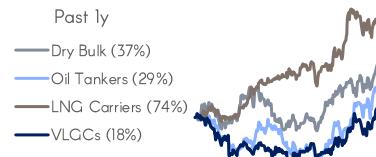




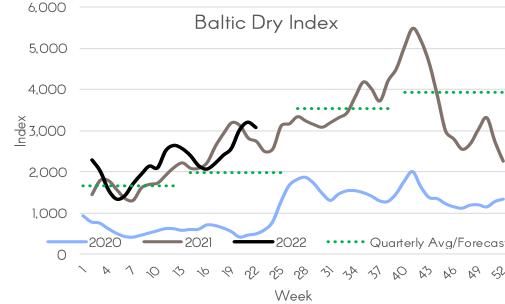
Shipping Weekly 22/2022

Shipping Coverage

d 29 May 16:20 CET		Cleaves'	Last	Δ
Ticker	Rating	TP	Price	w/w
2020 NO	BUY	212.0	128	-4%
BULK NO	BUY	248	75	
DSX US	BUY	7.5	6.42	14%
EGLE US	BUY	86.0	70.2	4%
GNK US	BUY	37.0	25.2	11%
GOGL US	BUY	23.0	15.9	2%
HSHIP NO	BUY	87.0	55.0	
SBLK US	BUY	46.0	32.5	2%
Dry Bulk				5%
ADS NO	HOLD	1.5	1.9	19%
DHT US	BUY	7.8	6.1	7%
EURN US	BUY	13.0	13.0	11%
FRO US	BUY	11.0	11.4	31%
HUNT NO	BUY	3.8	3.5	4%
INSW US	BUY	26.0	24.5	4%
NAT US	HOLD	1.9	2.3	-14%
OET NO	BUY	131.0	108.0	8%
TNK US	BUY	20	21	13%
Oil Tankers				9%
ALNG NO	HOLD	4.8	6.5	9%
FLNG NO	HOLD	170	257	-4%
LNG Carriers				2%
AGAS NO	BUY	58	52.7	24%
BWLPG NO	BUY	82	74.5	11%
LPG US	BUY	19.0	16.9	7%
LPG Carriers				14%

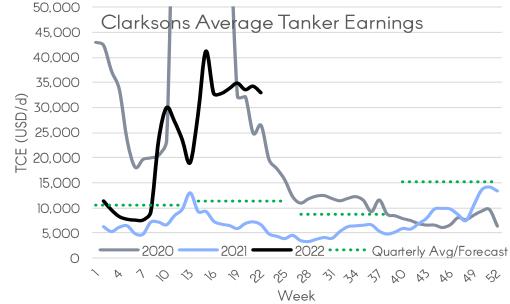


Dry Bulk Shipping



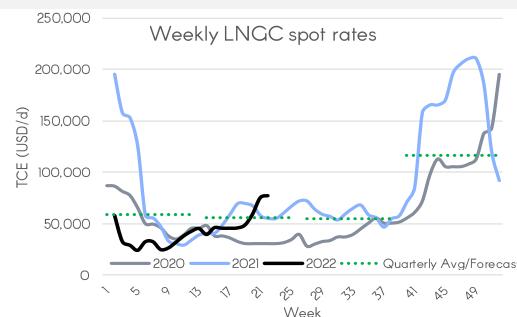
Capesize avg earnings saw a significant correction the past week, dropping 38% w/w to \$23k/d. A weak Pacific market was the main driver of the downturn, with W.Aus-CN dropping 70% w/w to \$9k/d. Fixing activity ex-Brazil also saw a sharp decline, with BR-CN shedding 40% w/w to \$21k/d. Panamax earnings -10% w/w to \$26k/d as demand dropped, particularly in the Atlantic.

Oil Tankers



The past week saw small improvements in WS terms in the East, but with sharply increasing fuel prices rates for older, non-scrubber fitted VLCC's fell further into the abyss. Modern, scrubber fitted VLCC's +9% w/w to \$14k/d. In smaller tonnage, an uptick in activity ex-USG in the early part of the week supported a lift in rates in the Atlantic as Suezmax avg earnings added 36% w/w to \$22k/d (+46% w/w to \$20k/d excl. B.Sea).

LNG Carriers



Analysts

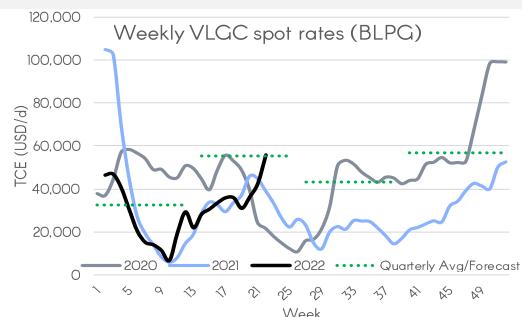
Peter Michael E. Christensen

Head of Research

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MEGIs added +2% w/w to \$100k/d, TFDEs +3% w/w to \$77k/d, and Steam Turbines rose 5% w/w to \$56k/d.

LPG Carriers



BLPG +30% w/w to \$62k/d on the back of a very thin tonnage list in the East. By contrast, the market in the West saw a quiet week and is now trading at a sharp discount to the East.

Key Shipping Statistics

Dry Bulk	Spot rates				Cleaves' spot rate forecasts				Last	1y timecharter rates				5y old vessel values (broker quotes)			
	Last	(1y)	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	2022E	2023E	2024E	2025E	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	Last	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	
BDI	2,681		-20%	12%	0%	2,787	3,070	2,541	1,915	29,000	-11%	-4%	3%	53.0	0%	3%	23%
Capesize	23,373		-38%	30%	-16%	37,841	44,898	36,202	25,896	28,875	-5%	2%	16%	38.0	0%	4%	36%
Panamax	26,095		-10%	5%	12%	22,554	23,205	19,921	16,030	29,500	-2%	2%	25%	34.0	-1%	0%	42%
Supramax	30,757		-1%	3%	11%	19,878	19,248	16,519	13,284	20,750	4%	8%	43%	33.5	3%	3%	22%
Oil Tankers	Last	(1y)	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	2022E	2023E	2024E	2025E	Last	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	Last	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$
VLCC	-9,713		-32%	-60%	-295%	13,176	45,621	53,075	51,547	22,500	0%	0%	-10%	77.0	0%	4%	10%
Suezmax	22,399		36%	-8%	698%	13,588	31,969	36,805	35,813	26,000	0%	0%	30%	52.0	0%	2%	9%
Aframax	28,941		7%	-36%	304%	14,536	25,006	28,382	27,690	25,000	2%	14%	33%	49.0	0%	4%	23%
MR	35,869		-10%	7%	398%	9,453	15,409	16,960	16,642	20,750	4%	8%	43%	33.5	3%	3%	22%
Gas Carriers	Last	(1y)	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	2022E	2023E	2024E	2025E	Last	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$	Last	$\Delta w/w$	$\Delta m/m$	$\Delta y/y$
TFDE (LNG)	76,750		3%	68%	41%	71,498	69,324	63,783	82,943	120,000	0%	9%	60%	72.0	0%	0%	3%
VLGC (LPG)	62,193		30%	65%	62%	46,943	34,304	27,540	22,581	37,809	0%	7%	8%				

Source: Cleaves Securities, Bloomberg, Shipping Intelligence Network, company data, www

Disclaimer: The analyst may have investments in some of the companies covered in the report. More disclaimers at the end of the document



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Cleaves Securities

Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Recent Events

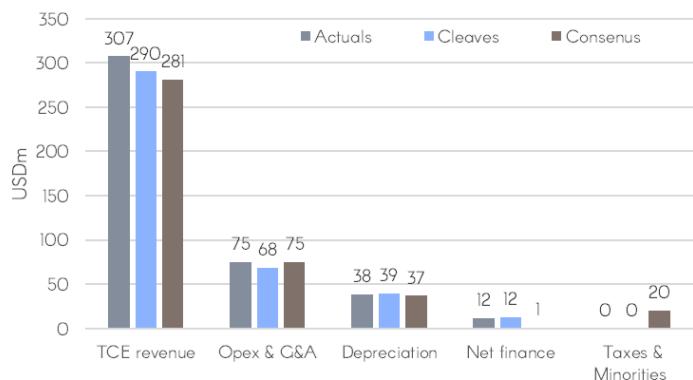
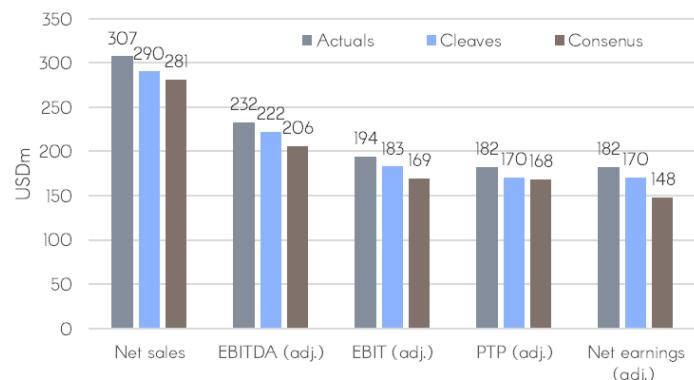
Star Bulk Carriers – SBLK US (BUY/\$46) reported 1Q22 TCE earnings of \$308m, outperforming both our and consensus' estimates of \$290m and \$281m, resp. The reason for the outperformance was higher than expected daily TCE earnings. Despite seeing a spike in opex of \$450/d compared to last years run rate (8m higher than our forecast for the quarter), other cost items were in-line with expectations. Thus, EPS (adj.) of \$1.78 was also higher than our forecast, but substantially above consensus at \$1.43. With the improved cash position, a dividend of \$1.65/sh was declared for the quarter.

Strong 2Q22E guidance raises our forecast for the quarter.

1Q22 Review USDm			1Q22			Actuals vs		Actuals vs	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves	Cons.
Net sales	160.4	427.6	307.5	290.3	281.4	17.2	26.1	6%	9%
EBITDA (adj.)	98.2	356.8	232.4	222.0	206.1	10.4	26.3	5%	13%
EBIT (adj.)	61.9	317.6	193.9	182.8	169.2	11.1	24.7	6%	15%
PTP (adj.)	49.3	304.5	182.1	170.4	168.0	11.7	14.1	7%	8%
Net earnings (adj.)	49.3	304.5	182.1	170.4	147.8	11.7	34.3	7%	23%
EPS (adj.)	0.48	2.98	1.78	1.63	1.43	0.15	0.35	9%	25%
DPS	0.30	2.00	1.65	1.22	1.38	0.43	0.27	35%	19%
Implied, line by line	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves	Cons.
TCE revenue	160.4	427.6	307.5	290.3	281.4	17.2	26.1	6%	9%
Opex & G&A	62.3	70.8	75.1	68.2	75.3	6.8	-0.2	10%	0%
Depreciation	36.2	39.2	38.5	39.2	36.9	-0.7	1.5	-2%	4%
Net finance	12.7	13.2	11.8	12.4	1.2	-0.6	10.6	-5%	885%
Taxes & Minorities	-	-	0.0	-	20.2	0.0	-20.2	-	-100%

CF & BS

1Q22 Review USDm			1Q22			Actuals vs		Actuals vs	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves	Cons.
TCE/day	15,589	37,028	27,150	25,783	24,998	1,367	2,152	5%	9%
Utilization	94.3%	97.2%	96.6%	96.5%		0.1%		0%	
Fleet days	10,912	11,883	11,719	11,663		56		0%	



P&L

Estimate changes USDm	Tentative changes post-Q							
	1Q22	2Q22	New 3Q22	4Q22	1Q22	2Q22	Old 3Q22	4Q22
Net sales	307	347	428	488	290	257	441	488
EBITDA (adj.)	232	272	354	414	222	188	370	418
EBIT (adj.)	194	233	315	374	183	149	331	379
PTP (adj.)	182	222	304	364	170	137	319	367
Net earnings (adj.)	182	222	304	364	170	137	319	367
EPS (adj.)	1.78	2.13	2.91	3.49	1.63	1.31	3.06	3.52
DPS	2.00	1.64	1.87	2.60	2.00	1.22	0.98	2.90
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22
TCE revenue					17	90	-12	-1
Opex & G&A					7	6	4	4
Depreciation					-1	-	-	-
Net finance					-1	-1	-1	-1
Taxes & Minorities					0	-	-	-



Cleaves Securities

Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

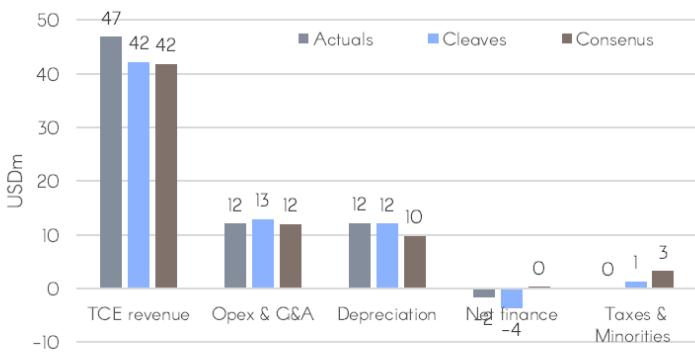
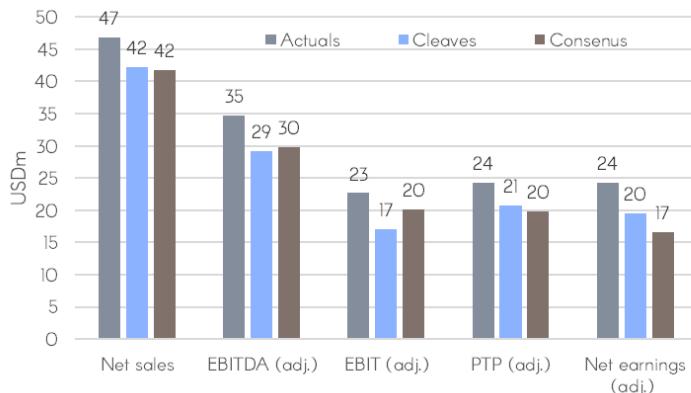
Avance Gas – AGAS NO (BUY/NOK58) posted a top-line of \$46.9m for 1Q22, outperforming both our and consensus' estimates. The reason for the outperformance was both higher than expected daily TCE earnings and fleet utilization. Despite both opex and G&A being lower than our expected, finance costs were higher than expected. Thus, EPS came in at \$0.31 vs our \$0.25 forecast and consensus at \$0.12. A dividend of \$0.20/sh was declared for the quarter, higher than forecasted by both us and consensus.

The company also guided on 2Q22E TCE earnings, which has caused us to revise down our forecast going forward.

1Q22 Review USDm	1Q22				Actuals vs Cleaves		Actuals vs Cons.	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves
Net sales	47.8	32.9	46.9	42.2	41.8	4.7	5.1	11%
EBITDA (adj.)	35.3	21.6	34.8	29.2	29.9	5.6	4.9	19%
EBIT (adj.)	23.2	10.2	22.7	17.1	20.1	5.5	2.5	32%
PTP (adj.)	18.9	8.0	24.3	20.8	19.8	3.5	4.5	17%
Net earnings (adj.)	18.9	7.5	24.3	19.5	16.6	4.8	7.7	24%
EPS (adj.)	0.29	0.10	0.31	0.25	0.21	0.06	0.10	24%
DPS	0.14	0.05	0.20	0.13	0.12	0.07	0.08	59%
Implied, line by line	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves
TCE revenue	47.8	32.9	46.9	42.2	41.8	4.7	5.1	11%
Opex & G&A	12.4	11.3	12.1	13.0	12.0	-0.9	0.1	-7%
Depreciation	12.1	11.4	12.1	12.1	9.7	0.0	2.4	0%
Net finance	4.3	2.2	-1.6	-3.7	0.3	2.1	-1.9	56%
Taxes & Minorities	-	0.5	-	1.3	3.3	-1.3	-3.3	-100%

CF & BS

1Q22 Review USDm	1Q22				Actuals vs Cleaves		Actuals vs Cons.	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves
TCE/day	44,165	28,566	38,316	34,647	34,337	3,669	3,979	11%
Utilization	92.5%	96.3%	97.0%	95.5%		1.5%		2%
Fleet days	1,170	1,196	1,261	1,275		-14		-1%



P&L

Estimate changes USDm	Tentative revisions post-Q							
	New				Old			
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22
Net sales	47	44	42	51	42	54	43	56
EBITDA (adj.)	35	32	31	40	29	42	31	44
EBIT (adj.)	23	19	19	28	17	29	20	32
PTP (adj.)	24	19	14	23	21	32	17	29
Net earnings (adj.)	24	19	14	23	20	30	16	27
EPS (adj.)	0.31	0.25	0.19	0.30	0.25	0.38	0.21	0.35
DPS	0.05	0.20	0.12	0.09	0.05	0.13	0.19	0.11
Change	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22



Cleaves Securities

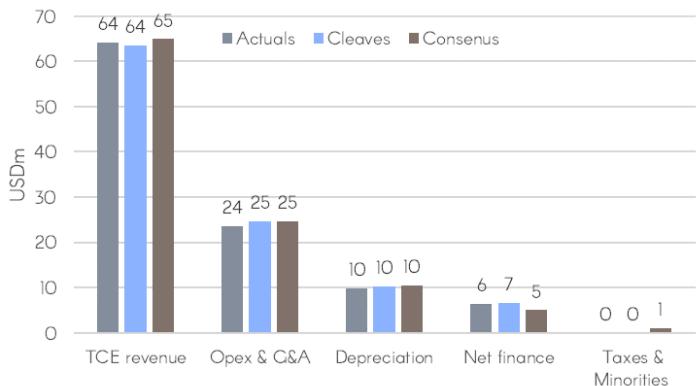
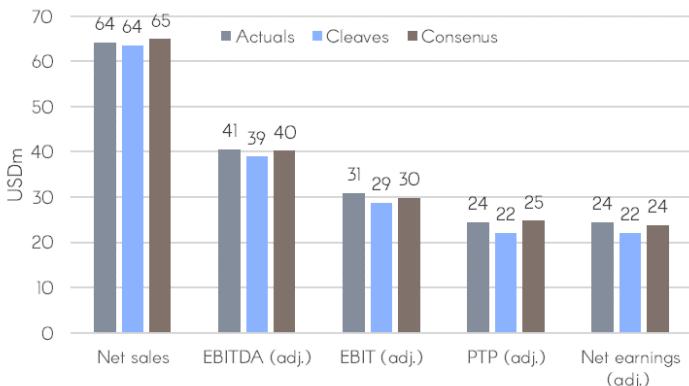
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Diana Shipping Inc – DSX US (BUY/\$7.50) reported 1Q22 net sales of \$64m, in line with our \$64m forecast and consensus at \$65m. With both opex and G&A lower than expected, adjusted EPS came in at \$0.27 vs our \$0.24 forecast (consensus at \$0.28).

A dividend of \$0.25 was also declared for the quarter, significantly above expectations.

1Q22 Review USDm			1Q22			Actuals vs		Actuals vs	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves	Cons.
Net sales	39.3	68.0	64.2	63.6	64.9	0.6	-0.7	1%	-1%
EBITDA (adj.)	13.6	41.5	40.6	38.9	40.2	1.7	0.4	4%	1%
EBIT (adj.)	3.5	31.4	30.8	28.7	29.8	2.1	1.1	7%	4%
PTP (adj.)	-2.6	24.8	24.4	22.0	24.8	2.4	-0.4	11%	-1%
Net earnings (adj.)	-2.6	24.8	24.4	22.0	23.7	2.4	0.7	11%	3%
EPS (adj.)	-0.03	0.28	0.27	0.24	0.28	0.03	-0.02	11%	-5%
DPS	-	0.20	0.25	0.13	0.17	0.12	0.09	95%	52%
Implied, line by line	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves	Cons.
TCE revenue	39.3	68.0	64.2	63.6	64.9	0.6	-0.7	1%	-1%
Opex & G&A	25.7	26.6	23.6	24.6	24.7	-1.0	-1.1	-4%	-4%
Depreciation	10.0	10.1	9.8	10.2	10.5	-0.4	-0.7	-4%	-6%
Net finance	6.2	6.6	6.4	6.7	5.0	-0.3	1.4	-4%	28%
Taxes & Minorities	-	-	-	-	1.0	-	-1.0	-	-100%





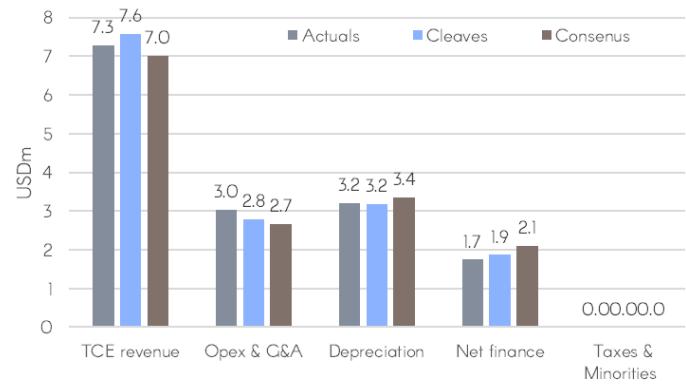
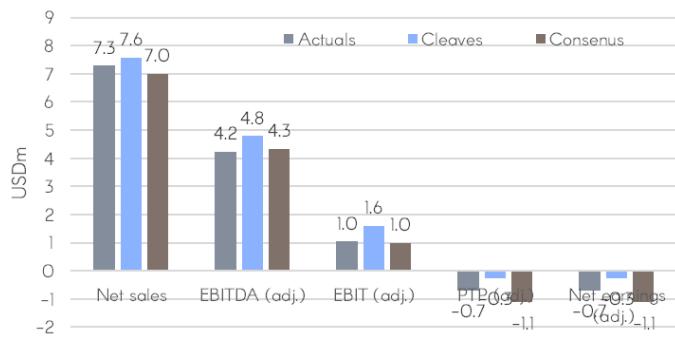
Cleaves Securities

Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Hunter Group – HUNT NO (BUY/NOK3.8) 1Q22 top-line of \$7.3m slightly below our \$7.6m forecast but above consensus at \$7m. Higher than expected opex and G&A was offset by lower than expected finance costs. Thus, net earnings of -\$0.7m was below our -\$0.3 forecast but above consensus at -\$1.1m.

1Q22 Review USDm	1Q22			Actuals vs Cleaves Cons.		Actuals vs Cleaves Cons.	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.
Net sales	12.1	8.1	7.3	7.6	7.0	-0.3	0.3
EBITDA (adj.)	9.0	5.1	4.2	4.8	4.3	-0.5	-0.1
EBIT (adj.)	5.0	1.9	1.0	1.6	1.0	-0.6	0.1
PTP (adj.)	2.5	0.1	-0.7	-0.3	-1.1	-0.4	0.4
Net earnings (adj.)	2.5	0.1	-0.7	-0.3	-1.1	-0.4	0.4
EPS (adj.)	0.004	0.000	-0.001	-0.000	-	-0.001	-0.001
DPS	-	-	-	-	-	-	-
Implied, line by line	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.
TCE revenue	12.1	8.1	7.3	7.6	7.0	-0.3	0.3
Opex & G&A	3.0	3.0	3.0	2.8	2.7	0.2	0.4
Depreciation	4.0	3.2	3.2	3.2	3.4	0.0	-0.2
Net finance	2.5	1.8	1.7	1.9	2.1	-0.1	-0.4
Taxes & Minorities	-	-	-	-	-	-	-





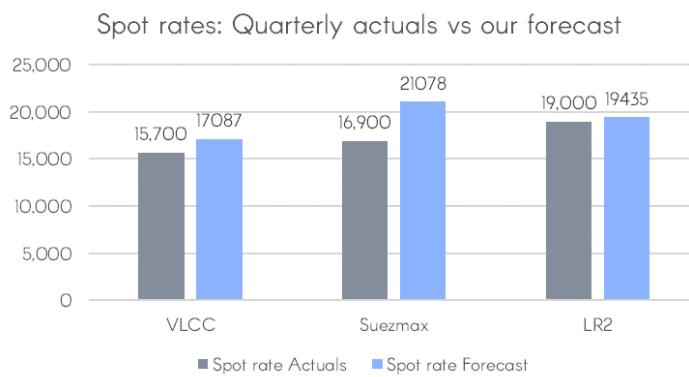
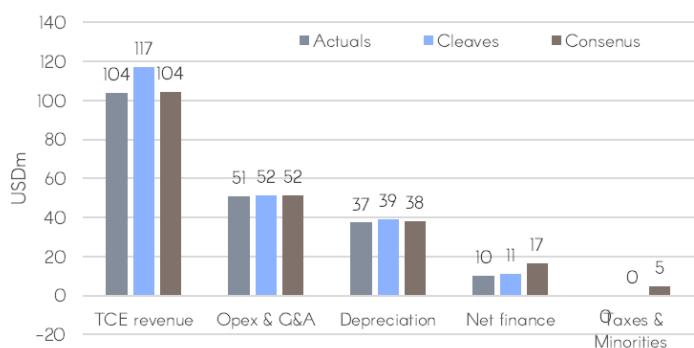
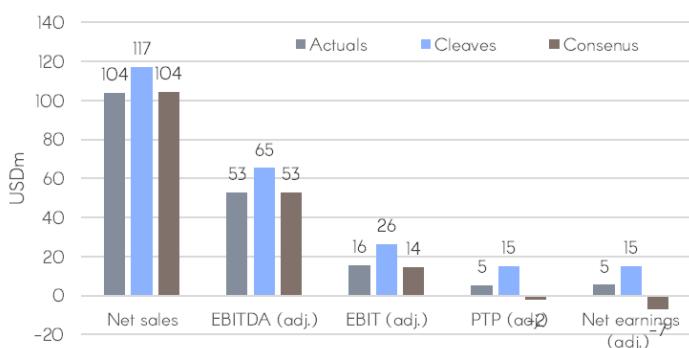
Cleaves Securities

Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Frontline – FRO US (BUY/\$11) reported 1Q22 TCE revenues of \$104m, well below our \$117m forecast but in line-with consensus. The main culprit for the difference was that the company achieved daily TCE earnings, particularly in the Suezmax segment, significantly below our forecast. With aggregate cost items also slightly lower than our forecast, adjusted EPS for the quarter came in at \$0.03 vs our \$0.07 forecast, but substantially outperforming consensus at -\$0.02.

1Q22 Review USDm	1Q22				Actuals vs Cleaves		Actuals vs Cons.	
	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves
Net sales	107.1	100.7	103.8	117.0	104.2	-13.2	-0.4	-11%
EBITDA (adj.)	59.0	51.5	53.0	65.4	52.7	-12.4	0.3	-19% 1%
EBIT (adj.)	23.5	13.0	15.6	26.4	14.5	-10.9	1.1	-41% 7%
PTP (adj.)	8.9	-3.8	5.5	15.2	-2.1	-9.8	7.6	-64% 357%
Net earnings (adj.)	8.9	-8.5	5.5	15.2	-7.0	-9.7	12.5	-64% 178%
EPS (adj.)	0.04	-0.04	0.03	0.07	-0.02	-0.05	0.05	-64% 228%
DPS	-	-	-	0.04	0.02	-0.04	-0.02	-100% -100%
Implied, line by line	1Q21	4Q21	Actuals	Cleaves	Consensus	Cleaves	Cons.	Cleaves
TCE revenue	107.1	100.7	103.8	117.0	104.2	-13.2	-0.4	-11% 0%
Opex & G&A	48.1	49.1	50.8	51.6	51.6	-0.7	-0.7	-1% -1%
Depreciation	35.5	38.6	37.4	39.0	38.2	-1.6	-0.8	-4% -2%
Net finance	14.7	16.8	10.1	11.2	16.6	-1.1	-6.5	-10% -39%
Taxes & Minorities	-0.0	4.7	-0.0	-	4.9	-0.0	-4.9	-100%





Our Universe at a Glance

Updated 28 May 2022 06 CET			Return			Rec.	Target Price	Last Price	Target/Price	P/NAV			EV/GAV	adj. equity	EV/EBITDA			Dividend yield		
Company	Sector	ly	Now	ly fwd	ϵ					2021	2022	2023			2021	2022	2023			
DHT US	Oil	-3%	BUY	7.8	6.1	28%	0.97	0.84	1.39	0.98	65%	0.2	10.4	2.9	41%	1%	11%			
EURN US	Oil	36%	BUY	13.0	13.0	0%	1.19	1.07	1.73	1.16	50%	0.1	20.2	5.0	29%	1%	4%			
FRO US	Oil	34%	BUY	11.0	11.4	-4%	1.58	1.38	2.70	1.20	33%	0.4	16.7	5.6	32%	1%	8%			
HUNT NO	Oil	29%	BUY	3.8	3.5	9%	0.99	0.86	1.70	0.99	53%	0.2	13.1	4.6	30%	1%	9%			
INSW US	Oil	32%	BUY	26.0	24.5	6%	0.82	0.99	1.63	0.91	51%	0.2	19.5	4.7	39%	1%	9%			
NAT US	Oil	-33%	HOLD	1.9	2.3	-17%	1.01	0.93	1.69	1.01	50%	0.2	37.9	4.4	36%	2%	8%			
OET NO	Oil	31%	BUY	131.0	108.0	21%	1.00	0.88	2.88	1.01	33%	0.2	12.6	5.2	39%	3%	11%			
TNK US	Oil	41%	BUY	20.0	21.2	-6%	1.17	1.17	1.82	1.08	44%	0.6	112.9	3.5	49%	0%	6%			
Average, Oil Tankers						5%	1.09	1.02	1.94	1.04	47%	0.3	30.4	4.5	37%	1%	8%			
2020 NO	Dry	54%	BUY	212	128	66%	1.04	0.66	1.73	1.03	55%	0.2	4.4	3.0	25%	27%	42%			
BULK NO	Dry		BUY	248	82.9	199%	0.50	0.32	1.21	0.60	73%	0.2	1.4	0.9	52%	61%	73%			
DSX US	Dry	65%	BUY	7.5	6.4	17%	0.99	0.68	1.67	0.96	50%	0.0	3.8	2.2	23%	12%	16%			
EGLE US	Dry	66%	BUY	86.0	70.2	23%	1.10	1.03	1.12	0.92	76%	0.1	3.7	3.3	13%	7%	6%			
GNK US	Dry	73%	BUY	37.0	25.2	47%	1.03	0.81	1.13	1.03	75%	0.2	3.1	2.6	19%	15%	25%			
GOGL US	Dry	100%	BUY	23.0	15.9	45%	1.37	0.91	1.50	1.23	58%	0.2	3.9	3.3	15%	17%	19%			
HSHIP NO	Dry		BUY	87.0	55.0	58%	0.90	0.52	4.61	0.98	21%	0.3		7.2	43%	0%	14%			
SBLK US	Dry	96%	BUY	46.0	32.5	41%	1.26	0.90	1.38	1.18	60%	0.0	3.4	3.0	19%	22%	26%			
Average, Dry Bulk						62%	1.02	0.73	1.79	0.99	59%	0.2	3.4	3.2	26%	20%	28%			
ALNG NO	LNG	224%	HOLD	4.8	6.5	-27%	1.47	1.10	4.37	1.11	21%	6.7	7.7	12.8	0%	9%	6%			
FLNG NO	LNG	135%	HOLD	170	257	-34%	1.13	0.98	2.13	1.06	44%	11.1	9.2	9.7	6%	9%	8%			
Average, LNG Carriers						-30%	1.30		3.25	1.08	33%	8.9	8.4	11.3	3%	9%	7%			
AGAS NO	LPG	29%	BUY	58	53	10%	0.64	0.65	1.97	0.82	46%	0.0	4.7	6.9	9%	8%	7%			
BWLPG NO	LPG	44%	BUY	82	75	10%	0.73	0.65	1.28	0.82	60%	0.0	3.5	5.4	9%	9%	5%			
LPG US	LPG	60%	BUY	19.0	16.9	13%	0.61	0.61	1.31	0.72	65%	0.0	4.0	6.7	6%	13%	7%			
Average, LPG Carriers						11%	0.66	0.64	1.52	0.79	57%	0.0	4.0	6.3	8%	10%	6%			
Average of all segments						12%	1.02	0.79	2.13	0.98	49%	2.3	11.6	6.3	19%	10%	12%			

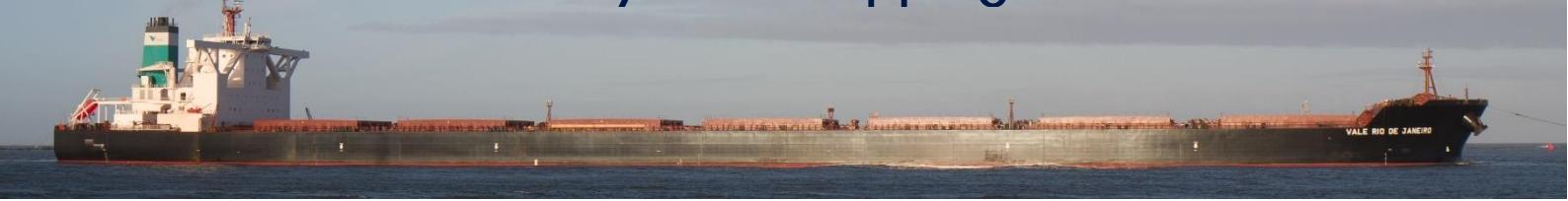
Indicative Quarterly Reporting Schedule

Company	Indicative* Reporting Schedule	Sector	TCE Revenue				Cleaves			EBITDA			Cleaves			Net Profit			Cleaves
			Cleaves	Consensus	Last year	vs Cons.	Cleaves	Consensus	Last year	Cleaves	Consensus	Last year	vs Cons.	Cleaves	Consensus	Last year	vs Cons.		
NAT US	31-May/22	Oil	19	21	n.a.	-9%	-1	1	-1	-219%	-22	-21	-25	-1					
BULK NO	03-Jun/22	Dry	36	36	26	-1%	23	23	15	-1%	11	11	3	0					
DSX US	03-Aug/22	Dry																	
EURN US	04-Aug/22	Oil																	
LPG US	04-Aug/22	LPG																	
GNK US	04-Aug/22	Dry																	
TNK US	05-Aug/22	Oil																	
SBLK US	05-Aug/22	Dry																	
EGL E US	05-Aug/22	Dry																	
DHT US	09-Aug/22	Oil																	
INSW US	09-Aug/22	Oil																	
HSHIP NO	10-Aug/22	Dry																	
OET NO	12-Aug/22	Oil																	
2020 NO	17-Aug/22	Dry																	
ALNG NO	23-Aug/22	LNG																	
HUNT NO	25-Aug/22	Oil																	
BWLPG NO	29-Aug/22	LPG																	
FLNG NO	31-Aug/22	LNG																	
AGAS NO	31-Aug/22	LPG																	
GOGL US	31-Aug/22	Dry																	
FRO US	31-Aug/22	Oil																	

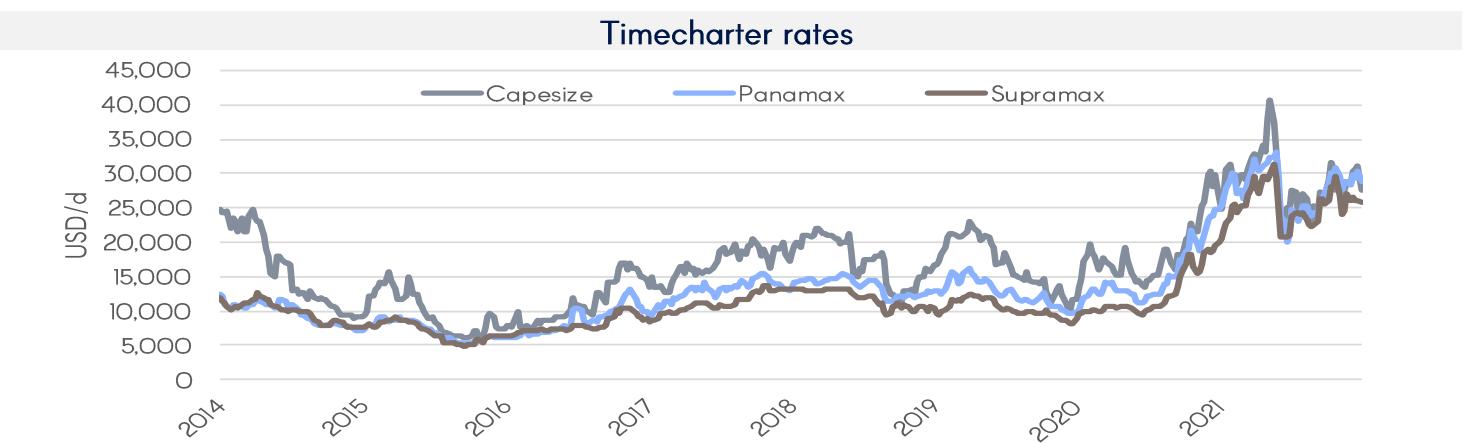
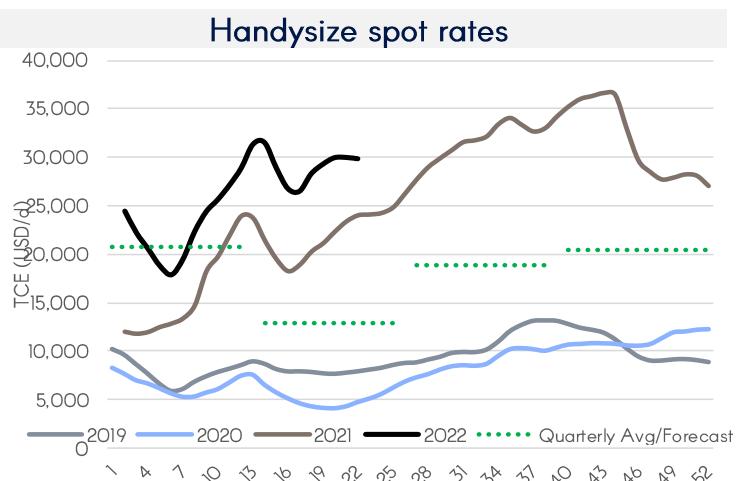
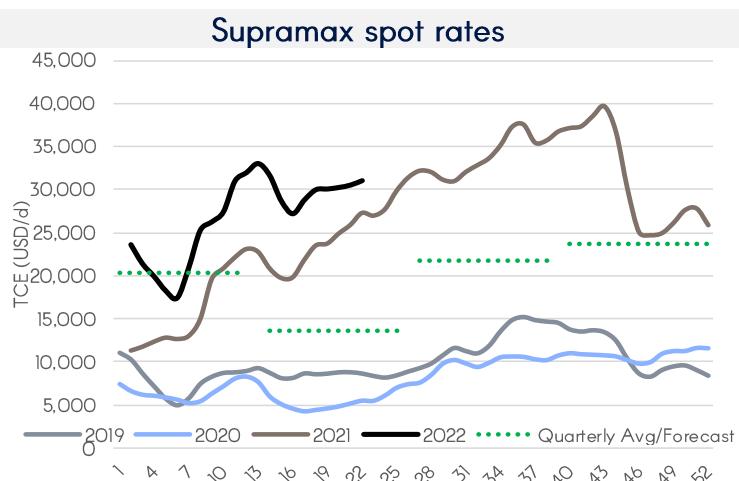
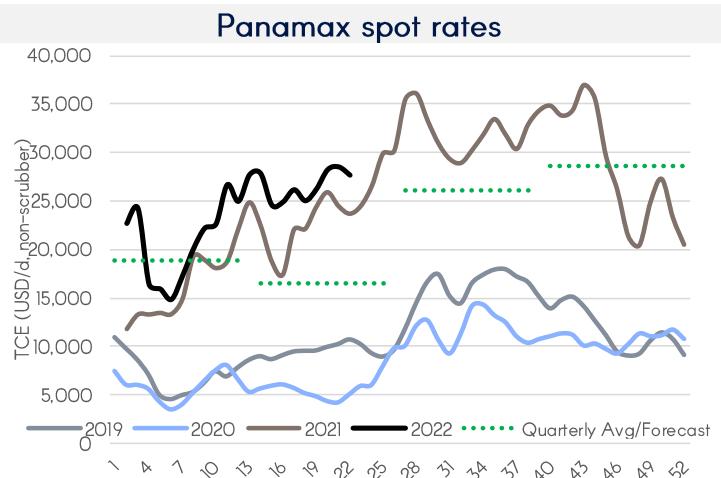
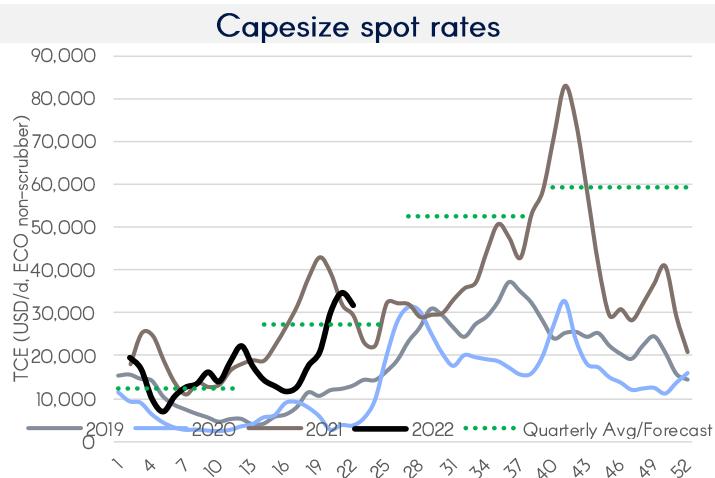
* Extracted from Bloomberg. Not always up-to-date. Please see company websites to validate actual reporting dates



