1,364	na	19.9	na	0.64	0.60	-7.6%	3.1%	28.1	4.9	0.2%	0.2%
Shanghai International	600009 CH	Not Rated	Rmb32.84	na	11,357	82.3	22.0	na	2.03	1.85	2.7%	8.8%	21.8	12.7	0.3%	0.3%
Aeroports de Paris	ADP FP	Not Rated	€116.70	na	12,551	20.2	21.4	106.8%	2.64	2.49	14.4%	12.0%	10.1	9.8	2.4%	2.4%
TAV Havalimanlari	TAVHL TI	Not Rated	TRY125.60	na	1,515	12.6	8.0	32.9%	1.04	0.83	11.1%	11.6%	9.9	7.0	0.0%	0.0%
Airports - average						**48.3**	**24.6**	**na**	**2.82**	**2.63**	**6.2%**	**11.0%**	**15.1**	**11.2**	**1.0%**	**1.5%**
SIA Engineering	SIE SP	Hold	S$2.35	S$2.51	1,969	24.3	20.0	na	1.54	1.51	6.5%	7.6%	9.4	9.5	3.5%	4.5%
Engineering - average						**24.3**	**20.0**	**29.4%**	**1.54**	**1.51**	**6.5%**	**7.6%**	**25.7**	**18.7**	**3.5%**	**4.5%**
Average (all)						**17.7**	**11.6**	**na**	**2.05**	**1.73**	**12.1%**	**16.1%**	**7.9**	**6.6**	**1.3%**	**1.3%**

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Attacks on Red Sea marine traffic from mid-Nov 2023

Houthi militants in Yemen have been launching drone and missile attacks against commercial marine traffic in the Red Sea since their first attack on 19 Nov 2023 on a car carrier.

The Houthi militants had said that they were attacking vessels owned by Israeli interests or that were heading towards Israeli ports, purportedly to protest Israel's role in the war in Gaza. However, many ships traversing the Red Sea with no apparent links to Israel, for instance, vessels operated by France's CMA CGM, Denmark's Maersk, Germany's Hapag-Lloyd, Switzerland's MSC, South Korea's SK Shipping, Japan's NYK, Hong Kong's OOCL, among others, had been targeted by Houthi militants in Nov and Dec 2023.

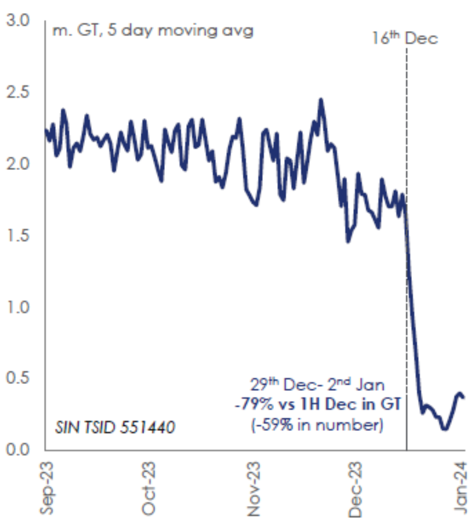
In Dec 2023, in response to the Houthi attacks, the US and various national navies put together a multinational coalition to safeguard Red Sea shipping, called 'Operation Prosperity Guardian'.

On 12 Jan 2024, the US and UK militaries launched strikes across Houthi-controlled areas of Yemen to degrade their capacity to threaten Red Sea shipping, but despite that, US officials believe that the Houthis have so far retained about three-quarters of their capacity to fire missiles and launch drones, according to an Al Jazeera article on Monday, 15 Jan 2024.

Impact most significant on container shipping services

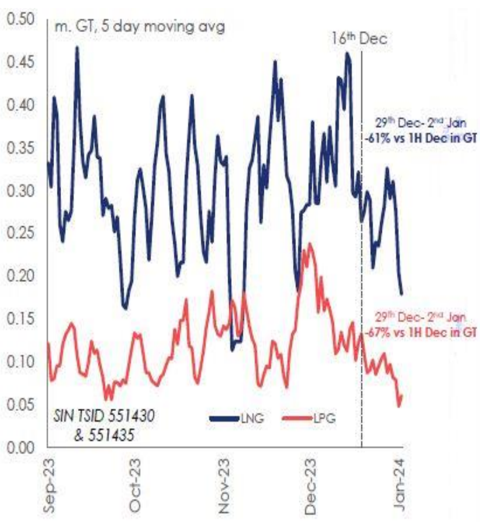
In the last two weeks of Dec 2023 (2H Dec; after the Houthi attacks started) vs. the first two weeks of Dec 2023 (1H Dec; before the Houthi attacks), shipbroker Clarksons reported that **containership arrivals** into the Gulf of Aden (which is proximate to the Red Sea) **declined by c.80%** in terms of gross tonnage (GT) (Figure 4).

