

Shipping - Global

Shipping & supply chain high frequency tracker #59

Industry Overview

Tracking the high frequency shipping data

This report contains our favorite charts to track shipping & supply chains. Red Sea diversions have stabilized at 70% of normal, but recent Houthi attacks are likely to prolong any return to 2H24 at the earliest. Panama Canal transits have rebounded a little but water levels are a risk during the 1H24 dry season. Container spot rates look poised to drift lower with easing Red Sea disruptions offsetting strong US container imports. Bulker appears to have bottomed with a new upcycle ahead on strong demand. Tanker fundamentals are positive but watch seasonality and new orders.

Red Sea at ~30% of normal, Panama transit slightly up

Red Sea vessel transits are holding at around ~30% of normal with container and car carrier having largely diverted but some bulkers and tankers still transiting. Houthi attacks have continued with the sinking of the *Rubymar* and three fatalities on the *True Confidence* and it's unclear whether a Palestine ceasefire would be enough to reduce attacks. Panama Canal transits have rebounded to 60% of normal (from lows of 50%) but water levels remain historically low and are likely to constrain transits ahead.

Container: Spot rates set to drift further lower

US container imports are trending +15-20% YoY in February 2024 led by improving furniture imports. Vessel congestion is down to 4.8% of the fleet (from 7% in early January) despite Red Sea disruptions. SCFI spot rates are down -12% from mid-January highs due to post-CNY seasonality and Red Sea disruptions passing the peak. Our checks suggest further gradual spot freight rate declines ahead with capacity being restored post-CNY holidays which will pressure utilization.

Bulker: Passed the bottom with new upcycle building

Dry bulk has had a strong start to 2024 with supra & handy rates trending at US\$3-4k/day YoY higher so far supported by strong demand (Chinese steel exports, Chinese log imports). Forward curves suggest risk are to the upside to spot rates into 2Q24 as South America grain exports ramps and ongoing disruptions from Red Sea and Panama keep the market tight. Signs point to the start of a new upcycle with secondhand prices continuing to move higher and time charter rates trending higher from mid-2023 lows.

Tanker: Seasonal dip looms, watching new orders

VLCC crude rates have averaged around US\$45k/day in 1Q24 supported by healthy Middle East and US exports. Forward curves suggest that VLCC rates will seasonally fade back to ~US\$30-40k/day into 2Q-3Q2, while six-month time charter rates are more positive suggesting average VLCC rates of US\$50k/day. Crude tanker has seen a doubling of new orders so far in (2M24 at 7.2mn dwt or 1.6% of the fleet)– but the orderbook remains manageable at ~6% of fleet for now with shipyards still largely booked out in the near term.

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Equity
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Shipping

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Abbreviations

CNY: Chinese New Year

VLCC: Very Large Crude Carrier

SCFI: Shanghai Containerized Freight Index

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Refer to important disclosures on page 27 to 28.

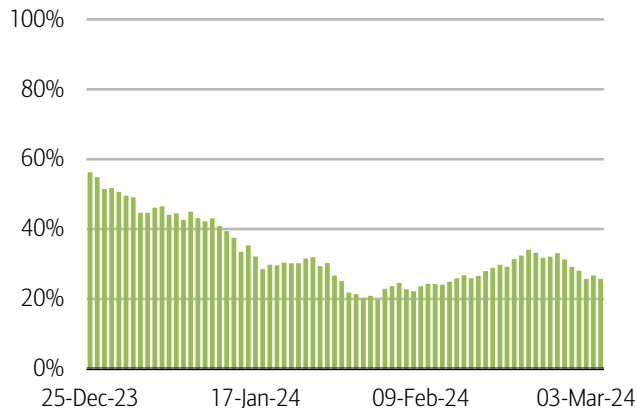
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Timestamp: 07 March 2024 07:01AM EST

Red Sea disruptions

Exhibit 1: Red Sea total vessel arrivals vs 1H Dec levels (%), 7D MA

Overall arrivals remain less than 1/3 of 1H of December level in 2024

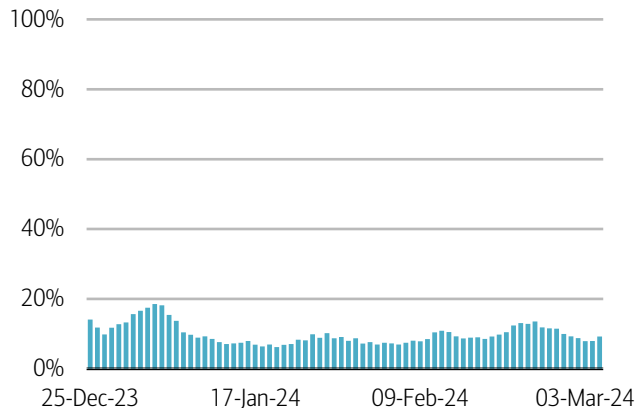


Source: Clarksons

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Exhibit 2: Container ship Red Sea arrivals vs 1H Dec levels (%), 7D MA

Containers ship arrivals are less than 10% of 1H of December level

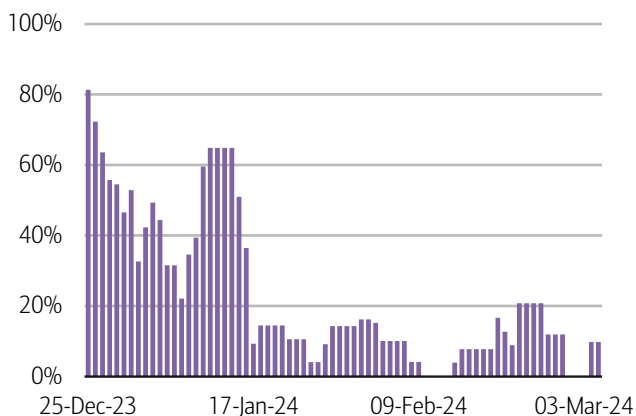


Source: Clarksons

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Exhibit 3: Car carrier Red Sea arrivals vs 1H Dec levels (%), 7D MA

Car carrier arrivals now less than 5-10% of 1H of December level

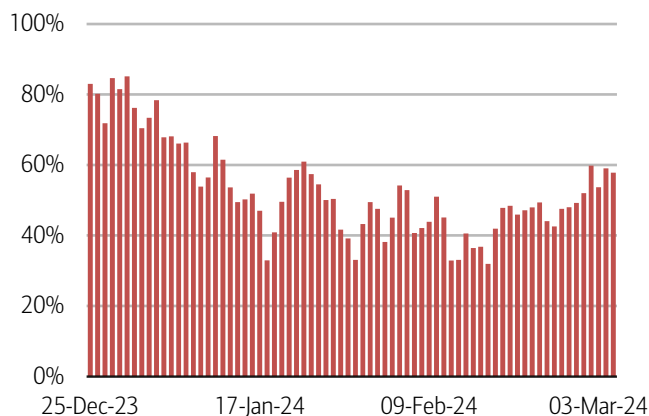


Source: Clarksons

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Exhibit 4: Product tanker Red Sea arrivals vs 1H Dec levels (%), 7D MA