Dry Bulk Shipping



Earnings

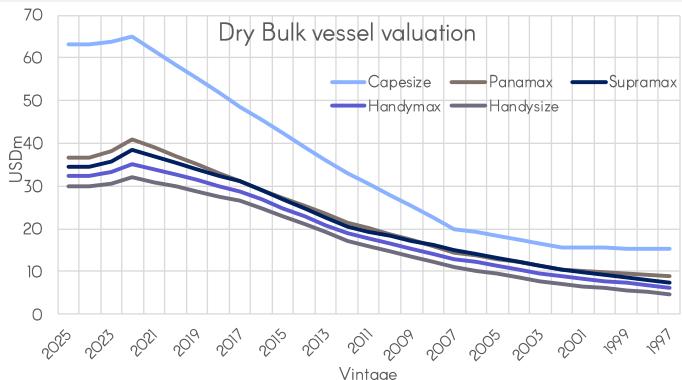


Asset Valuation

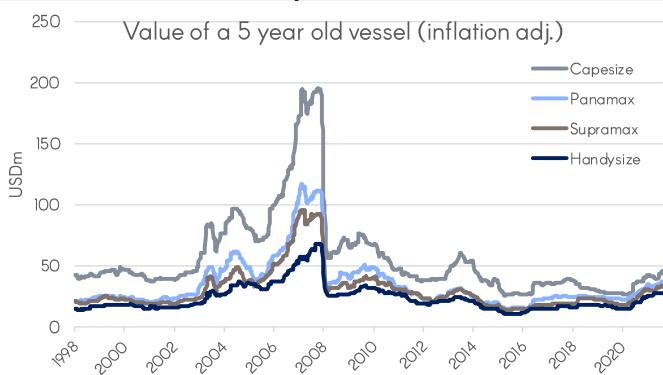
Asset valuation overview

Summary	Capesize	Panamax	Supramax	Handymax	Handysize
NB	63.0	36.8	34.5	32.3	30.0
resale	65.0	41.0	38.5	35.3	32.0
5y	48.5	31.0	31.0	28.8	26.5
10y	33.0	21.5	20.5	18.9	17.3
15y	20.0	14.5	15.0	13.0	11.0
20y	15.7	10.5	10.5	8.8	7.0
scrap	15.2	8.9	7.3	6.3	4.6
<i>All prices are excluding scrubbers</i>					
NB parity	22,268	15,050	14,003	12,930	11,883

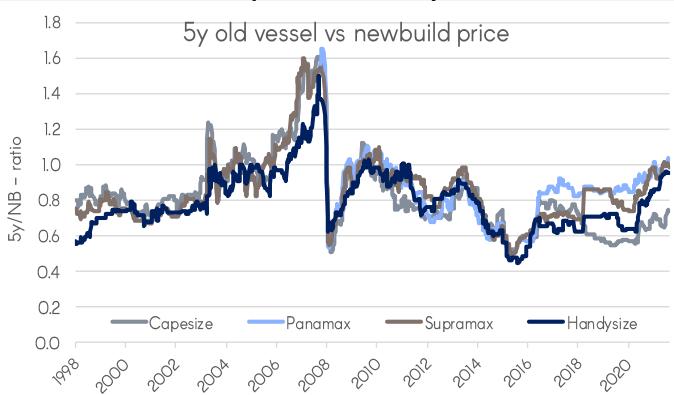
Asset valuation overview



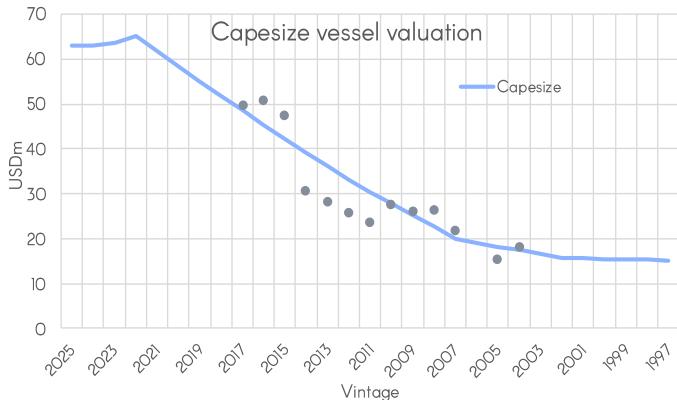
Historical 5y old vessel values



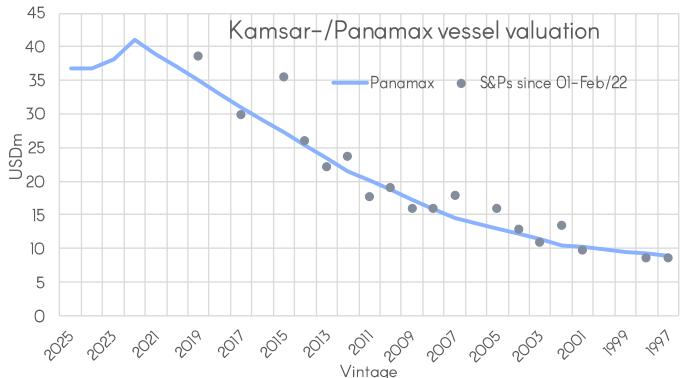
Historical price ratio, 5y/newbuild



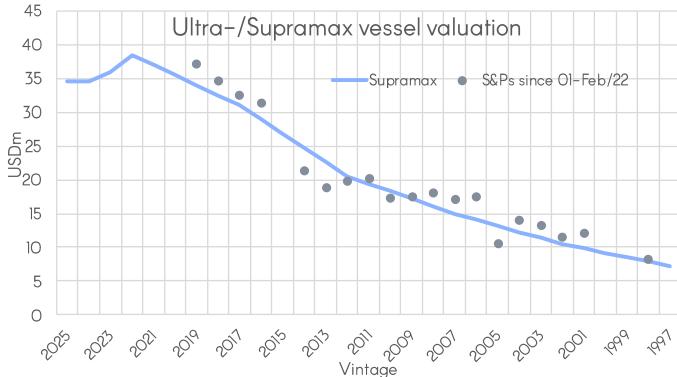
Capesize valuation vs recent S&Ps



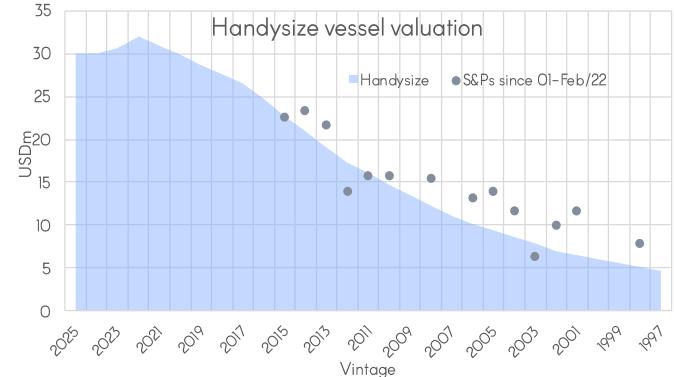
Pana-/Kamsarmax valuation vs recent S&Ps



Supra-/Ultramax valuation vs recent S&Ps



Handysize valuation vs recent S&Ps





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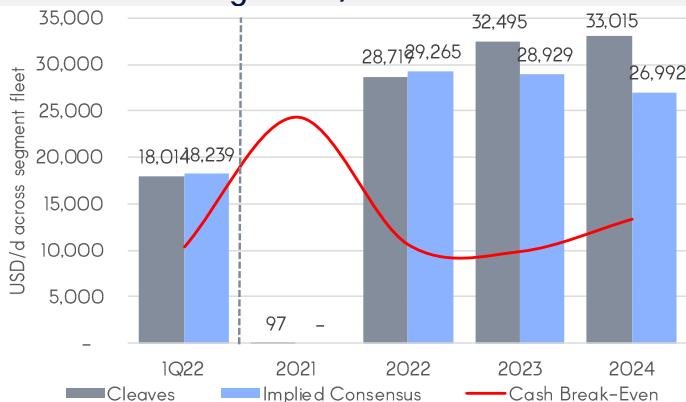
$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

Peer Group

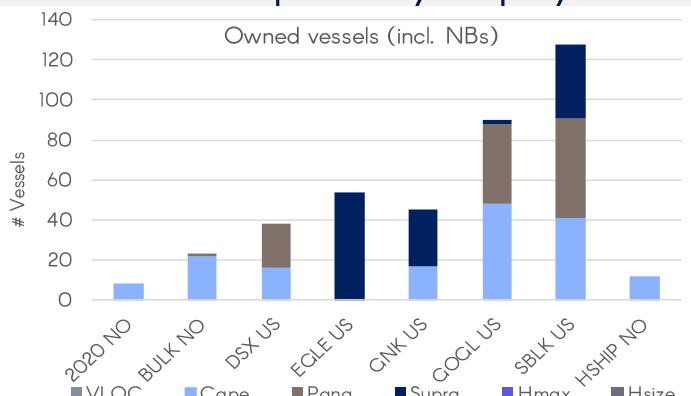
Updated 28 May 19:40 CEST				Return		Target	Last	Target/	NAV	P/NAV	EV/GAV	adj.	τ	
Company	M.cap	Turnover	ly	Rec.	Price	Price	/sh	Now	ly fwd	ϵ	equity			
2020 NO	300	3.0	54%	BUY	212	128	66%	122	1.05	0.66	1.73	1.03	55%	1.00
BULK NO	263			BUY	248	83	199%	164	0.50	0.32	1.21	0.60	73%	0.95
DSX US	553	5.8	65%	BUY	7.5	6.4	17%	6.5	0.99	0.68	1.67	0.96	50%	0.89
EGLE US	961	28.4	66%	BUY	86	70	23%	64.1	1.10	1.03	1.12	0.92	76%	0.99
GNK US	1,060	28.3	73%	BUY	37.0	25.2	47%	24.5	1.03	0.81	1.13	1.03	75%	0.85
GOGL US	3,188	70.1	100%	BUY	23.0	15.9	45%	11.5	1.37	0.91	1.50	1.23	58%	0.89
SBLK US	3,342	76.5	96%	BUY	46	33	41%	25.8	1.26	0.90	1.38	1.18	60%	1.00
HSHIP NO	174	2.1		BUY	87	55.0	58%	61	0.90	0.52	4.61	0.98	21%	1.00
Average	1,230		76%				62%		1.02	0.73	1.79	0.99	59%	0.95
Median	757		70%				46%		1.04	0.74	1.44	1.00	59%	0.97

Company	EV/EBITDA				P/E				Dividend yield				FCF yield			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
2020 NO	0.2	4.4	3.0	3.6	4.4	2.9	1.9	2.5	25%	27%	42%	32%	72%	33%	47%	37%
BULK NO	0.2	1.4	0.9	0.9	0.6	1.2	0.9	1.2	52%	61%	73%	56%	79%	79%	101%	77%
DSX US	0.0	3.8	2.2	2.2	1.8	2.4	1.6	2.2	23%	12%	16%	17%	58%	14%	45%	37%
EGLE US	0.1	3.7	3.3	3.5	4.1	4.0	4.3	5.9	13%	7%	6%	5%	79%	27%	26%	20%
GNK US	0.2	3.1	2.6	3.2	3.5	2.9	2.6	3.5	19%	15%	25%	24%	80%	25%	33%	26%
GOGL US	0.2	3.9	3.3	4.0	3.8	2.3	2.1	2.8	15%	17%	19%	19%	62%	30%	29%	21%
SBLK US	0.0	3.4	3.0	3.6	3.5	2.6	2.4	3.1	19%	22%	26%	27%	73%	32%	35%	28%
HSHIP NO	0.3		7.2	5.1	6.1		2.6	1.5	43%	0%	14%	42%	33%	-52%	-137%	-84%
Average	0.2	3.4	3.2	3.3	3.5	2.6	2.3	2.8	26%	20%	28%	28%	67%	23%	22%	20%
Median	0.2	3.7	3.0	3.5	3.7	2.6	2.3	2.6	21%	16%	22%	26%	72%	28%	34%	27%

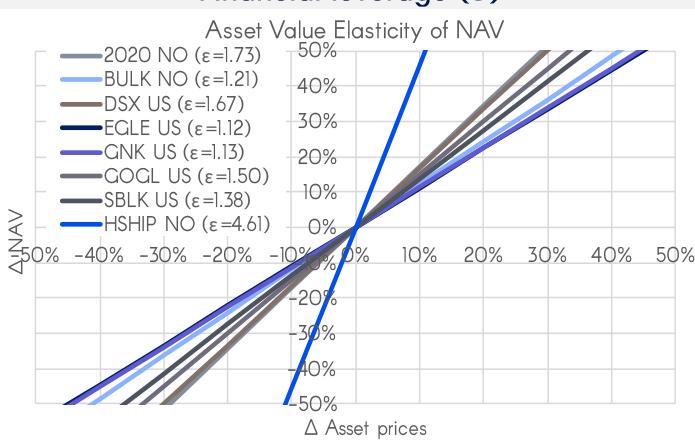
Cleaves' average TCE/d forecast vs consensus



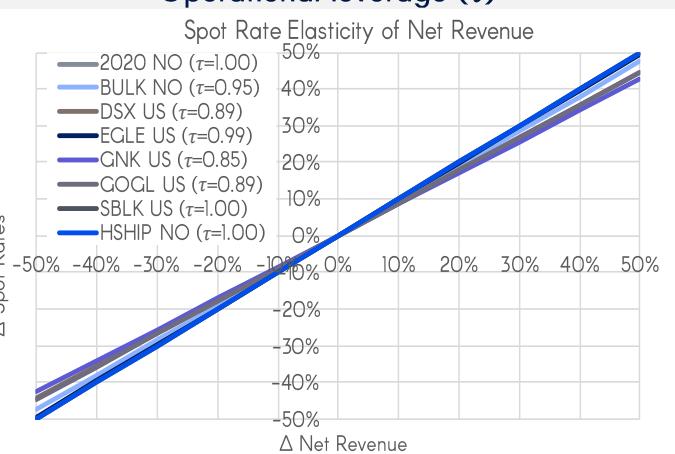
Fleet composition by company



Financial leverage (ϵ)



Operational leverage (τ)



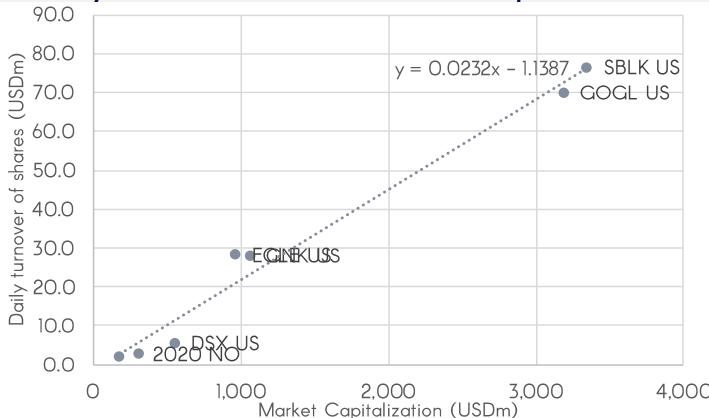


Cleaves Securities

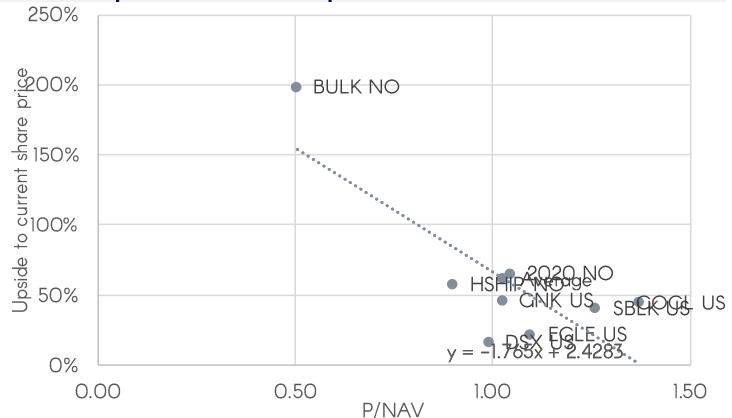
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

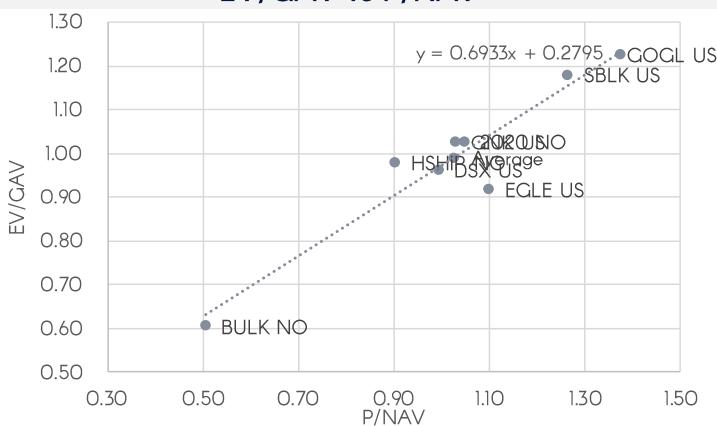
Daily share turnover vs market capitalization



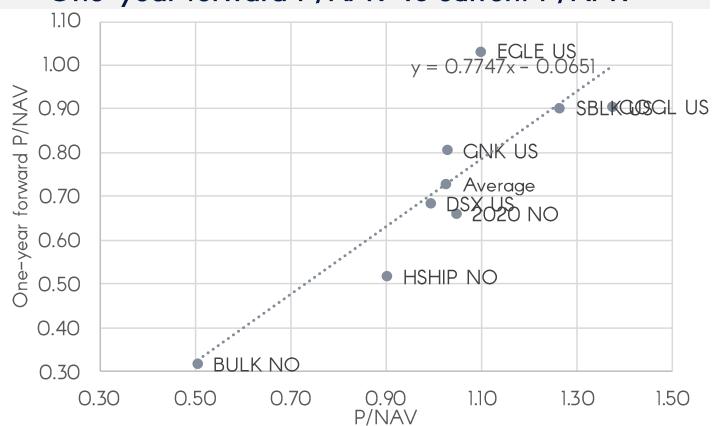
Upside to share price current P/NAV



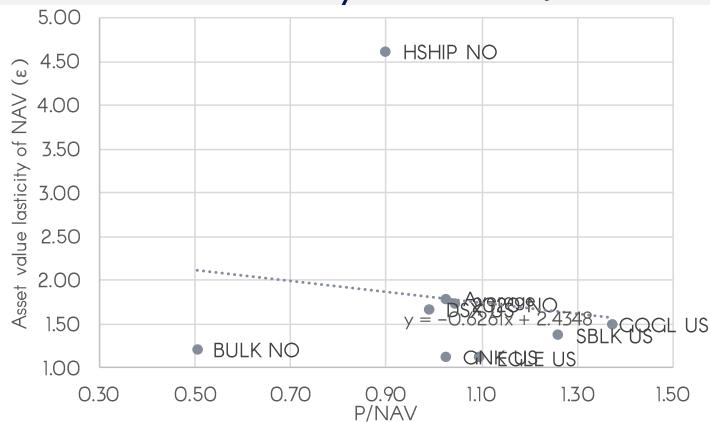
EV/GAV vs P/NAV



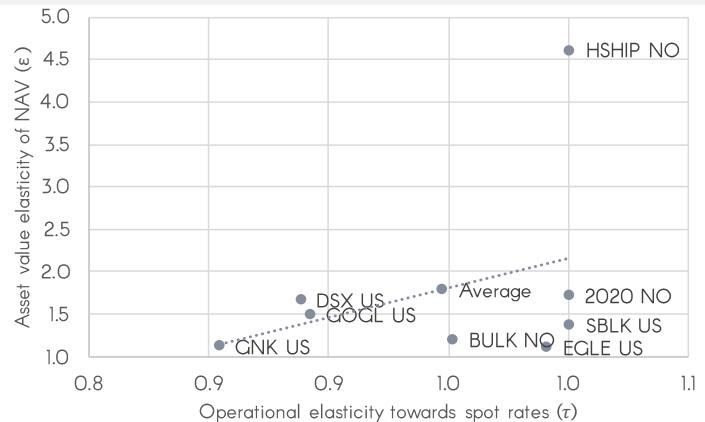
One-year forward P/NAV vs current P/NAV



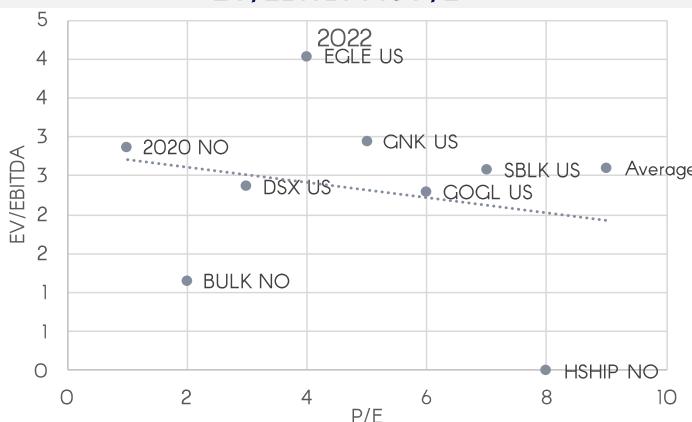
Asset value elasticity of NAV vs P/NAV



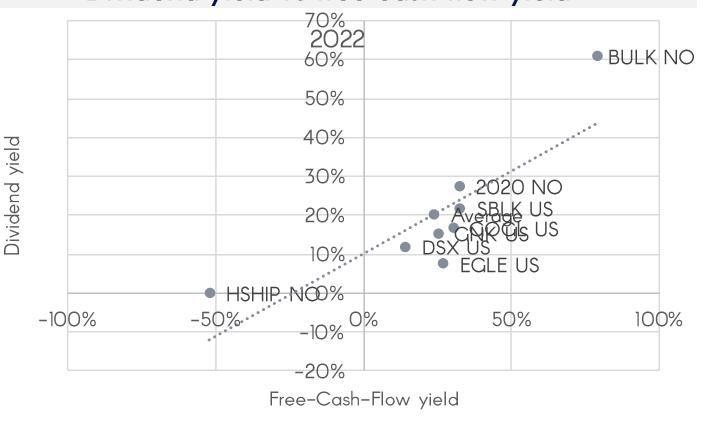
Elasticities: NAV vs net revenue



EV/EBITDA vs P/E



Dividend yield vs free cash flow yield





Generic Shipping Accounting

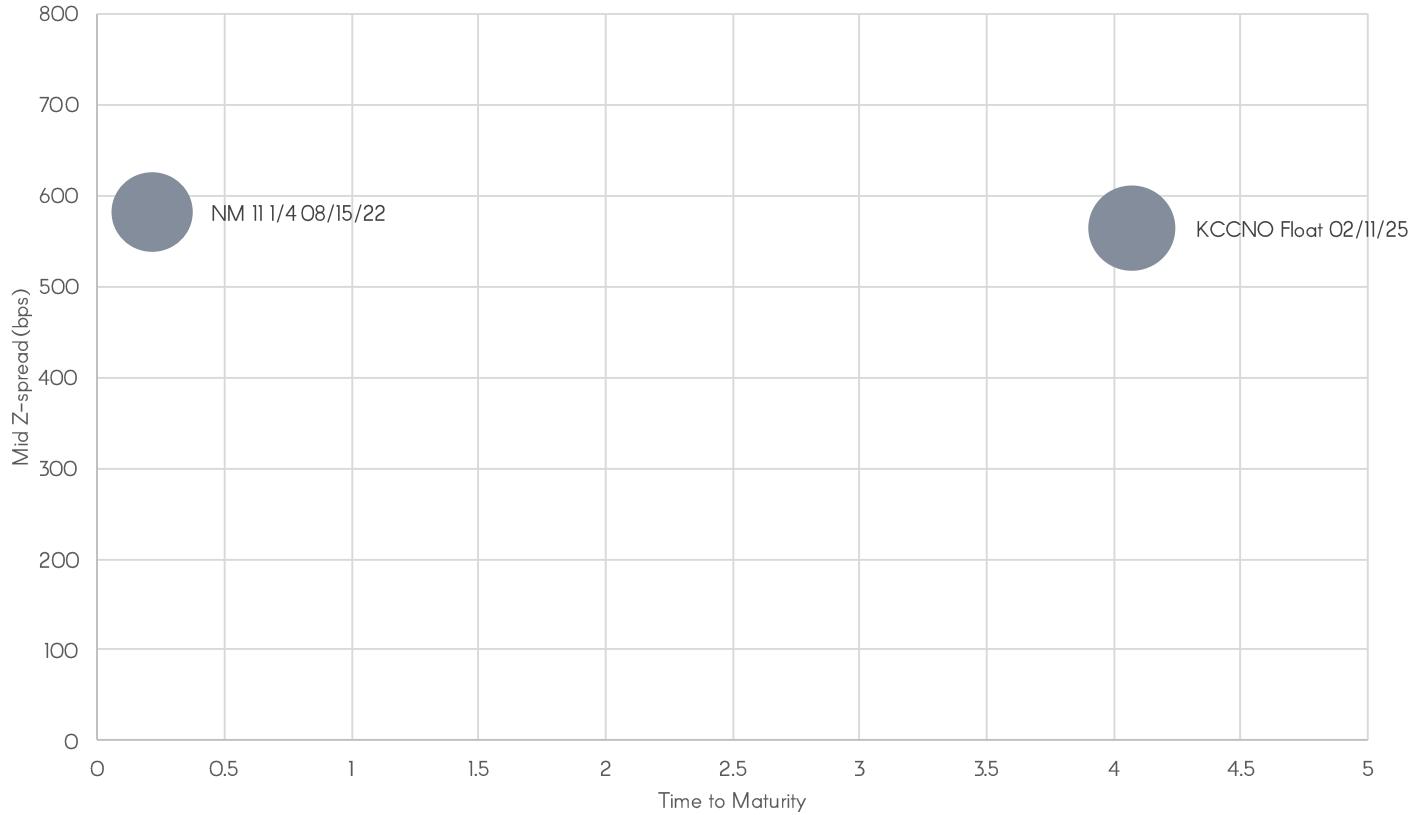
Current vessel economics (5y old)

Current vessel economics (5y old)			
Profit & Loss (USDm)	Capesize	Panamax	Supramax
Revenue	10.4	10.4	10.6
Opex/C&A	-2.6	-2.4	-2.2
EBITDA	7.9	8.0	8.4
Depreciation	-1.7	-1.1	-1.2
EBIT	6.2	6.9	7.2
Financials (6% pa)	-2.0	-1.3	-1.3
Net profit	4.2	5.6	5.9
Balance (USDm)	Capesize	Panamax	Supramax
Asset (5y)	48.5	31.0	31.0
Equity (30%)	14.6	9.3	9.3
Debt (70%)	34.0	21.7	21.7
Cash Flow (USDm)	Capesize	Panamax	Supramax
Net profit	4.2	5.6	5.9
Depreciation	1.7	1.1	1.2
Operational CF	5.8	6.7	7.1
Docking accruals	-0.3	-0.2	-0.2
Debt repayments	-2.8	-1.8	-1.8
Net Cash Flow	2.7	4.7	5.1
Key Ratios	Capesize	Panamax	Supramax
EV/EBITDA	6.2	3.9	3.7
EV/EBIT	7.8	4.5	4.3
P/E	3.5	1.7	1.6
ROE	29%	60%	64%
ROCE	13%	22%	23%
FCF yield	38%	70%	75%
Variables	Capesize	Panamax	Supramax
1y TC (USD/d)	29,000	28,875	29,500
Opex (USD/d)	-6,000	-5,500	-5,000
C&A (USD/d)	-1,000	-1,000	-1,000
Docking (USD/d)	-800	-600	-500
Assumptions: 25 years life, depreciated to scrap, 360 revenue days, 365 opex days, 12 years debt amortization			
Cash Break-even (USD/d)	Capesize	Panamax	Supramax
Opex	6,000	5,500	5,000
C&A	1,000	1,000	1,000
Docking	800	600	500
Interest cost	5,581	3,567	3,567
Debt amortization	7,751	4,954	4,954
Cash Break-even	21,132	15,621	15,021
Current 1y TC	29,000	28,875	29,500
NB parity rate	22,268	15,050	14,003



The Credit Market

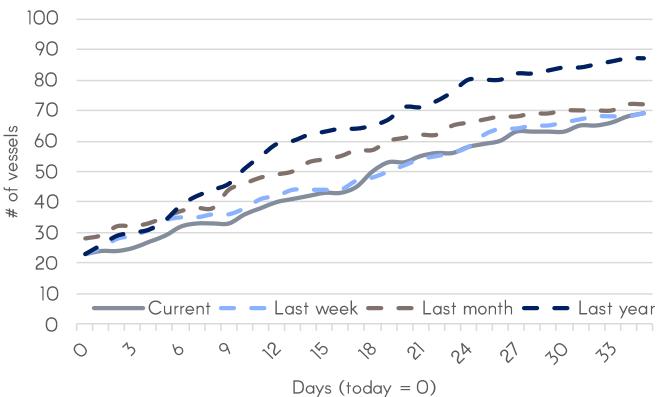
Dry Bulk bond pricing (by amount outstanding)



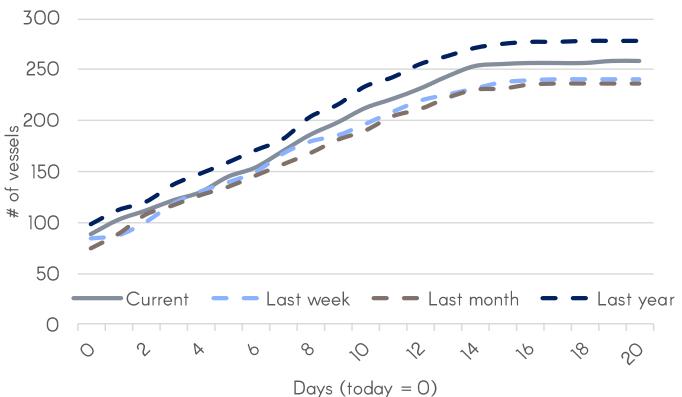


Market Snapshots

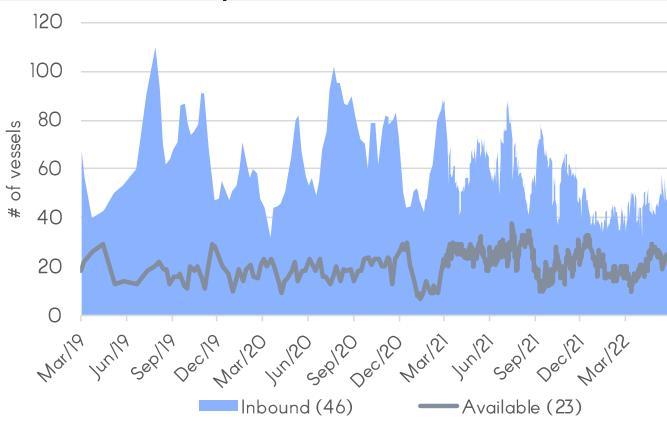
of Capesizes inbound for Brazil



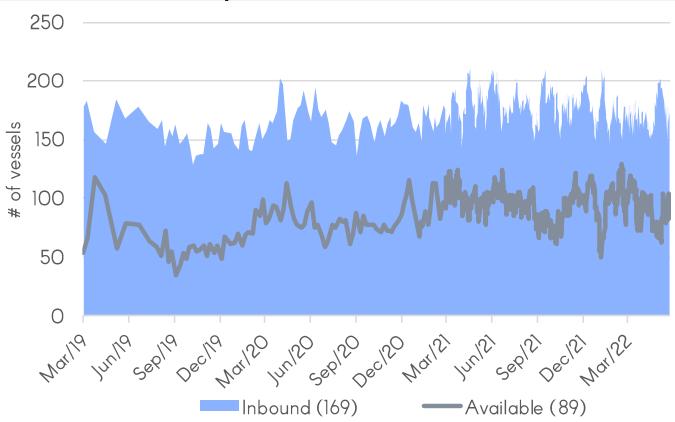
of Capesizes inbound for Australia



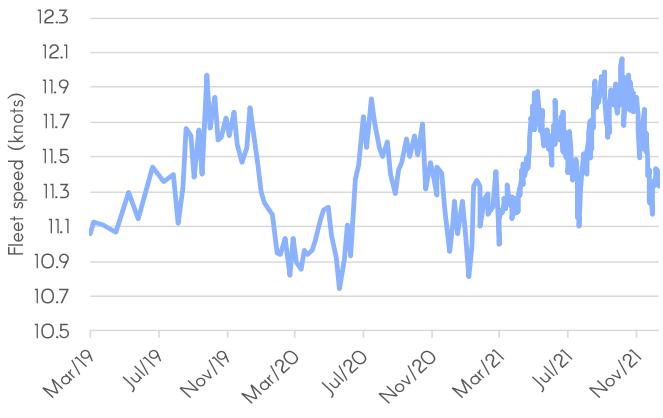
of Capesizes inbound for Brazil



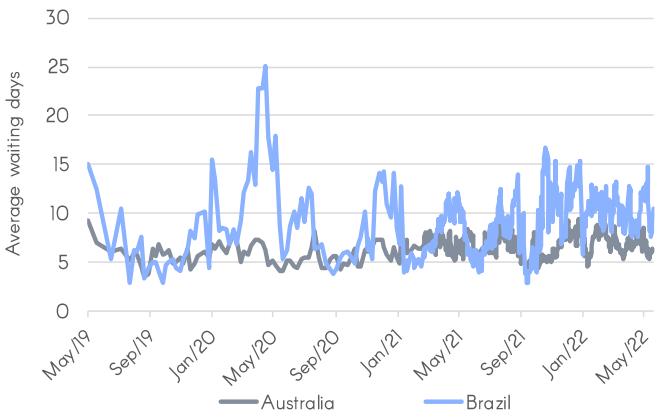
of Capesizes inbound Australia



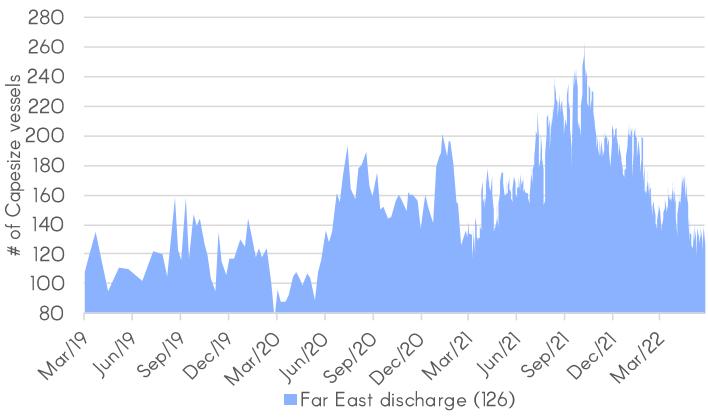
Average vessel speed



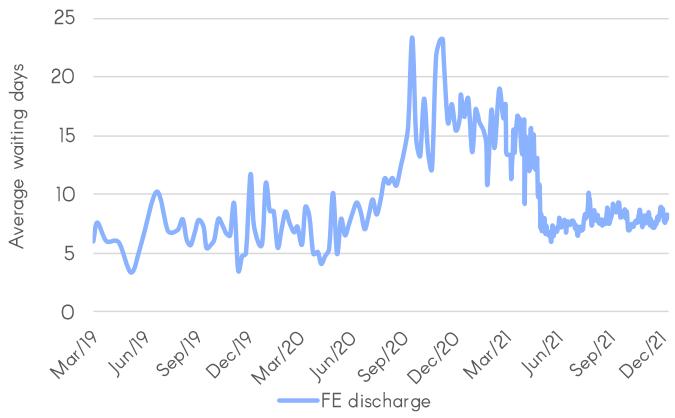
Average waiting days for vessels in loading ports



Vessels in Far Eastern discharge



Average waiting days for FE discharge



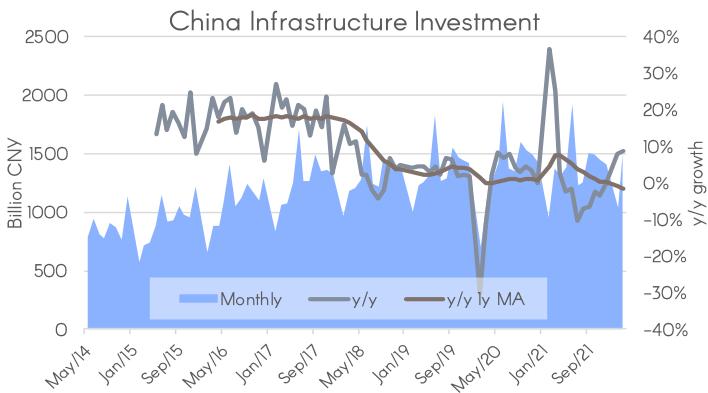


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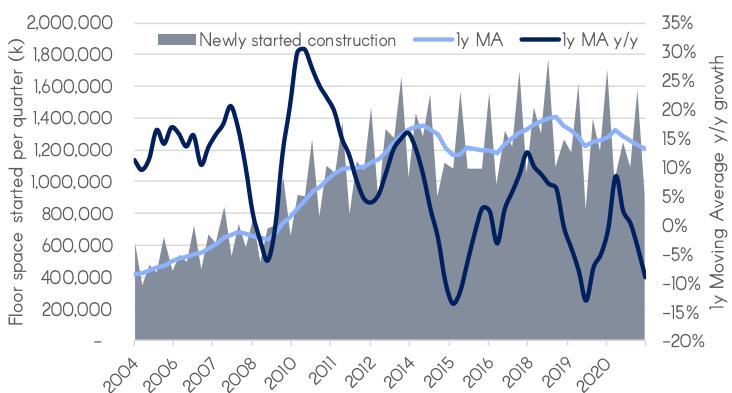
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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