Figure 4: Containership arrivals in the Gulf of Aden (up to 2 Jan 2024)



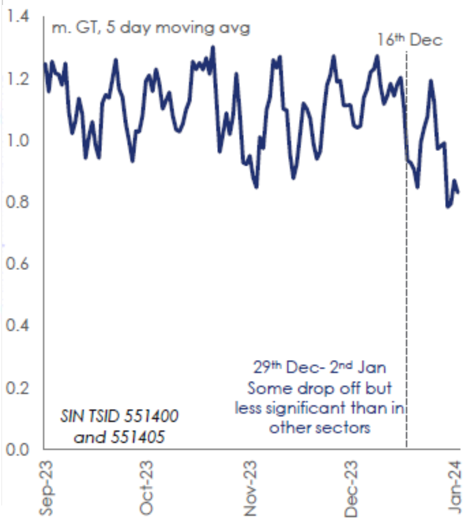
SOURCE: CLARKSON RESEARCH SERVICES

Figure 5: LNG and LPG carrier arrivals in the Gulf of Aden (up to 2 Jan 2024)



SOURCE: CLARKSON RESEARCH SERVICES

Figure 6: Crude and product tanker arrivals in the Gulf of Aden (up to 2 Jan 2024)



SOURCE: CLARKSON RESEARCH SERVICES

Over the same period, liquefied petroleum gas carrier (LPG) arrivals in the Red Sea declined 67%, liquefied natural gas carrier (LNG) arrivals fell 61% (Figure 5), and car carrier arrivals fell 38%, all measured in terms of the gross tonnage (GT) of the ships.

However, crude oil and product oil tankers arrivals, as well as bulk ship arrivals, declined by lesser percentages (Figure 6). Clarksons reported that oil tanker arrivals into the Red Sea declined by **20%** (in GT terms) in the period 1-11 Jan 2024 vs. the 1H Dec 2023.

However, in the three days immediately following the US and UK strikes on Yemen, i.e. 12-14 Jan 2024 vs. 1H Dec 2023, the total tonnage of vessels arriving in the Gulf of Aden fell c.70%, according to Clarksons, as:

- The decline in containership arrivals in the Red Sea widened to **90%** (GT terms); while,
- Oil tanker arrivals declined by a wider **50%** (GT terms).

Positive impact on container freight rates

Clarksons estimates that more than 20% of seaborne container trade passes through the Suez Canal, mainly on services from Asia to Europe and from Asia to East Coast North America (the latter also has the option of using the Panama Canal).

Given the sizable decline in containership transits through the Suez Canal, and the subsequent rerouting of Asia-Europe services via South Africa's Cape of Good Hope, shipping distances on Asia-Europe services have lengthened by about 8 days, in Clarksons' estimate (Figure 8).

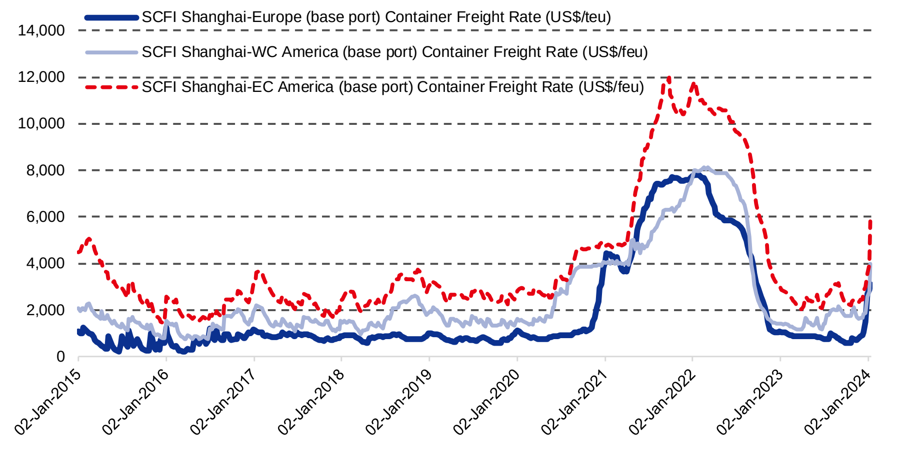
Container shipping freight rates have naturally rallied, because of the additional cost of the services, but also because container shipping capacity on Asia-Europe services has fallen by about 10% compared to before the Houthi attacks.

The Shanghai Containerized Freight Index (SCFI) **Shanghai to Europe freight rate** has more than tripled from US$925 per twenty-foot equivalent unit (teu) on 8 Dec 2023 to US$3,103/teu on 12 Jan 2024, albeit significantly lower than the peak of almost US$8,000/teu in 2H21 (Figure 7).

Container freight rates on **Shanghai to East Coast North America** have also rallied because some of these services transit through the Suez Canal and now may have to take the longer route via the Cape of Good Hope (Figure 9).