Product tanker arrivals now 50-60% of 1H of December level

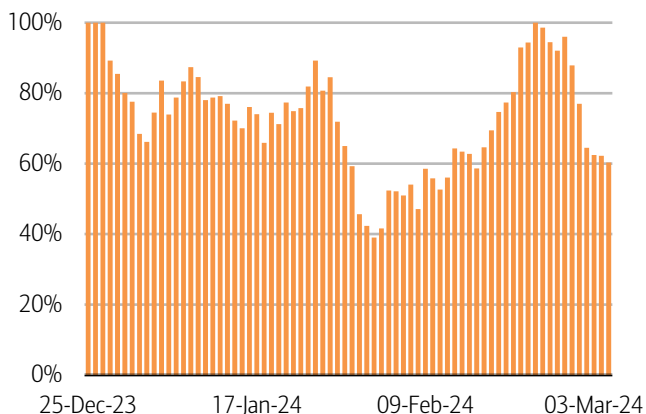


Source: Clarksons

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Exhibit 5: Crude tanker Red Sea arrivals vs 1H Dec levels (%), 7D MA

Crude tanker around 50-60% of 1H of December level

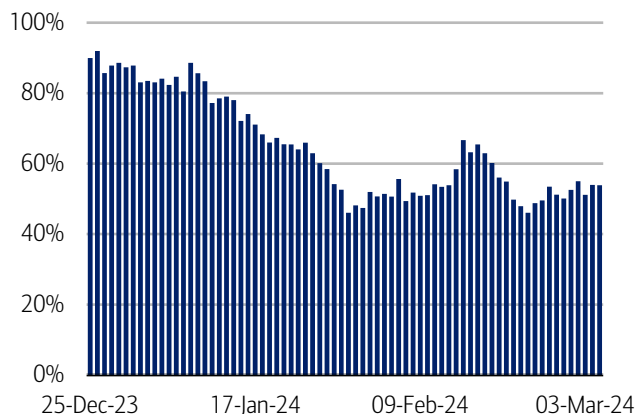


Source: Clarksons

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Exhibit 6: Bulker Red Sea arrivals vs 1H Dec levels (%), 7D MA

Bulker arrivals around 50% of 1H of December level



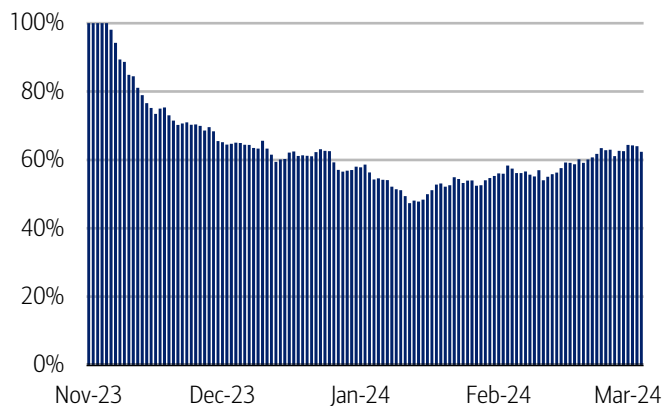
Source: Clarksons

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Panama Canal drought

Exhibit 7: Panama total transits % of normal (10DMA), 2023-24

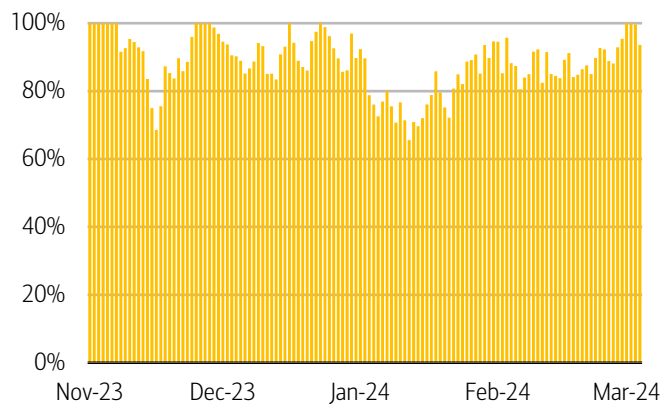
Total transit just over 60% of normal in early 2024



Source: Clarksons. Note: % of normal is against same period in 2022 using 10 day average.
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Exhibit 8: Panama container transits % of normal (10DMA), 2023-24

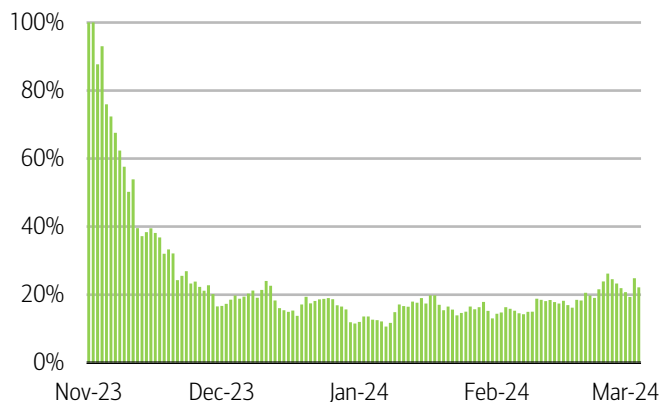
Container seeing the least impact from drought – nearly back to normal



Source: Clarksons. Note: % of normal is against same period in 2022 using 10 day average.
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Exhibit 9: Panama bulk transits % of normal (10DMA), 2023-24

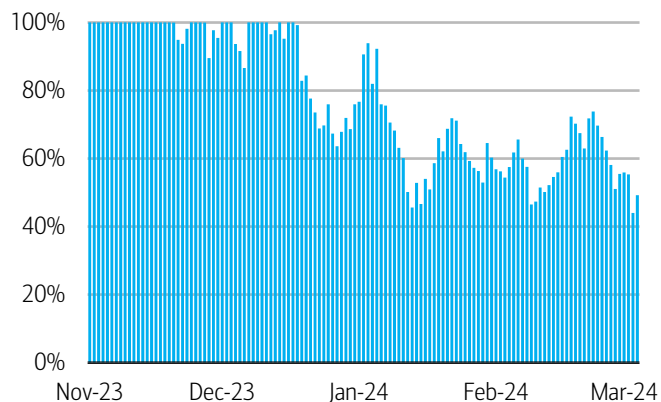
Bulk has seen the biggest impact – around 20% of normal



Source: Clarksons. Note: % of normal is against same period in 2022 using 10 day average.
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Exhibit 10: Panama product tanker % of normal (10DMA), 2023-24