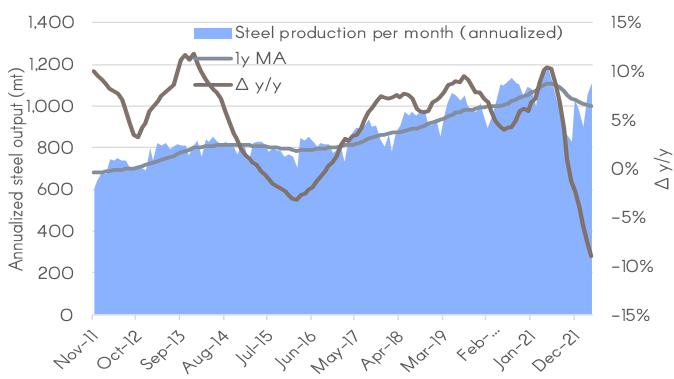
Chinese infrastructure investments



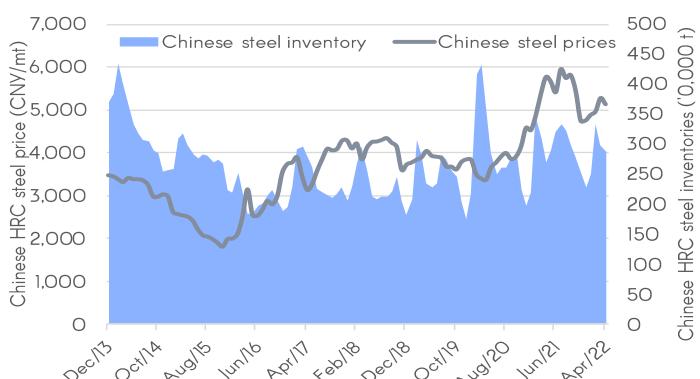
Chinese housing construction



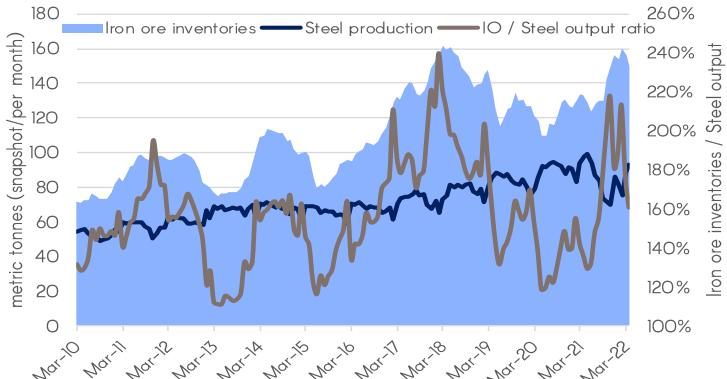
Chinese steel production



Stocks & prices for Chinese steel mills



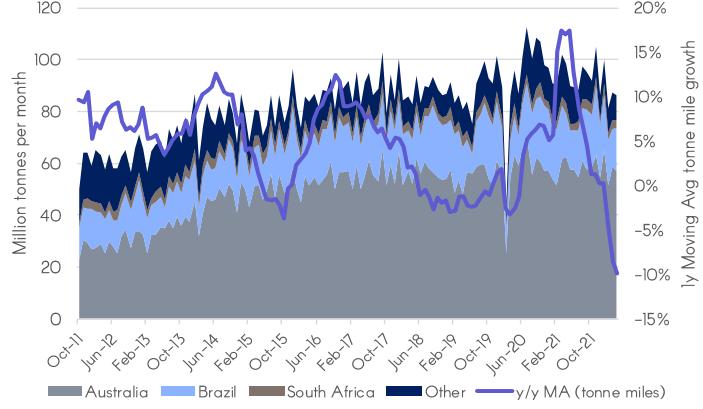
Chinese iron ore stockpiles vs steel production



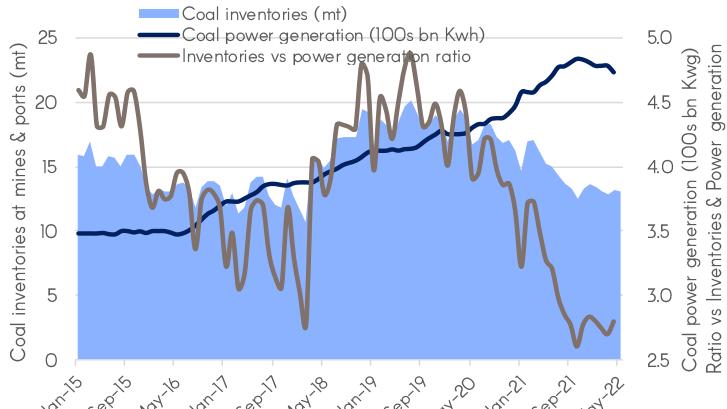
Iron ore prices by FE content



Chinese iron ore imports by source

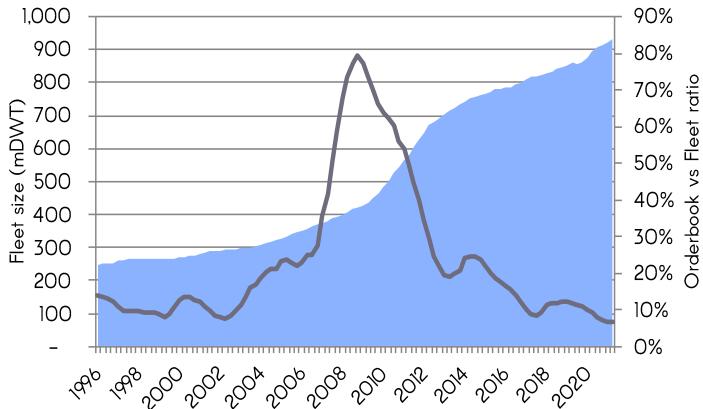


Chinese coal inventories

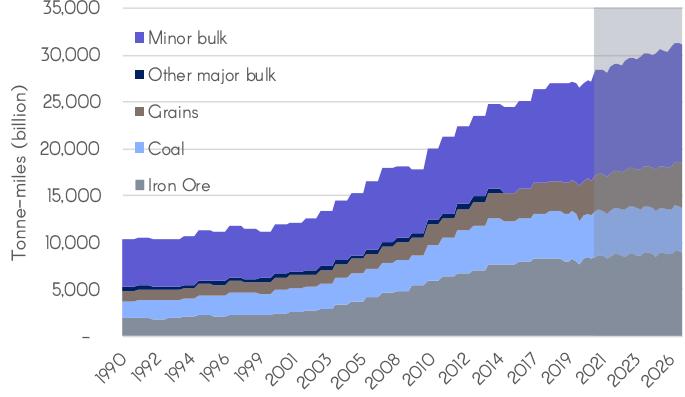


Market Fundamentals

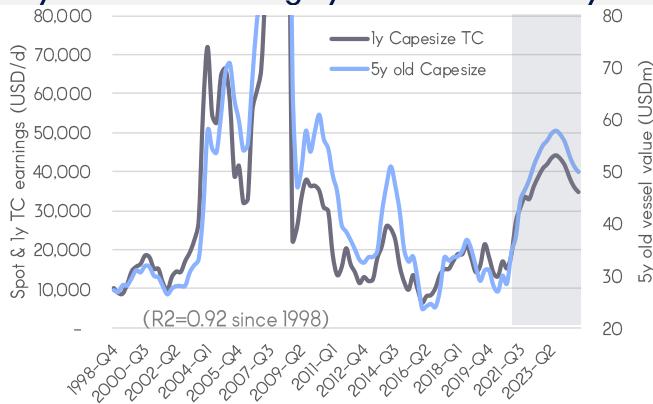
Orderbook vs fleet



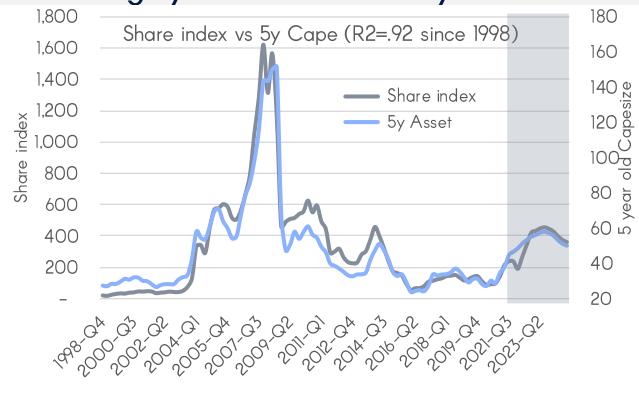
Historical dry bulk shipping demand



5y vessel values highly correlated with 1y TC



Shares highly correlated with 5y vessel values





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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Market Overview

Annual view

Base case	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
VLOC, spot ^a (TCE/d)	57,933	149,165	134,674	54,751	42,760	20,095	9,878	18,660	18,579	10,335	9,499	19,476	21,113	22,931	16,706	41,910	48,436	57,469	46,339
Capesize, spot ^a (TCE/d)	45,260	116,535	105,214	42,774	33,406	15,699	7,717	14,578	14,515	8,074	7,421	15,215	16,494	17,915	13,051	32,742	37,841	44,898	36,202
Panamax, spot ^a (TCE/d)	23,853	57,004	48,682	19,332	25,059	14,016	7,701	9,497	7,726	5,534	5,588	10,053	13,009	12,383	9,906	27,124	22,554	23,205	19,921
Supramax, spot ^a (TCE/d)	22,680	47,604	41,290	17,351	22,477	14,409	9,459	10,296	9,819	6,941	6,168	9,365	11,488	9,923	8,180	26,795	19,878	19,248	16,519
Handymax, spot ^a (TCE/d)	21,546	45,224	39,226	16,483	21,353	13,689	8,986	9,782	9,328	6,594	5,860	8,897	10,914	9,427	7,771	25,455	18,884	18,286	15,693
Handysize, spot ^a (TCE/d)	9,855	32,541	29,100	11,359	16,437	10,560	7,636	8,190	7,687	5,366	5,222	7,659	10,482	9,274	8,003	24,862	18,226	17,042	15,005
VLOC, 5y ^a (USDm)	111	193	224	91	100	76	60	63	82	57	42	55	61	54	49	70	86	103	96
Capesize, 5y ^a (USDm)	64	111	128	52	57	43	34	36	47	33	24	32	35	31	28	40	49	59	55
Panamax, 5y ^a (USDm)	37	66	73	32	39	31	22	21	24	17	14	18	21	19	18	26	31	35	33
Supramax, 5y ^a (USDm)	33	57	61	27	32	28	22	21	25	16	13	16	18	17	16	25	28	27	26
Handymax, 5y ^a (USDm)	31	54	58	25	30	26	21	20	23	15	12	15	17	16	15	24	26	25	25
Handysize, 5y ^a (USDm)	26	37	44	21	26	23	18	18	20	13	10	14	15	16	15	20	22	25	22

High case	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
VLOC, spot ^a (TCE/d)	57,933	149,165	134,674	54,751	42,760	20,095	9,878	18,660	18,579	10,335	9,499	19,476	21,113	22,931	16,706	52,373	78,305	108,577	79,411
Capesize, spot ^a (TCE/d)	45,260	116,535	105,214	42,774	33,406	15,699	7,717	14,578	14,515	8,074	7,421	15,215	16,494	17,915	13,051	37,945	61,176	84,826	62,040
Panamax, spot ^a (TCE/d)	23,853	57,004	48,682	19,332	25,059	14,016	7,701	9,497	7,726	5,534	5,588	10,053	13,009	12,383	9,906	28,301	30,854	41,616	31,247
Supramax, spot ^a (TCE/d)	22,680	47,604	41,290	17,351	22,477	14,409	9,459	10,296	9,819	6,941	6,168	9,365	11,488	9,923	8,180	26,140	27,113	35,542	27,421
Handymax, spot ^a (TCE/d)	21,546	45,224	39,226	16,483	21,353	13,689	8,986	9,782	9,328	6,594	5,860	8,897	10,914	9,427	7,771	24,833	25,758	33,765	26,050
Handysize, spot ^a (TCE/d)	9,855	32,541	29,100	11,359	16,437	10,560	7,636	8,190	7,687	5,366	5,222	7,659	10,482	9,274	8,003	21,723	19,180	24,829	19,386
VLOC, 5y ^a (USDm)	111	193	224	91	100	76	60	63	82	57	42	55	61	54	49	77	121	152	139
Capesize, 5y ^a (USDm)	64	111	128	52	57	43	34	36	47	33	24	32	35	31	28	44	70	87	80
Panamax, 5y ^a (USDm)	37	66	73	32	39	31	22	21	24	17	14	18	21	19	18	29	43	54	49
Supramax, 5y ^a (USDm)	33	57	61	27	32	28	22	21	25	16	13	16	18	17	16	27	35	42	38
Handymax, 5y ^a (USDm)	31	54	58	25	30	26	21	20	23	15	12	15	17	16	15	25	33	40	37
Handysize, 5y ^a (USDm)	26	37	44	21	26	23	18	18	20	13	10	14	15	16	15	21	29	33	15

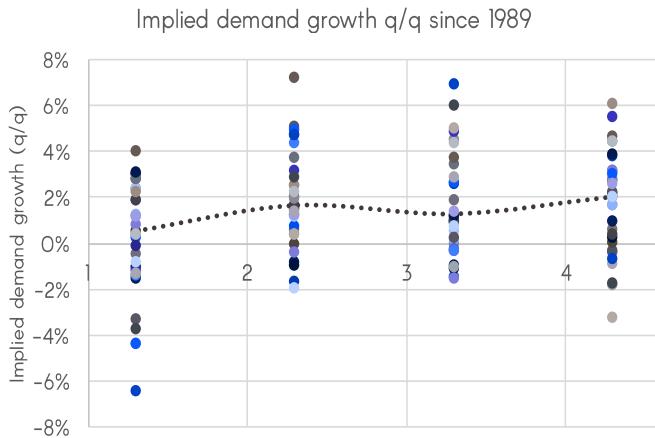
Quarterly view

Base case	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
VLOC, spot ^a (TCE/d)	12,713	26,574	21,688	21,921	39,834	54,245	51,640	15,656	34,805	67,341	75,943	34,747	37,695	74,343	83,092	32,371	31,887	58,569	62,529
Capesize, spot ^a (TCE/d)	9,932	20,761	16,944	17,126	31,120	42,379	40,344	12,231	27,192	52,610	59,330	27,146	29,449	58,080	64,916	25,290	24,912	45,757	48,851
Panamax, spot ^a (TCE/d)	7,390	13,108	12,045	18,493	26,052	32,406	31,543	18,926	16,519	26,117	28,655	16,502	17,372	28,183	30,764	15,801	15,658	23,529	24,698
Supramax, spot ^a (TCE/d)	5,484	9,931	10,749	16,633	25,538	31,048	33,960	20,376	13,691	21,669	23,778	13,676	14,399	23,386	25,531	13,094	12,975	19,518	20,489
Handymax, spot ^a (TCE/d)	5,210	9,435	10,211	15,801	24,261	29,495	32,262	19,357	13,006	20,585	22,589	12,993	13,679	22,216	24,254	12,439	12,326	18,542	19,464
Handysize, spot ^a (TCE/d)	5,221	9,136	11,142	16,610	22,507	25,762	34,569	20,741	12,895	18,848	20,421	12,884	13,424	20,129	21,729	12,450	12,361	17,243	17,967
VLOC, 5y ^a (USDm)	47	52	50	60	65	78	74	74	95	100	101	103	105	104	103	99	93	90	
Capesize, 5y ^a (USDm)	27	30	29	35	38	45	45	42	42	55	58	58	59	60	60	59	57	53	52
Panamax, 5y ^a (USDm)	18	18	18	22	26	29	29	27	27	35	34	35	35	36	36	35	34	32	31
Supramax, 5y ^a (USDm)	16	16	16	19	23	29	29	28	28	27	27	27	28	28	27	26	25	24	24
Handymax, 5y ^a (USDm)	15	15	15	18	22	28	28	26	26	27	25	26	26	26	26	25	25	24	23
Handysize, 5y ^a (USDm)	15	15	15	16	20	23	20	19	19	24	25	25	25	24	24	23	22	22	21

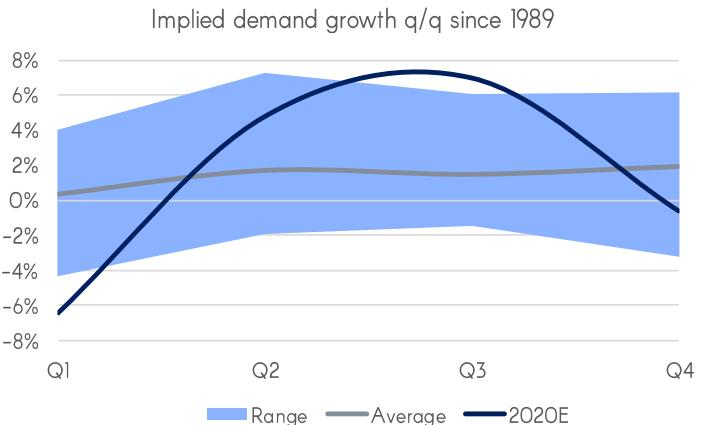


Seasonality

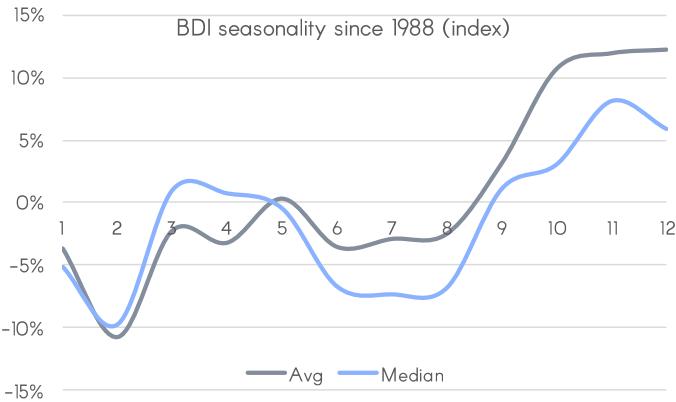
Historically strongest demand growth in 2Q/4Q



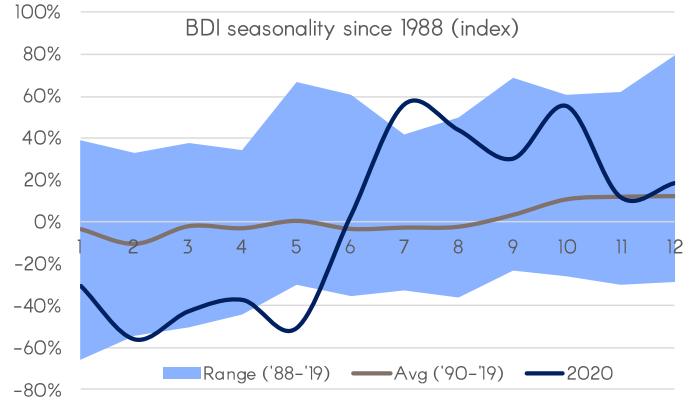
Historical demand growth



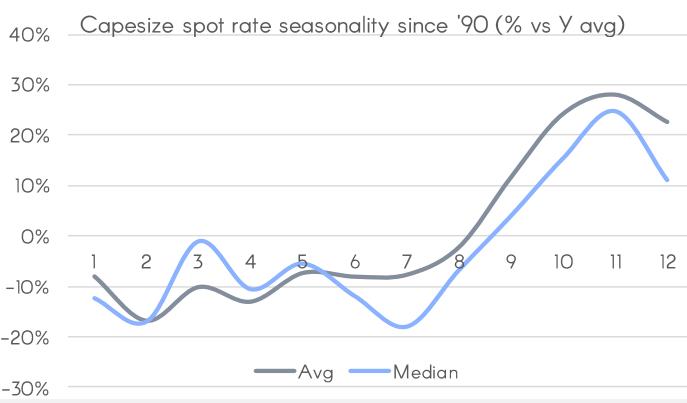
Historical Baltic Dry Index seasonality



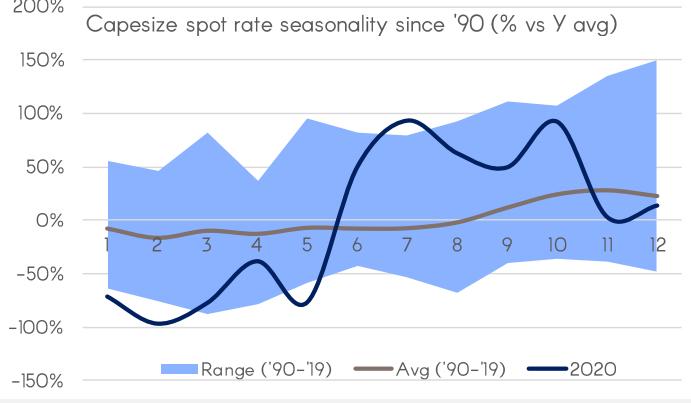
Historical Baltic Dry Index seasonality



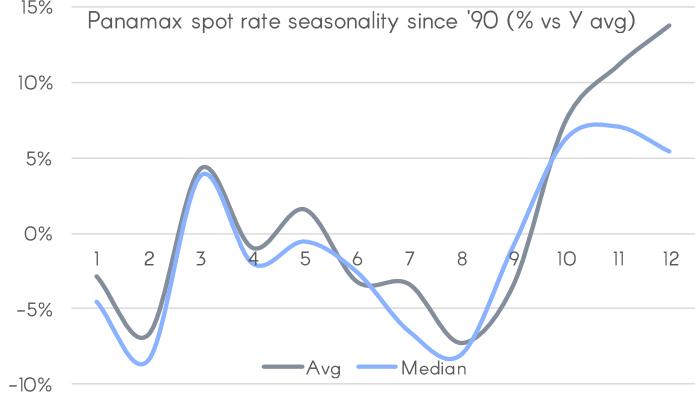
Historical Capesize spot rate seasonality



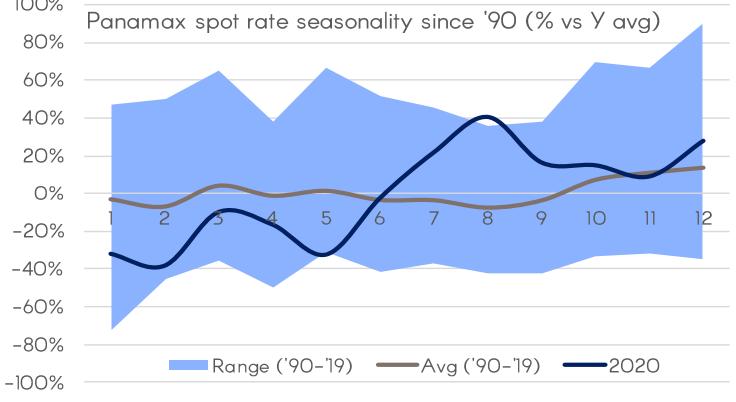
Historical Capesize spot rate seasonality



Historical Panamax spot rate seasonality



Historical Panamax spot rate seasonality



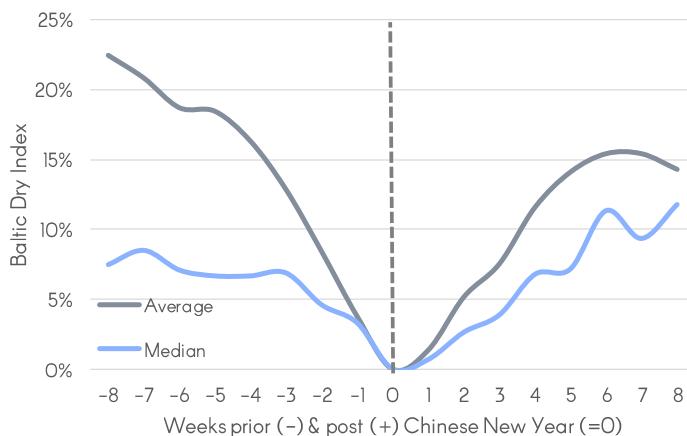


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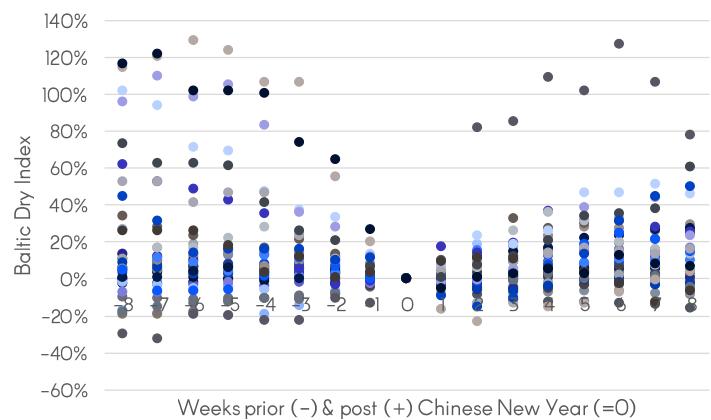
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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

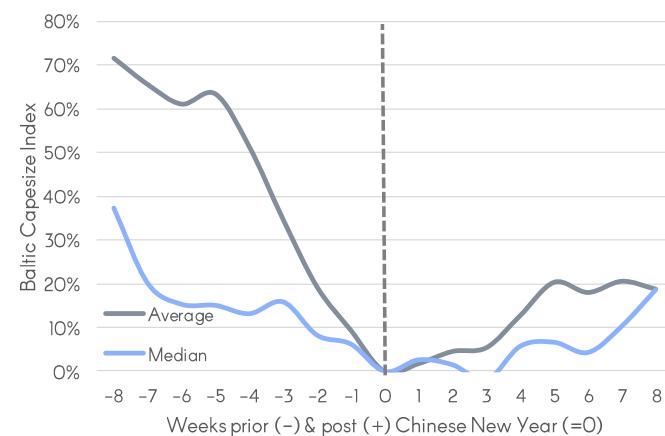
Dry Bulk spot rates vs Chinese New Year



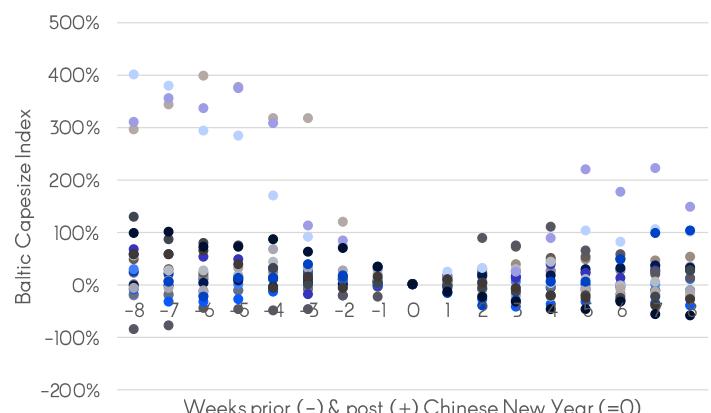
Dry Bulk spot vs Chinese New Year (distribution)



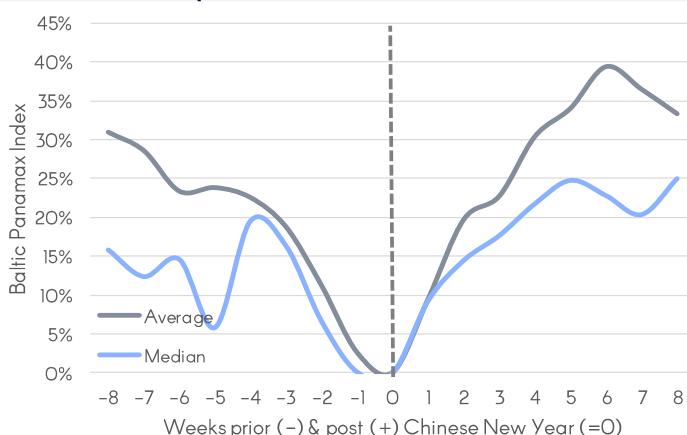
Capesize spot rates vs Chinese New Year



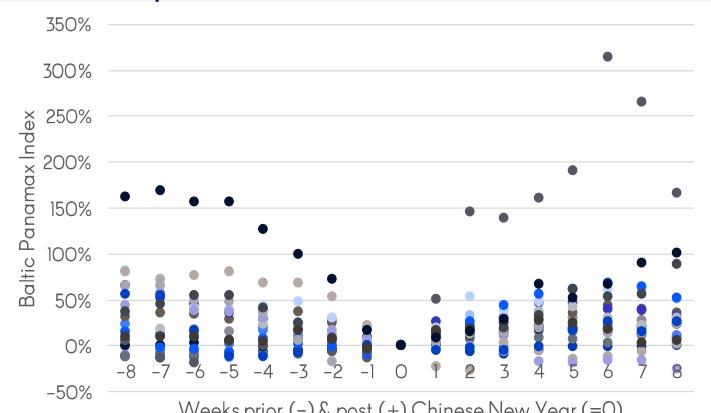
Capesize spot vs Chinese New Year (distribution)



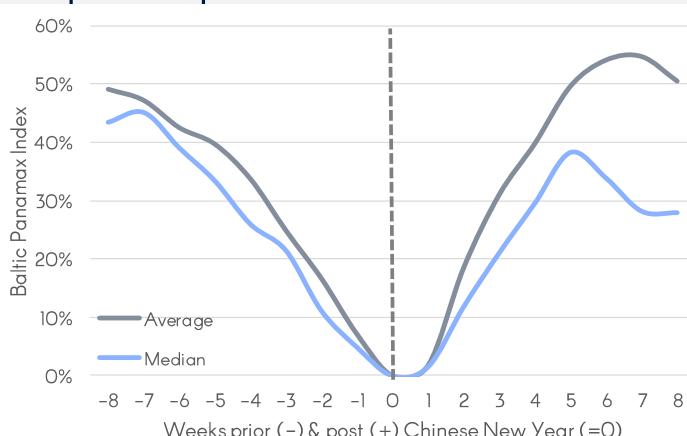
Panamax spot rates vs Chinese New Year



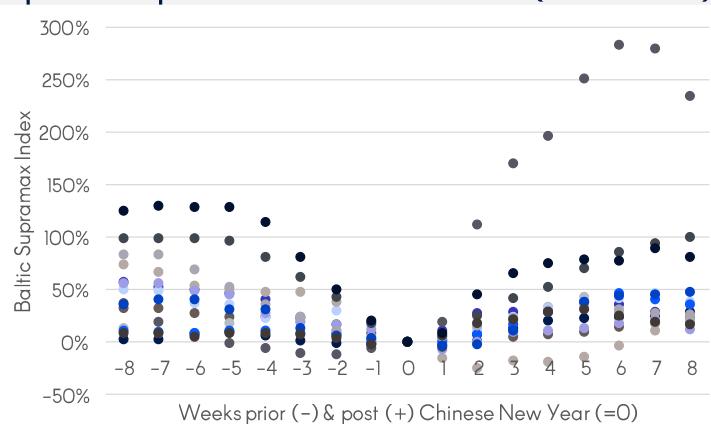
Panamax spot vs Chinese New Year (distribution)



Supramax spot rates vs Chinese New Year



Supramax spot vs Chinese New Year (distribution)





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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Company Financials (annual estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
2020 NO	137	184	150	108	118	166	132	90	106	154	120	78	98	146	112	71
BULK NO	302	358	290	208	250	305	237	155	208	263	196	114	202	258	191	108
DSX US	327	397	340	257	224	292	234	151	182	249	191	108	154	223	166	84
EGLE US	462	398	342	275	294	269	212	144	236	212	155	87	213	200	145	78
GNK US	485	477	401	308	343	372	296	201	286	316	239	144	276	309	234	139
GOCL US	1,266	1,348	1,069	776	982	1,059	849	553	849	926	705	408	822	892	673	379
HSHIP NO	0	91	191	152	-2	83	168	125	-2	78	144	92	-4	66	113	54
SBLK US	1,476	1,522	1,269	957	1,199	1,250	998	699	1,042	1,093	841	543	994	1,054	808	512
Average	557	597	506	380	426	474	391	265	364	411	324	197	344	393	305	178
Median	394	398	341	266	272	299	235	153	222	256	193	111	207	241	179	96

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity			
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025
2020 NO	352	343	335	323	26	30	33	47	384	379	373	375	160	170	179	196
BULK NO	432	402	374	332	64	115	147	327	535	556	560	698	373	421	451	510
DSX US	720	684	641	598	163	292	389	492	955	1,047	1,102	1,162	484	616	690	767
EGLE US	865	817	770	722	221	361	451	509	1,219	1,311	1,353	1,364	813	955	1,049	1,080
GNK US	1,011	970	929	872	189	240	232	255	1,283	1,293	1,244	1,210	1,031	1,073	1,052	1,029
GOCL US	2,778	2,748	2,746	2,632	476	714	690	674	3,582	3,790	3,764	3,635	2,220	2,508	2,586	2,584
HSHIP NO	186	530	813	780	7	54	64	51	193	585	878	831	88	127	153	146
SBLK US	2,908	2,775	2,655	2,536	584	628	566	990	3,762	3,673	3,492	3,797	2,333	2,507	2,409	2,791
Average	1,156	1,159	1,158	1,099	216	304	322	418	1,489	1,579	1,596	1,634	938	1,047	1,071	1,138
Median	793	750	791	751	176	266	310	409	1,087	1,170	1,173	1,186	648	786	870	898

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E	
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2023	2024	2023	2024
2020 NO	109	158	124	83	106	155	121	83	2	4	3	14	63,310	51,528	13,990	13,800
BULK NO	243	300	233	149	226	288	219	149	24	51	32	180	42,460	34,381	10,243	9,864
DSX US	202	272	215	133	83	266	215	133	36	129	97	103	31,644	27,033	12,955	20,331
EGLE US	270	257	202	135	256	248	192	126	135	140	89	58	20,537	17,597	9,858	9,883
GNK US	333	365	291	196	265	349	275	196	69	51	-8	23	30,230	25,403	8,895	8,577
GOCL US	954	1,025	818	525	960	921	675	493	266	238	-23	-16	38,991	32,017	10,874	13,923
HSHIP																
SBLK US	1,151	1,211	965	669	1,099	1,188	927	632	112	45	-62	424	32,787	27,288	12,139	8,171
Average	466	513	407	270	428	488	375	259	92	94	18	112	37,137	30,750	11,279	12,078
Median	270	300	233	149	256	288	219	149	69	51	3	58	32,787	27,288	10,874	9,883



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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Company Financials (quarterly estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
2020 NO		27	46	48		22	41	44		19	39	41		17	36	39	
BULK NO	36	52	101	114	23	39	88	100	13	29	77	90	11	27	76	88	
DSX US		74	89	100		48	63	73		38	53	63		31	46	56	
EGLS US		80	125	127		37	83	87		23	69	72		19	66	69	
GNK US		86	141	156		52	106	121		38	92	107		35	90	104	
GOCL US		222	402	442		159	322	365		126	289	332		126	280	323	
HSHIP NO	0	0	0	0	0	-1	-1	-1	0	-1	-1	-1	0	-1	-1	-2	
SBLK US		257	441	488		188	370	418		149	331	379		137	319	367	
Average	18	100	168	184	11	68	134	151	6	52	119	135	5	49	114	131	
Median	18	77	113	120	11	44	86	93	6	33	73	81	5	29	71	79	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
2020 NO		356	354	352		24	25	26		386	385	384		154	157	160	
BULK NO	450	444	438	432	49	25	62	64	539	508	540	535	356	332	371	373	
DSX US		705	713	720		134	147	163		912	932	955		419	450	484	
EGLS US		893	879	865		110	171	221		1,135	1,182	1,219		704	764	813	
GNK US		1,031	1,021	1,011		96	164	189		1,210	1,268	1,283		941	1,008	1,031	
GOCL US		2,820	2,800	2,778		187	362	476		3,334	3,491	3,582		1,901	2,093	2,220	
HSHIP NO	0	125	159	186	0	10	9	7	0	135	168	193	0	91	89	88	
SBLK US		2,981	2,946	2,908		371	571	584		3,623	3,788	3,762		2,051	2,268	2,333	
Average	225	1,169	1,164	1,156	25	120	189	216	269	1,405	1,469	1,489	178	824	900	938	
Median	225	799	796	793	25	103	155	176	269	1,023	1,057	1,087	178	562	607	648	

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	2Q22	3Q22	2Q22	3Q22	
USDm																	
2020 NO		20	39	41		19	39	41		0	1	1	37,306	63,000	15,117	14,102	
BULK NO	21	37	86	99	17	33	82	95	10	-25	38	2	25,947	49,949	10,283	10,246	
DSX US		43	58	68		25	40	50		2	13	16	23,768	28,270	13,224	13,121	
EGLS US		33	80	83		28	80	82		-2	61	50	14,909	22,991	11,026	10,565	
GNK US		49	104	119		43	100	114		5	68	25	20,523	33,023	10,457	10,401	
GOCL US		159	313	356		200	299	345		78	176	114	25,782	45,129	14,193	12,894	
HSHIP NO	0	-1	-1	-2	0	-14	-35	-29	0	-1	-1	-2					
SBLK US		176	358	407		154	354	405		-25	200	12	22,754	37,659	11,229	11,244	
Average	10	65	130	146	8	61	120	138	5	4	69	27	24,427	40,003	12,218	11,796	
Median	10	40	83	91	8	31	81	88	5	0	50	14	23,768	37,659	11,229	11,244	



Cleaves Securities

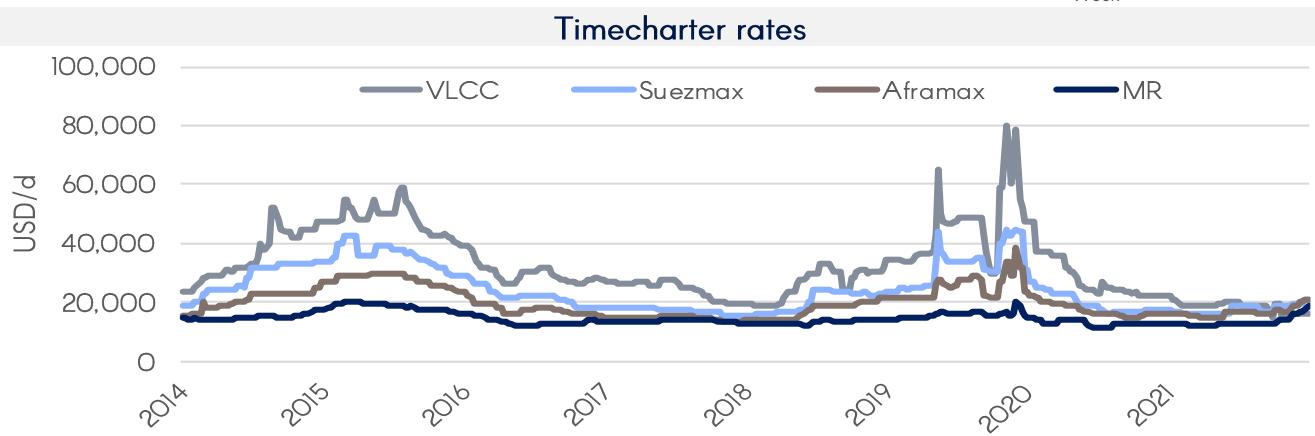
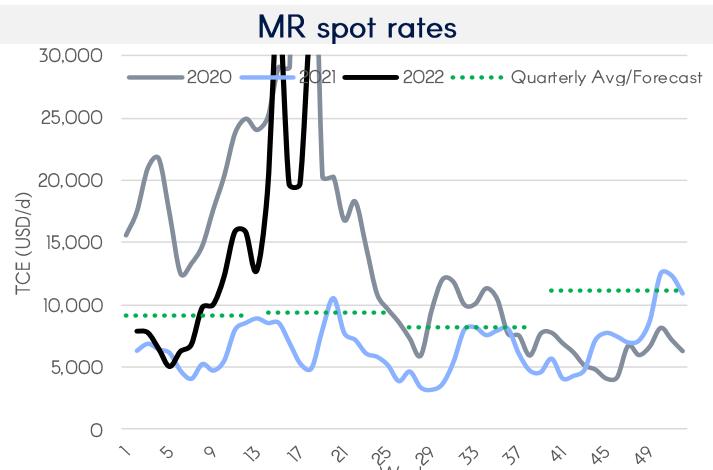
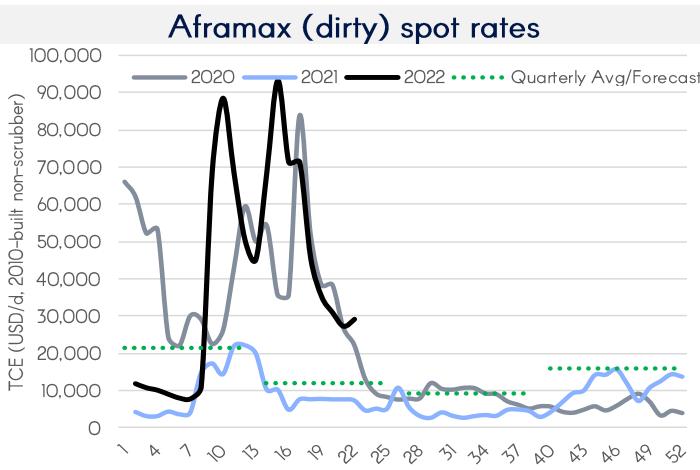
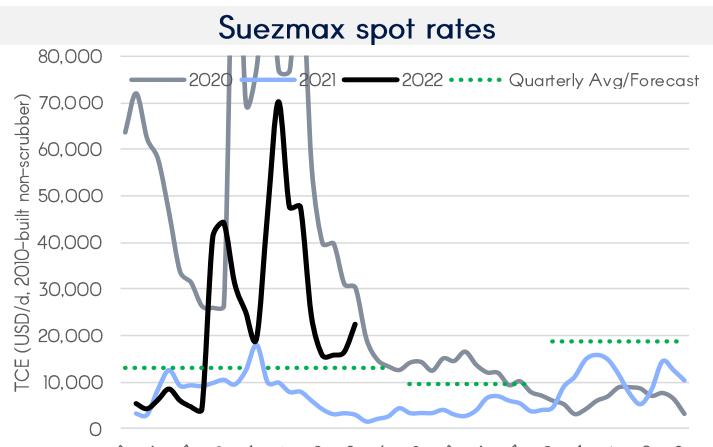
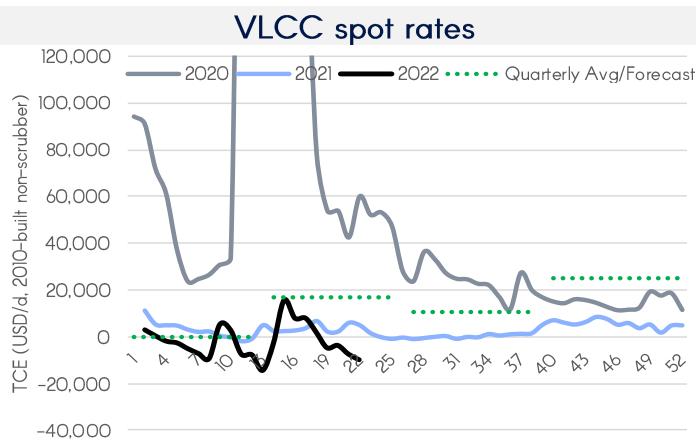
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