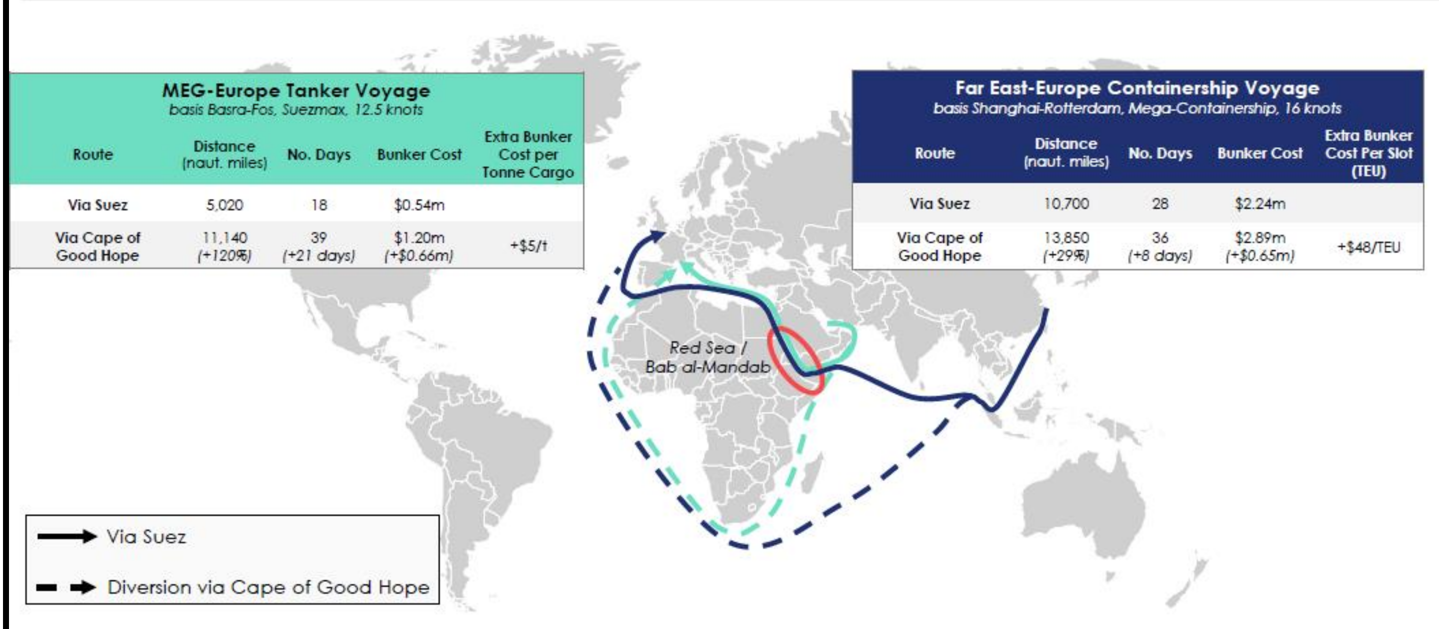
Meanwhile, container freight rates on the Shanghai to West Coast North America services have also rallied for a completely different reason, i.e. because of the capacity constraints at the drought-stricken Panama Canal, which have restricted its use by containerships heading from Asia towards the East Coast of North America. As such, some boxes heading towards the East Coast are instead being transported on services between Asia and the West Coast of North America, before being transported by rail services in a 'land bridge' towards the East Coast.

Figure 7: Container shipping freight rates have rallied since the Houthi attacks started



SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 8: Asia-Europe (Shanghai-Rotterdam) container shipping services will need an extra eight days to sail via the Cape of Good Hope (36 days) vs. sailing via the Suez Canal (28 days); Middle East Gulf (MEG) to Europe crude tanker shipping (Basra, Iraq to Fos, France) will need an extra 21 days to sail via the Cape of Good Hope (39 days) vs. sailing via the Suez Canal (18 days)



MEG-Europe Tanker Voyage
basis Basra-Fos, Suezmax, 12.5 knots

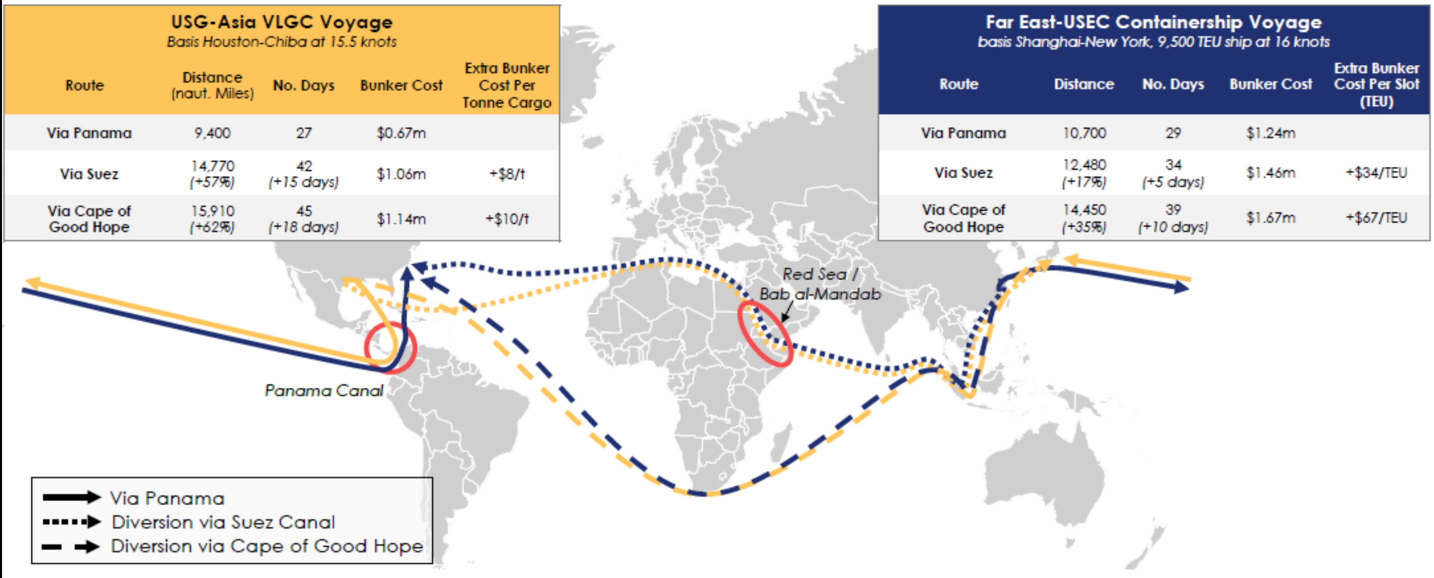
Route	Distance (naut. miles)	No. Days	Bunker Cost	Extra Bunker Cost per Tonne Cargo
Via Suez	5,020	18	$0.54m	
Via Cape of Good Hope	11,140 (+120%)	39 (+21 days)	$1.20m (+$0.66m)	+$5/t