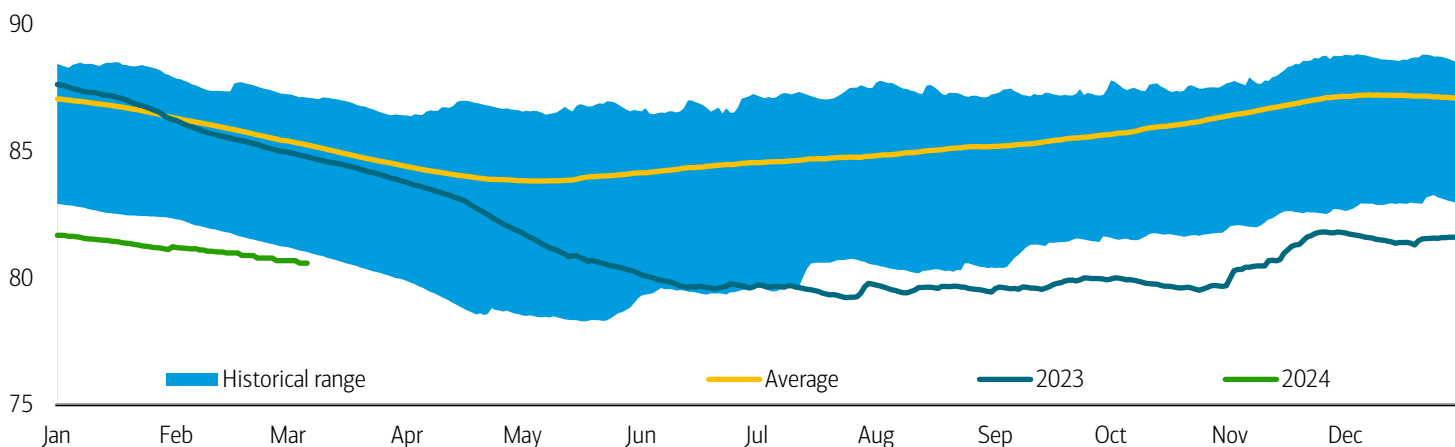
Product tanker Panama transits down to less than 50% of normal



Source: Clarksons. Note: % of normal is against same period in 2022 using 10 day average.
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Exhibit 11: Panama Gatun lake water level (ft)

Current water level remains well below historical water level



Source: Panama Canal Authority. Note: 2024 data is Panama Canal Authority's estimates

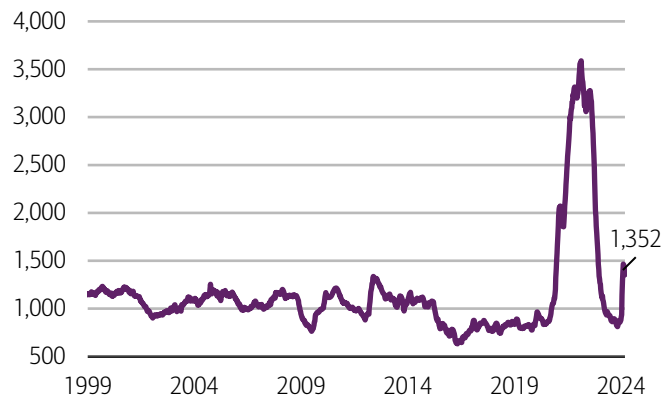
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Container shipping

Blended freight rates

Exhibit 12: China Containerized Freight Index (CCFI), 1999-2024

WoW: -4% MoM: -4% YoY: +28% vs 2019: +59%



Source: Shanghai Shipping Exchange

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Exhibit 13: CCFI quarterly average, 2023-24

CCFI trending up both YoY and QoQ in 1Q24

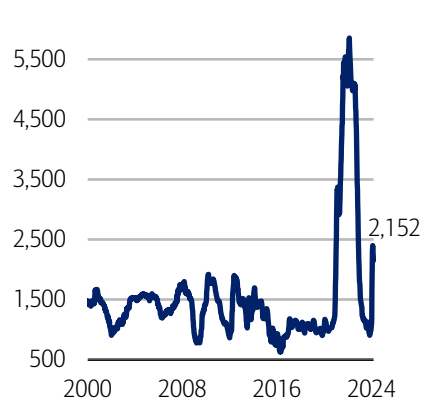
CCFI	1Q23	2Q23	3Q23	4Q23	1Q24
CCFI	1,087	938	876	854	1,299
CCFI Europe	1,411	1,154	1,059	985	2,010
CCFI USWC	789	707	733	725	941
CCFI USEC	1,161	886	870	839	1,145
% YoY					
CCFI	-68%	-70%	-70%	-47%	20%
CCFI Europe	-74%	-77%	-78%	-61%	42%
CCFI USWC	-70%	-72%	-69%	-33%	19%
CCFI USEC	-57%	-68%	-69%	-52%	-1%
% QoQ					
CCFI	-33%	-14%	-7%	-2.5%	52.1%
CCFI Europe	-44%	-18%	-8%	-7%	104%
CCFI USWC	-27%	-10%	4%	-1%	30%
CCFI USEC	-34%	-24%	-2%	-4%	36%

Source: Shanghai Shipping Exchange

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Exhibit 14: CCFI Europe, 2000-24

MoM: -6% YoY: +56% vs 2019: +92%

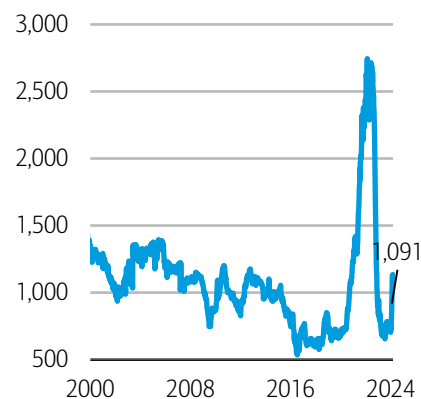


Source: Shanghai Shipping Exchange

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Exhibit 15: CCFI US West Coast, 2000-24

MoM: +20% YoY: +40% vs 2019: +55%

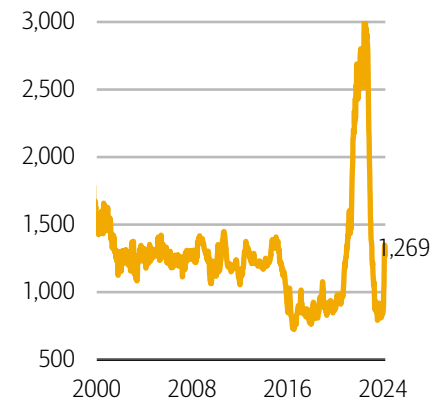


Source: Shanghai Shipping Exchange

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Exhibit 16: CCFI US East Coast, 2000-24