Oil Tankers



Earnings





Cleaves Securities

Shipping Weekly 22/2022

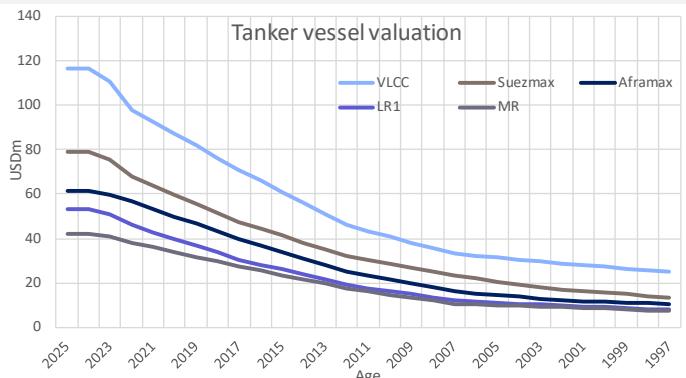
$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Asset Valuation

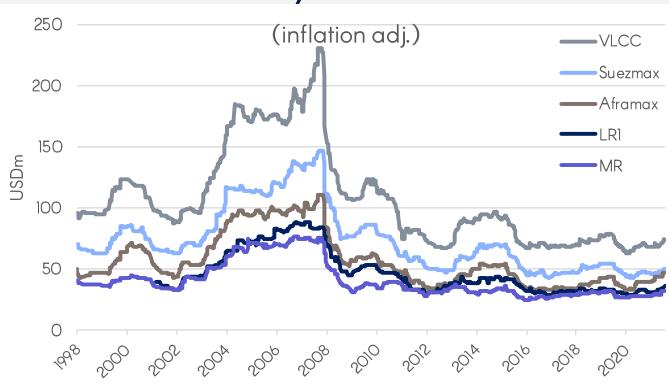
Asset valuation overview

Summary	VLCC	Suezmax	Aframax	LR2	LRI	MR	SR
NB	117.0	79.0	61.5	63.5	53.0	42.0	40.0
resale	98.0	68.0	56.5	58.5	46.0	38.0	34.0
5y	71.0	47.5	40.0	41.5	30.5	27.5	24.0
10y	46.0	32.0	25.0	26.0	19.0	17.5	15.5
15y	33.0	23.0	16.0	17.0	12.0	10.5	9.5
20y	28.8	17.0	11.9	12.4	9.6	8.9	6.6
scrap	24.8	13.3	10.3	10.3	7.9	7.3	4.8
All prices are excluding scrubbers							
NB parity	38,246	28,120	22,576	23,105	19,905	16,760	15,551

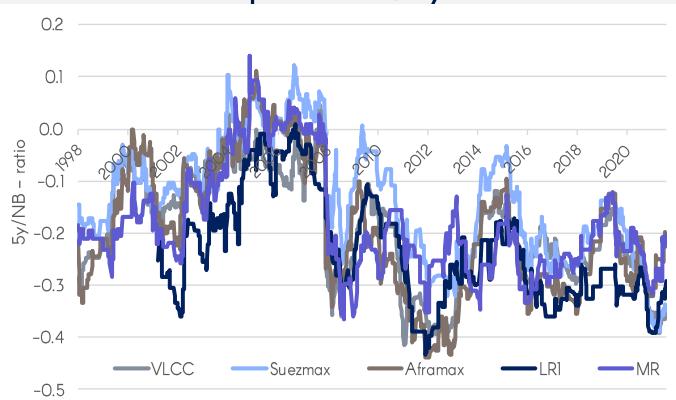
Asset valuation overview



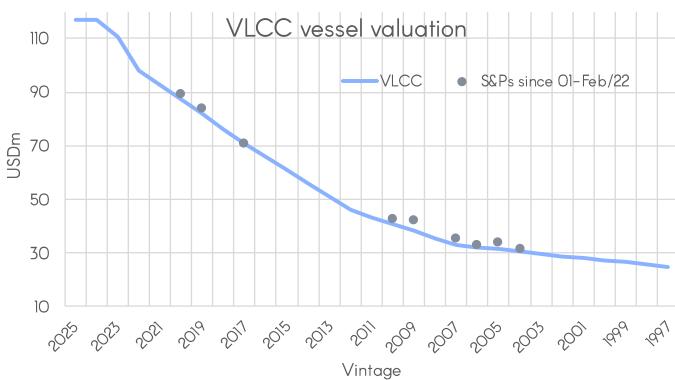
Historical 5y old vessel values



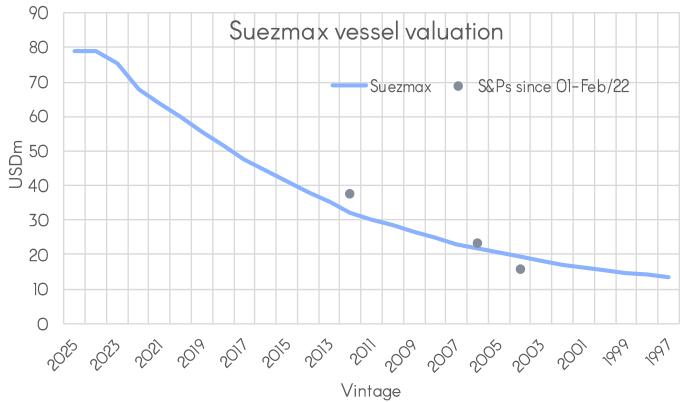
Historical price ratio, 5y/newbuild



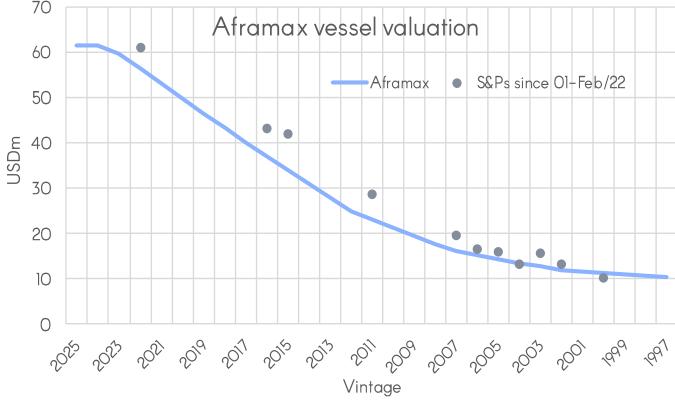
VLCC valuation vs recent S&P



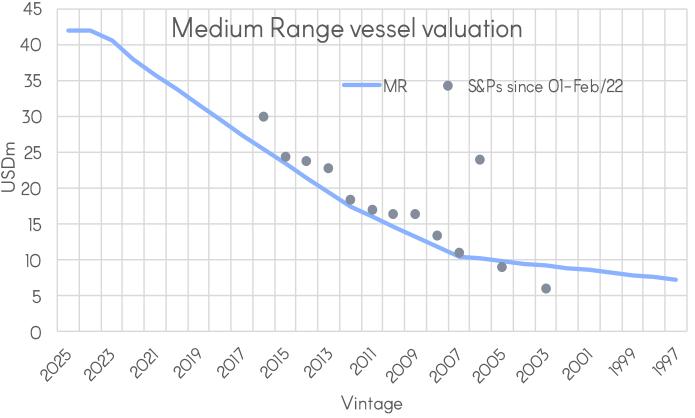
Suezmax valuation vs recent S&P



Aframax valuation vs recent S&P



MR valuation vs recent S&P





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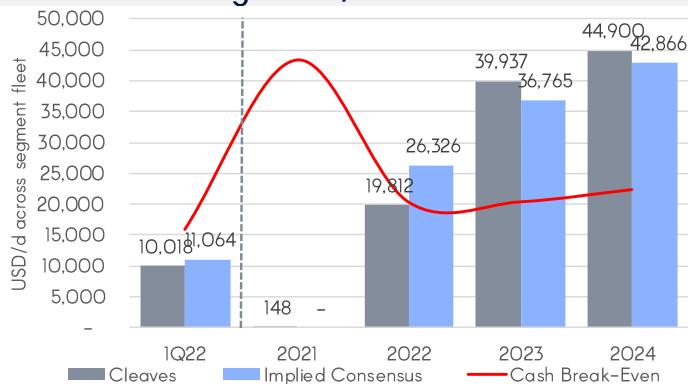
$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

Peer Group

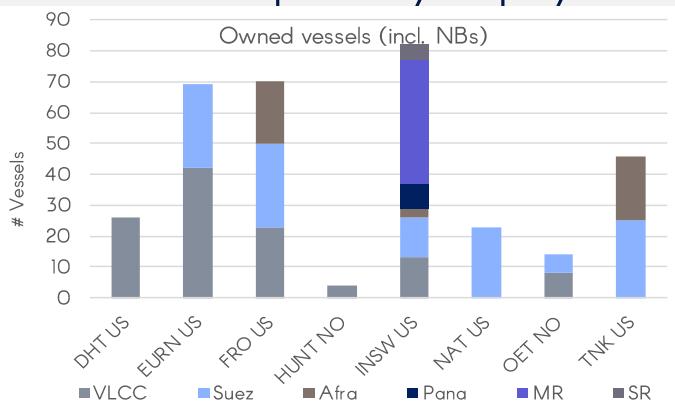
Updated 28 May 19:34 CET				Return 1y	Target Rec.	Target Price	Last Price	Target/ Price /sh	NAV Now	P/NAV 1y fwd	ϵ	EV/ GAV	adj. equity	τ
DHT US	1,019	16.0	-3%	BUY	7.8	6.1	28%	6.3	0.97	0.84	1.39	0.98	65%	0.95
EURN US	2,867	26.9	36%	BUY	13.0	13.0	0%	10.9	1.19	1.07	1.73	1.16	50%	0.86
FRO US	2,326	25.9	34%	BUY	11.0	11.4	-4%	7.2	1.58	1.38	2.70	1.20	33%	1.00
HUNT NO	212	0.9	29%	BUY	4	3.5	9%	4	0.99	0.86	1.70	0.99	53%	1.00
INSW US	129	1.7	32%	BUY	26.0	24.5	6%	30	0.82	0.99	1.63	0.91	51%	0.95
NAT US	447	21.5	-33%	HOLD	1.9	2.3	-17%	2.3	1.01	0.93	1.69	1.01	50%	0.91
OET NO	3,552	3.9	31%	BUY	131.0	108.0	21%	11.5	1.00	0.88	2.88	1.01	33%	0.87
TNK US	76	0.8	41%	BUY	20	21.2	-6%	18	1.17	1.17	1.82	1.08	44%	1.00
Average	1,328		21%				5%		1.09	1.02	1.94	1.04	47%	0.94
Median	733		32%				3%		1.00	0.96	1.71	1.01	50%	0.95

Company	EV/EBITDA			P/E			Dividend yield			FCF yield		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
DHT US	0.2	10.4	2.9	1.2		3.4	41%	1%	11%	82%	10%	35%
EURN US	0.1	20.2	5.0	2.2		4.0	29%	1%	4%	58%	1%	17%
FRO US	0.4	16.7	5.6	2.5	22.3	2.4	32%	1%	8%	44%	-6%	28%
HUNT NO	0.2	13.1	4.6	2.1	16.9	2.7	30%	1%	9%	59%	9%	28%
INSW US	0.2	19.5	4.7	1.5		1.8	39%	1%	9%	46%	-1%	15%
NAT US	0.2	37.9	4.4	2.0		4.5	36%	2%	8%	60%	-15%	28%
OET NO	0.2	12.6	5.2	3.0		2.8	39%	3%	11%	47%	-31%	31%
TNK US	0.6	112.9	3.5	0.6		1.4	49%	0%	6%	43%	0%	36%
Average	0.3	30.4	4.5	1.9	19.6	2.9	37%	1%	8%	55%	-4%	27%
Median	0.2	18.1	4.6	2.0	19.6	2.8	38%	1%	9%	52%	-1%	28%

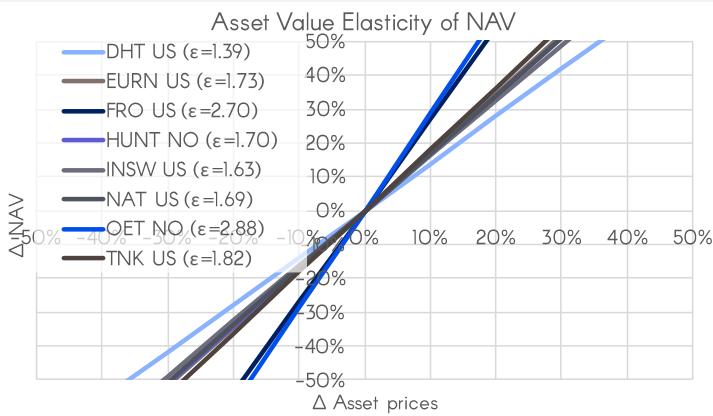
Cleaves' average TCE/d forecast vs consensus



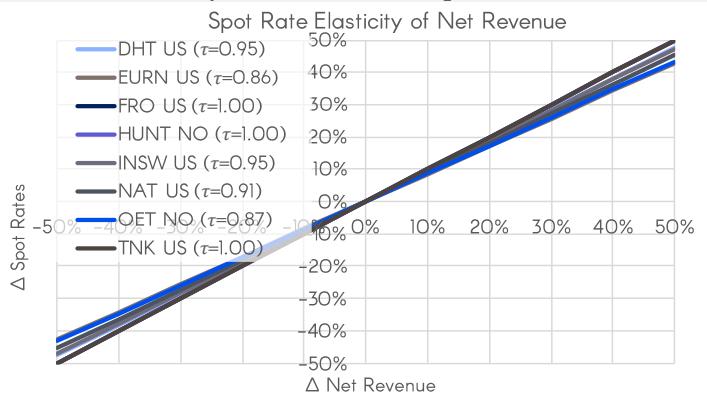
Fleet composition by company



Financial leverage (ϵ)



Operational leverage (τ)



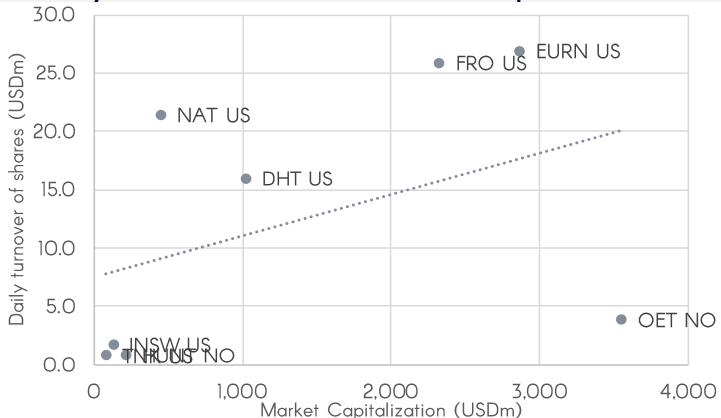


Cleaves Securities

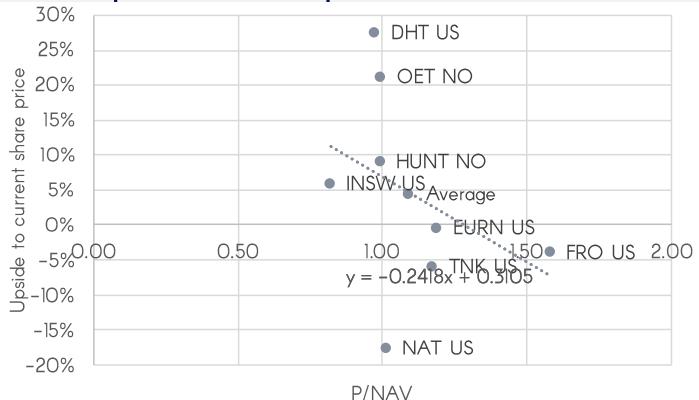
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

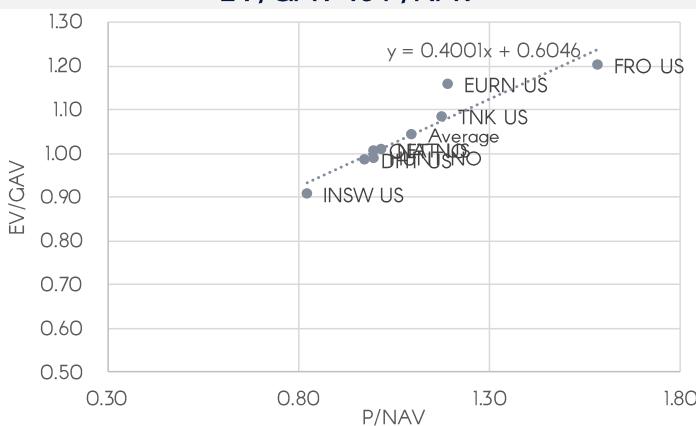
Daily share turnover vs market capitalization



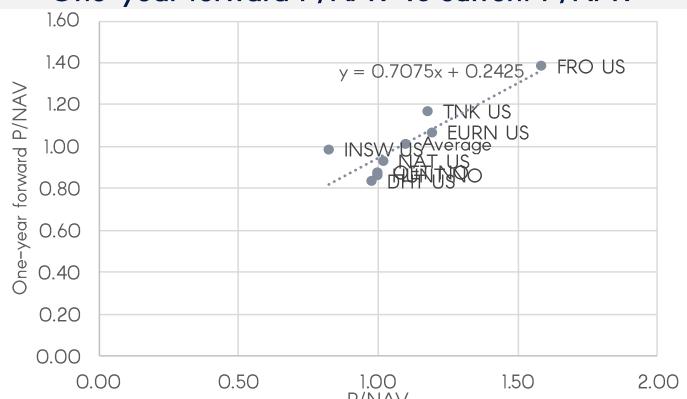
Upside to share price current P/NAV



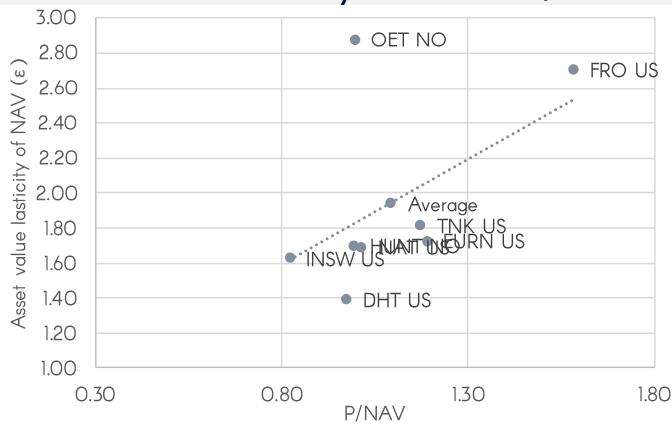
EV/GAV vs P/NAV



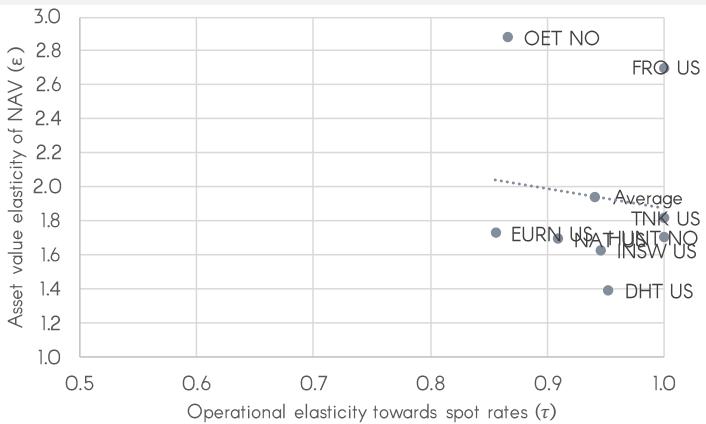
One-year forward P/NAV vs current P/NAV



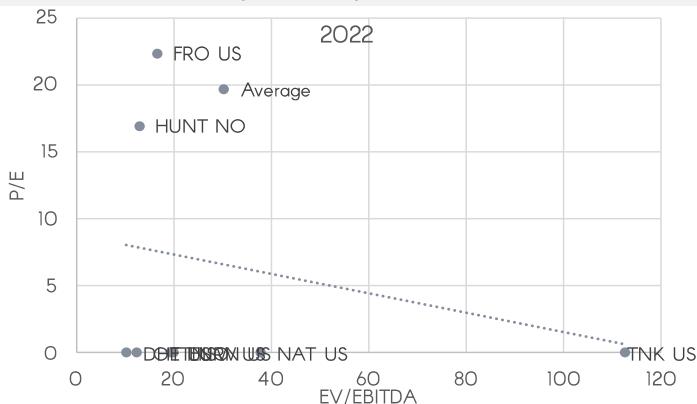
Asset value elasticity of NAV vs P/NAV



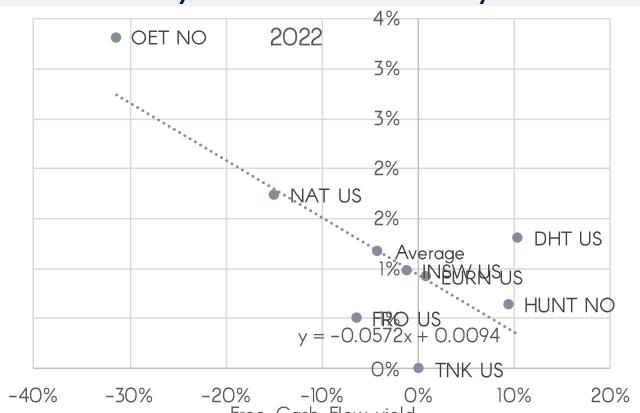
Elasticities: NAV vs net revenue



P/E vs EV/EBITDA



Dividend yield vs free cash flow yield

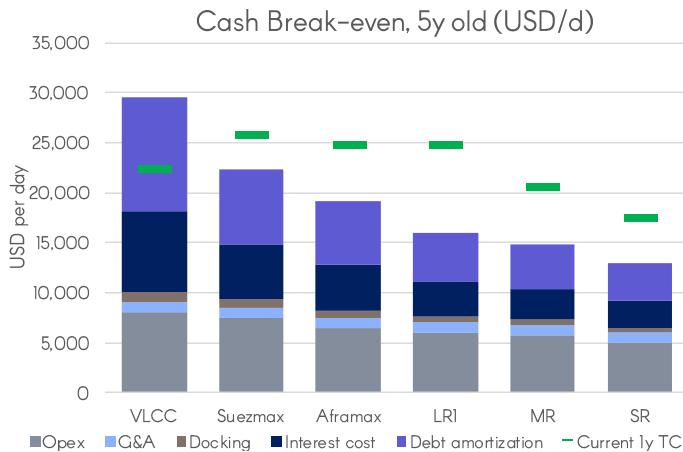


Generic Shipping Accounting

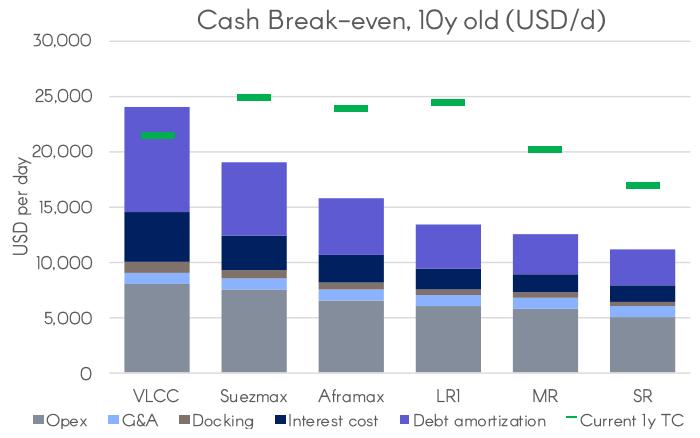
Current vessel economics (5y old)

Current vessel economics (5y old)						
Profit & Loss (USDm)	VLCC	Suezmax	Aframax	LRI	MR	SR
Revenue	8.1	9.4	9.0	9.0	7.5	6.3
Opex/G&A	-3.3	-3.1	-2.7	-2.6	-2.5	-2.2
EBITDA	4.8	6.3	6.3	6.4	5.0	4.1
Depreciation	-2.3	-1.7	-1.5	-1.1	-1.0	-1.0
EBIT	2.5	4.5	4.8	5.3	4.0	3.2
Financials (6% pa)	-3.0	-2.0	-1.7	-1.3	-1.2	-1.0
Net profit	-0.5	2.6	3.1	4.0	2.8	2.1
Balance (USDm)	VLCC	Suezmax	Aframax	LRI	MR	SR
Asset (5y)	71.0	47.5	40.0	30.5	27.5	24.0
Equity (30%)	21.3	14.3	12.0	9.2	8.3	7.2
Debt (70%)	49.7	33.3	28.0	21.4	19.3	16.8
Cash Flow (USDm)	VLCC	Suezmax	Aframax	LRI	MR	SR
Net profit	-0.5	2.6	3.1	4.0	2.8	2.1
Depreciation	2.3	1.7	1.5	1.1	1.0	1.0
Operational CF	1.8	4.3	4.6	5.2	3.9	3.1
Docking accruals	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1
Debt repayments	-4.1	-2.8	-2.3	-1.8	-1.6	-1.4
Net Cash Flow	-2.7	1.2	2.0	3.2	2.1	1.6
Key Ratios	VLCC	Suezmax	Aframax	LRI	MR	SR
EV/EBITDA	14.7	7.6	6.4	4.7	5.5	5.8
EV/EBIT	28.3	10.4	8.4	5.7	6.9	7.6
P/E	-44.7	5.6	3.9	2.3	2.9	3.4
ROE	-2%	18%	26%	44%	34%	30%
ROCE	4%	10%	12%	17%	15%	13%
FCF yield	7%	28%	36%	54%	44%	41%
Variables	VLCC	Suezmax	Aframax	LRI	MR	SR
1y TC (USD/d)	22,500	26,000	25,000	25,000	20,750	17,500
Opex (USD/d)	-8,000	-7,500	-6,500	-6,000	-5,750	-5,000
G&A (USD/d)	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000
Docking (USD/d)	-1,000	-800	-700	-600	-500	-400
<i>Assumptions: 25 years life, depreciated to scrap, 360 revenue days, 365 opex days, 12 years debt amortization</i>						
Cash Break-even, 5y old (USD/d)	VLCC	Suezmax	Aframax	LRI	MR	SR
Opex	8,000	7,500	6,500	6,000	5,750	5,000
G&A	1,000	1,000	1,000	1,000	1,000	1,000
Docking	1,000	800	700	600	500	400
Interest cost	8,170	5,466	4,603	3,510	3,164	2,762
Debt amortization	11,347	7,591	6,393	4,874	4,395	3,836
Cash Break-even	29,517	22,357	19,195	15,984	14,809	12,997
Current 1y TC	22,500	26,000	25,000	25,000	20,750	17,500
NB parity rate	38,246	28,120	22,576	19,905	16,760	15,551

Cash break-even vs 1y TC on a 5y old vessel



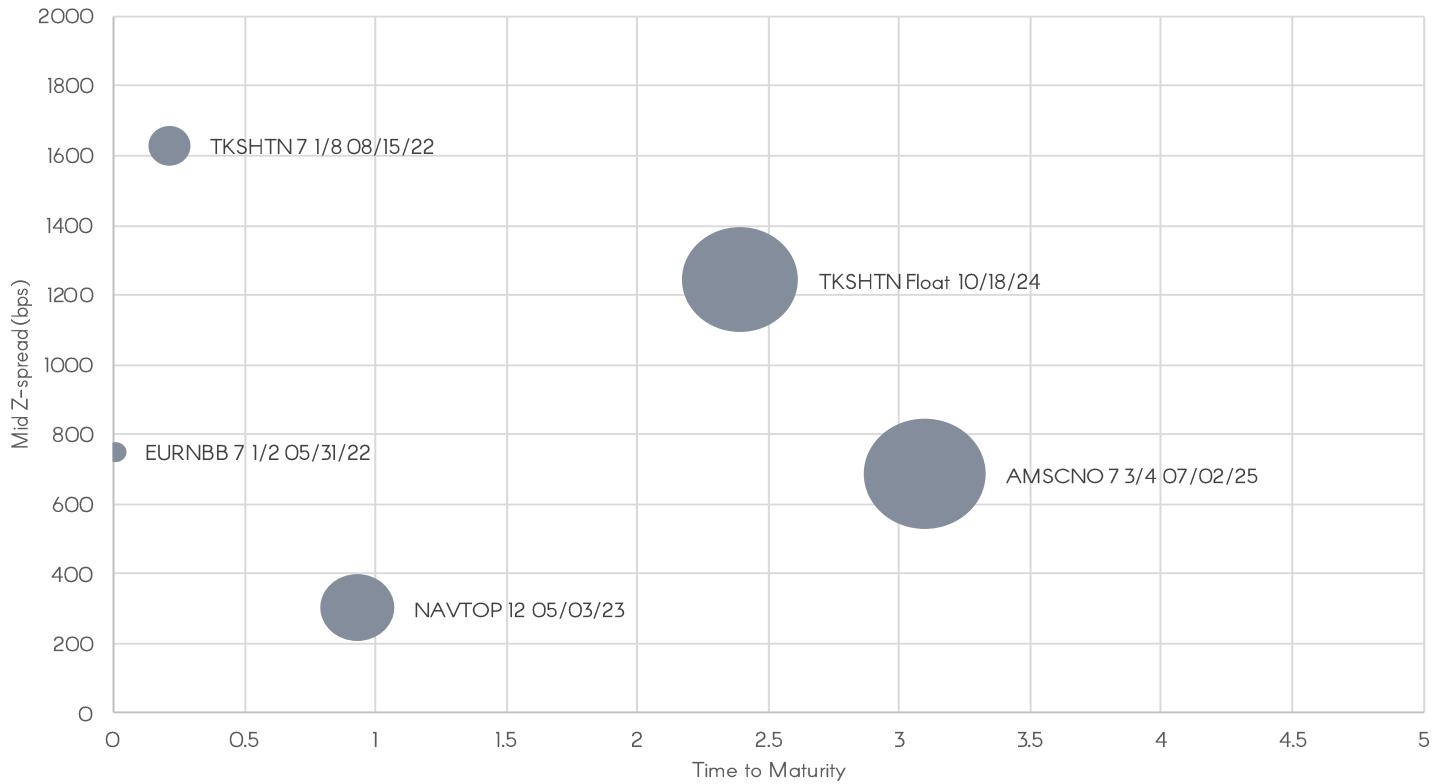
Cash break-even vs 1y TC on a 10y old vessel





The Credit Market

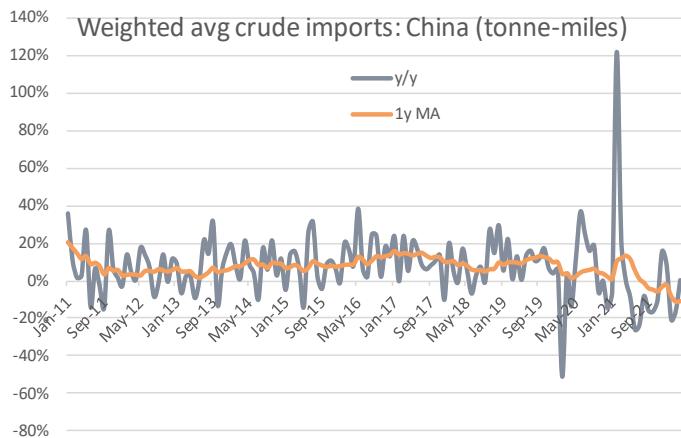
Oil Tanker bond pricing (by amount outstanding)



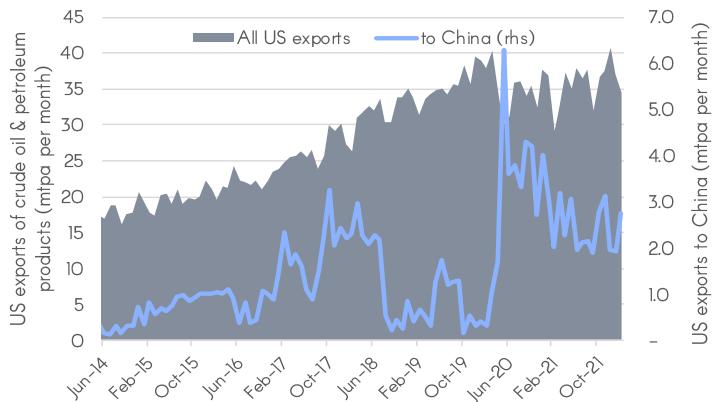


Market Snapshots

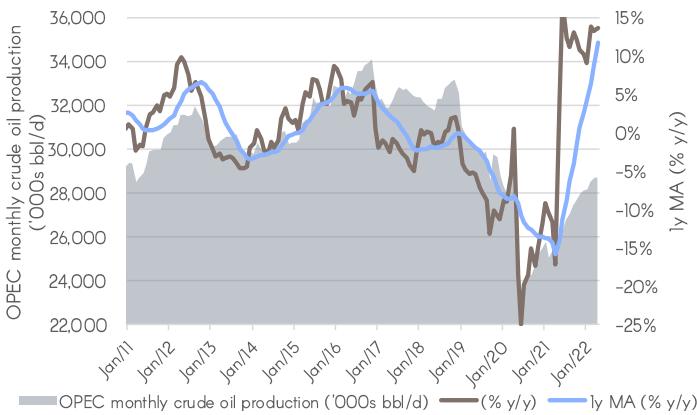
Chinese crude oil imports



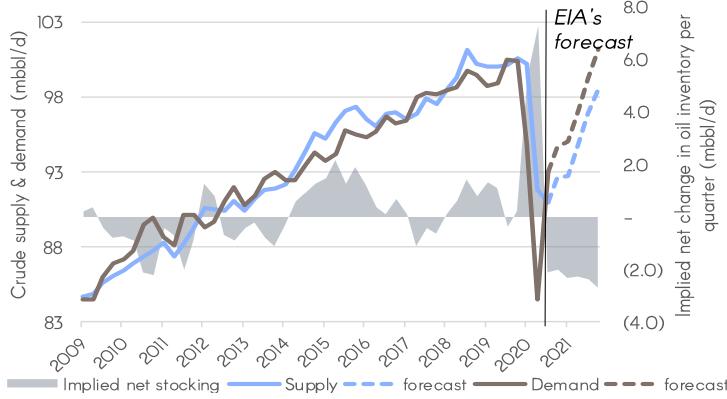
US petroleum exports



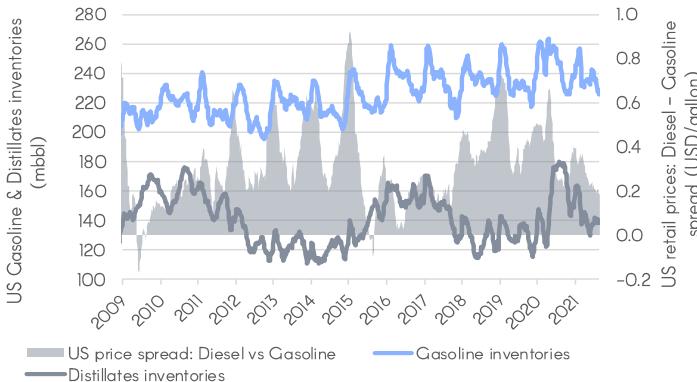
OPEC monthly crude oil production



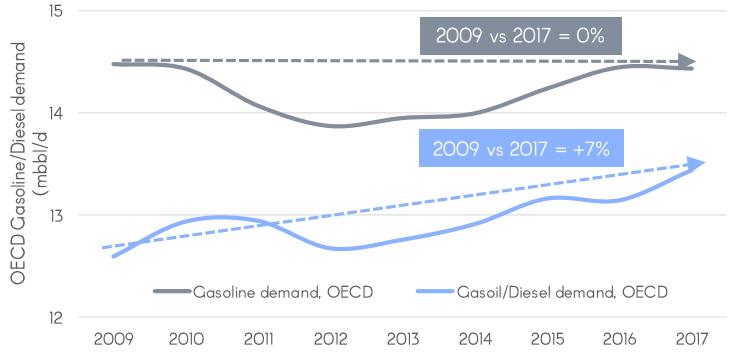
Global oil supply/demand & implied net stocking



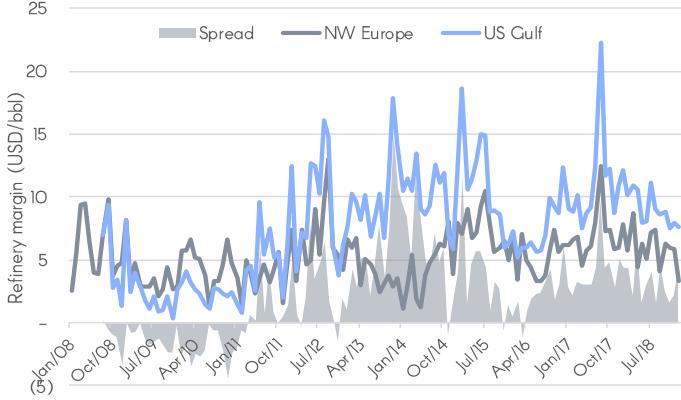
US light/sweet crude => less diesel



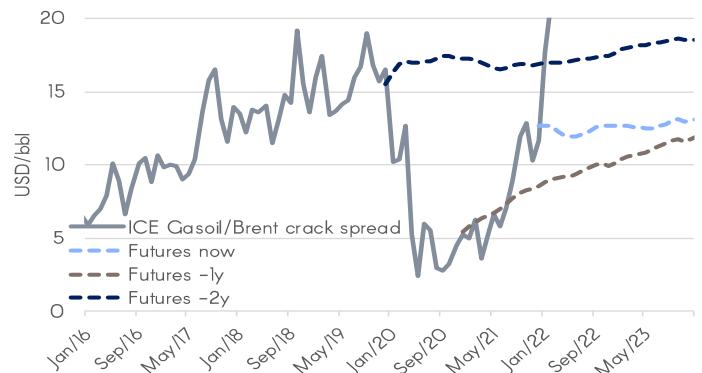
OECD demand for diesel outpacing gasoline



Refinery margins (FCC), US Gulf vs NW Europe

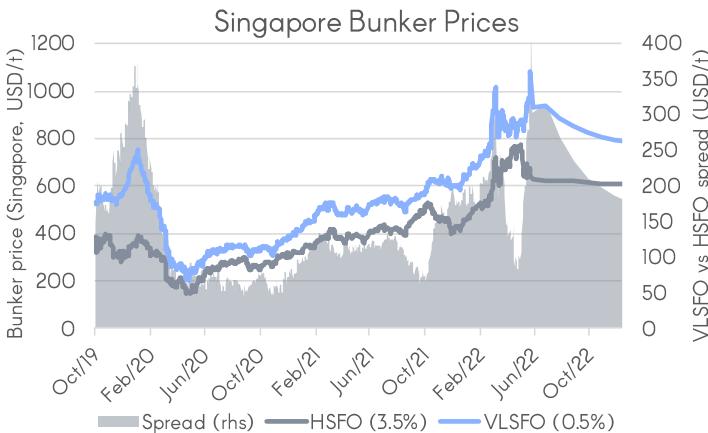


Gasoil crack spread futures

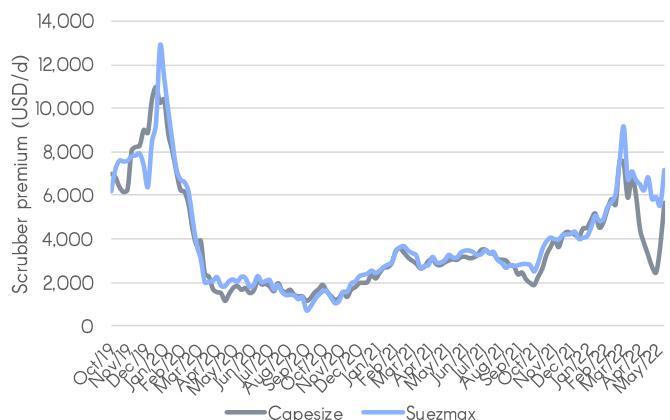


IMO 2020 Sulphur Regulations

VLSFO vs HSFO in Singapore: Spot & futures



Scrubber premium for selected vessel classes



Scrubber economics

Dry bulk scrubber economics (2010-built)