Far East-Europe Containership Voyage
basis Shanghai-Rotterdam, Mega-Containership, 16 knots

Route	Distance (naut. miles)	No. Days	Bunker Cost	Extra Bunker Cost Per Slot (TEU)
Via Suez	10,700	28	$2.24m	
Via Cape of Good Hope	13,850 (+29%)	36 (+8 days)	$2.89m (+$0.65m)	+$48/TEU

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 9: Asia-US east coast (Shanghai-New York) container shipping services will need an extra five days to sail via the Cape of Good Hope (39 days) vs. sailing via the Suez Canal (34 days), and an extra 10 days to sail via the Cape of Good Hope (39 days) vs. sailing via the Panama Canal (29 days); US Gulf (USG) to Asia gas tanker shipping (Houston, US to Chiba, Japan) will need an extra 18 days to sail via the Cape of Good Hope (45 days) vs. sailing via the Panama Canal (27 days)



USG-Asia VLGC Voyage
Basis Houston-Chiba at 15.5 knots

Route	Distance (naut. Miles)	No. Days	Bunker Cost	Extra Bunker Cost Per Tonne Cargo
Via Panama	9,400	27	$0.67m	
Via Suez	14,770 (+57%)	42 (+15 days)	$1.06m	+$8/t
Via Cape of Good Hope	15,910 (+62%)	45 (+18 days)	$1.14m	+$10/t

Far East-USEC Containership Voyage
basis Shanghai-New York, 9,500 TEU ship at 16 knots

Route	Distance	No. Days	Bunker Cost	Extra Bunker Cost Per Slot (TEU)
Via Panama	10,700	29	$1.24m	
Via Suez	12,480 (+17%)	34 (+5 days)	$1.46m	+$34/TEU
Via Cape of Good Hope	14,450 (+35%)	39 (+10 days)	$1.67m	+$67/TEU

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Modest impact on oil tanker and LNG tanker rates

Clarksons estimates that only about **9% of the global oil tanker fleet**, 9-10% of the global LNG/LPG fleet, and 4% of the global dry bulk carrier fleet pass through the Suez Canal. This is lower than the equivalent of 20% for the seaborne container trade. As a result, the impact of the Houthi attacks on Red Sea shipping will not be as significant on non-container shipping segments.

For the oil tanker trades, consultancy Vortexa estimated that **72% of the oil tanker southbound transits through the Suez Canal comprise of Russian crude oil exports**, which we believe most likely originates from Russia's Black Sea or Baltic Sea ports on aframax or suezmax tankers heading towards East of Suez markets, such as India and China.

Shipping consultancy Poten suggests that these eastbound Russian crude oil exports will most likely continue using the Suez Canal on southbound transits, and the return, ballast legs will also most likely continue to traverse the Suez Canal on northbound transits, because the Houthi rebels are unlikely to attack vessels carrying Russian oil due to the close relationship between Russia and Iran.

If Poten's assumptions turn out to be correct, then the impact of the Houthi attacks on Red Sea shipping may not be that significant to the crude oil tanker shipping market, compared to the container shipping market.

Also, we note that a lot of crude oil that is exported from major Middle East producers such as Saudi Arabia (from the port of Ras Tanura), Kuwait (from the port of Mina al-Ahmadi), the UAE (from the port of Fujairah), Iraq (from the port of Basra) and Iran (from the port of Kharg) originate from the Persian Gulf, not the Red Sea. Persian Gulf crude oil exports that head east towards Asia do not pass through the Gulf of Aden or the Red Sea (Figure 10).