MoM: +10% YoY: +17% vs 2019: +42%

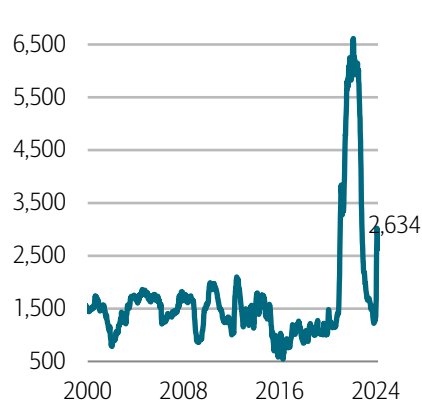


Source: Shanghai Shipping Exchange

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Exhibit 17: CCFI Mediterranean, 2000-24

MoM: -7% YoY: +44% vs 2019: +133%

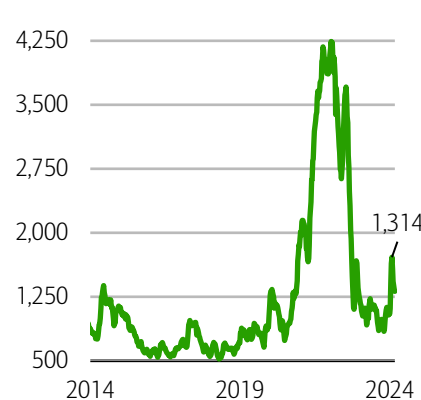


Source: Shanghai Shipping Exchange

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Exhibit 18: CCFI Middle East, 2014-24

MoM: -23% YoY: +18% vs 2019: +66%

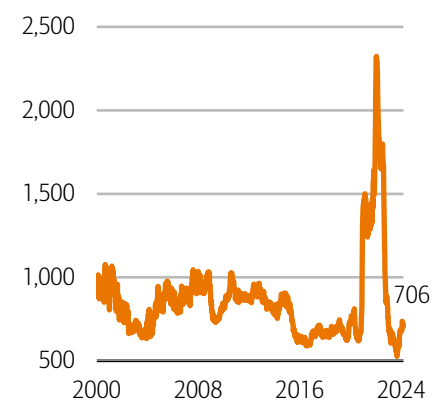


Source: Shanghai Shipping Exchange

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Exhibit 19: CCFI Singapore, 2000-24

MoM: -4% YoY: +17% vs 2019: -2%



Source: Shanghai Shipping Exchange

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Spot freight rates

Exhibit 20: Shanghai Containerized Freight Index (SCFI), 2010-24

WoW: -6% MoM: -9% YoY: +113% vs2019: +146%



Source: Shanghai Shipping Exchange

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Exhibit 21: SCFI quarterly average, 2023-24

SCFI significantly up both QoQ and YoY in 1Q24

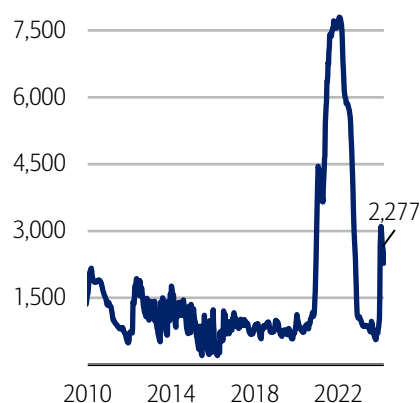
SCFI	1Q23	2Q23	3Q23	4Q23	1Q24
SCFI	969	983	986	1,089	2,145
SCFI Europe	926	848	776	989	2,821
SCFI USWC	1,265	1,419	1,884	1,851	4,287
SCFI USEC	2,438	2,366	2,768	2,540	5,950
% YoY					
SCFI	-80%	-77%	-70%	-21%	121%
SCFI Europe	-88%	-86%	-83%	-34%	204%
SCFI USWC	-84%	-82%	-64%	14%	239%
SCFI USEC	-78%	-77%	-68%	-38%	144%
% QoQ					
SCFI	-30%	2%	0%	10%	97%
SCFI Europe	-38%	-8%	-9%	28%	185%
SCFI USWC	-22%	12%	33%	-2%	132%
SCFI USEC	-41%	-3%	17%	-8%	134%

Source: Shanghai Shipping Exchange

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Exhibit 22: SCFI Europe, 2010-24 (\$/TEU)

MoM: -20% YoY: +189% vs 2019: +186%

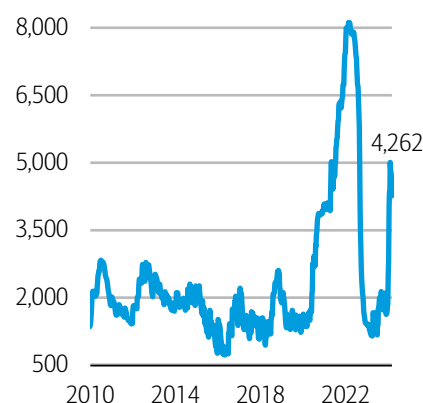


Source: Shanghai Shipping Exchange. \$=USD

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Exhibit 23: SCFI USWC, 2010-24 (\$/TEU)

MoM: -3% YoY: +255% vs 2019: +175%

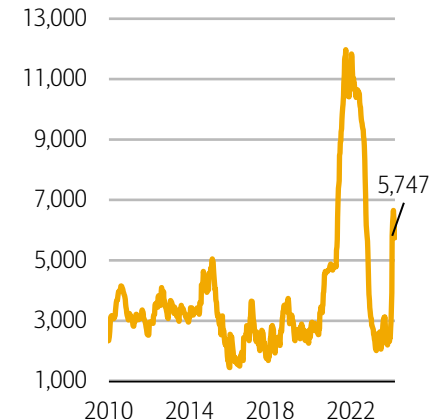


Source: Shanghai Shipping Exchange. \$=USD

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Exhibit 24: SCFI USEC, 2010-24 (\$/FEU)

MoM: -10% YoY: +148% vs 2019: +118%

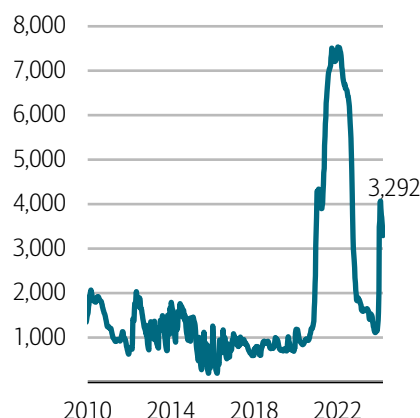


Source: Shanghai Shipping Exchange. \$=USD

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Exhibit 25: SCFI Med, 2010-24 (\$/TEU)