(USDm)	Capesize	Kamsarmax	Supramax
Cost of scrubber installation	-2.8	-2.6	-2.6
Offhire "cost"	-1.2	-1.0	-1.3
Annual savings	2.1	1.0	0.8
Payback time (years)	1.9	3.6	4.6
VLSFO/HSFO spread from futures market	236		
Fuel consumption per day at sea, 2010-built (t)	43	24	22
Voyage days per annum	250	225	200
Scrubber running costs* (USD per calendar day)	-1,274	-675	-578
Savings per day at sea (USD/d)	8,296	4,455	4,141
Savings per calendar day (USD/d)	5,682	2,746	2,269

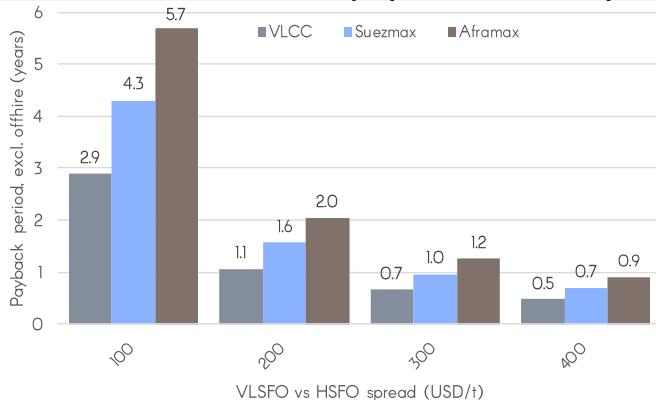
* Reflects added energy consumption & maintenance capex

Oil tanker scrubber economics (2010-built)

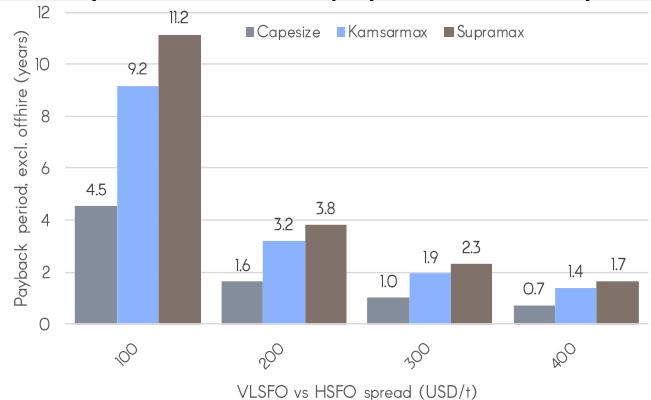
(USDm)	VLCC	Suezmax	Aframax
Cost of scrubber installation	-3.2	-3.1	-2.9
Offhire "cost"	0.7	-0.5	-1.3
Annual savings	3.7	2.4	1.8
Payback time (years)	0.7	1.5	2.4
VLSFO/HSFO spread from futures market	236		
Fuel consumption per day at sea, 2010-built (t)	65	45	35
Voyage days per annum	292	276	260
Scrubber running costs* (USD per calendar day)	-2,176	-1,457	-1,093
Savings per day at sea (USD/d)	12,632	8,702	6,732
Savings per calendar day (USD/d)	10,106	6,580	4,795

* Reflects added energy consumption & maintenance capex

Oil tankers: Scrubber payback sensitivity



Dry bulk: Scrubber payback sensitivity



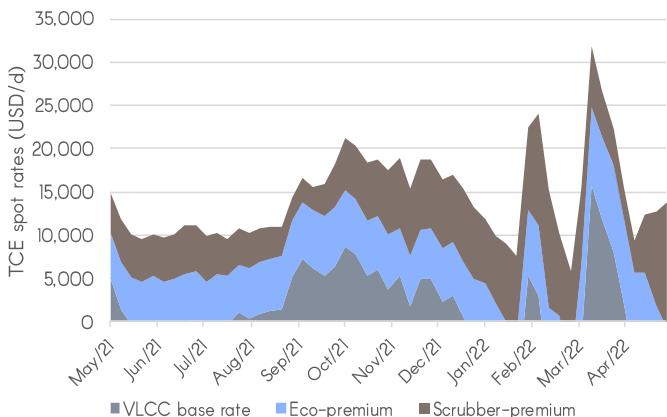


Cleaves Securities

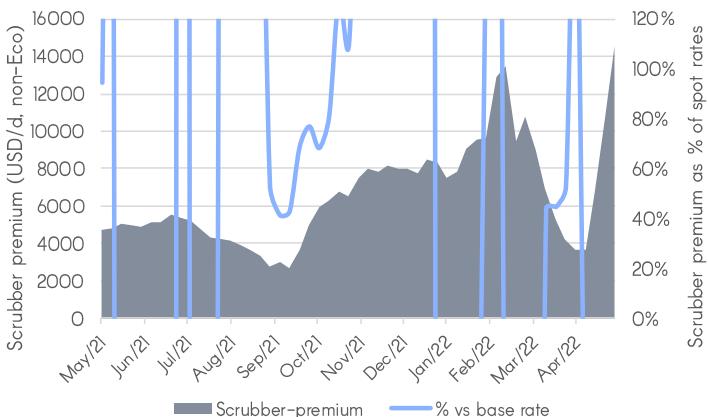
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

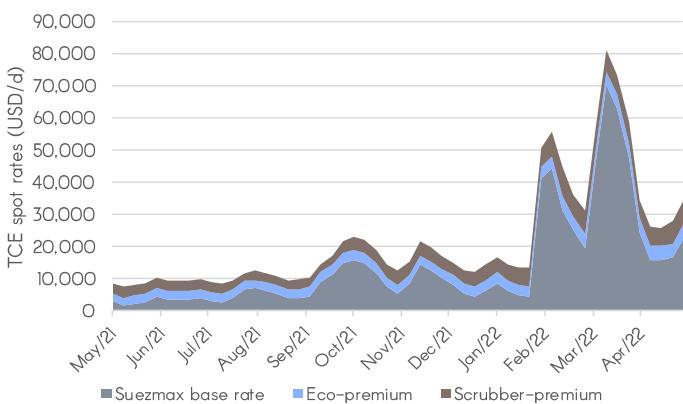
VLCC spot rate breakdown



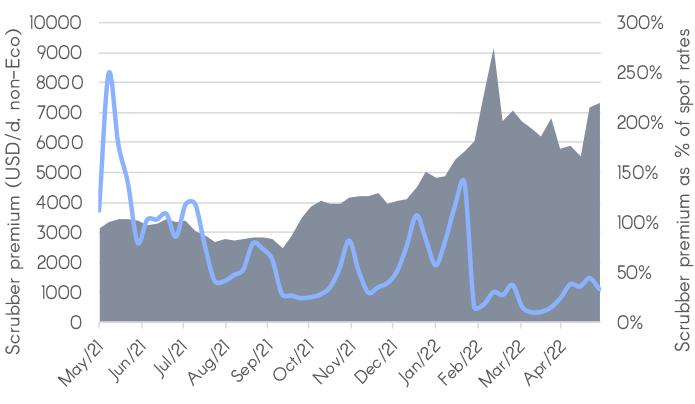
VLCC spot rate scrubber premium



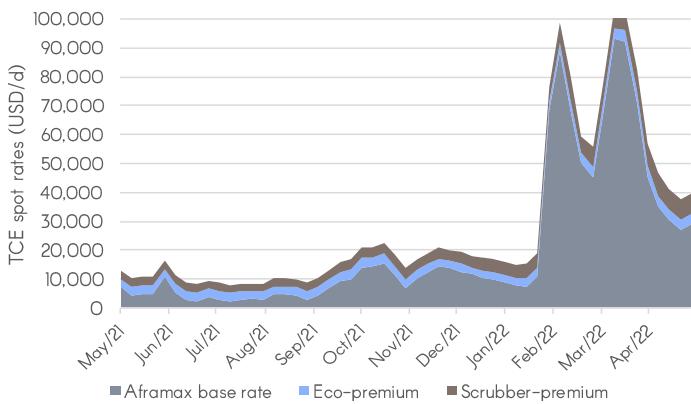
Suezmax spot rate breakdown



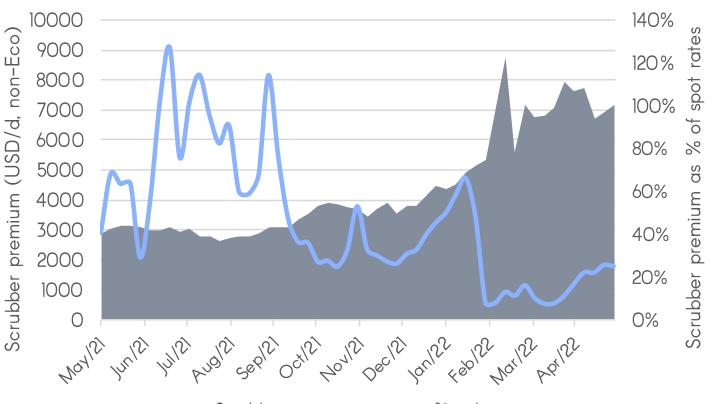
Suezmax spot rate scrubber premium



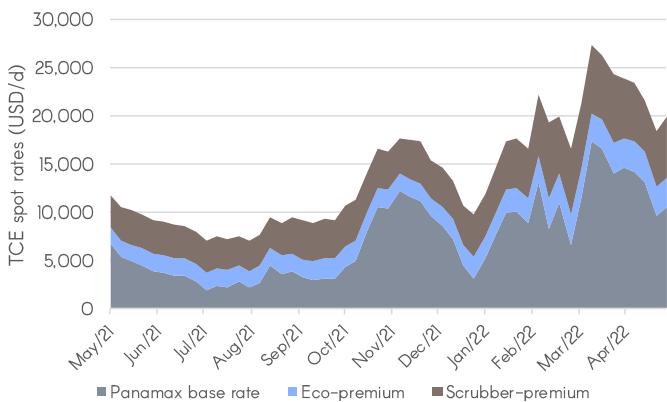
Aframax spot rate breakdown



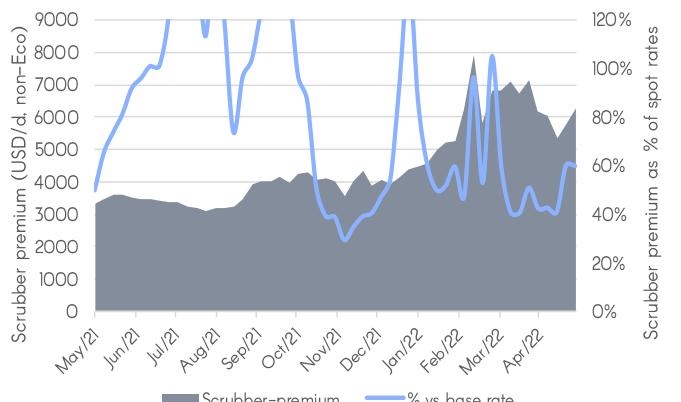
Aframax spot rate scrubber premium



Panamax (dirty) spot rate breakdown



Panamax (dirty) spot rate scrubber premium



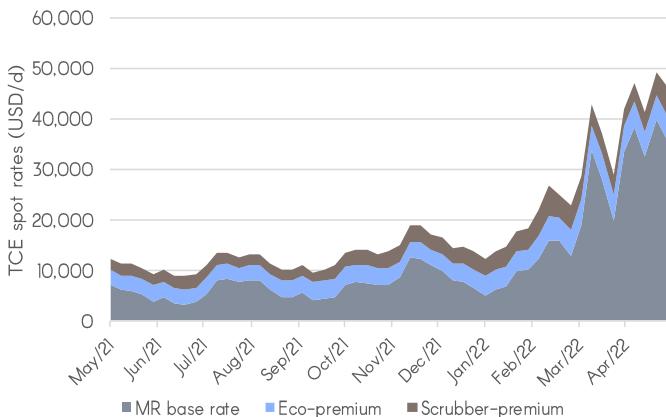


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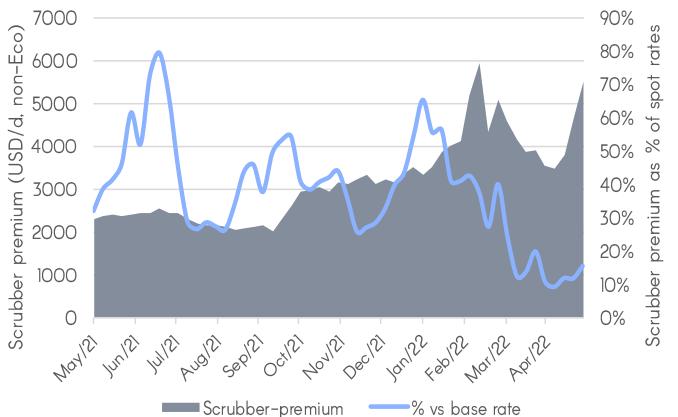
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

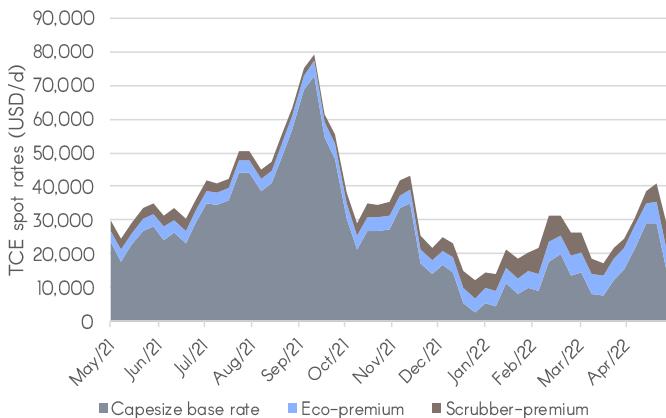
MR spot rate breakdown



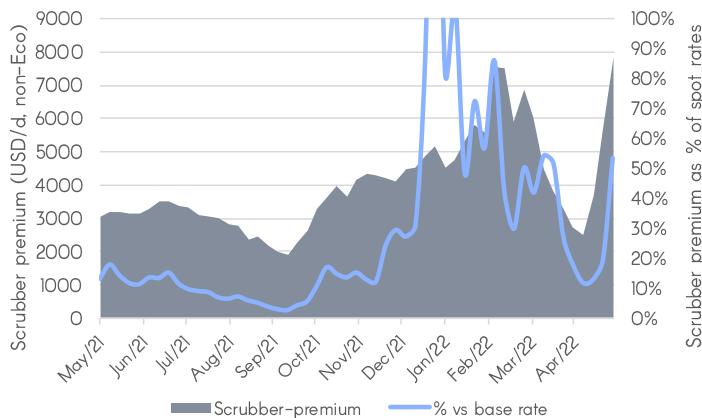
MR spot rate scrubber premium



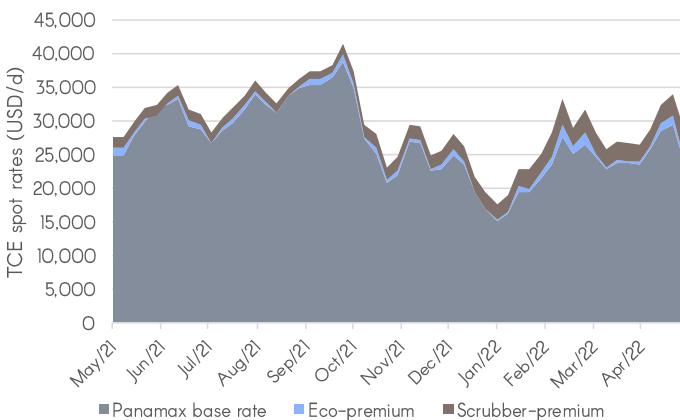
Capesize spot rate breakdown



Capesize spot rate scrubber premium



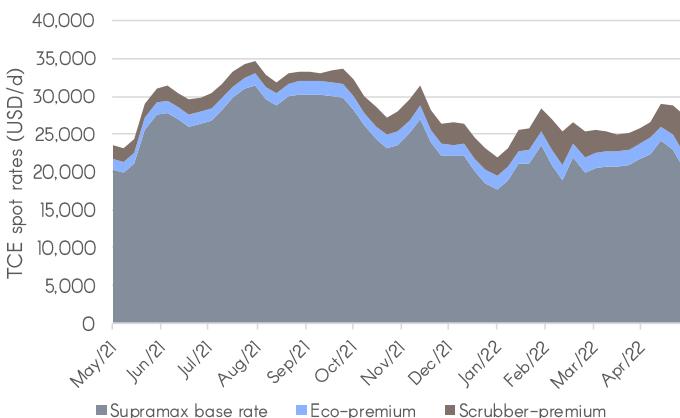
Panamax spot rate breakdown



Panamax spot rate scrubber premium



Supramax spot rate breakdown



Supramax spot rate scrubber premium



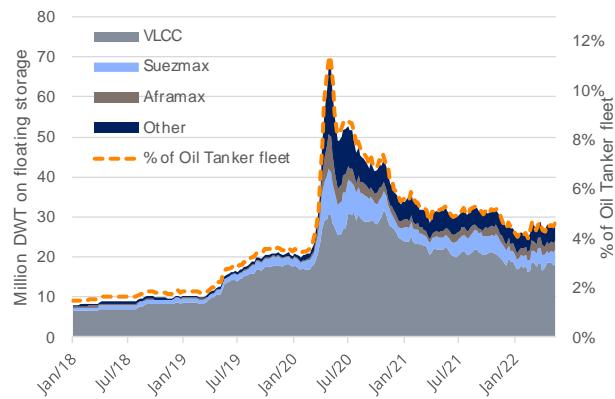
Oil Tanker Storage Economics

VLCC & Suezmax floating storage economics

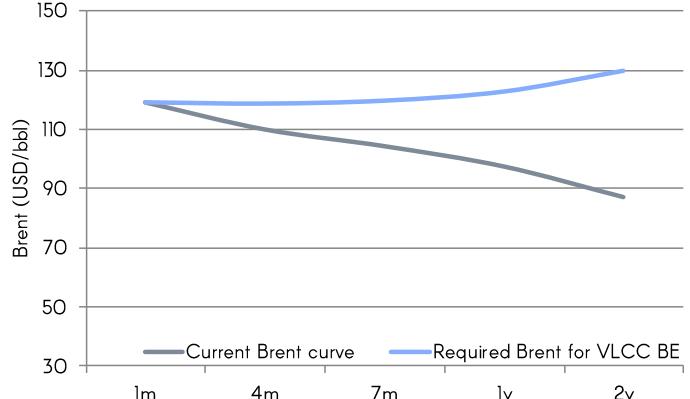
Crude tanker storage arbitrage (excl. cost of carry)

	1m	4m	7m	1y	2y
Brent (USD/bbl)	119.3	110.2	104.5	97.6	87.3
Time-spread against 1m		-9.1	-14.8	-21.7	-32.0
Profit/loss from storage at current rates (USDm)					
VLCC		-18.3	-32.3	-53.1	-89.3
Suezmax		-11.2	-18.7	-28.4	-50.2
Required Brent fwd price for VLCC break-even					
Brent (USD/bbl)	119.3	118.9	119.9	122.9	129.8
Time-spread against 1m		-0.4	0.6	3.6	10.5
Required tanker rates for storage to break-even					
VLCC		(210,691)	(170,625)	(136,211)	(96,230)
Suezmax		(100,329)	(81,250)	(64,862)	(45,824)

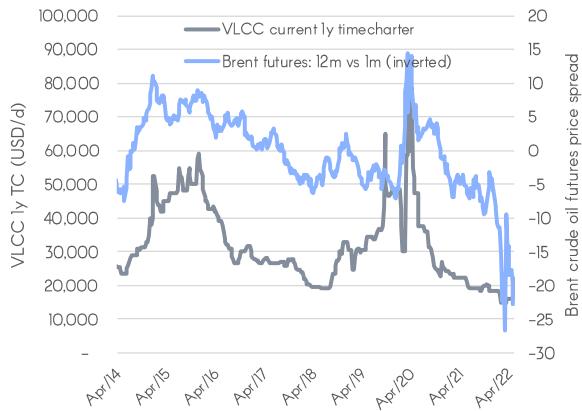
Oil Tanker floating storage



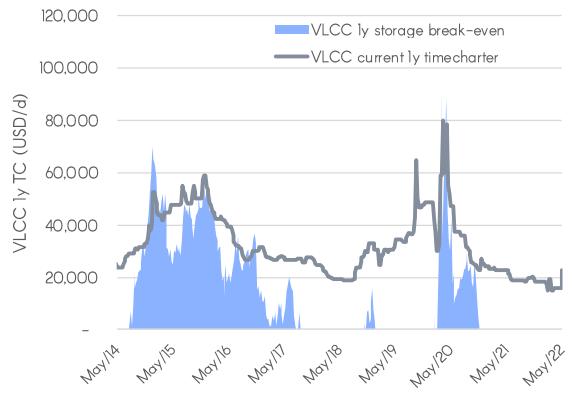
VLCC floating storage economics



Brent oil futures contango vs VLCC 1y TC

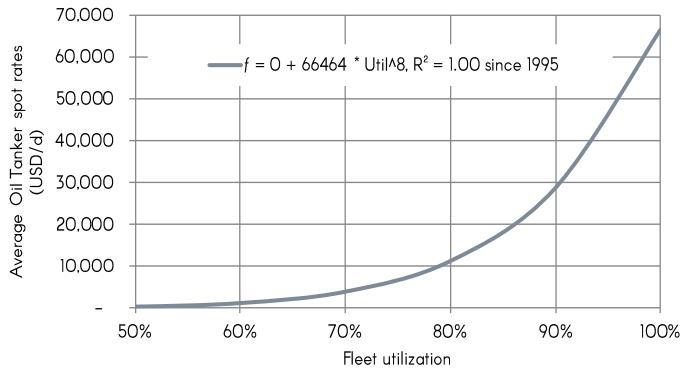


VLCC 1y floating storage breakeven vs 1y TC

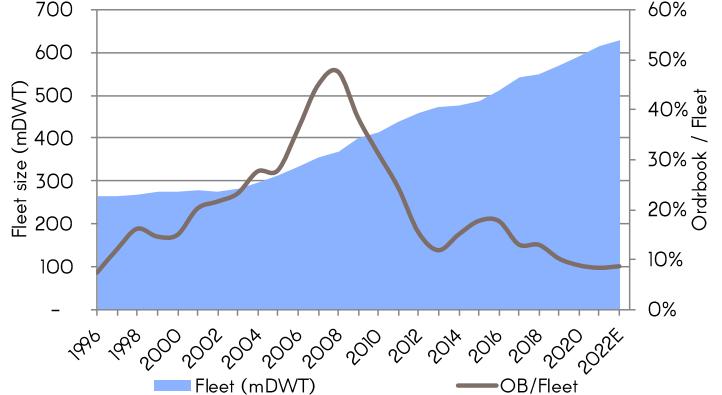


Market Fundamentals

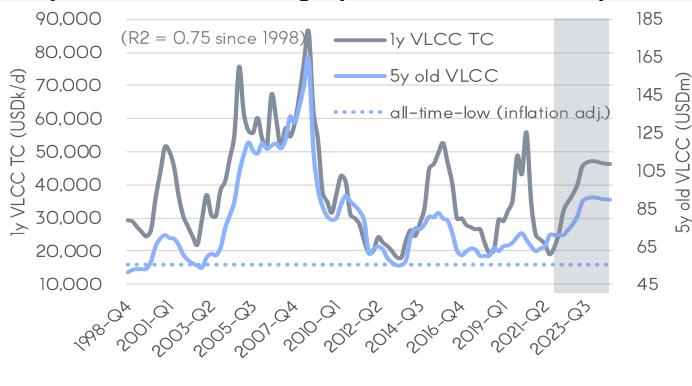
Econometrics: Spot rates vs fleet utilization



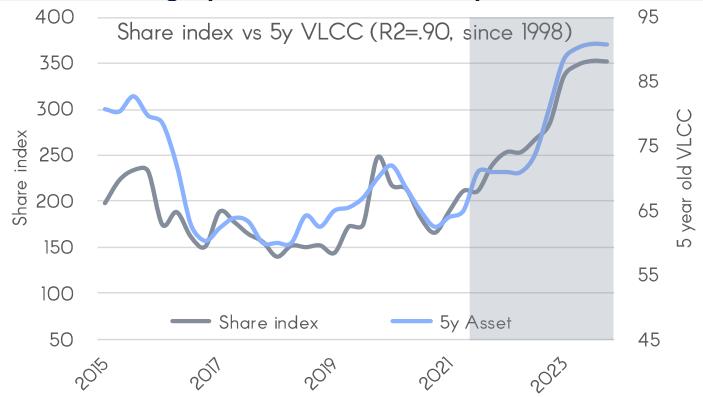
Orderbook vs fleet



5y vessel values highly correlated with 1y TC



Shares highly correlated with 5y vessel values





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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

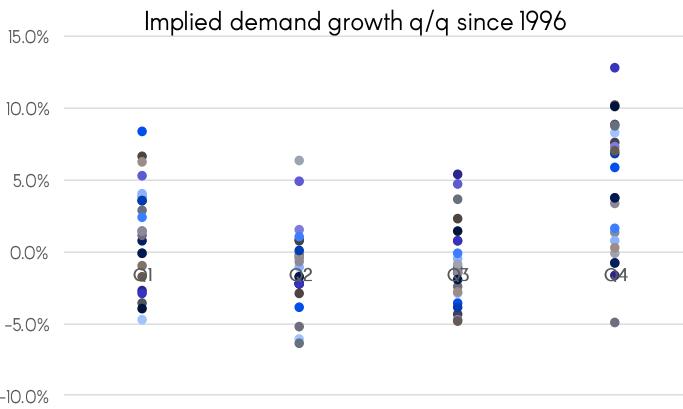
Market Overview

Annual view		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Base case		VLCC, spot ^a (TCE/d)	58,795	97,152	28,434	34,060	18,596	21,187	18,621	30,015	64,846	41,908	17,794	15,561	41,364	53,145	3,177	13,176	45,621	53,075	51,547
Suezmax, spot ^a (TCE/d)	43,437	73,863	25,733	27,864	18,432	16,908	15,511	27,791	46,713	27,799	15,436	16,466	31,560	30,240	7,272	13,588	31,969	36,805	35,813		
Aframax, spot ^a (TCE/d)	33,311	50,010	14,370	17,690	12,378	12,541	14,131	24,705	37,977	23,142	13,873	16,175	26,225	22,161	8,187	14,536	25,006	28,382	27,690		
LR2, spot ^a (TCE/d)	23,704	41,305	16,926	16,080	13,331	14,172	13,683	18,302	30,497	16,567	10,077	11,002	22,045	28,582	7,687	11,004	22,901	25,567	25,020		
Panamax, spot ^a (TCE/d)	33,029	38,574	10,538	12,393	8,593	11,671	11,127	18,858	26,548	15,495	10,184	9,739	16,681	14,392	5,359	9,069	20,224	23,137	22,540		
LRL, spot ^a (TCE/d)	24,194	34,854	13,676	12,041	10,207	12,890	12,951	15,232	24,847	12,923	8,247	8,397	15,147	19,858	7,029	10,310	19,657	21,741	21,314		
MR, spot ^a (TCE/d)	23,669	21,168	9,176	10,692	10,638	10,589	13,277	12,360	21,405	12,166	10,220	8,750	13,740	15,251	6,719	9,453	15,409	16,960	16,642		
SR, spot ^a (TCE/d)	31,942	32,792	5,319	11,232	9,566	10,592	10,668	12,473	22,094	9,049	7,380	6,734	14,560	13,881	7,831	10,591	16,904	19,547	19,005		
VLCC, 5y ^a (USDm)	126	142	85	87	77	63	56	74	81	68	62	62	67	67	68	73	94	98	97		
Suezmax, 5y ^a (USDm)	90	95	61	62	54	45	40	50	60	49	41	41	46	46	45	49	62	64	63		
Aframax, 5y ^a (USDm)	68	71	44	44	39	31	29	39	46	36	30	31	36	37	37	40	49	51	50		
LR2, 5y ^a (USDm)	69	72	45	46	40	32	30	40	47	38	32	32	37	39	39	41	50	52	51		
Panamax, 5y ^a (USDm)	57	57	36	37	33	25	26	31	34	31	26	26	28	30	29	29	35	37	36		
LRL, 5y ^a (USDm)	58	58	38	39	35	26	28	33	36	33	27	28	30	32	30	31	36	38	38		
MR, 5y ^a (USDm)	50	50	29	27	29	25	26	27	28	25	24	25	27	27	26	26	28	30	30		
SR, 5y ^a (USDm)	43	44	25	24	26	23	23	24	25	22	21	23	25	24	24	24	30	33	32		
Quarterly view		3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	
Base case		VLCC, spot ^a (TCE/d)	23,711	15,404	3,989	2,837	503	5,378	(11)	16,644	10,823	25,249	50,426	43,498	37,258	51,303	63,128	53,021	42,381	53,770	61,730
Suezmax, spot ^a (TCE/d)	12,229	6,455	9,156	5,177	4,207	10,547	13,045	13,167	9,390	18,750	35,086	30,591	26,542	35,655	43,327	36,770	29,866	37,255	42,420		
Aframax, spot ^a (TCE/d)	8,698	5,713	10,527	7,648	3,479	11,093	21,245	11,879	9,242	15,777	27,183	24,044	21,217	27,580	32,936	28,358	23,538	28,697	32,303		
LR2, spot ^a (TCE/d)	11,971	11,350	5,563	6,994	8,380	9,809	5,406	12,538	10,456	15,615	24,619	22,142	19,910	24,933	29,162	25,547	21,742	25,815	28,662		
Panamax, spot ^a (TCE/d)	4,918	3,135	2,582	8,464	2,995	7,396	8,498	8,897	6,621	12,260	22,102	19,394	16,954	22,445	27,067	23,116	18,957	23,409	26,520		
LRL, spot ^a (TCE/d)	7,993	9,282	5,708	6,920	7,275	8,214	5,841	11,555	9,927	13,916	21,001	19,063	17,319	21,246	24,552	21,726	18,751	21,935	24,161		
MR, spot ^a (TCE/d)	9,062	6,432	6,339	6,880	5,809	7,847	9,091	9,381	8,170	11,171	16,409	14,968	13,669	16,591	19,051	16,948	14,735	17,104	18,760		
SR, spot ^a (TCE/d)	4,993	1,703	7,372	6,598	4,292	13,064	21,492	6,629	4,564	9,680	18,608	16,151	13,938	18,919	23,112	19,528	15,755	19,794	22,616		
VLCC, 5y ^a (USDm)	65	63	64	65	71	71	71	71	71	80	89	93	96	98	99	99	98	97	97		
Suezmax, 5y ^a (USDm)	45	43	42	44	48	48	48	48	48	53	59	61	63	64	65	65	64	64	64		
Aframax, 5y ^a (USDm)	36	35	35	37	39	39	39	39	39	41	46	48	50	51	51	51	50	50	50		
LR2, 5y ^a (USDm)	38	36	36	38	41	41	41	41	41	43	47	50	51	52	52	52	52	52	52		
Panamax, 5y ^a (USDm)	30	29	29	29	30	29	29	29	29	31	34	34	35	36	37	37	36	36	36		
LRL, 5y ^a (USDm)	32	30	30	30	31	31	31	31	31	32	35	36	37	38	38	38	38	38	38		
MR, 5y ^a (USDm)	27	26	26	26	26	26	26	26	26	25	26	28	29	30	30	30	30	30	30		
SR, 5y ^a (USDm)	24	23	23	23	24	24	24	24	24	26	29	29	31	32	33	33	33	33	33		

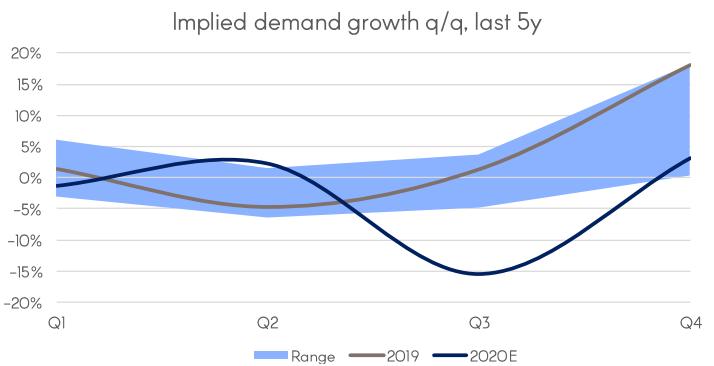
^a Average during period

Seasonality

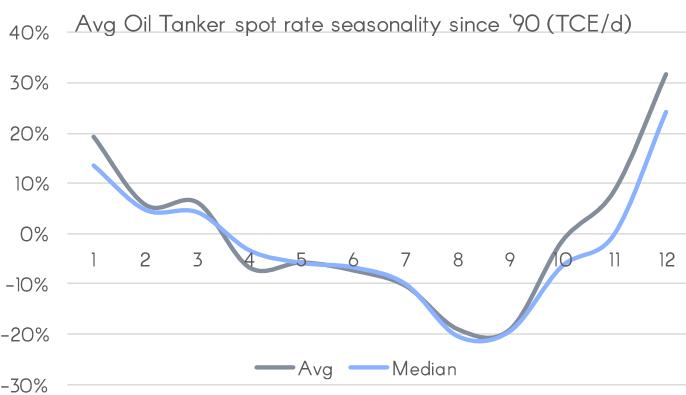
Historically strong demand growth in 4Q



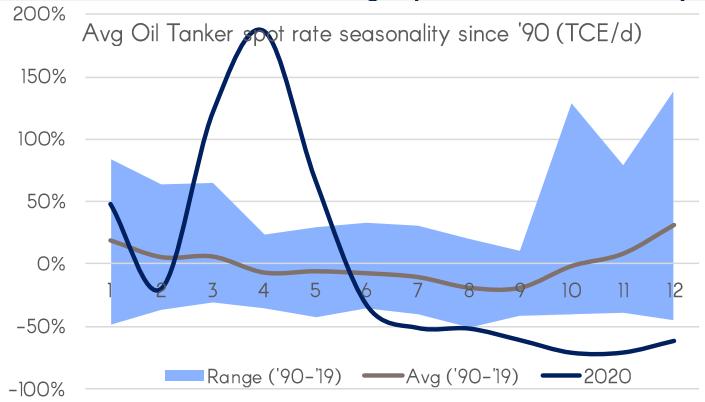
Historic demand growth



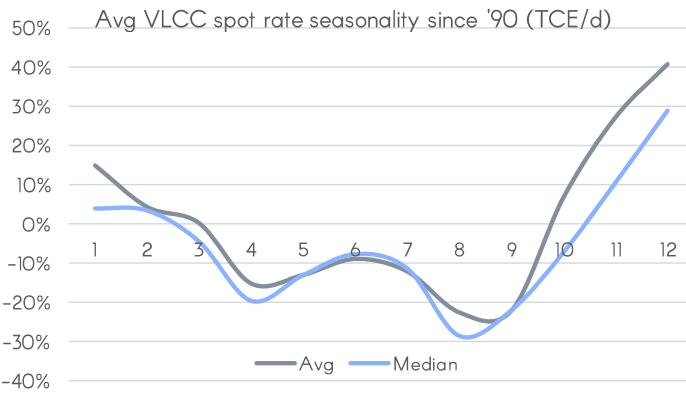
Historical Oil Tanker avg. spot rate seasonality



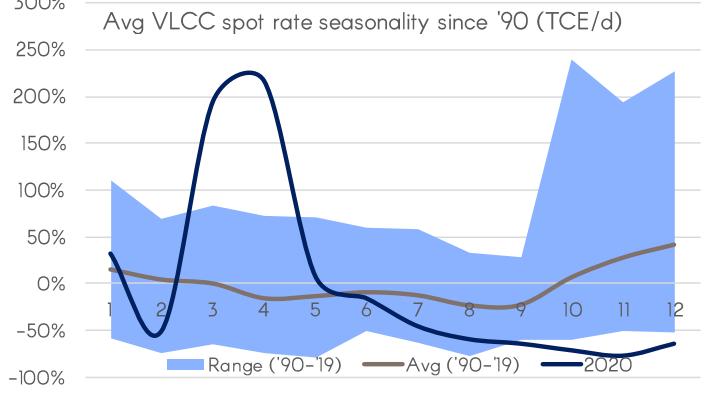
Historical Oil Tanker avg. spot rate seasonality



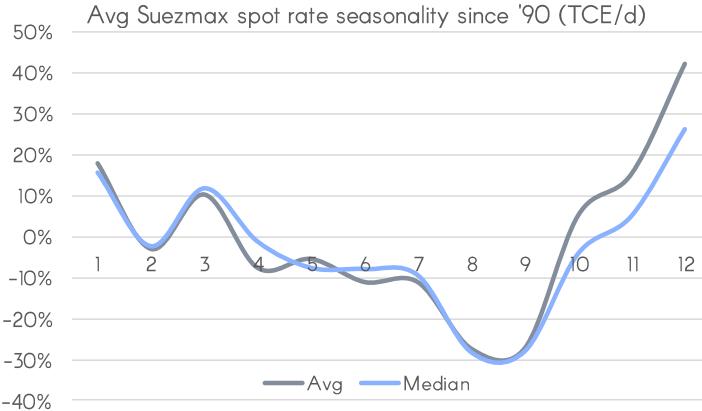
Historical VLCC spot rate seasonality



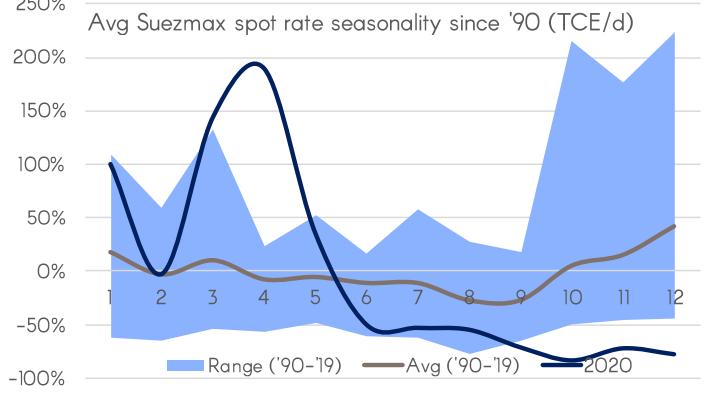
Historical VLCC spot rate seasonality



Historical Suezmax spot rate seasonality



Historical Suezmax spot rate seasonality



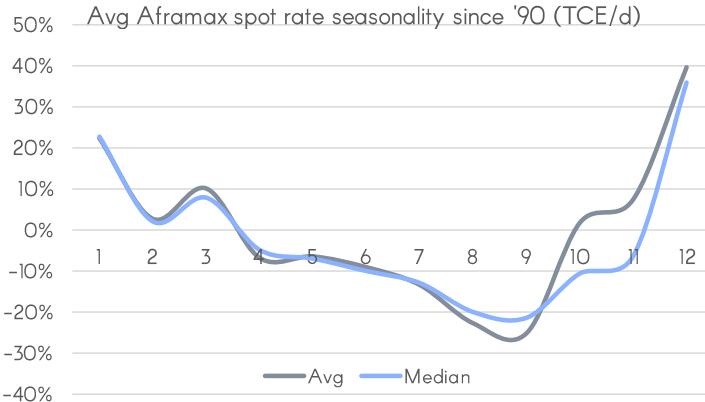


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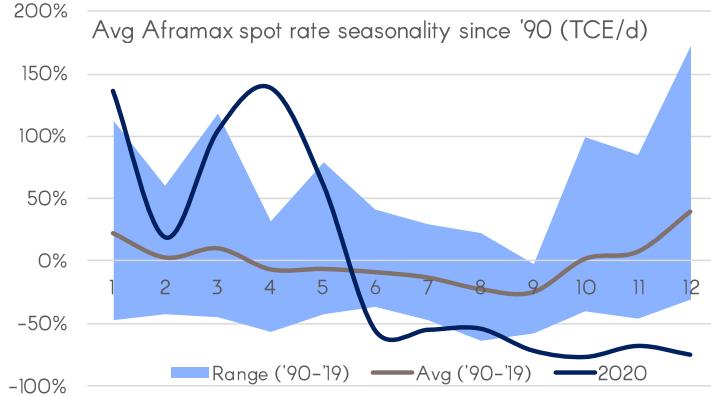
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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