However, this is not to say that there will be no impact on the crude tanker shipping markets. Persian Gulf crude oil exports on Very Large Crude Carriers (VLCC) to Europe sail westwards through the Gulf of Aden and then sail northwards through the Red Sea to discharge at the port of Ain Sukhna, Egypt (on the Red Sea), before the oil is piped northwards on the SUMED pipeline to the port of Sidi Kerir, Egypt (on the Mediterranean Sea), and then lifted by aframaxes to be delivered to Trieste, Italy or Fos, south of France. These VLCC movements from the Persian Gulf to Ain Sukhna may be disrupted, forcing sailings around the Cape of Good Hope. Crude oil exports on suezmax tankers from the Persian Gulf to France via the Suez Canal, which typically take 18 days, may take 39 days via the Cape of Good Hope (Figure 8).

Figure 10: Crude oil exports from the Middle East originate primarily from the Persian Gulf

SOURCES: POTEN, US ENERGY INFORMATION ADMINISTRATION (EIA)

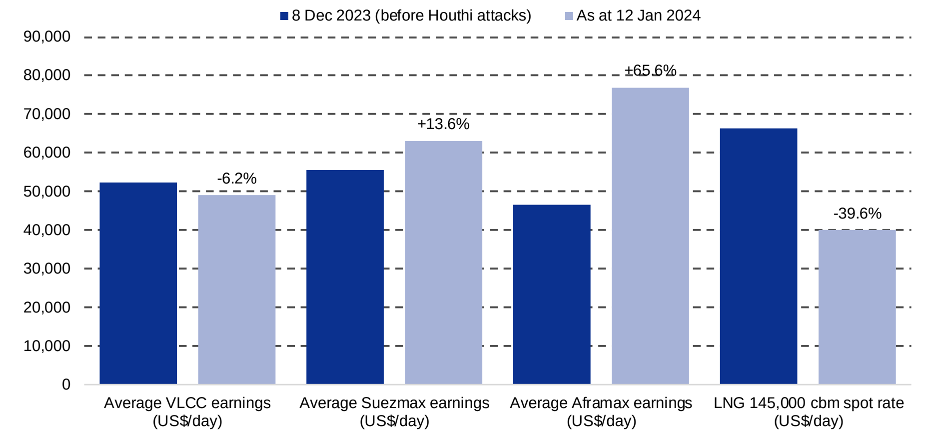
Another potential disruption is for product tanker movements of clean petroleum products from the Middle East/India to Europe, which usually passes through the Suez Canal. Some of these product tankers may also have to reroute via the Cape of Good Hope. The Red Sea impact has caused **product tanker shipping rates** to increase significantly. For instance, between Kuwait and Rotterdam, Long Range 1 (LR1) clean tankers and Medium Range (MR) clean tanker rates have risen between 90% and 130% between 8 Dec 2023 and 12 Jan 2024. However, product tanker rates in other regions did not necessarily follow suit.

The impact of the Red Sea crisis on **crude tanker shipping rates** has so far been modest, if any. Average VLCC (> 200,000 deadweight tonnes capacity) earnings have actually declined in the week ending 12 Jan 2024, compared to the week ending 8 Dec 2023 before the Houthi attacks began. Average suezmax tanker (120,000 – 200,000 dwt capacity) earnings rose by only 13.6% over that time period, and only average aframax tanker (80,000 – 120,000 dwt capacity) earnings rose by a more significant 65.6% (Figure 11).

According to Clarksons, the rise in aframax tanker rates since the Houthi attacks have not been universal across all route regions but have been concentrated in the cross-Mediterranean shipments. Aframax crude tanker rates have also risen sharply in the past five weeks since 8 Dec 2023 for shipments originating from Latin America to Europe (Curacao to Hamburg, Germany) and the intra-Gulf of Mexico shipments (e.g. Curacao to Texas, US); these freight rate increases may have less to do with the Red Sea crisis, and have instead been influenced by Panama Canal water restrictions which have absorbed product tanker capacity for shipments between the US Gulf and the West Coast of South America, and which may have spilled over into the aframax space.

Separately, **LNG tanker rates** have actually declined c.40% since the Houthi attacks started, mainly because of ample natural gas storage in Europe, and the consequential moderation in LNG import demand into Europe.

Figure 11: Change in time charter equivalent (TCE) earnings of crude tankers and LNG carriers, before and after the Houthi attacks



SOURCES: CGS-CIMB RESEARCH, CLARKSONS SHIPPING RESEARCH

Positive impact on MISC, but not necessarily from the Houthi attacks

In general, any diversion of crude oil and refined product shipping via the Cape of Good Hope, instead of the Red Sea/Suez Canal routing, is incrementally positive for tanker freight rates.