MoM: -16% YoY: +106% vs 2019: +306%

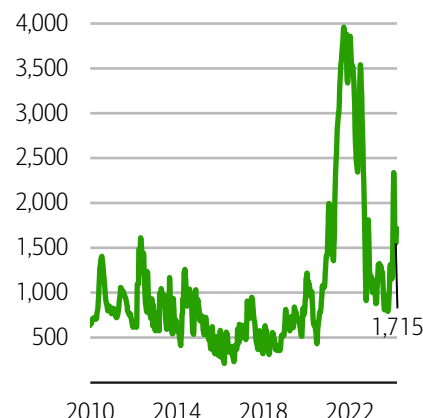


Source: Shanghai Shipping Exchange. \$=USD

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Exhibit 26: SCFI Middle East, 2010-24 (\$/TEU)

MoM: +3% YoY: +78% vs 2019: +168%



Source: Shanghai Shipping Exchange. \$=USD

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Exhibit 27: SCFI Singapore, 2010-24 (\$/TEU)

MoM: -11% YoY: +61% vs 2019: +93%



Source: Shanghai Shipping Exchange. \$=USD

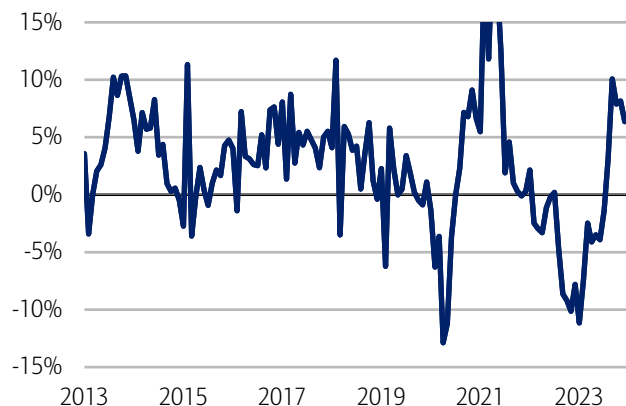
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World trade trends

Exhibit 28: Global container volume growth (YoY %), 2013-24

World container trade up 5-10% YoY in past two months

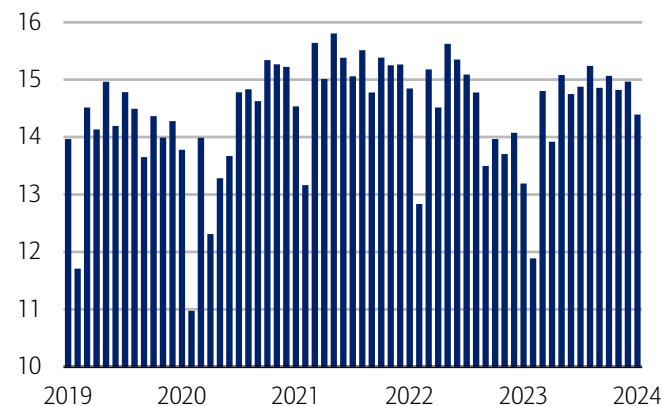


Source: Bloomberg

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Exhibit 29: Global monthly container volumes (mn TEU), 2019-24

World trade has been firm since spring 2023

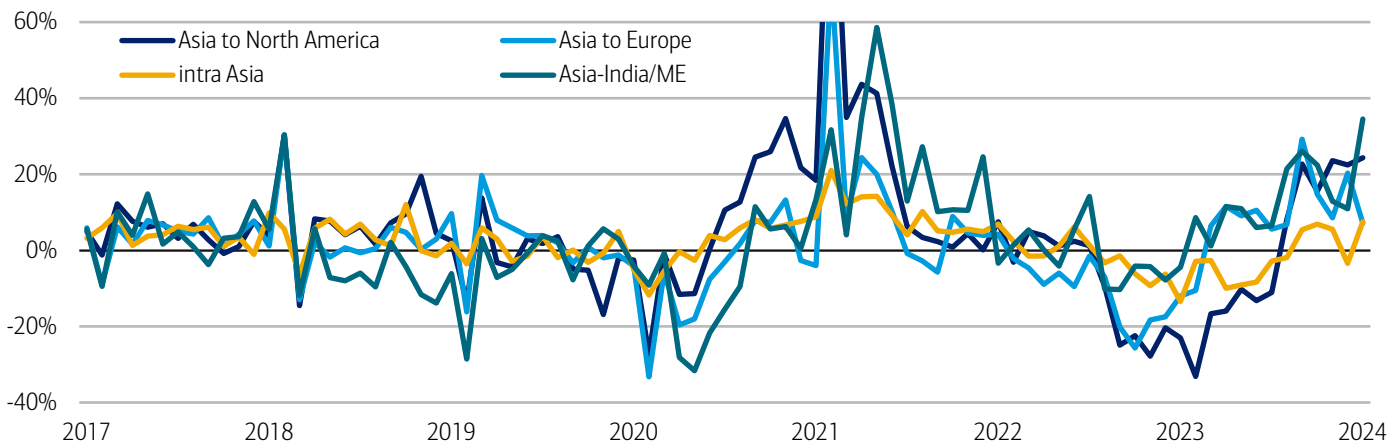


Source: Bloomberg

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Exhibit 30: Container volumes by route (% YoY), 2017-23

Key trade lane volumes still seeing positive YoY growth



Source: Bloomberg

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US high frequency container volumes

Exhibit 31: US weekly container imports 4w MA (% YoY), 2018-24

US weekly imports +15-20% YoY higher in past month

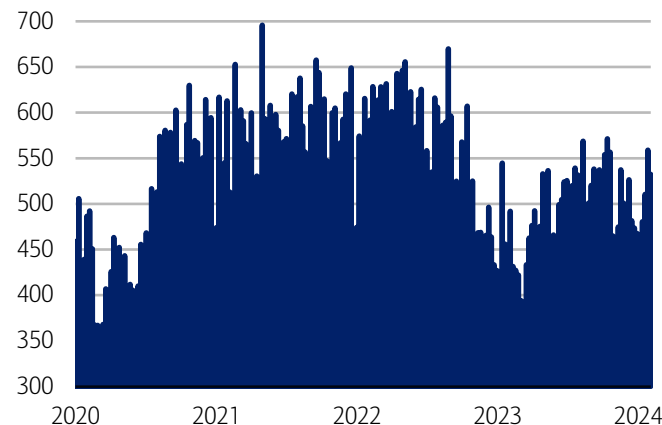


Source: Bloomberg

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Exhibit 32: US weekly container imports (K TEU), 2020-24

US weekly imports picked up in 2024

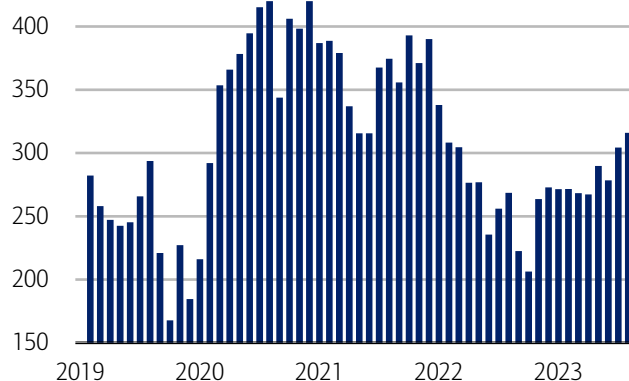


Source: Bloomberg

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Exhibit 33: US furniture monthly imports (TEU), 2019-24