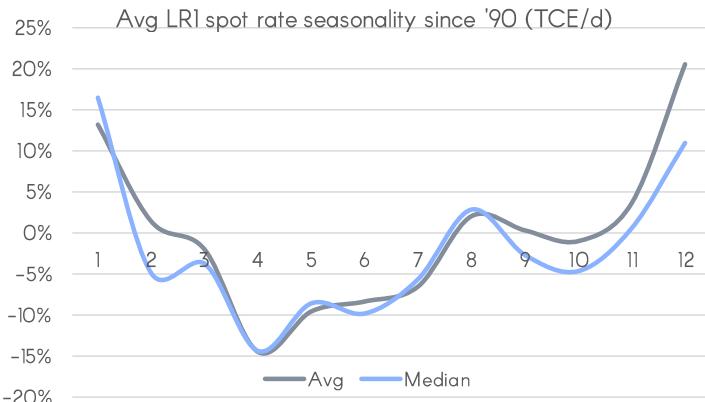
Historical Aframax spot rate seasonality



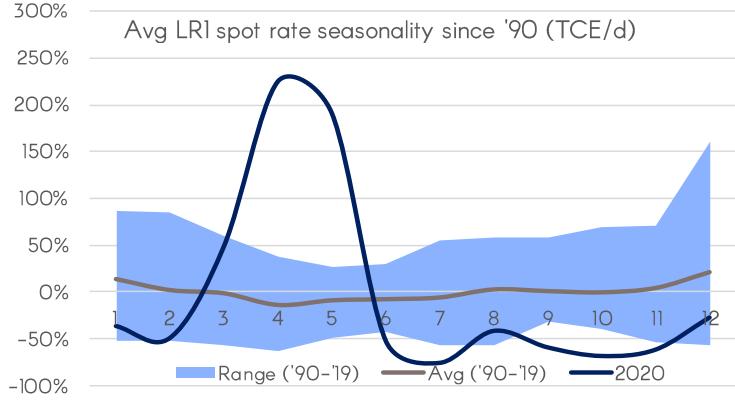
Historical Aframax spot rate seasonality



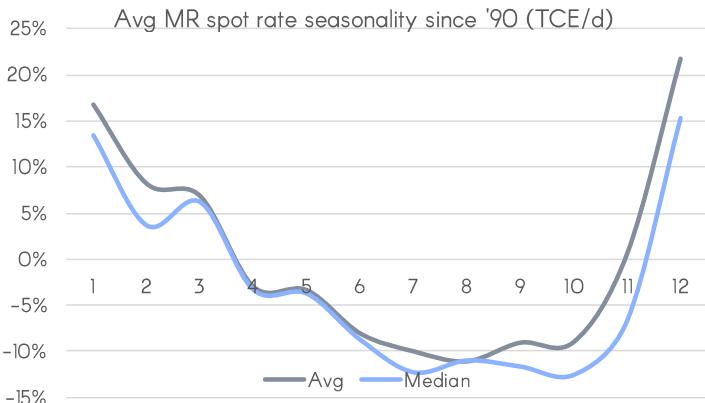
Historical LR1 spot rate seasonality



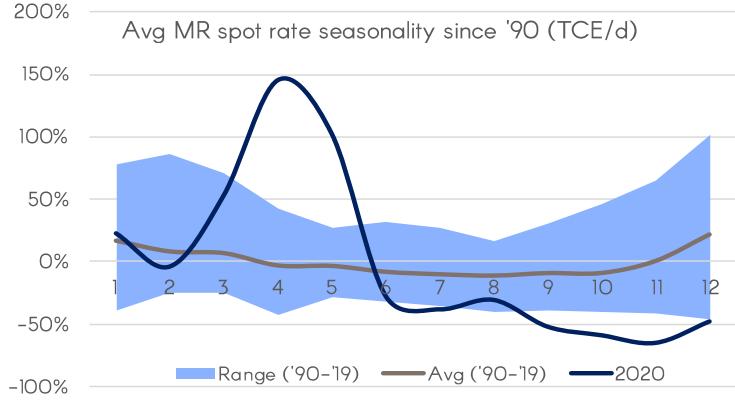
Historical LR1 spot rate seasonality



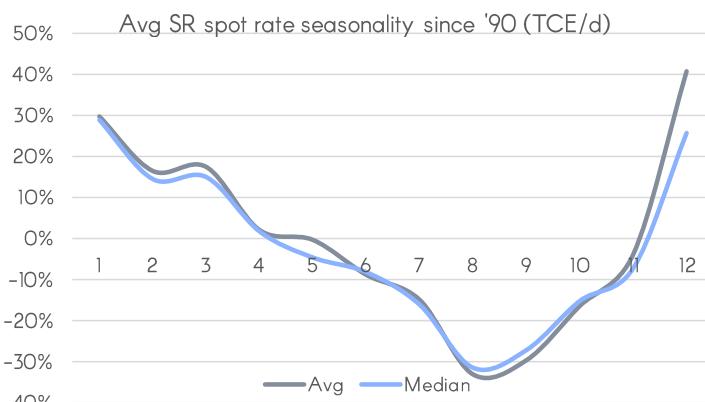
Historical MR spot rate seasonality



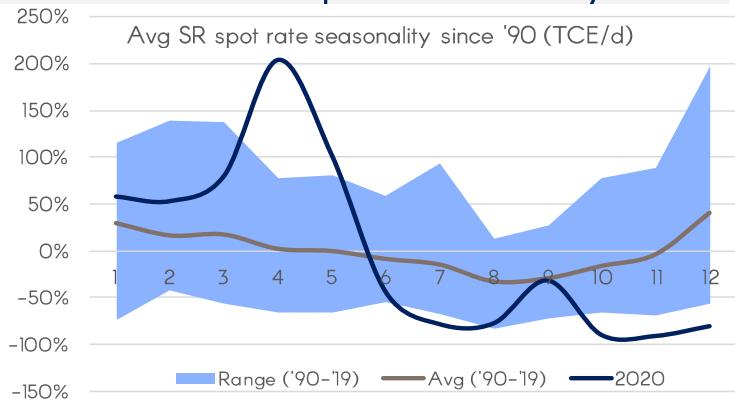
Historical MR spot rate seasonality



Historical SR spot rate seasonality



Historical SR spot rate seasonality

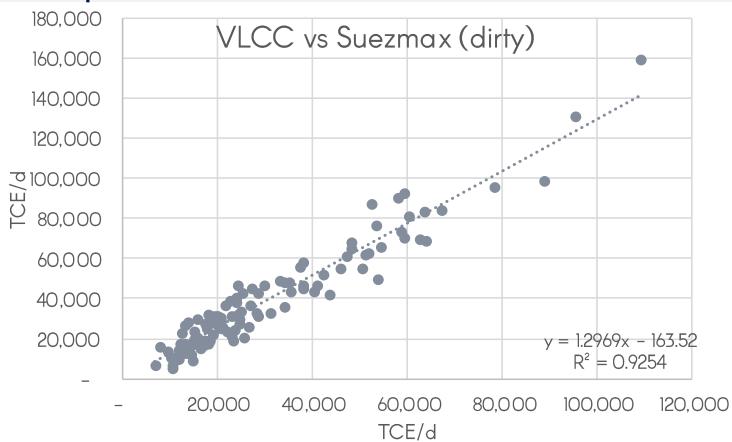


Product Tanker Dynamics

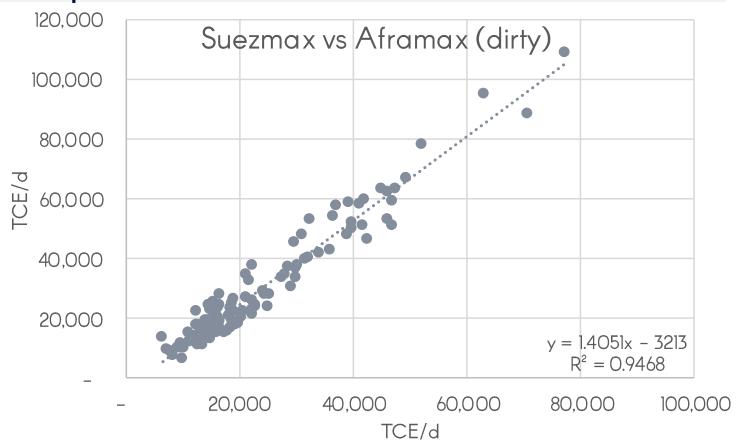
Oil Tanker spot earnings correlation matrix (quarterly since 1990)

	Crude/dirty tanker spot rates				Product/clean tanker spot rates			
	VLCC	Suezmax	Aframax	Panamax	LR2	LRI	MR	SR
VLCC		0.93	0.86	0.80	0.52	0.57	0.60	0.61
Suezmax	0.93		0.95	0.89	0.61	0.64	0.69	0.73
Aframax	0.86	0.95		0.91	0.66	0.70	0.74	0.78
Panamax	0.80	0.89	0.91		0.65	0.73	0.85	0.87
LR2	0.52	0.61	0.66	0.65		0.97	0.69	0.62
LRI	0.57	0.64	0.70	0.73	0.97		0.78	0.70
MR	0.60	0.69	0.74	0.85	0.69	0.78		0.88
SR	0.61	0.73	0.78	0.87	0.62	0.70	0.88	

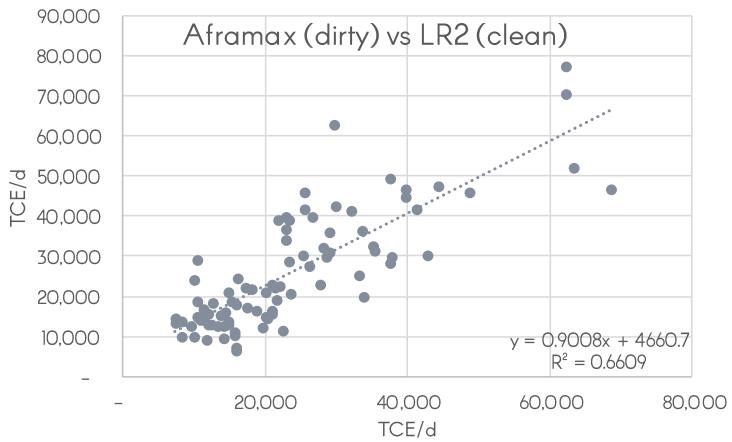
Spot rate correlation: VLCC vs Suezmax



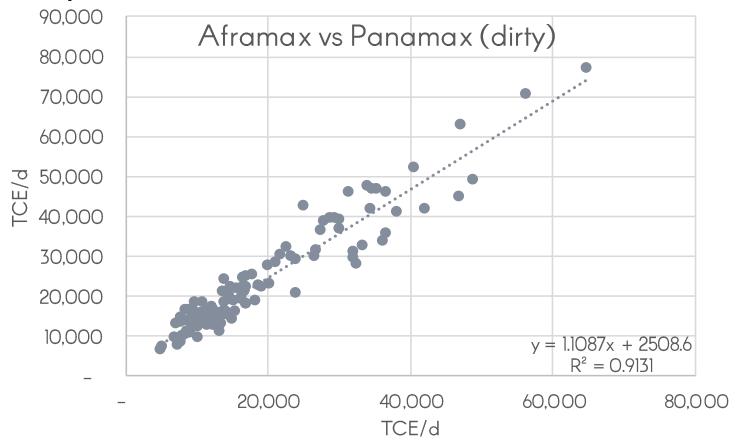
Spot rate correlation: Suezmax vs Aframax



Spot rate correlation: Aframax vs LR2

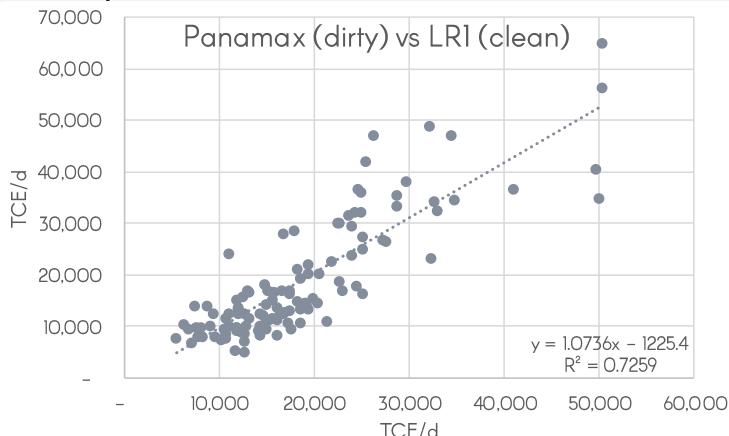


Spot rate correlation: Aframax vs Panamax

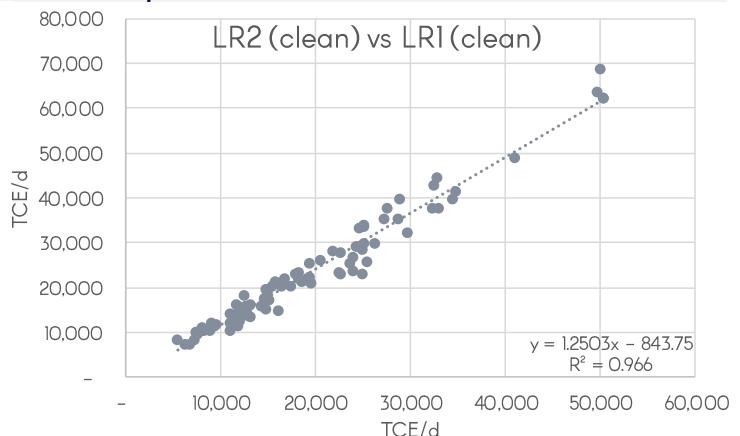


Product Tanker Dynamics (continued)

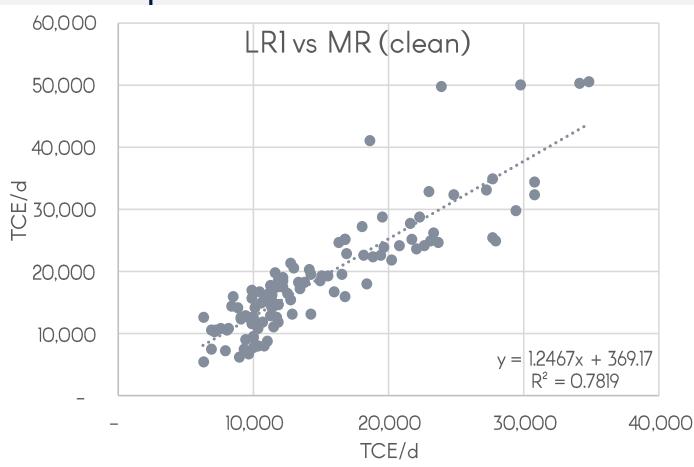
Spot rate correlation: Panamax vs LR1



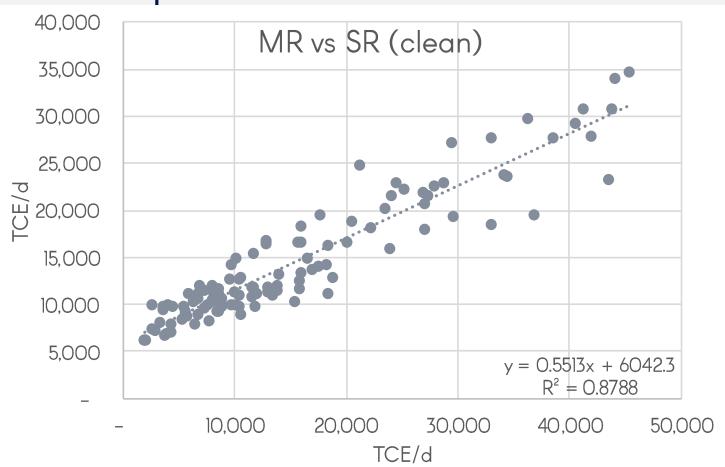
Spot rate correlation: LR2 vs LR1



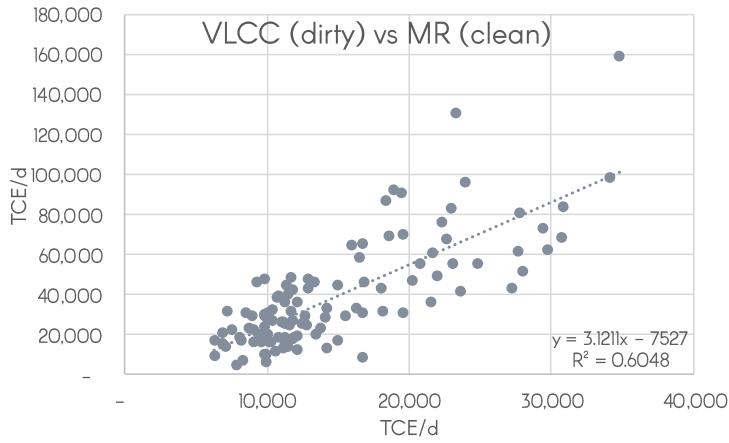
Spot rate correlation: LR1 vs MR



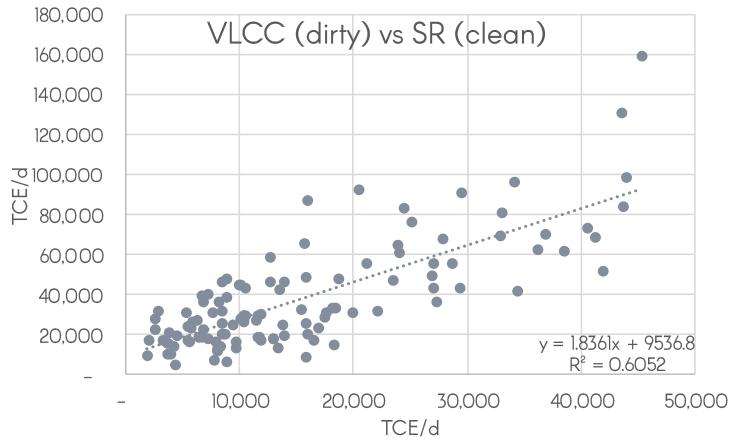
Spot rate correlation: MR vs SR



Spot rate correlation: VLCC vs MR



Spot rate correlation: VLCC vs SR





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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Company Financials (annual estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
DHT US	227	480	539	518	132	385	443	422	3	255	312	291	-16	233	300	284	
EURN US	434	983	1,118	1,077	191	751	884	844	-89	483	616	576	-158	408	540	507	
FRO US	492	956	1,064	1,037	280	737	844	812	116	544	599	567	52	473	531	503	
HUNT NO	40	81	90	85	28	70	79	74	15	57	66	61	8	51	60	55	
INSW US	401	735	807	771	113	453	536	506	0	332	414	384	-34	292	382	356	
NAT US	102	242	277	270	21	161	195	187	-42	97	131	123	-70	68	104	98	
OET NO	127	231	262	249	84	186	217	204	49	149	181	167	-13	88	124	115	
TNK US	251	525	580	599	12	291	359	377	-93	187	254	272	-121	167	240	260	
Average	259	529	592	576	108	379	445	428	-5	263	322	305	-44	222	285	272	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
DHT US	1,348	1,227	1,108	979	142	297	290	458	1,570	1,604	1,479	1,518	1,018	1,145	1,248	1,340	
EURN US	2,984	2,949	2,801	2,549	110	560	929	1,293	3,570	3,986	4,206	4,318	1,791	2,081	2,351	2,604	
FRO US	3,810	3,626	3,388	3,151	162	486	860	969	4,368	4,507	4,644	4,515	1,693	1,972	2,241	2,237	
HUNT NO	320	308	301	288	36	64	88	123	365	382	398	421	183	213	243	275	
INSW US	1,833	1,942	1,841	1,719	113	221	297	574	2,511	2,729	2,704	2,859	1,124	1,311	1,504	1,739	
NAT US	764	707	649	585	37	104	176	243	893	903	917	920	473	503	539	569	
OET NO	993	961	964	927	22	48	43	111	1,045	1,040	1,038	1,069	333	377	420	486	
TNK US	1,215	1,123	1,030	937	57	168	345	443	1,501	1,520	1,604	1,609	717	840	986	1,053	
Average	1,658	1,605	1,510	1,392	85	244	378	527	1,978	2,084	2,124	2,153	916	1,055	1,191	1,288	

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2023	2024	2023	2024	
USDm																	
DHT US	114	363	431	415	105	354	419	413	81	155	-6	168	52,174	58,380	21,988	15,186	
EURN US	135	676	808	775	21	442	689	759	-43	450	368	364	41,852	47,091	18,893	18,940	
FRO US	216	665	777	748	-150	657	769	740	49	324	374	108	38,515	42,784	17,346	16,876	
HUNT NO	21	64	73	68	21	63	67	68	6	29	24	35	55,703	61,575	21,340	20,999	
INSW US	80	413	503	478	-15	182	483	478	15	108	76	277	24,512	27,719	17,339	17,629	
NAT US	-7	132	168	162	-67	126	162	162	-7	67	72	67	31,138	35,534	16,377	43,921	
OET NO	22	124	161	151	-122	120	121	151	-19	26	-5	68	46,539	52,739	30,518	28,558	
TNK US	-17	271	344	365	0	259	332	353	4	111	177	98	29,066	33,380	19,546	17,072	
Average	70	338	408	395	-26	275	380	391	11	159	135	148	39,937	44,900	20,419	22,398	



Company Financials (quarterly estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
DHT US	64	49	79		40	25	54		8	-8	22		2	-14	16		
EURN US	113	85	147		52	23	90		-19	-46	23		-35	-65	5		
FRO US	118	99	159		66	45	104		25	3	61		8	-14	43		
HUNT NO	10	8	13		8	5	10		4	2	7		3	0	6		
INSW US	95	80	120		23	7	49		-5	-21	20		-13	-31	10		
NAT US	19	24	21	38	-1	5	0	17	-17	-10	-16	1	-22	-17	-23	-7	
OET NO		31	29	41		21	17	29		12	8	20		-3	-8	4	
TNK US		59	43	82		-1	-16	20		-27	-43	-6		-34	-50	-12	
Average	19	64	52	85	-1	27	13	47	-17	-1	-15	19	-22	-11	-26	8	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
DHT US	1,408	1,378	1,348		91	102	142		1,580	1,561	1,570		1,023	1,006	1,018		
EURN US	3,092	3,041	2,984		99	140	110		3,666	3,658	3,570		1,863	1,792	1,791		
FRO US	3,692	3,719	3,810		126	110	162		4,214	4,224	4,368		1,668	1,650	1,693		
HUNT NO	326	323	320		32	31	36		367	363	365		179	178	183		
INSW US	1,864	1,854	1,833		125	130	113		2,555	2,550	2,511		1,151	1,117	1,124		
NAT US	720	793	779	764	61	53	37	37	873	938	907	893	526	507	481	473	
OET NO		1,009	1,001	993		43	26	22		1,082	1,058	1,045		343	332	333	
TNK US		1,262	1,239	1,215		108	64	57		1,599	1,531	1,501		780	729	717	
Average	720	1,681	1,667	1,658	61	85	80	85	873	2,000	1,981	1,978	526	939	911	916	

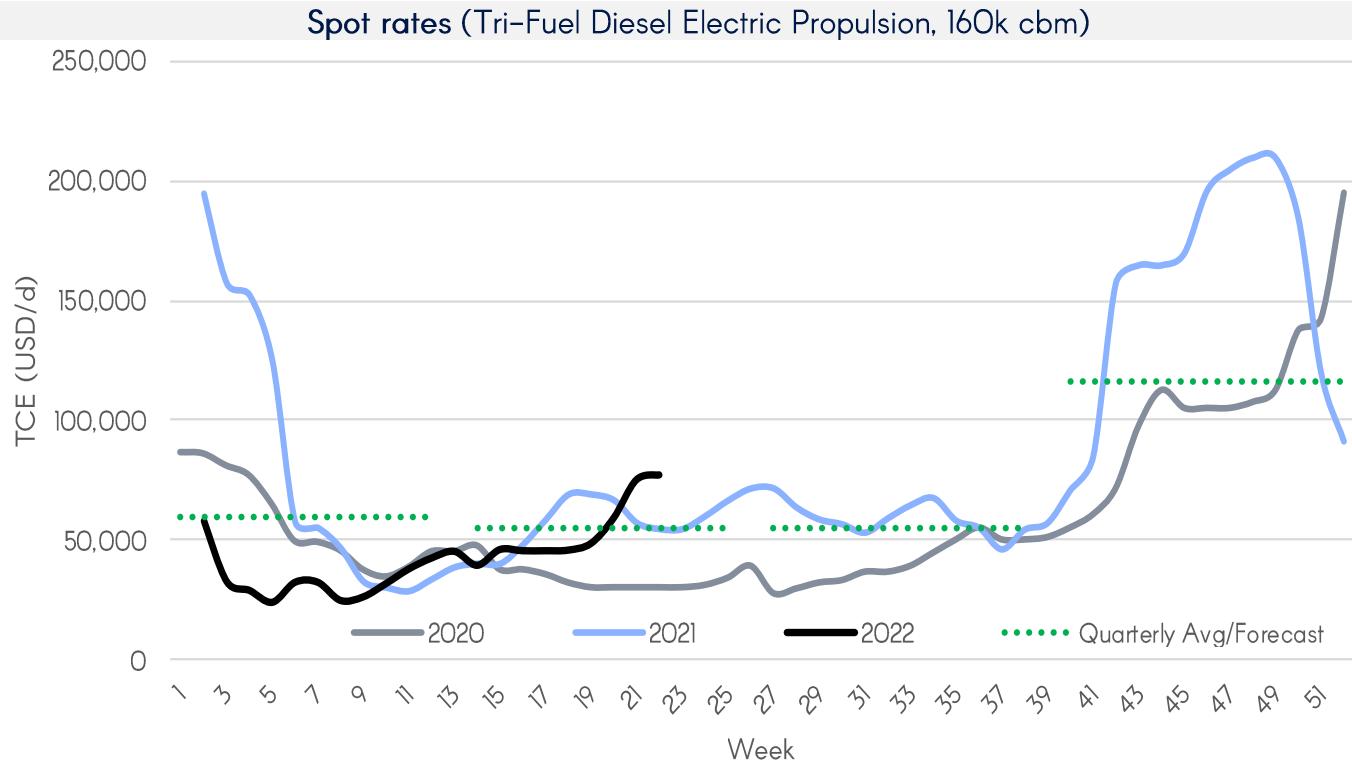
Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	2Q22	3Q22	2Q22	3Q22	
USDm																	
DHT US	35	19	49		32	16	46		26	11	40		27,733	20,936	13,746	13,461	
EURN US	36	4	72		26	-15	63		-58	42	-30		19,271	14,226	26,014	27,225	
FRO US	49	28	85		-23	-41	-49		-3	-17	53		19,987	16,243	19,186	18,931	
HUNT NO	6	4	9		6	4	9		2	-1	5		28,600	22,288	22,066	21,513	
INSW US	16	-3	39		-7	-21	31		19	5	-17		12,690	10,504	16,197	16,155	
NAT US	-7	-2	-7	9	24	-90	-9	8	16	-8	-16	1	13,084	10,612	16,689	16,680	
OET NO	5	1	13		-66	0	12		12	-17	-4		27,254	22,910	32,099	31,624	
TNK US	-8	-24	14		-11	-27	11		-4	-45	-7		13,310	9,842	18,236	18,077	
Average	-7	17	3	36	24	-17	-12	16	16	-2	-5	5	20,241	15,945	20,529	20,458	

LNG Carriers



Earnings



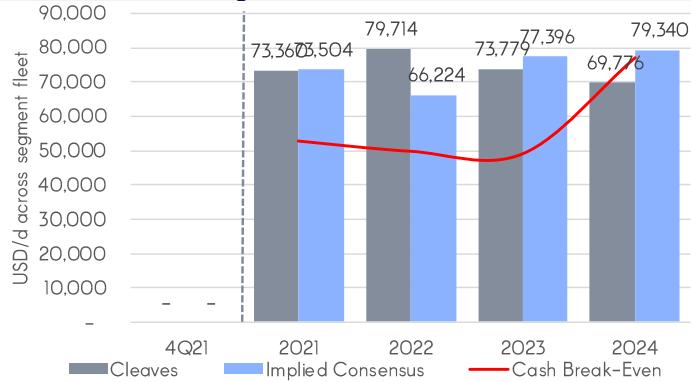


Peer Group

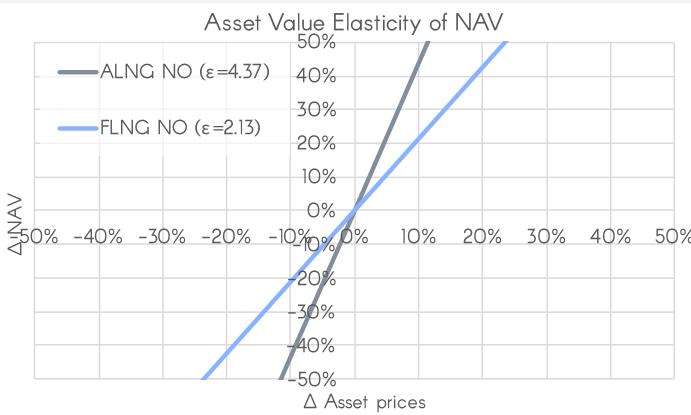
Updated 28 May 19 25 CET				Return		Target	Last	Target/	NAV	P/NAV		EV/	adj.	
Company	M.cap	Turnover	ly	Rec.	Price	Price	Price	/sh	Now	ly fwd	ϵ	GAV	equity	τ
ALNG NO	92	1.0	224%	HOLD	4.8	6.5	-27%	4.4	1.48	1.10	4.37	1.11	21%	0.75
FLNG NO	1,468	4.7	135%	HOLD	170	256.6	-34%	226	1.14	0.98	2.13	1.06	44%	0.28
Average	780	3	180%				-30%		1.31	1.04	3.25	1.08	33%	0.52
Median	780	3	180%				-30%		1.31	1.04	3.25	1.08	33%	0.52

Company	EV/EBITDA			P/E			Dividend yield			FCF yield		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
ALNG NO	6.7	7.7	12.8	2.7	3.9		0%	9%	6%	42%	21%	13%
FLNG NO	11.1	9.2	9.7	5.1	4.0	4.6	6%	9%	8%	-3%	16%	15%
Average	8.9	8.4	11.3	3.9	3.9	4.6	3%	9%	7%	19%	19%	14%
Median	8.9	8.4	11.3	3.9	3.9	4.6	3%	9%	7%	19%	19%	14%

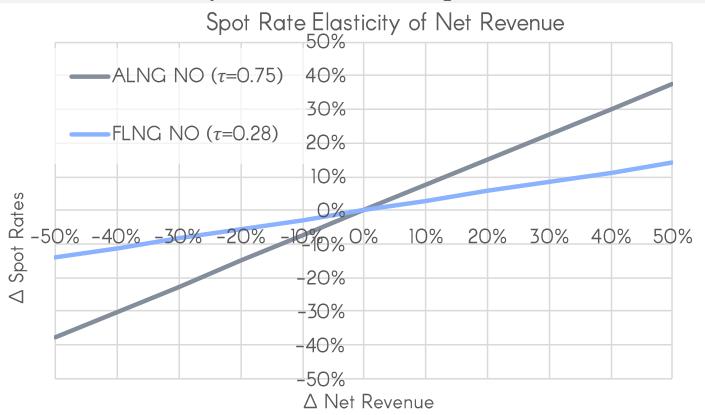
Cleaves' average TCE/d forecast vs consensus



Financial leverage (ϵ)



Operational leverage (τ)



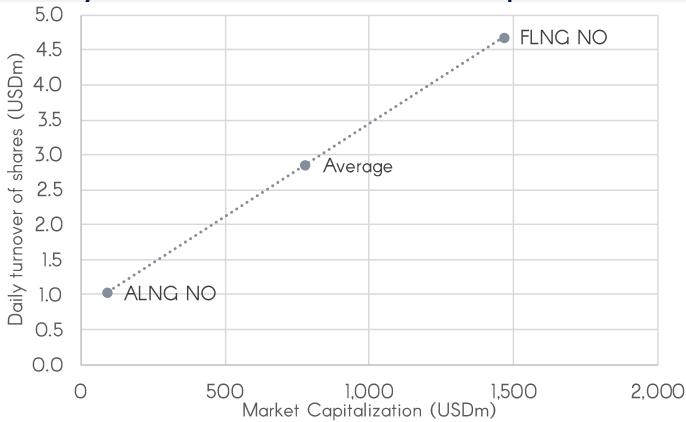


Cleaves Securities

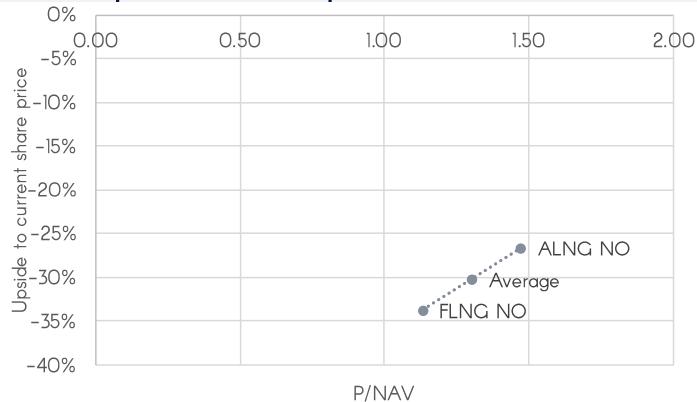
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

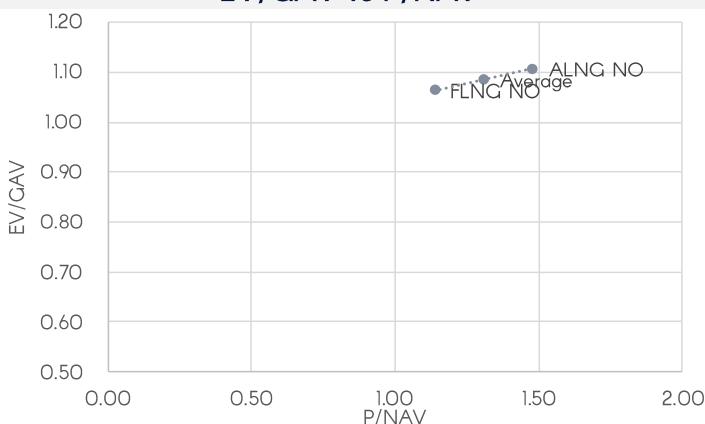
Daily share turnover vs market capitalization



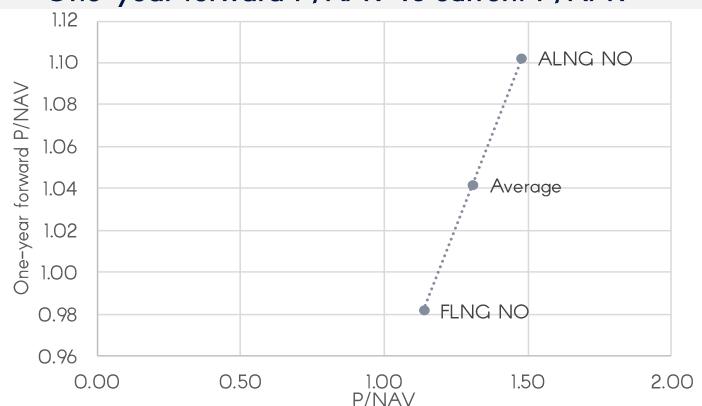
Upside to share price current P/NAV



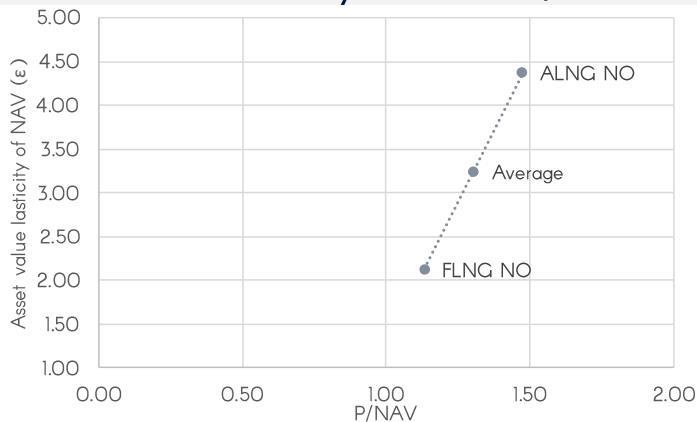
EV/GAV vs P/NAV



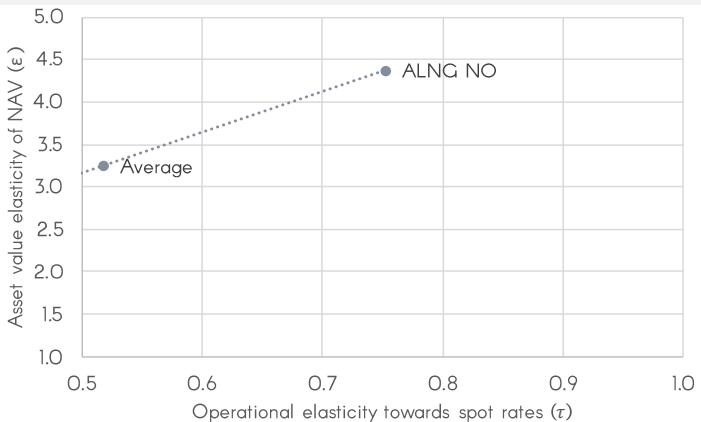
One-year forward P/NAV vs current P/NAV



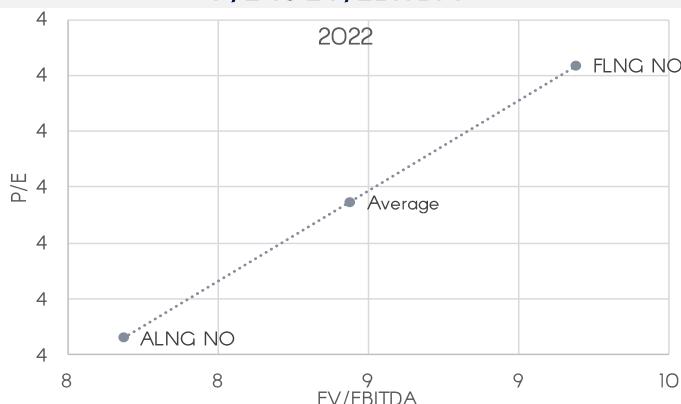
Asset value elasticity of NAV vs P/NAV



Elasticities: NAV vs net revenue



P/E vs EV/EBITDA



Dividend yield vs free cash flow yield





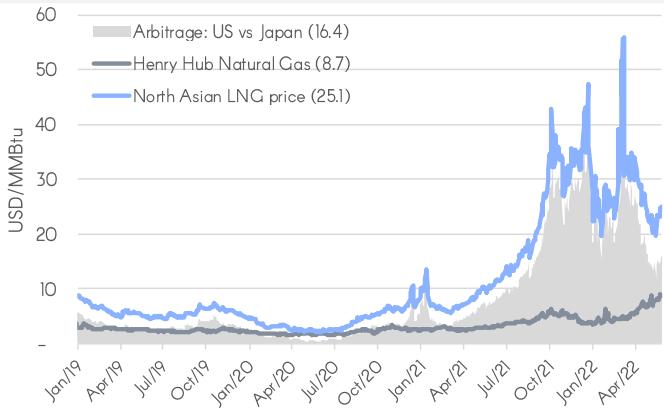
Cleaves Securities

Shipping Weekly 22/2022

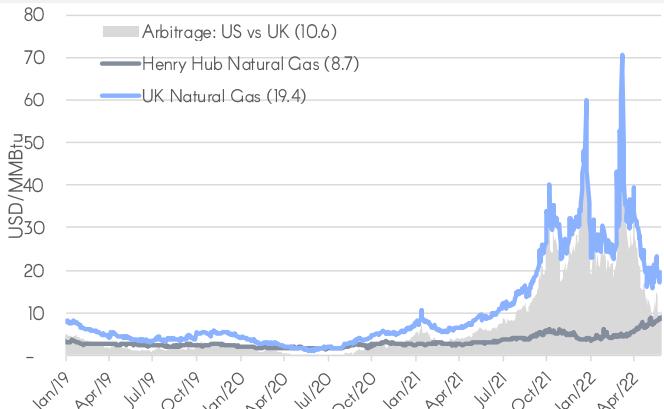
$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