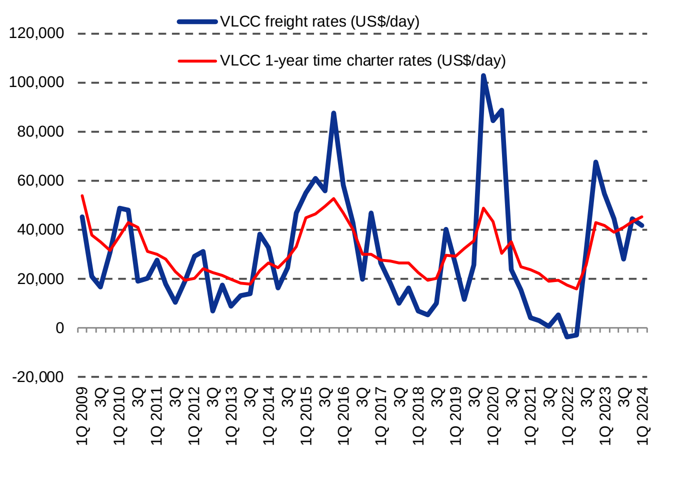
The positive impact on tanker freight rates is not likely to be as high as for the container shipping sector, because oil shipments via the Suez Canal are only about 9% of the entire oil fleet (in terms of GT), compared to about 20% for the global containership fleet. Also, Russian crude oil shipments make up 72% of the southbound Suez Canal transits, and we suspect that Russia may continue to send its ships through the Red Sea.

Despite these qualifications, the Houthi attacks on Red Sea shipping will most likely be positive for crude tanker shipping rates. This is on top of Panama Canal transit restrictions due to the drought that have already boosted product and crude tanker shipping rates in the Gulf of Mexico region. At least half of MISC's aframax tanker fleet is based in the US Gulf, and will be in a position to benefit from the aforementioned rate strength.

As can be seen in Figures 12-17, crude tanker spot freight rates have risen sharply in 4Q23 and in the first two weeks of Jan 2024 (1Q24), from the trough of the 3Q23 summer lull. This is on the back of a recovery in Chinese crude oil imports, which may have increased by c.11% yoy in 2023, in our estimate, as well as the general overproduction of crude oil globally, which caused the oil inventories of OECD nations to rise by 2.7% in Dec 2023, vs. Dec 2022.

The outlook for crude tanker freight rates for 2024-2025F looks strong, with Clarksons forecasting **fleet growth of just 0.2% p.a.** in both years, while it expects **tonne-mile crude tanker demand to rise by more than 3% p.a.** These demand forecasts were released prior to the Houthi attacks and may have to be revised higher to take into account increases in distances shipped via the Cape of Good Hope. The longer the Houthi attacks last, the bigger the potential positive impact on tanker freight rates.

Figure 12: VLCC crude tanker spot freight rates and 1-year time charter rates (US$/day) - quarterly averages



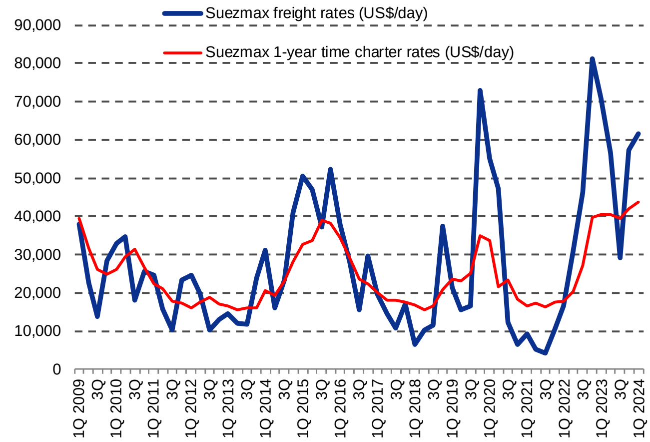
SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 13: VLCC crude tanker spot freight rates (US$/day) - quarterly averages

VLCC spot average (US$/day)	1Q	2Q	3Q	4Q	Full year
2009	45,134	20,955	16,850	30,799	28,434
2010	48,964	48,078	19,065	20,132	33,797
2011	24,680	14,793	7,567	16,119	18,263
2012	26,194	27,441	4,860	14,942	21,187
2013	7,115	11,209	11,674	34,870	18,621
2014	29,398	13,824	22,090	43,948	30,015
2015	55,239	60,940	55,811	87,395	64,846
2016	58,367	42,969	19,659	46,639	41,488
2017	26,518	18,229	10,092	16,334	17,794
2018	6,701	5,301	9,909	40,331	15,561
2019	25,625	11,565	25,504	102,761	41,364
2020	84,557	88,907	23,711	15,404	53,145
2021	3,989	2,837	503	5,378	3,177
2022	-3,590	-2,978	31,740	67,650	23,205
2023	54,777	44,644	27,910	44,361	42,923
2024	41,667				41,667

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 14: Suezmax crude tanker spot freight rates and 1-year time charter rates (US$/day) - quarterly averages