US furniture imports remain above 300k TEU /month

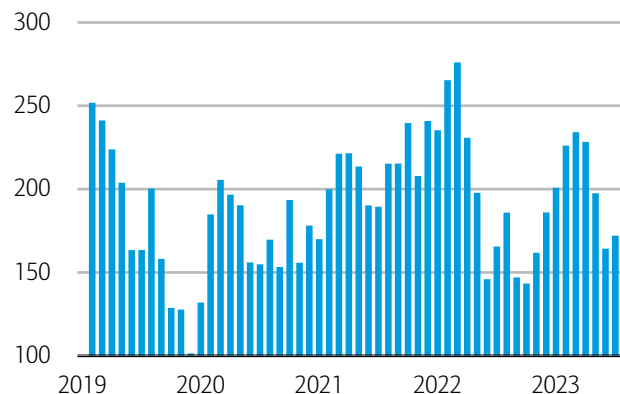


Source: Bloomberg

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Exhibit 34: US apparel & footwear monthly imports (TEU), 2019-24

US apparel & footwear imports reaches close to 190k TEU / month

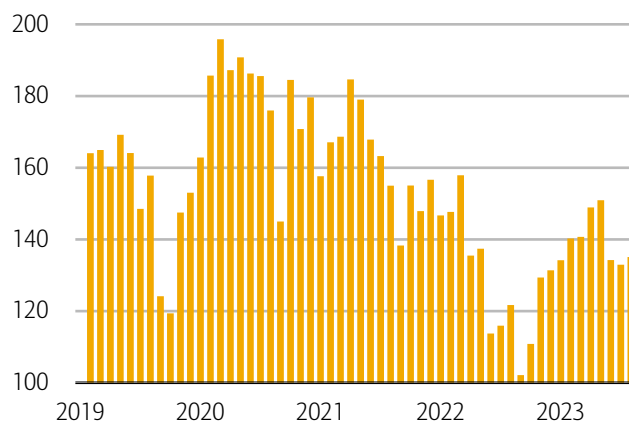


Source: Bloomberg

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Exhibit 35: US electronic monthly imports (TEU), 2019-24

US electronics imports remain below 140k TEU /month

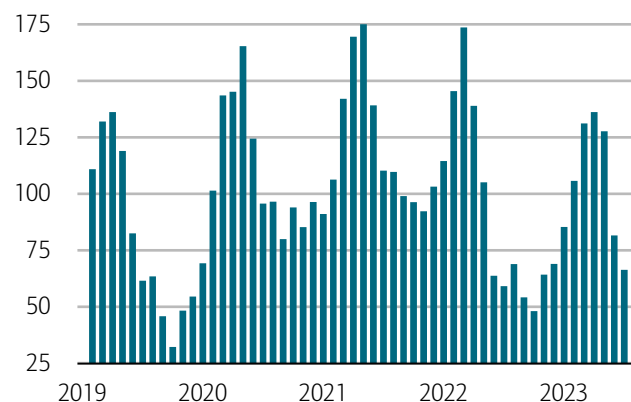


Source: Bloomberg

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Exhibit 36: US toy & leisure monthly imports (TEU), 2019-24

US toy & leisure imports back up to 75k TEU



Source: Bloomberg

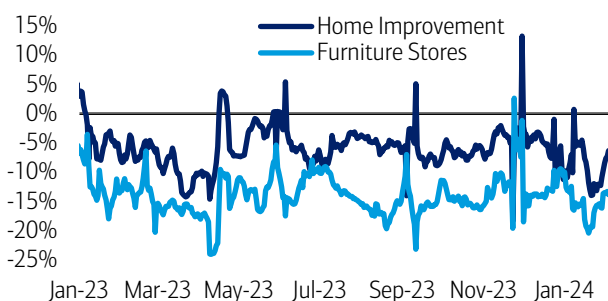
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US consumer reads

For more on BAC card spending data, and a detailed explanation of the methodology, disclaimers, and limitations in connection with such data see our note: [BofA on USA](#)

Exhibit 37: Spending per HH at home improvement and furniture stores, based on BAC aggregated card data (y/y % change of the 7-day ma of spending levels)

Furniture and home improvement spending growth remained negative on a y/y basis in the week ending Feb 3

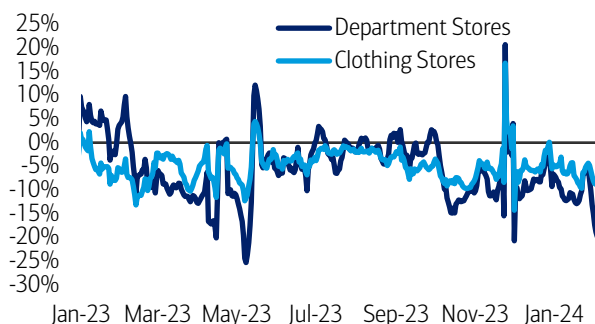


Source: BAC internal data

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Exhibit 38: Spending per HH at department and clothing stores, based on BAC aggregated card data (y/y % change of the 7-day ma of spending levels)

Y/y clothing spending growth has generally been negative in 2023

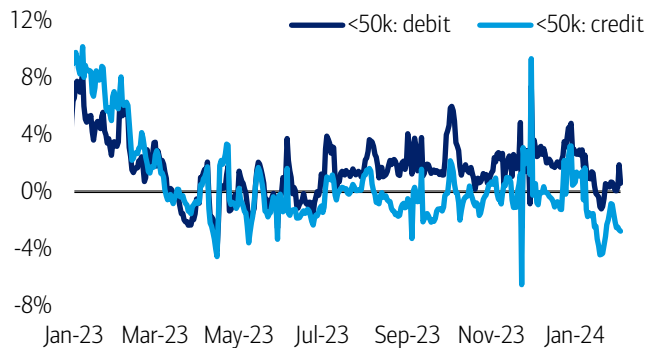


Source: BAC internal data

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Exhibit 39: Total credit card and total debit card spending per HH for lower-income group (y/y % change of the 7-day ma of spending levels)

Lower-income debit card spending growth significantly outpaced credit card spending growth on a y/y basis in the week ending Feb 3