Market Snapshots

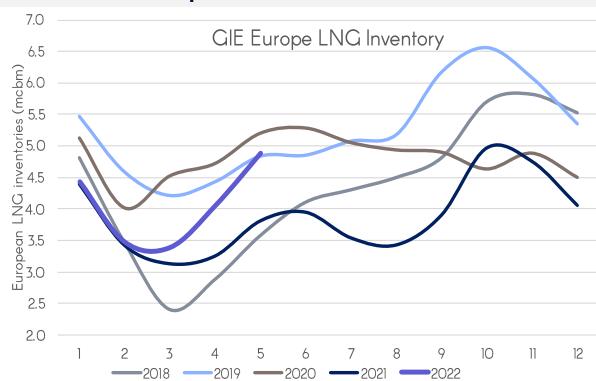
Natural gas price arbitrage: US vs North Asia



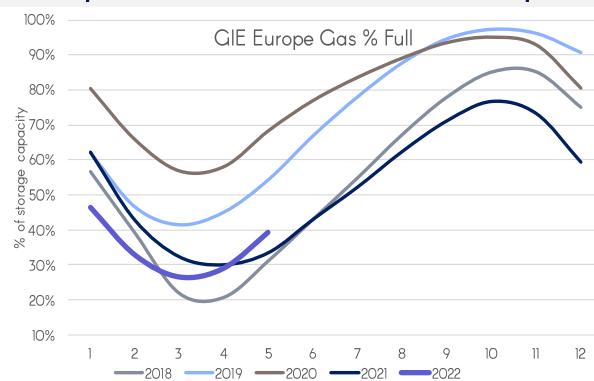
Natural gas price arbitrage: US vs UK



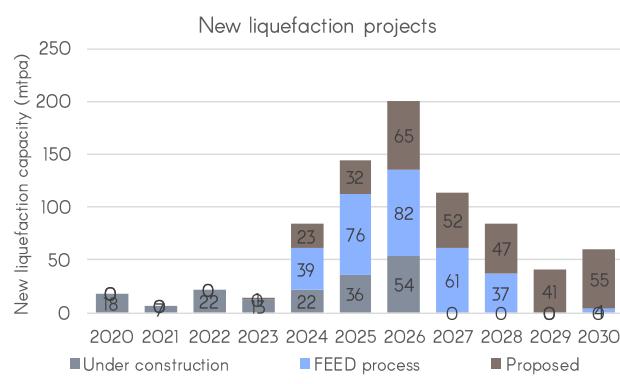
European LNG inventories



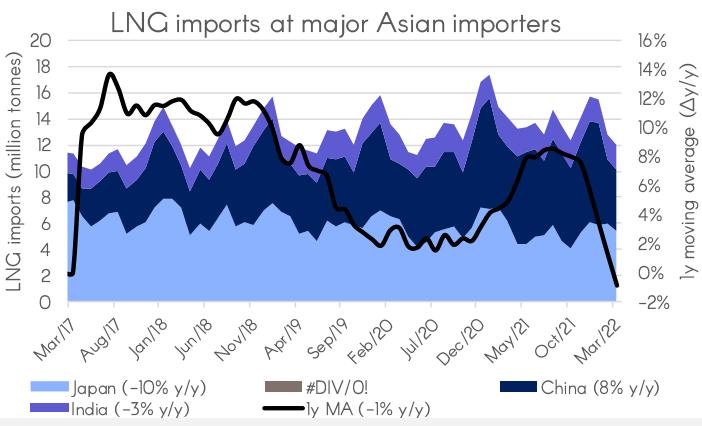
European LNG inventories: % of capacity



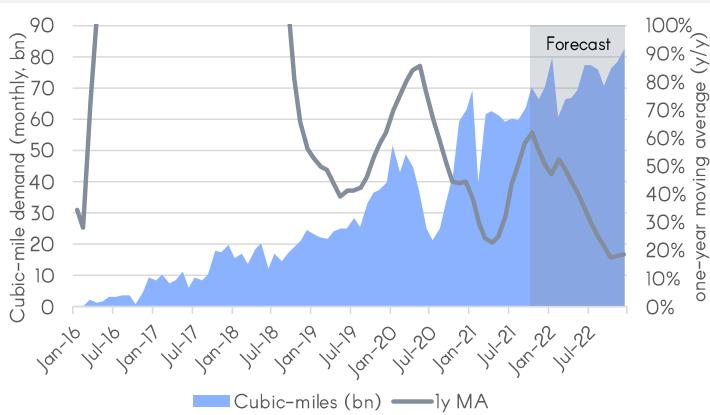
Expected & proposed new liquefaction capacity



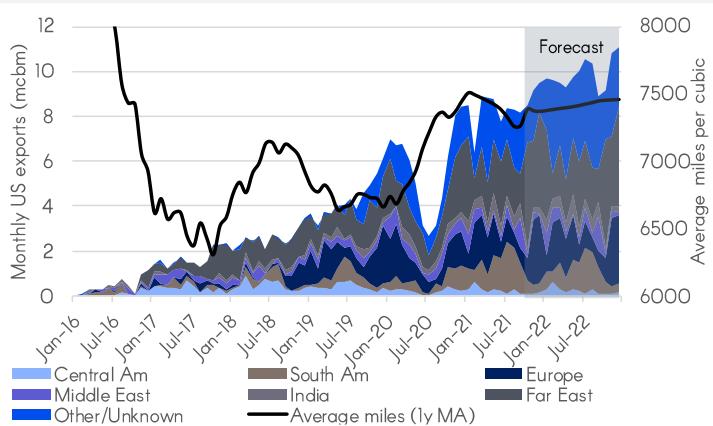
Major Asian LNG imports



US LNG exports (cubic-miles)



US LNG exports by import destination (mcmb)



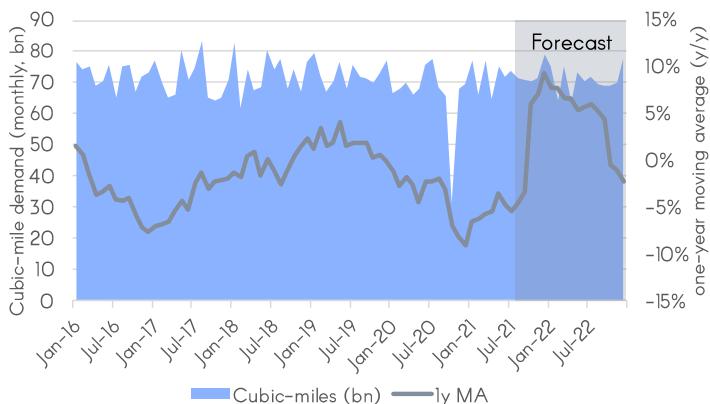


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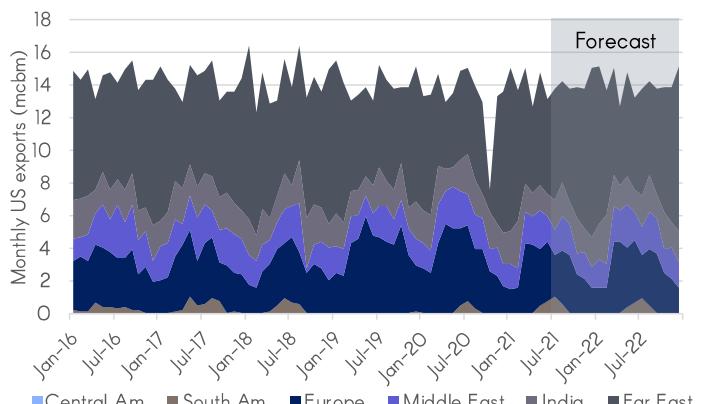
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

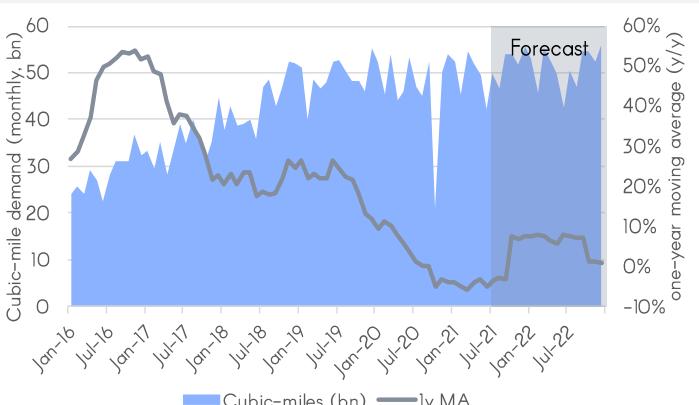
Qatari LNG exports (cubic-miles)



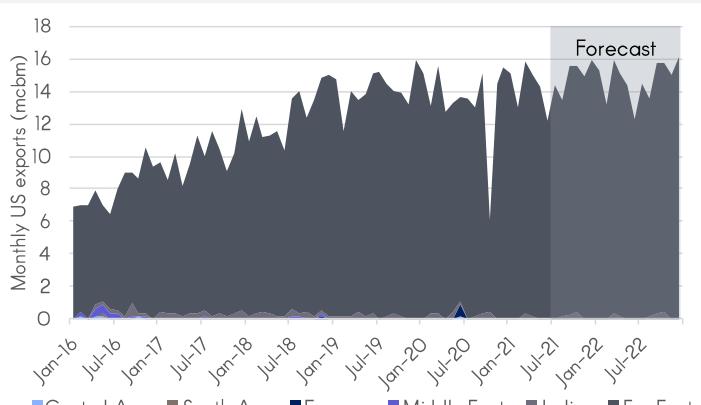
Qatari LNG exports by import destination (mcbm)



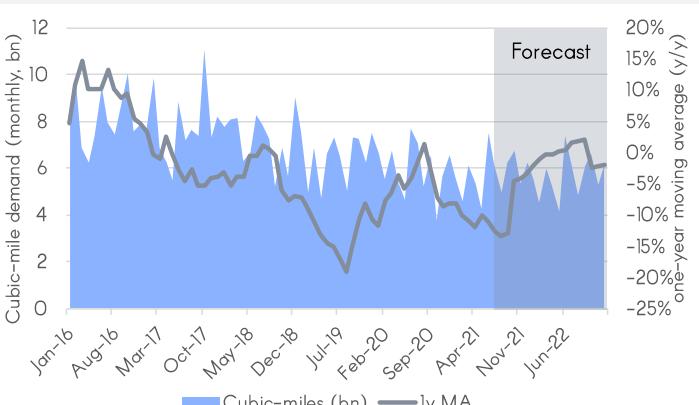
Australian LNG exports (cubic-miles)



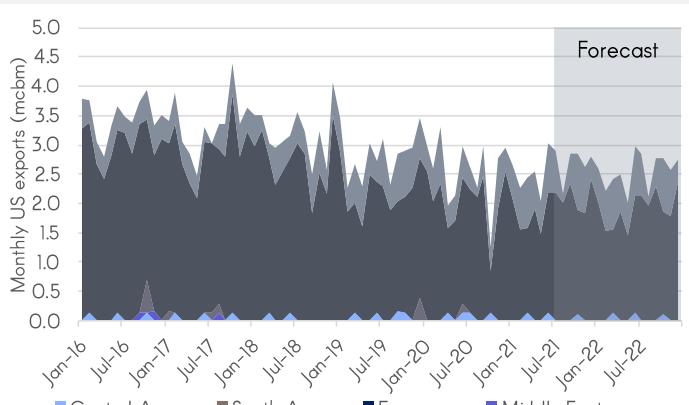
Australian LNG exports by import destination (mcbm)



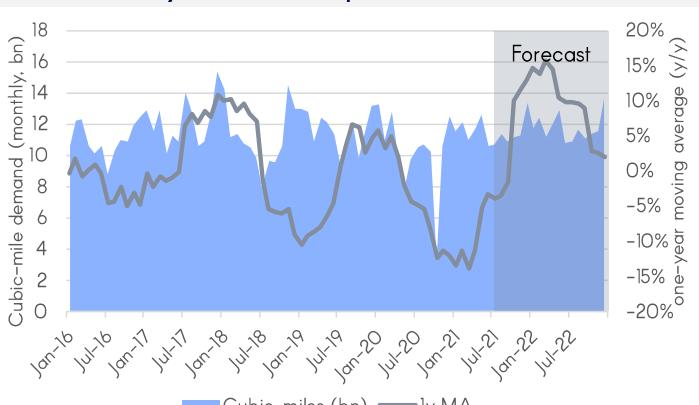
Indonesian LNG exports (cubic-miles)



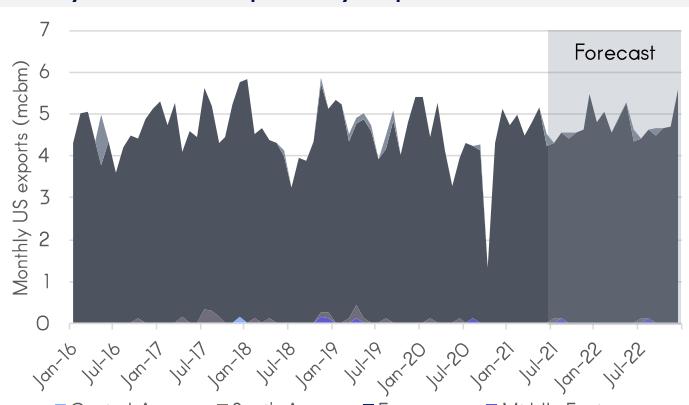
Indonesian LNG exports by import destination (mcbm)



Malaysian LNG exports (cubic-miles)



Malaysian LNG exports by import destination (mcbm)



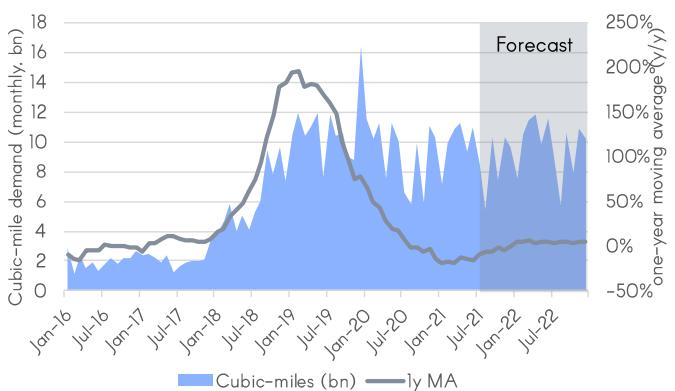


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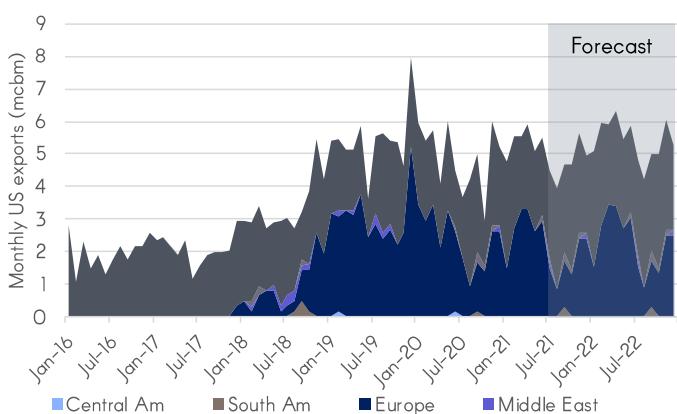
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

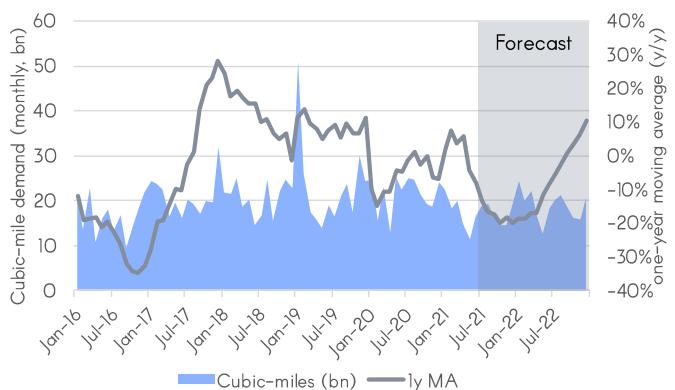
Russian LNG exports (cubic-miles)



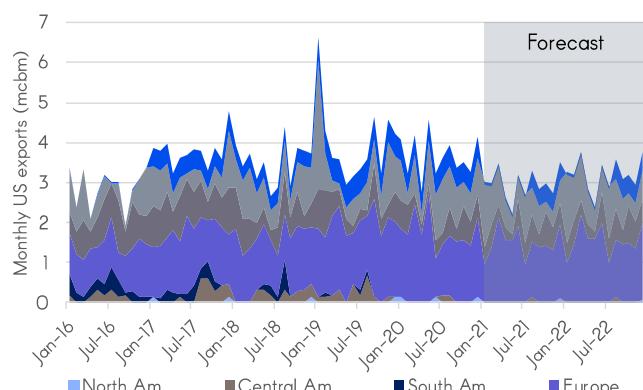
Russian LNG exports by import destination (mcbm)



Nigerian LNG exports (cubic-miles)

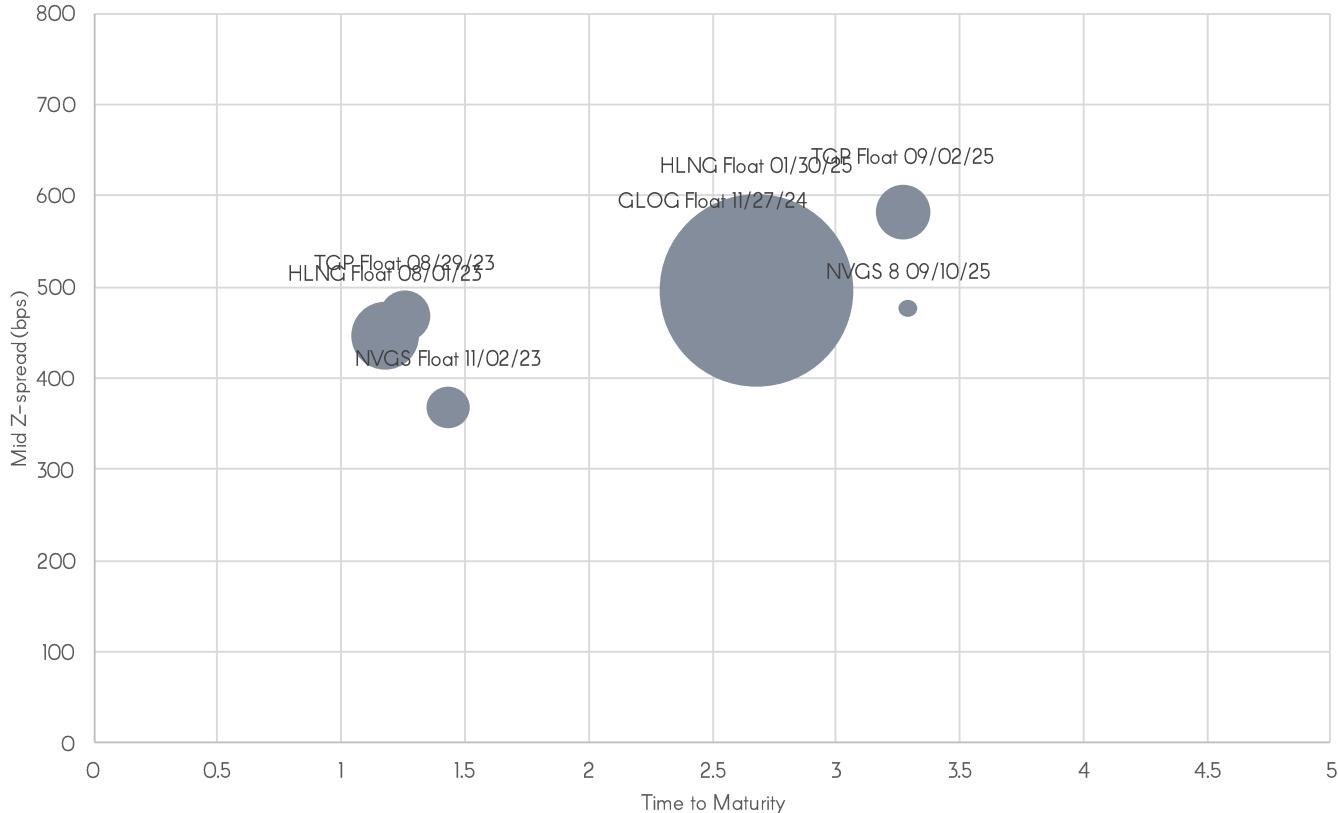


Nigerian LNG exports by import destination (mcbm)



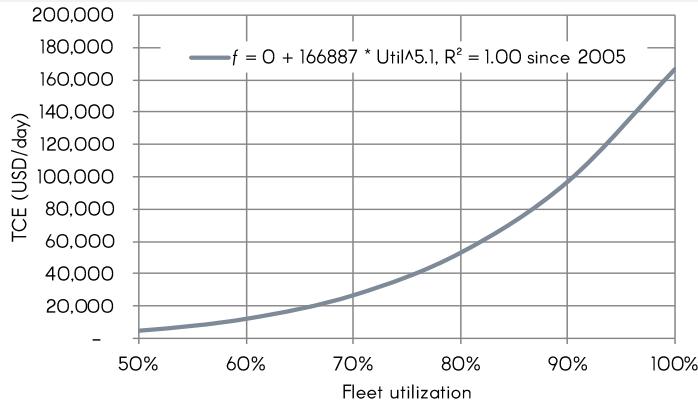
The Credit Market

Gas Carrier bond pricing (by amount outstanding)

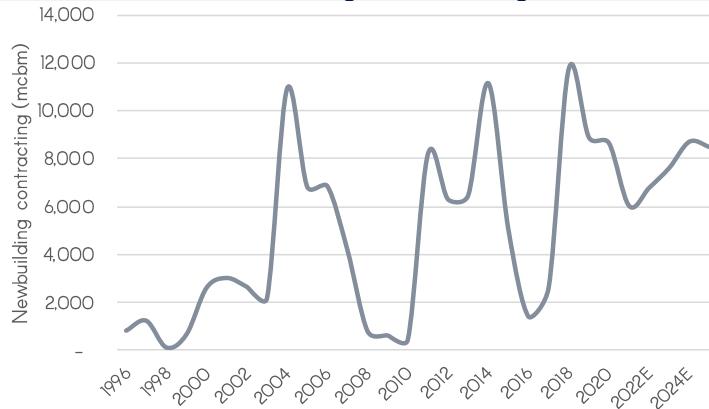


Market Fundamentals

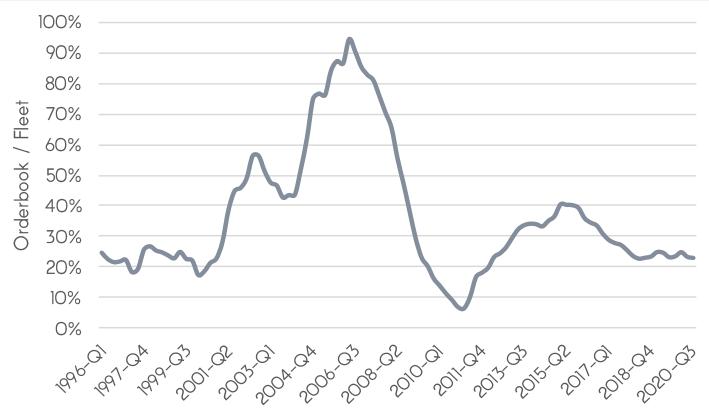
Econometrics: Spot rates vs fleet utilization



Newbuilding contracting



Orderbook vs fleet





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Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Market Overview

Annual view

Base case	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MEGI 175k, spot ^a (TCE/d)	-	-	-	-	19,818	119,397	149,316	124,129	88,687	49,417	46,608	60,376	107,007	81,915	71,173	109,467	91,705	80,899	76,016
DFDE 170k, spot ^a (TCE/d)					71,302	109,708	138,346	114,237	80,315	42,728	40,039	53,217	97,850	75,626	65,221	100,232	84,685	73,879	68,996
DFDE 155k, spot ^a (TCE/d)					63,333	100,020	127,375	104,346	71,942	36,038	33,470	46,058	88,692	69,337	59,269	92,799	77,665	66,859	61,976
Turbine 150k, spot ^a (TCE)	73,207	58,303	49,370	37,072	40,673	93,135	128,404	100,433	55,626	27,314	20,088	28,596	52,000	47,695	41,048	74,528	58,811	48,005	43,122
MEGI 175k, 5y ^a (USDm)										185	185	185	185	185	185	185	185	185	185
DFDE 170k, 5y ^a (USDm)										149	149	149	149	149	149	149	149	149	149
DFDE 155k, 5y ^a (USDm)										173	170	170	154	156	160	147	143	143	143
Turbine 150k, 5y ^a (USDm)										90	90	90	90	90	90	90	90	90	90
Turbine 125k, 5y ^a (USDm)										87	87	87	87	87	87	87	87	87	87

High case

Base case	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MEGI 175k, spot ^a (TCE/d)	-	-	-	-	19,818	119,397	149,316	124,129	88,687	49,417	46,608	60,376	107,007	81,915	71,173	109,467	104,858	101,504	107,145
DFDE 170k, spot ^a (TCE/d)					71,302	109,708	138,346	114,237	80,315	42,728	40,039	53,217	97,850	75,626	65,221	100,232	97,838	94,484	100,125
DFDE 155k, spot ^a (TCE/d)					63,333	100,020	127,375	104,346	71,942	36,038	33,470	46,058	88,692	69,337	59,269	92,799	90,818	87,464	93,105
Turbine 150k, spot ^a (TCE)	73,207	58,303	49,370	37,072	40,673	93,135	128,404	100,433	55,626	27,314	20,088	28,596	52,000	47,695	41,048	74,528	71,964	68,610	74,251
MEGI 175k, 5y ^a (USDm)										185	185	185	185	185	185	185	185	185	185
DFDE 170k, 5y ^a (USDm)										149	149	149	149	149	149	149	149	149	149
DFDE 155k, 5y ^a (USDm)										173	170	170	154	156	160	147	143	143	143
Turbine 150k, 5y ^a (USDm)										90	90	90	90	90	90	90	90	90	90
Turbine 125k, 5y ^a (USDm)										87	87	87	87	87	87	87	87	87	87

Low case

Base case	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MEGI 175k, spot ^a (TCE/d)	-	-	-	-	19,818	119,397	149,316	124,129	88,687	49,417	46,608	60,376	107,007	81,915	71,173	105,893	80,870	65,722	56,169
DFDE 170k, spot ^a (TCE/d)					71,302	109,708	138,346	114,237	80,315	42,728	40,039	53,217	97,850	75,626	65,221	96,658	73,850	58,702	49,149
DFDE 155k, spot ^a (TCE/d)					63,333	100,020	127,375	104,346	71,942	36,038	33,470	46,058	88,692	69,337	59,269	89,224	66,830	51,682	42,129
Turbine 150k, spot ^a (TCE)	73,207	58,303	49,370	37,072	40,673	93,135	128,404	100,433	55,626	27,314	20,088	28,596	52,000	47,695	41,048	70,953	47,976	33,248	26,968
MEGI 175k, 5y ^a (USDm)										185	185	185	185	185	185	185	185	185	185
DFDE 170k, 5y ^a (USDm)										149	149	149	149	149	149	149	149	149	149
DFDE 155k, 5y ^a (USDm)										173	170	170	154	156	160	147	143	143	143
Turbine 150k, 5y ^a (USDm)										90	90	90	90	90	90	90	90	90	90
Turbine 125k, 5y ^a (USDm)										87	87	87	87	87	87	87	87	87	87

Quarterly view

Base case	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
MEGI 175k, spot ^a (TCE/d)	43,500	52,500	118,500	101,500	74,327	81,115	180,927	108,191	59,997	59,775	138,858	96,288	56,699	54,244	116,366	87,471	52,683	50,574	113,333
DFDE 170k, spot ^a (TCE/d)	39,058	46,808	111,462	92,962	66,144	67,916	173,907	101,171	52,977	52,755	131,838	89,268	49,679	47,224	109,346	80,451	45,663	43,554	106,313
DFDE 155k, spot ^a (TCE/d)	34,615	41,115	104,423	84,423	57,982	61,923	166,887	94,151	45,957	45,735	124,818	82,248	42,659	40,204	102,326	73,431	38,643	36,534	99,293
Turbine 150k, spot ^a (TCE)	23,269	27,923	73,077	59,962	44,654	45,462	148,034	75,298	27,103	26,881	105,964	63,394	23,805	21,350	83,472	54,577	19,790	17,681	80,439
MEGI 175k, 5y ^a (USDm)	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185
DFDE 170k, 5y ^a (USDm)	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
DFDE 155k, 5y ^a (USDm)	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
Turbine 150k, 5y ^a (USDm)	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Turbine 125k, 5y ^a (USDm)	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87



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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Company Financials (annual estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
ALNG NO	49	34	29		37	21	17		24	9	4		15	0	-3		
FLNG NO	378	350	332		309	280	262		237	208	190		181	156	141		
Average	214	192	181	#####	173	151	140	#####	130	109	97	#####	98	78	69	#DIV/O!	
Median	214	192	181	#NUM!	173	151	140	#NUM!	130	109	97	#NUM!	98	78	69	#NUM!	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
ALNG NO	321	309	296		20	8	-4		343	319	294		126	121	115		
FLNG NO	2,270	2,198	2,125		227	236	220		2,519	2,456	2,368		927	950	975		
Average	1,296	1,253	1,211	#####	123	122	108	#####	1,431	1,388	1,331	#####	527	536	545	#DIV/O!	
Median	1,296	1,253	1,211	#NUM!	123	122	108	#NUM!	1,431	1,388	1,331	#NUM!	527	536	545	#NUM!	

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2023	2024	2023	2024	
USDm																	
ALNG NO	27	13	9		20	13	9		-7	-12	-13		46,055	39,917	53,919	52,854	
FLNG NO	253	228	213		253	228	213		32	9	-16		73,779	69,776	44,049	100,985	
Average	140	120	111	#####	137	120	111	#####	13	-1	-14	#####	59,917	54,846	48,984	76,920	
Median	140	120	111	#NUM!	137	120	111	#NUM!	13	-1	-14	#NUM!	59,917	54,846	48,984	76,920	

Company Financials (quarterly estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
ALNG NO	12	5			9	2			6	-1			4	-3			
FLNG NO	80	81			63	64			45	46			31	32			
Average	46	43			36	33			26	22			17	14			
Median	46	43			36	33			26	22			17	14			

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	
USDm																	
ALNG NO	328	324			20	13			350	339			123	118			
FLNG NO	2,306	2,288			180	181			2,509	2,492			873	880			
Average	1,317	1,306			100	97			1,429	1,416			498	499			
Median	1,317	1,306			100	97			1,429	1,416			498	499			

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	2Q22	3Q22	2Q22	3Q22	
USDm																	
ALNG NO	7	0			7	0			-5	-7			67,403	27,296	54,990	54,812	
FLNG NO	49	50			49	50			-7	2			67,975	67,999	42,594	45,899	
Average	28	25			28	25			-6	-3			67,689	47,647	48,792	50,356	
Median	28	25			28	25			-6	-3			67,689	47,647	48,792	50,356	

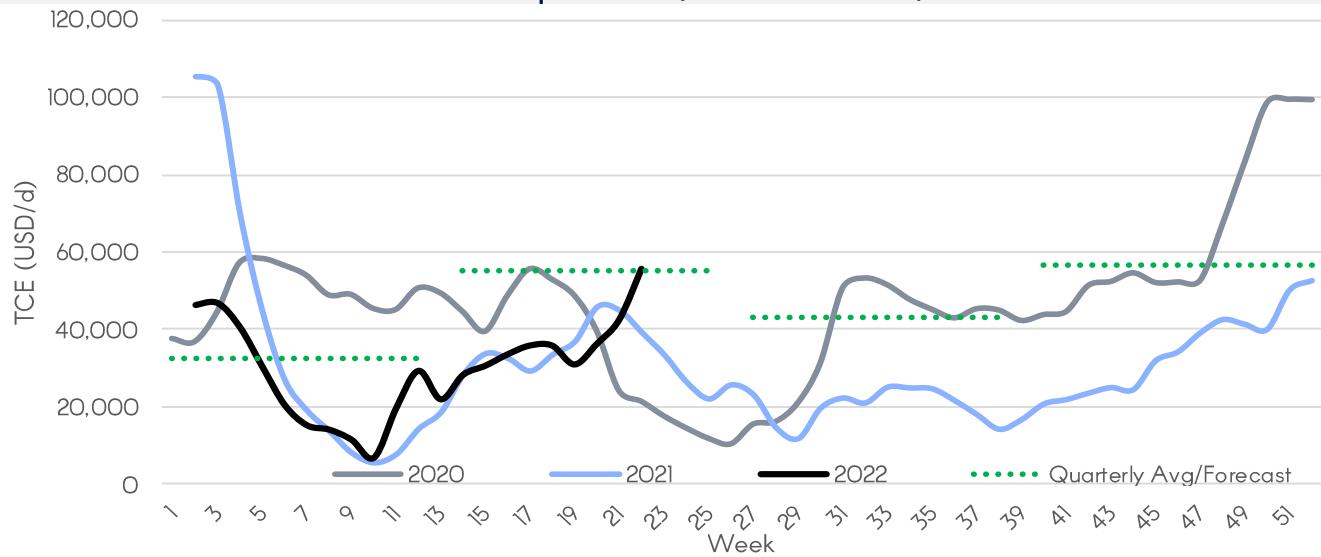


LPG Carriers



Earnings

VLGC spot rates (Baltic LPG Index)



VLGC one-year timecharter rates





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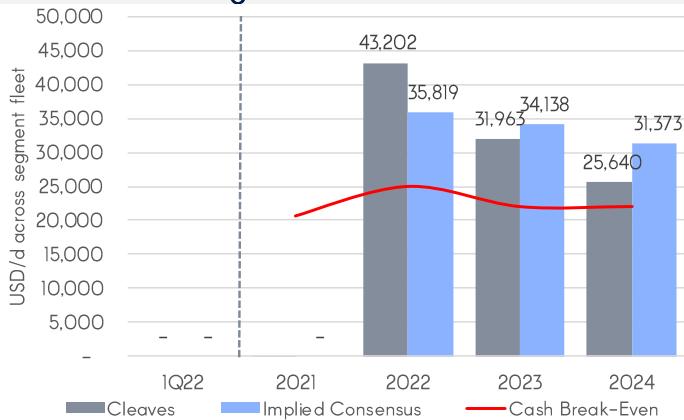
$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

Peer Group

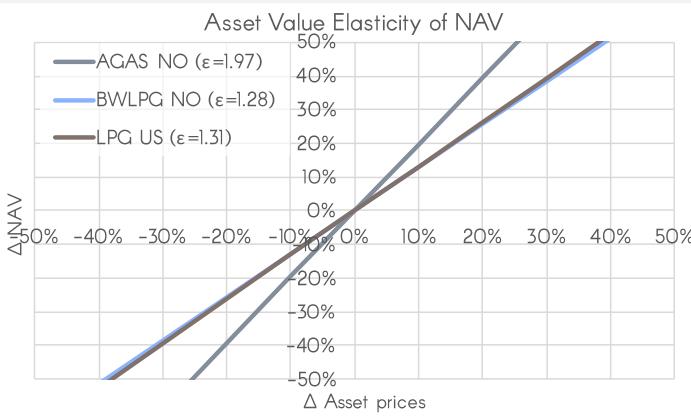
Updated 28 May 2021 CET				Return			Target Rec.	Price	Last Price	Target/ Price	NAV /sh	P/NAV Now	ly fwd	ϵ	EV/GAV	adj. equity	τ
Company	M.cap	Turnover	ly	BUY	58	52.7	10%	83	0.64	0.65	1.97	0.82	46%	0.83			
AGAS NO	431	0.6	29%	BUY	82	74.5	10%	102	0.73	0.65	1.28	0.82	60%	0.90			
BWLPG NO	1,118	2.9	44%	BUY	19	16.9	13%	28	0.61	0.61	1.31	0.72	65%	1.00			
Average	742	4.5	44%				11%		0.66	0.64	1.52	0.79	57%	0.91			
Median	678	2.9	44%				10%		0.64	0.65	1.31	0.82	60%	0.90			

Company	EV/EBITDA			P/E			Dividend yield			FCF yield		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
AGAS NO	0.0	4.7	6.9	10.1	3.6	6.2	9%	8%	7%	50%	7%	-16%
BWLPG NO	0.0	3.5	5.4	8.5	4.5	14.6	9%	9%	5%	73%	38%	17%
LPG US	0.0	4.0	6.7	12.4	3.7	9.9	6%	13%	7%	64%	36%	6%
Average	0.0	4.0	6.3	10.3	3.9	10.2	8%	10%	6%	62%	27%	3%
Median	0.0	4.0	6.7	10.1	3.7	9.9	9%	9%	7%	64%	36%	6%

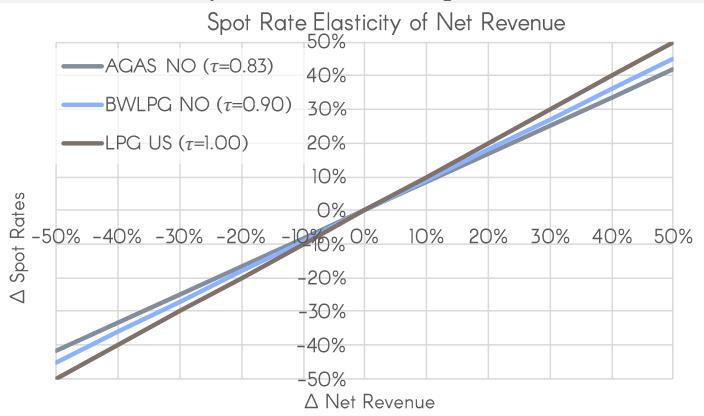
Cleaves' average TCE/d forecast vs consensus



Financial leverage (ϵ)



Operational leverage (τ)



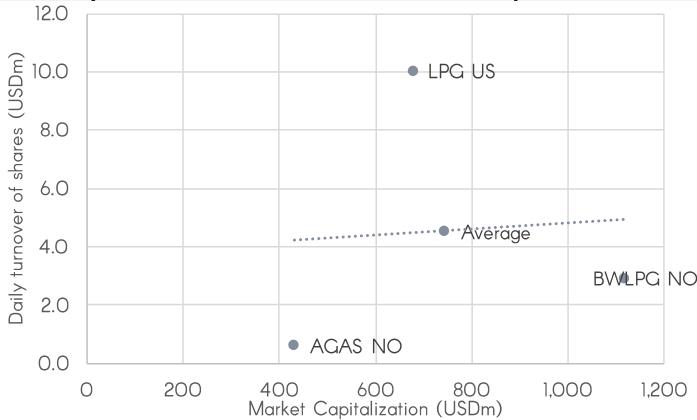


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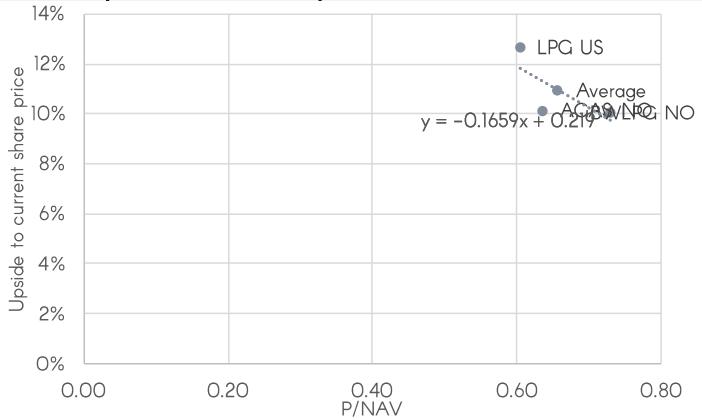
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

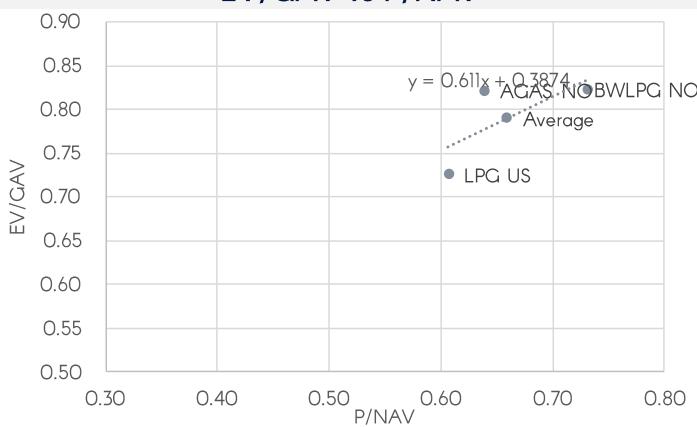
Daily share turnover vs market capitalization