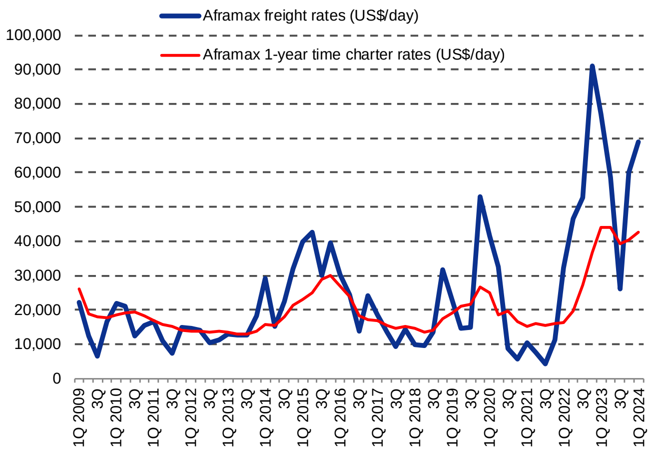
SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 15: Suezmax crude tanker spot freight rates (US$/day) - quarterly averages

Suezmax spot average (US$/day)	1Q	2Q	3Q	4Q	Full year
2009	38,011	22,703	13,828	28,391	25,733
2010	33,035	34,799	18,073	25,548	27,820
2011	24,599	15,728	10,151	23,251	18,154
2012	24,569	19,782	10,276	13,005	16,908
2013	14,576	11,987	11,704	23,777	15,511
2014	31,041	15,940	23,330	40,851	27,791
2015	50,455	46,923	37,123	52,352	46,713
2016	37,914	28,222	15,508	29,554	27,567
2017	19,690	14,452	10,646	16,957	15,436
2018	6,588	10,364	11,489	37,422	16,466
2019	21,391	15,425	16,602	72,822	31,560
2020	55,001	47,275	12,229	6,455	30,240
2021	9,156	5,177	4,173	10,547	7,263
2022	16,666	30,861	46,217	81,281	43,756
2023	70,911	56,637	29,099	57,271	53,479
2024	61,726				61,726

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 16: Aframax crude tanker spot freight rates and 1-year time charter rates (US$/day) - quarterly averages



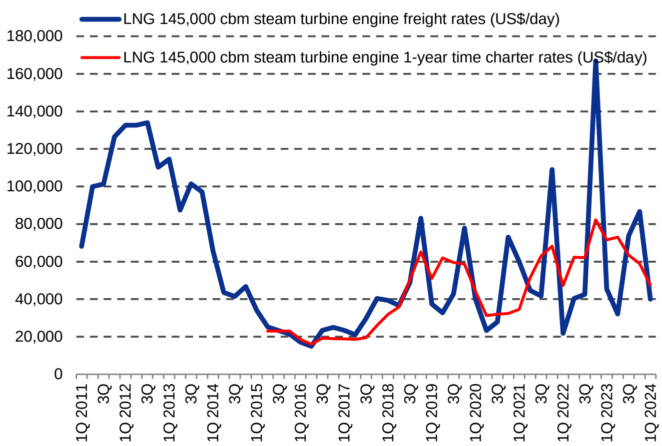
SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 17: Aframax crude tanker spot freight rates (US$/day) - quarterly averages

Aframax spot average (US$/day)	1Q	2Q	3Q	4Q	Full year
2009	22,227	12,395	6,401	16,458	14,370
2010	21,807	21,109	12,333	15,512	17,649
2011	16,574	10,931	7,252	14,756	12,199
2012	14,501	14,087	10,359	11,216	12,541
2013	12,934	12,659	12,612	18,318	14,131
2014	29,173	15,182	22,386	32,078	24,705
2015	39,715	42,542	30,006	39,643	37,977
2016	30,197	24,483	13,741	24,148	22,965
2017	18,591	13,404	9,238	14,260	13,873
2018	9,829	9,662	13,562	31,646	16,175
2019	22,661	14,636	14,748	52,853	26,225
2020	41,610	32,624	8,698	5,713	22,161
2021	10,527	7,648	4,281	11,093	8,387
2022	32,266	46,438	52,610	90,991	55,576
2023	77,027	58,654	26,137	59,894	55,428
2024	68,902				68,902

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 18: LNG tanker 145,000 cbm steam turbine engine spot freight rates and 1-year time charter rates (US$/day) - quarterly averages



SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

Figure 19: LNG tanker 145,000 cbm steam turbine engine spot freight rates (US$/day) - quarterly averages

LNG 145,000 cbm spot rate (US$/day) *Steam turbine engine*	1Q	2Q	3Q	4Q	Full year
2011	68,125	100,000	101,286	126,538	99,625
2012	132,692	132,692	134,000	110,231	127,404
2013	114,538	87,385	101,462	97,077	100,115
2014	65,615	43,500	41,423	46,731	49,317
2015	34,077	25,154	23,308	21,462	26,000
2016	17,154	14,846	23,429	24,923	20,151
2017	23,385	21,000	29,615	40,385	28,596
2018	39,385	36,692	48,846	83,077	52,000
2019	37,397	32,731	42,769	77,885	47,695
2020	39,923	23,269	27,923	73,077	41,048
2021	59,962	44,654	41,692	109,000	63,827
2022	21,750	40,346	42,518	166,923	67,884
2023	45,385	32,154	73,769	86,731	59,510
2024	40,000				40,000

SOURCES: CGS-CIMB RESEARCH, CLARKSONS RESEARCH SERVICES

MISC operates a fleet of 56 tankers, of which 17 are shuttle tankers locked into long-term time charter contracts. Excluding the shuttle tankers, MISC has a fleet of 39 tankers, of which 36 are crude tankers, two are product tankers, and one is a chemical tanker. Of the 36 crude tankers, 10 are VLCCs, six are suezmax tankers, and 20 are aframax tankers. In terms of deadweight tonnage (dwt) capacities, VLCCs are almost triple the size of the aframax tankers, and about double the size of the suezmax tankers.