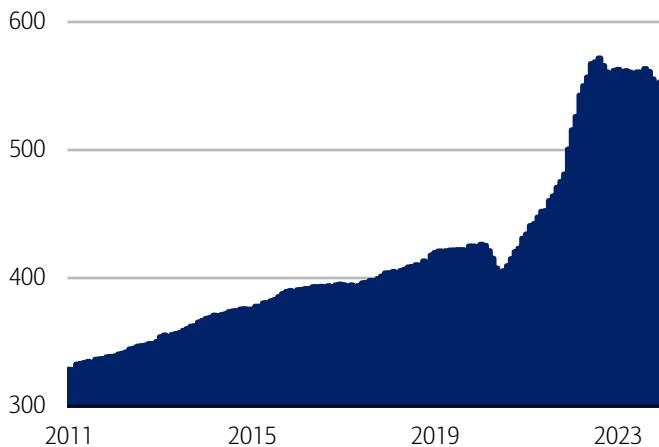


Source: BAC internal data

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US retail inventory levels**Exhibit 41: US retail (ex-auto) inventories (US\$bn), 2011-24**

Retail inventories have been stable, still well above pre-COVID levels

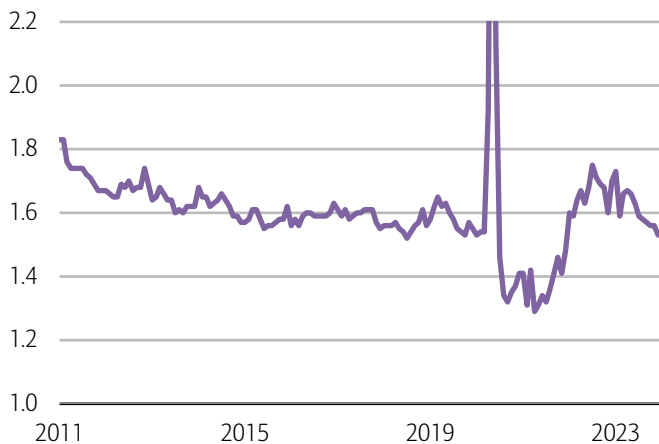


Source: Bloomberg

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Exhibit 43: Furniture – adjusted inventory to sales, 2011-24

Furniture inventory-to-sale closer to historical range



Source: Bloomberg

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Exhibit 40: Aggregated monthly card spending per HH by major category (%m/m, SA)

Card spending was weak in several categories in January

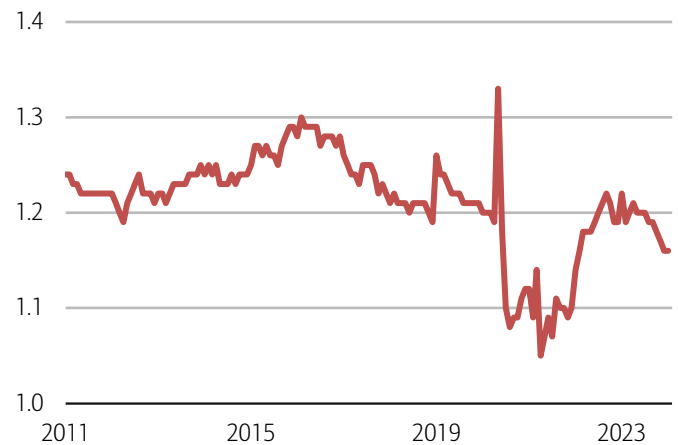
	Jan-24	Dec-23	Nov-23	Oct-23	Sep-23	Aug-23
Gas	-3.1%	0.8%	-3.9%	-3.2%	2.7%	5.8%
Furniture	-2.0%	-5.5%	3.8%	-1.4%	-1.2%	-2.4%
Home improvement	-2.6%	-1.1%	-0.3%	0.4%	-1.4%	-1.3%
Clothing	0.9%	-1.9%	2.8%	-1.9%	-1.3%	-1.7%
Grocery	1.1%	0.0%	-0.3%	0.9%	-0.2%	0.1%
Department Store	-1.8%	-1.0%	1.4%	-1.4%	0.0%	-2.9%
Restaurants	-2.4%	0.3%	0.4%	0.3%	0.1%	-0.6%
Lodging	-1.8%	0.9%	-0.2%	0.2%	0.0%	-1.6%
Airlines	0.6%	0.7%	3.2%	-2.9%	-0.5%	-0.9%
Total online retail (card not present)	-0.5%	0.0%	-0.1%	-0.4%	0.9%	-0.6%

Source: BAC internal data. Card not present is largely online but could include purchases made over the phone.

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Exhibit 42: US retail (ex-auto) inventory to sales ratio, 2011-24

Retail adjusted inventories to sales just below 1.2x below historical average

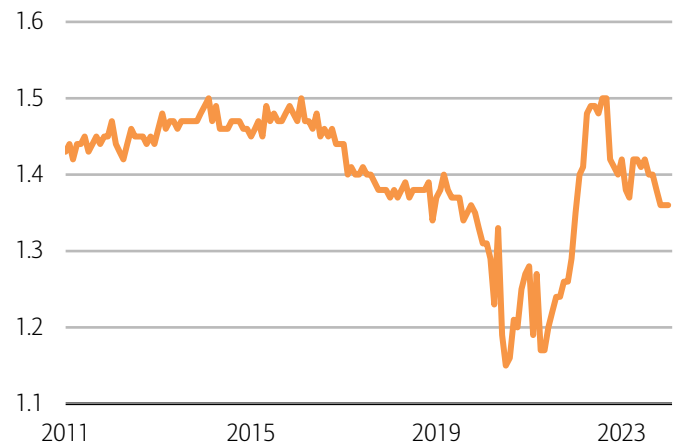


Source: Bloomberg

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Exhibit 44: General merchandise – adjusted inventory to sales, 2011-24

General merchandise inventory-to-sales returned to pre-COVID level

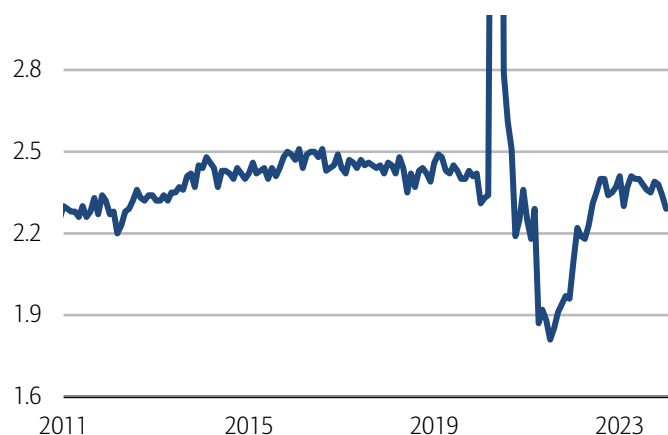


Source: Bloomberg

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Exhibit 45: Clothing – adjusted inventory to sales, 2011-24