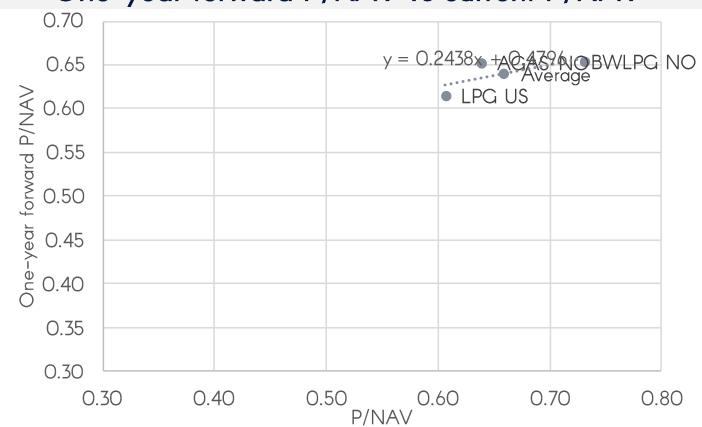
Upside to share price current P/NAV



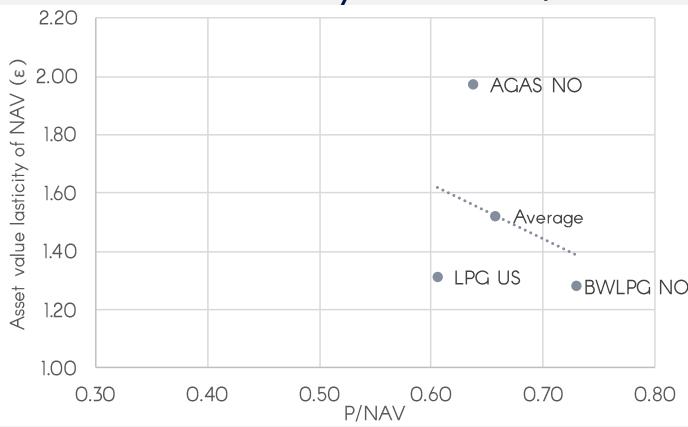
EV/GAV vs P/NAV



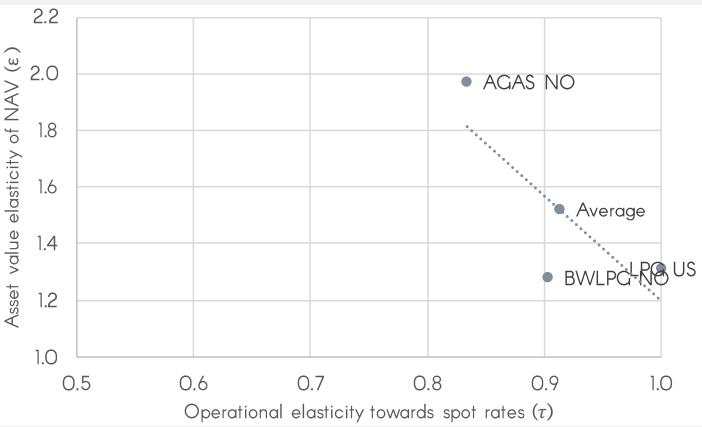
One-year forward P/NAV vs current P/NAV



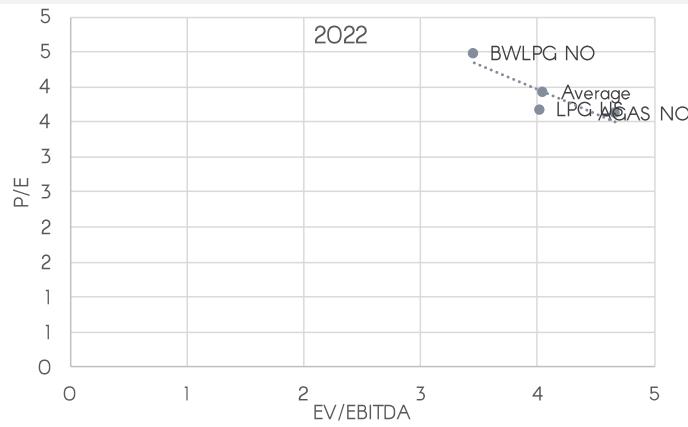
Asset value elasticity of NAV vs P/NAV



Elasticities: NAV vs net revenue



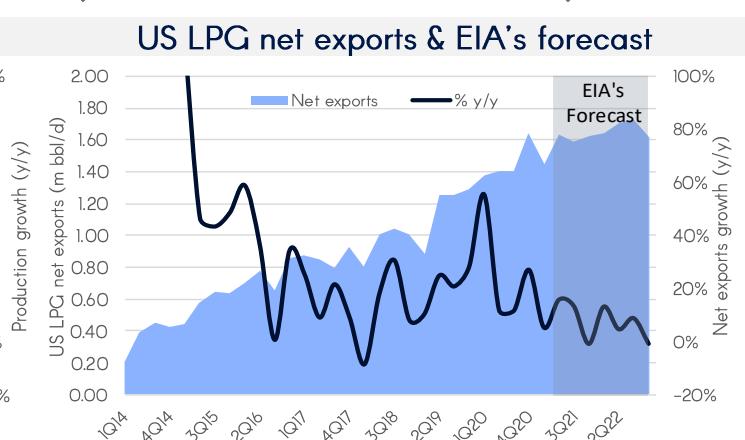
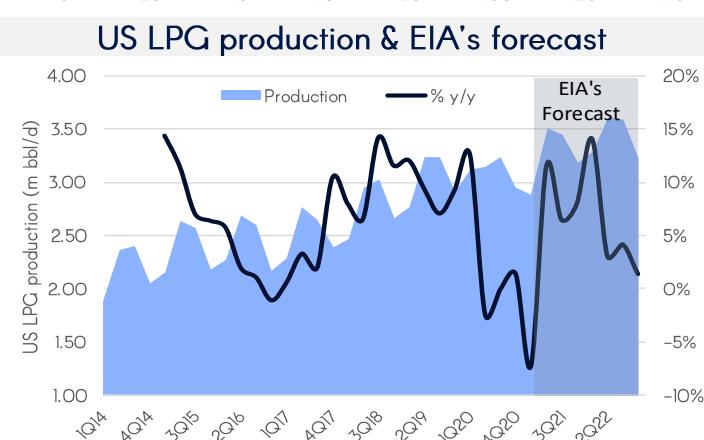
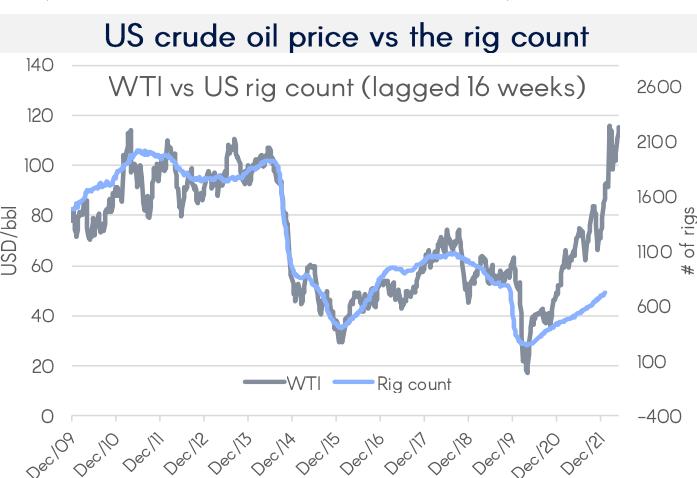
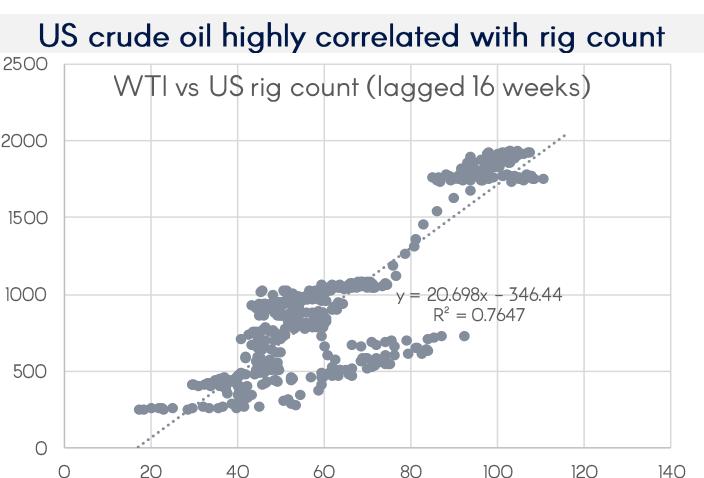
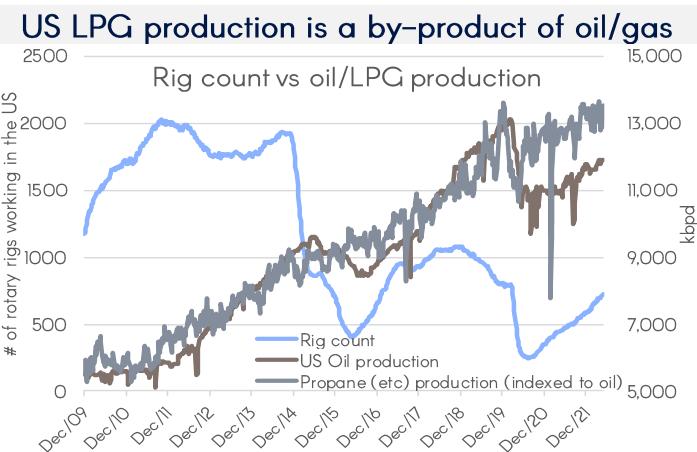
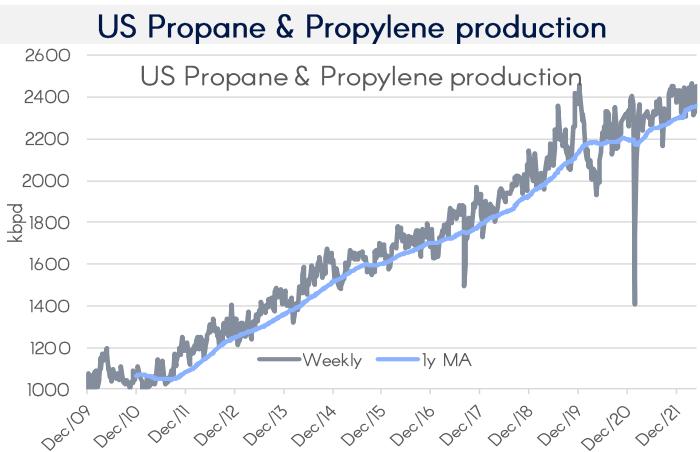
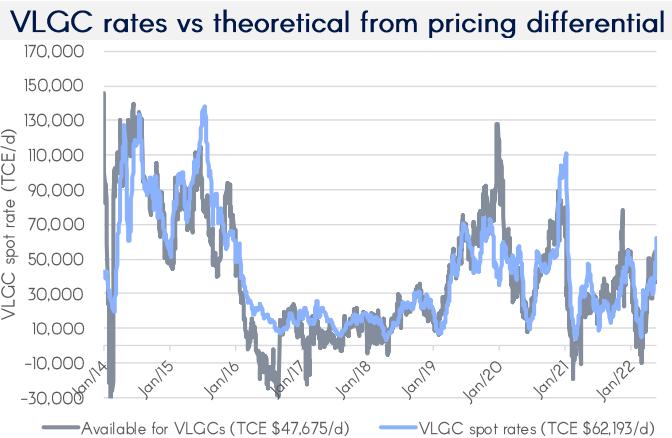
P/E vs EV/EBITDA



Dividend yield vs free cash flow yield



Market Snapshots



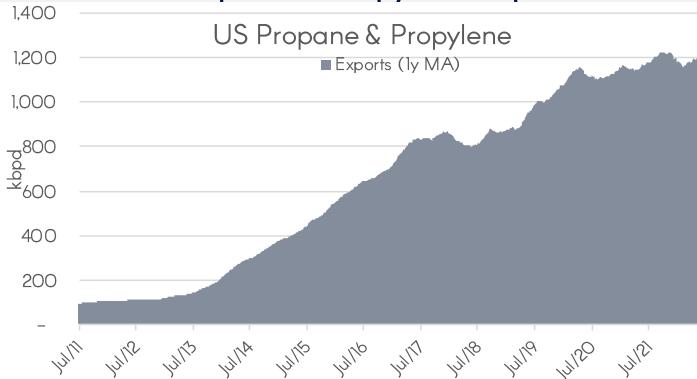


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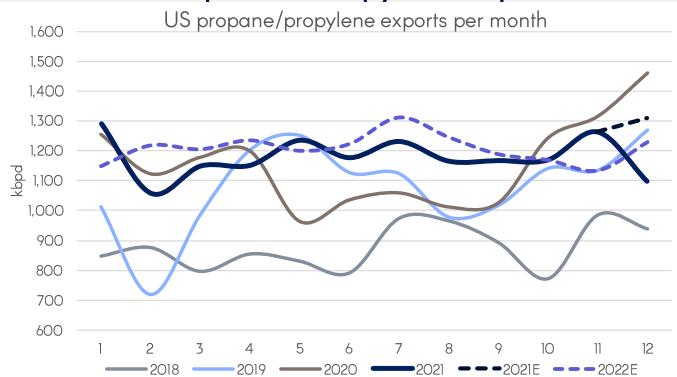
Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

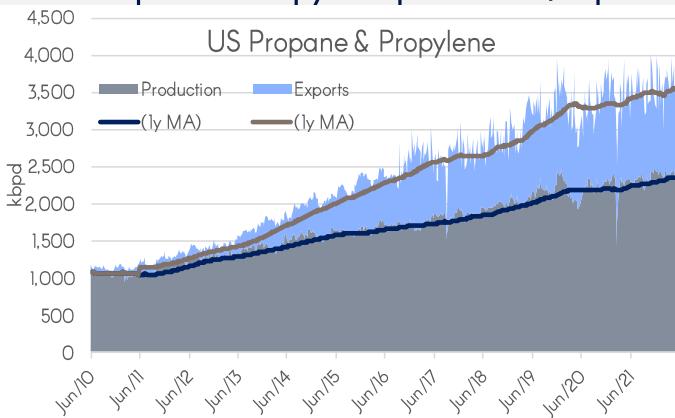
US Propane & Propylene exports



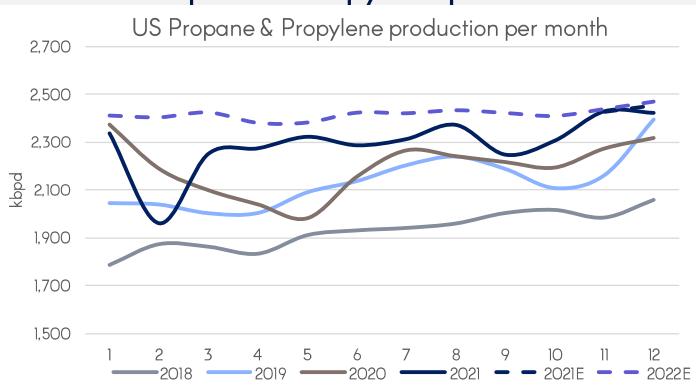
US Propane & Propylene exports



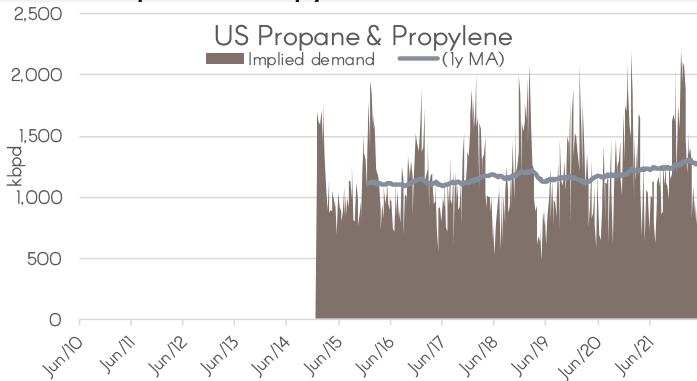
US Propane & Propylene production/exports



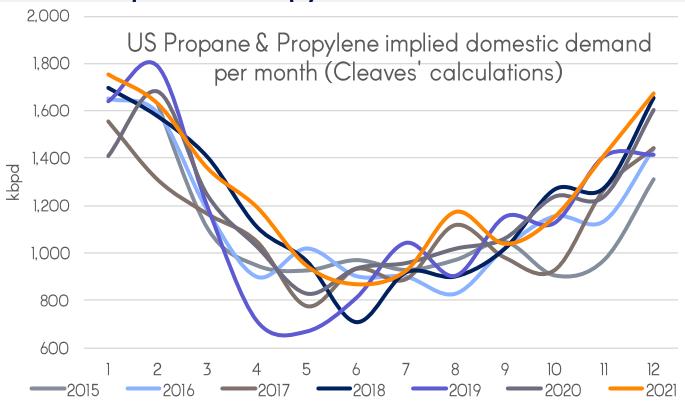
US Propane & Propylene production



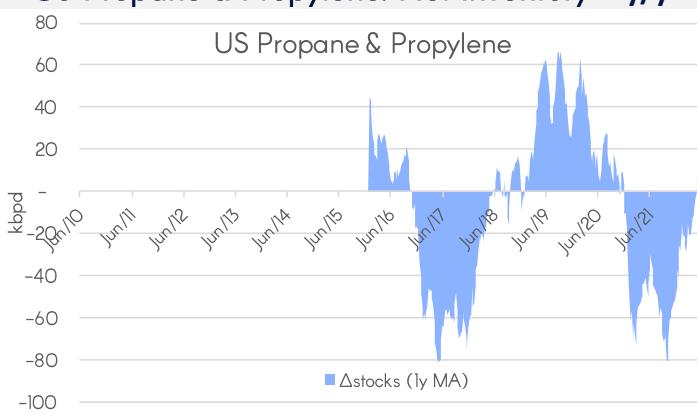
US Propane & Propylene: Domestic demand



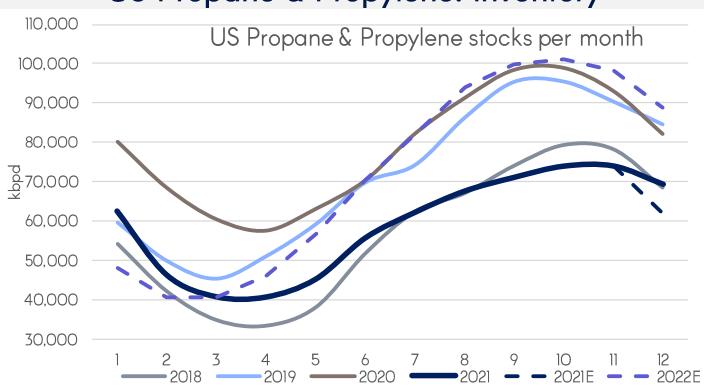
US Propane & Propylene: Domestic demand



US Propane & Propylene: Net inventory Δ y/y



US Propane & Propylene: Inventory



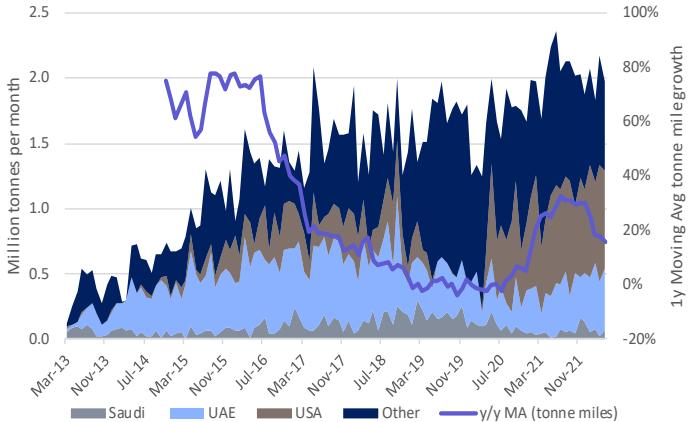


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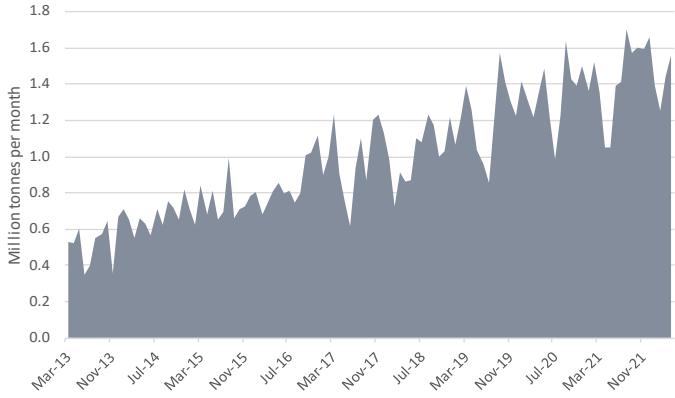
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$$f(\lambda) = a_0 + \beta_1 \lambda^{\tau}, R^2 \approx 1$$

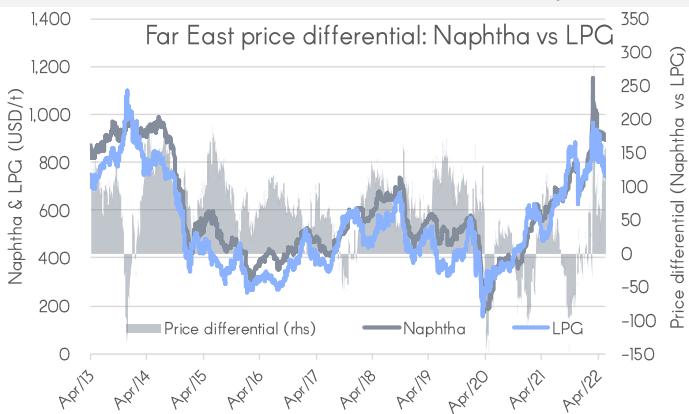
Chinese LPG imports by source



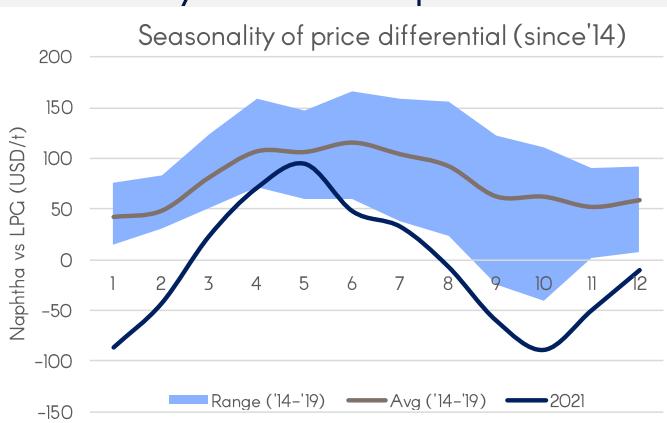
Indian LPG imports



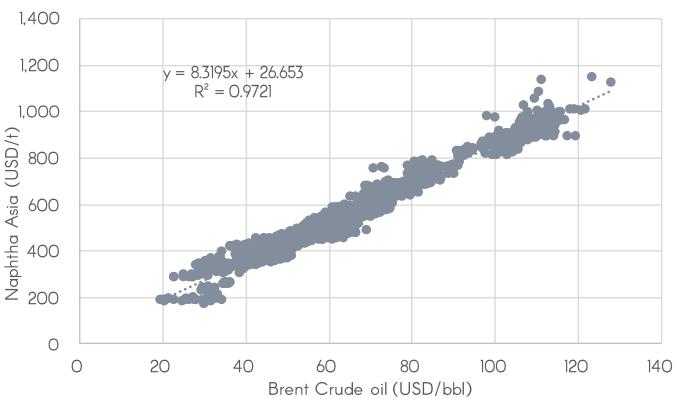
Far Eastern feedstock switch occurs ~\$50–100



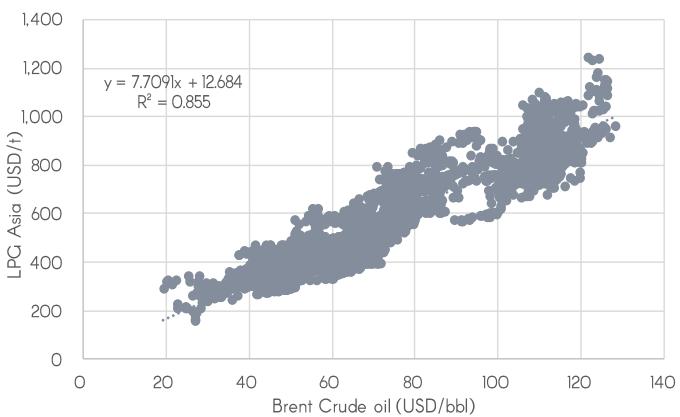
Seasonality of Far Eastern price differential



Correlation: Far East naphtha vs Brent Crude



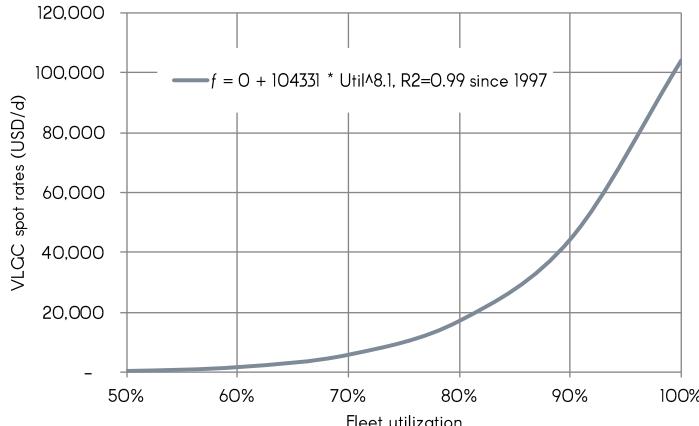
Correlation: Far East LPG vs Brent Crude



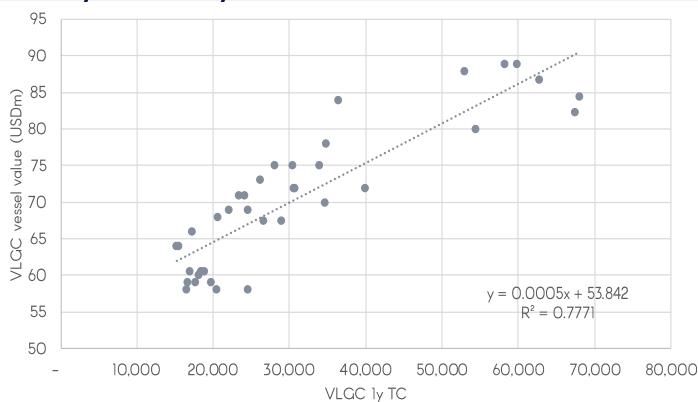


Market Fundamentals

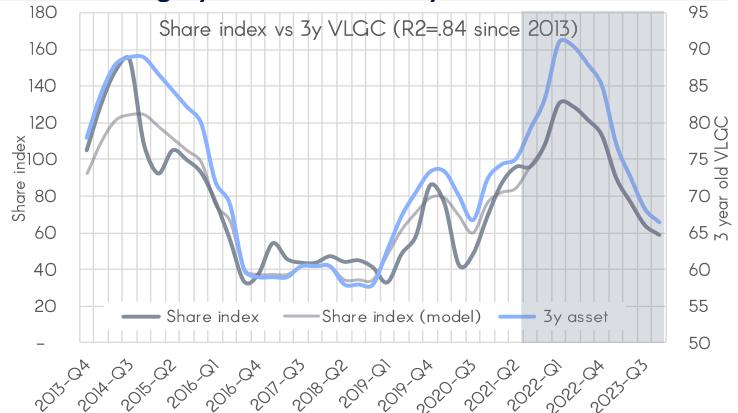
Econometrics: Spot rates vs fleet utilization



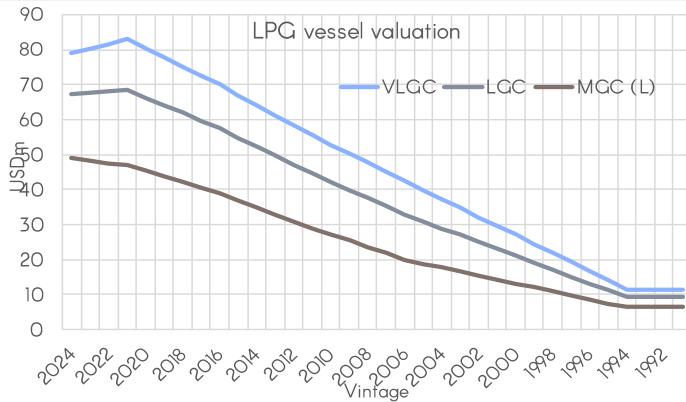
ly TC vs 3y VLGC value (since 2009)



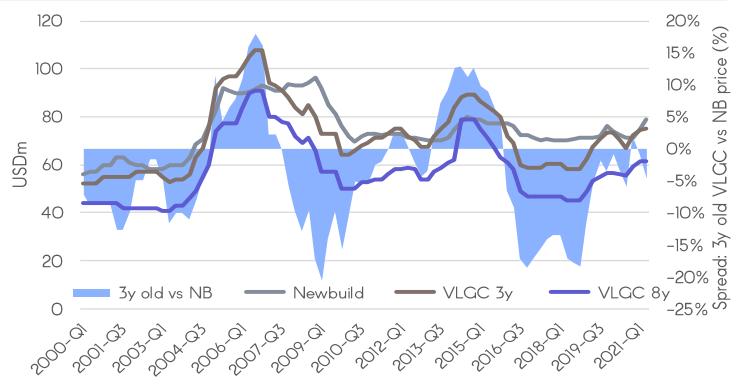
Shares highly correlated w 3y old vessel values



Cleaves' asset valuation overview



Historical asset values





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$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Market Overview

Annual view

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Base case	37,347	23,031	24,797	6,482	18,333	32,937	32,890	39,437	77,070	88,508	22,859	14,990	18,326	46,009	47,657	35,353	46,943	34,304	27,540
VLCG, spot ^a (TCE/d)												8,359	10,164	23,273	23,829	17,677	23,472	17,152	13,770
LGC, spot ^a (TCE/d)																			
VLCG, 5y ^a (USDm)	105	92	83	71	67	73	71	73	88	83	65	60	59	69	71	75	77	70	67
LGC, 5y ^a (USDm)											48	49	48	56	58	62	63	58	55

High case

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Base case	37,347	23,031	24,797	6,482	18,333	32,937	32,890	39,437	77,070	88,508	22,859	14,990	18,326	46,009	47,657	37,596	64,876	60,311	54,923
VLCG, spot ^a (TCE/d)												8,359	10,164	23,273	23,829	18,798	32,438	30,156	27,461
LGC, spot ^a (TCE/d)																			
VLCG, 5y ^a (USDm)	105	92	83	71	67	73	71	73	88	83	65	60	59	69	71	77	89	85	80
LGC, 5y ^a (USDm)											48	49	48	56	58	63	73	70	66

Low case

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Base case	37,347	23,031	24,797	6,482	18,333	32,937	32,890	39,437	77,070	88,508	22,859	14,990	18,326	46,009	47,657	33,508	34,144	19,508	13,048
VLCG, spot ^a (TCE/d)												8,359	10,164	23,273	23,829	16,754	17,072	9,754	8,000
LGC, spot ^a (TCE/d)																			
VLCG, 5y ^a (USDm)	105	92	83	71	67	73	71	73	88	83	65	60	59	69	71	74	69	62	60
LGC, 5y ^a (USDm)											48	49	48	56	58	61	57	51	49

Quarterly view

	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
Base case																			
VLCG, spot ^a (TCE/d)	33,381	39,680	66,926	43,434	35,499	25,242	37,238	32,687	55,154	43,252	56,681	30,013	42,750	28,781	35,673	20,906	32,367	24,330	32,558
LGC, spot ^a (TCE/d)	16,690	19,840	33,463	21,717	17,750	12,621	18,619	16,343	27,577	21,626	28,340	15,007	21,375	14,391	17,837	10,453	16,184	12,165	16,279
VLCG, 5y ^a (USDm)	70	67	72	74	75	75	76	79	78	77	75	72	71	69	69	68	68	67	66
LGC, 5y ^a (USDm)	58	55	59	61	62	62	65	64	63	61	59	58	57	56	56	56	55	54	



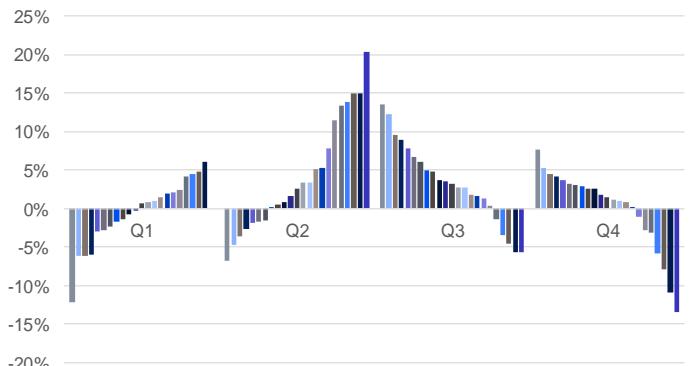
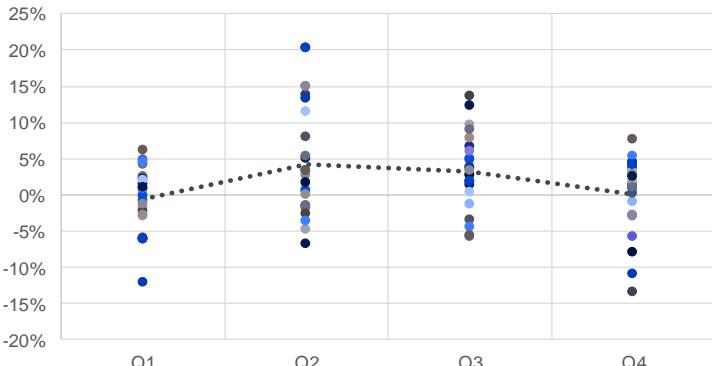
Seasonality

Historically strong demand growth in 2Q/3Q

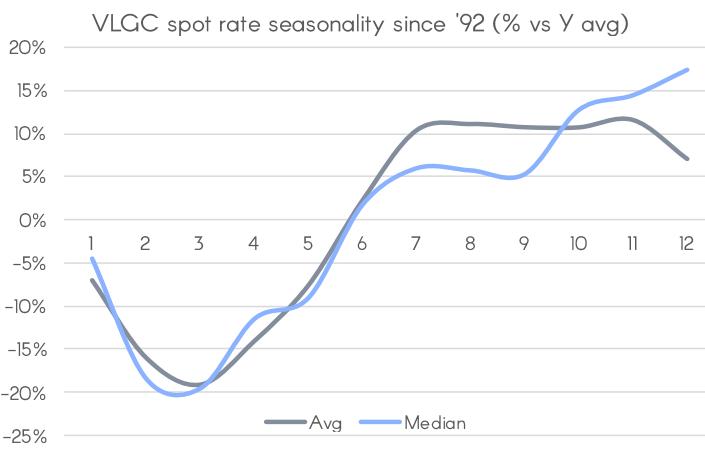
Historically strong demand growth in 2Q/3Q

Implied q/q demand growth since 1997

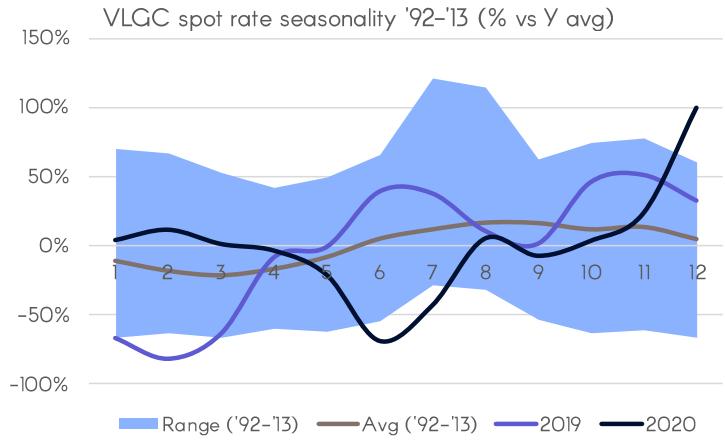
Implied q/q demand growth since 1997



Historical VLGC spot rate seasonality



Historical VLGC spot rate seasonality





Cleaves Securities

Shipping Weekly 22/2022

$$f(\lambda) = a_0 + \beta_1 \lambda^T, R^2 \approx 1$$

Company Financials (annual estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
AGAS NO	194	175	153	116	146	122	96	59	98	69	38	2	93	55	25	-8	
BWLPG NO	585	398	318	261	435	257	177	119	275	98	17	-42	219	67	-1	-46	
LPG US	364	242	203	166	236	140	98	61	169	73	28	-9	154	57	7	-28	
Average	381	272	224	181	272	173	123	80	180	80	27	-16	155	60	10	-27	
Median	364	242	203	166	236	140	98	61	169	73	28	-9	154	57	7	-28	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	
USDm																	
AGAS NO	868	996	943	894	161	161	133	123	1,073	1,201	1,120	1,062	595	617	627	606	
BWLPG NO	1,568	1,433	1,297	1,144	274	255	281	281	2,282	2,128	2,018	1,866	1,512	1,522	1,504	1,434	
LPG US	1,181	1,195	1,131	1,061	257	260	278	274	1,582	1,598	1,553	1,478	988	998	999	967	
Average	1,206	1,208	1,124	1,033	231	225	231	226	1,646	1,642	1,564	1,469	1,032	1,046	1,043	1,002	
Median	1,181	1,195	1,131	1,061	257	255	278	274	1,582	1,598	1,553	1,478	988	998	999	967	

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E		
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	2023	2024	2023	2024	
USDm																	
AGAS NO	141	108	83	50	34	-73	77	41	59	0	-28	-10	31,433	25,269	18,425	25,422	
BWLPG NO	393	226	158	114	457	202	134	107	142	-20	26	0	31,214	24,892	25,024	19,134	
LPG US	221	124	77	42	241	43	71	42	141	3	18	-4	33,241	26,759	22,378	21,303	
Average	252	153	106	69	244	58	94	63	114	-6	6	-5	31,963	25,640	21,942	21,953	
Median	221	124	83	50	241	43	77	42	141	0	18	-4	31,433	25,269	22,378	21,303	

Company Financials (quarterly estimates)

Profit & Loss

P&L	TCE Revenue				EBITDA				EBIT				Net Profit			
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22
USDm																
AGAS NO	54	43	56		42	31	44		29	20	32		30	16	27	
BWLPG NO	159	128	158		122	91	122		82	51	82		59	34	63	
LPG US	102	82	105		66	51	74		50	34	57		46	30	53	
Average	105	84	106		77	58	80		54	35	57		45	27	48	
Median	102	82	105		66	51	74		50	34	57		46	30	53	

Balance Sheet

BS	Property & Equip. (incl. NBs)				Liquidity				Total Assets				Total Equity			
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22
USDm																
AGAS NO	806	810	868		176	162	161		1,026	1,016	1,073		575	576	595	
BWLPG NO	1,634	1,601	1,568		243	236	274		2,317	2,277	2,282		1,458	1,462	1,512	
LPG US	1,201	1,190	1,181		224	226	257		1,568	1,560	1,582		942	949	988	
Average	1,214	1,200	1,206		214	208	231		1,637	1,618	1,646		991	996	1,032	
Median	1,201	1,190	1,181		224	226	257		1,568	1,560	1,582		942	949	988	

Cash Flow

CF	Net Operational CF				Free Cash Flow				Net Cash Flow				TCE/d		Cash B/E	
	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	1Q22	2Q22	3Q22	4Q22	2Q22	3Q22	2Q22	3Q22
USDm																
AGAS NO	42	28	39		81	12	-31		38	-14	-1	43,596	36,948	20,705	20,728	
BWLPG NO	106	78	109		99	71	102		24	-7	38	46,292	37,918	25,464	25,827	
LPG US	63	47	70		57	41	62		97	2	31	51,627	41,041	25,521	24,620	
Average	70	51	73		79	41	44		53	-6	23	47,172	38,636	23,897	23,725	
Median	63	47	70		81	41	62		38	-7	31	46,292	37,918	25,464	24,620	



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Recommendation Percent

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HOLD	18%
SELL	0%

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