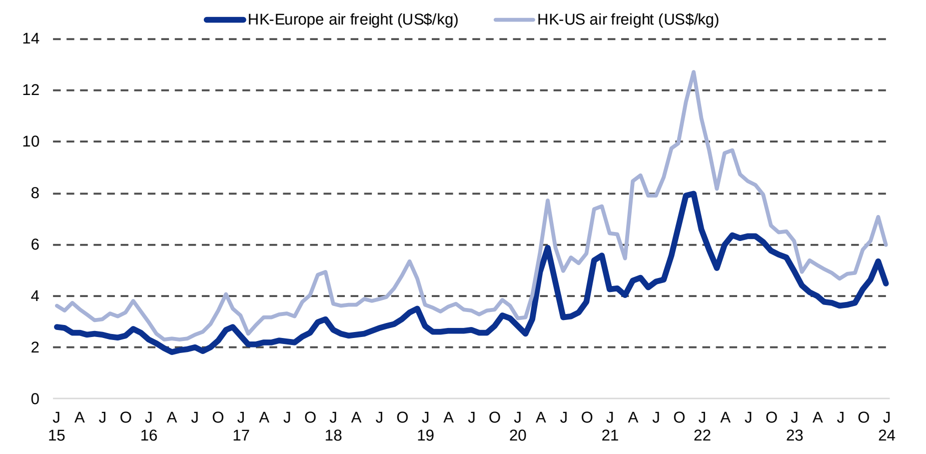
For the above 36 crude tankers, MISC disclosed in Nov 2023 that the fleet capacity in terms of days had spot exposure of 15% and term exposure of 85% at end-Sep 2023. VLCCs enjoyed the highest spot exposure of 25%, suezmaxes 22%, and aframaxes at just 7%. Because of MISC's low exposure in the aframax segment, the increase in spot aframax freight rates since the Houthi attacks may only have a small incremental impact to MISC. Conversely, MISC has a relatively large spot exposure for its VLCC fleet, and VLCC spot earnings actually fell 6.2% between 8 Dec 2023 and 12 Jan 2024 (Figure 11).

Singapore Airlines (SIA) is a potential beneficiary of higher container shipping rates

We upgraded our recommendation on SIA to an Add with a higher target price of S$6.91 in a note on 9 Jan 2024, on the back of continued strong passenger demand, a sharp 30% qoq rise in airfreight spot rates in the Oct-Dec 2023 quarter (vs. the Jul-Sep 2023 quarter), moderating jet fuel prices, and a potential bumper final DPS of 40 Scts to be announced in May 2024F in conjunction with the release of SIA's full-year results for the year ending 31 Mar 2024F.

Spot air freight rates on Asia-Europe and Asia-US routes have dropped 15-20% by end-2023 (this is plotted above "J 24" in Figure 20) relative to their Dec 2023 averages due to the end of the seasonal shipping surge, according to website Air Cargo News, and is likely to moderate further as the Lunar New Year approaches, in our view. However, lengthening container shipping times between Asia and Europe because of the Red Sea crisis, and longer shipping times between Asia and East Coast North America because of low water levels in the Panama Canal, could potentially keep airfreight rates higher than it would otherwise be, in our view.

Figure 20: Spot air freight rates have risen sharply since bottoming in Jul 2023



SOURCES: CGS-CIMB RESEARCH, BALTIC AIR FREIGHT INDEX

Non-rated companies mentioned in this report

Figure 21: Non-rated companies mentioned in this report

No	Companies mentioned	Bloomberg code	Share price	CGS-CIMB Research	
				Recom.	Target price
1	Maersk	MAERSKA DC	DKK13,070.00	Not rated	N.A.
2	CMA CGM	Not listed	N.A.	N.A.	N.A.
3	MSC	Not listed	N.A.	N.A.	N.A.
4	Hapag Lloyd	HLAG GR	€159.10	Not rated	N.A.
5	SK Shipping	Not listed	N.A.	N.A.	N.A.
6	NYK	9101 JT	JPY5,191	Not rated	N.A.
7	OOCL	316 HK	HK$114.90	Not rated	N.A.

SOURCES: CGS-CIMB RESEARCH, BLOOMBERG; NOTE: SHARE PRICE AS AT 16 JAN 2024

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	Rating Distribution (%)	Investment Banking clients (%)
Add	67.5%	1.3%
Hold	22.5%	0.0%
Reduce	10.1%	0.2%

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Stock Ratings	Definition:
Add	The stock's total return is expected to exceed 10% over the next 12 months.
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