Clothing inventory to sales returning to historical range

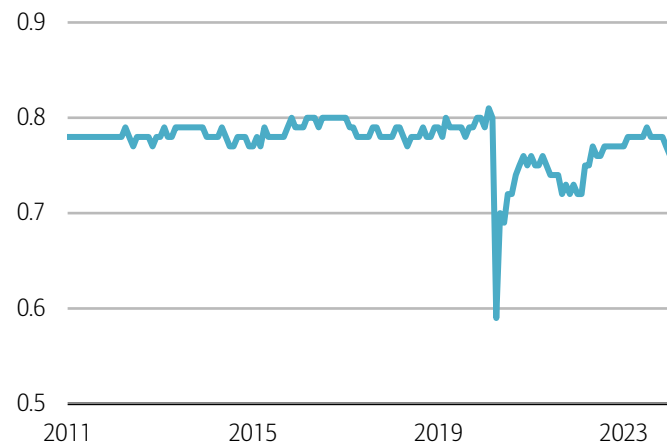


Source: Bloomberg

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Exhibit 46: Food & Beverage – adjusted inventory to sales, 2011-24

Food & beverage inventory to sales still slightly below historical level

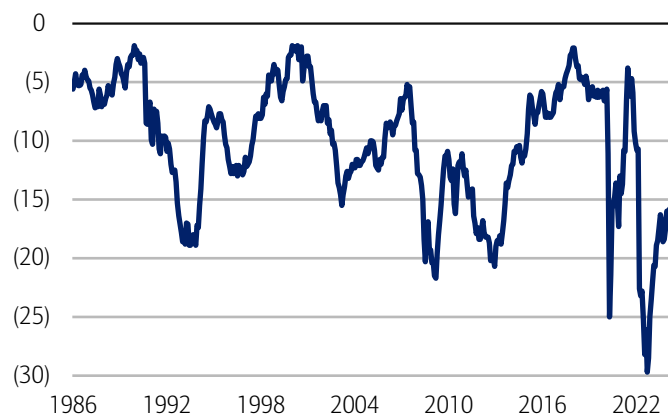


Source: Bloomberg

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EU consumer and retail sentiments and indicators**Exhibit 47: EU overall consumer sentiment indicator, 1986-2024**

Consumer sentiment has been recovering but still much lower than normal

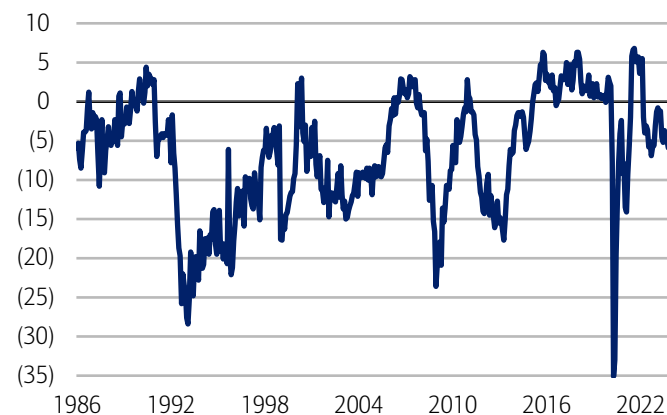


Source: European Commission

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Exhibit 48: EU overall retail sentiment indicator, 1986-2024

Retail sentiment has been on a downward trend

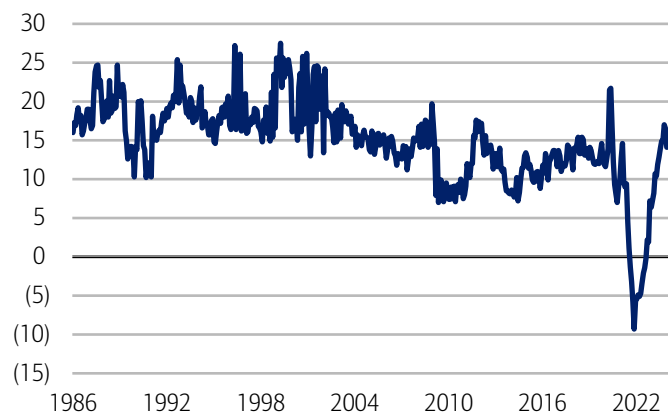


Source: European Commission

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Exhibit 49: EU retail indicator - inventory, 1986-2024

Retail inventory indicator bounced back to normal

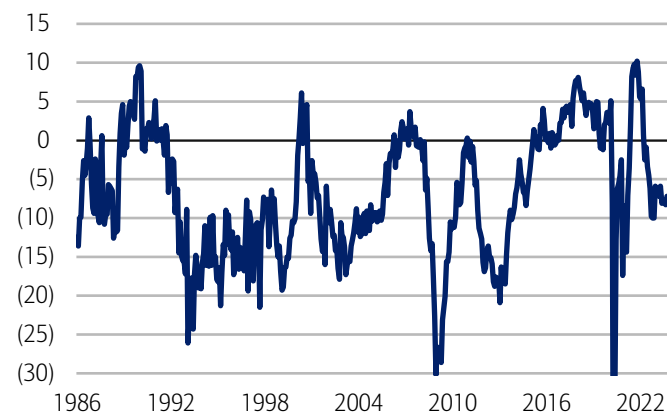


Source: European Commission

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Exhibit 50: EU retail indicator- order expectations, 1986-2024

Order expectation slowly making improvement



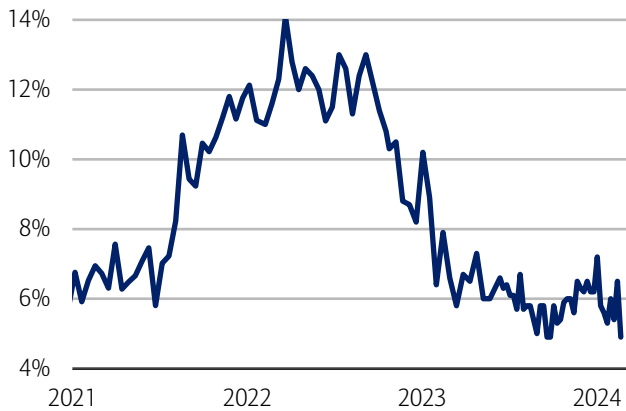
Source: European Commission

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Idling & port congestion

Exhibit 51: Global port congestion - % of fleet, 2021-24

Port congestion came down and now around 5%



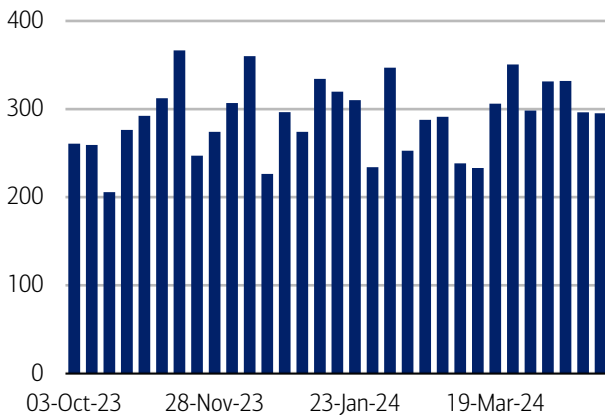
Source: Linerlytica

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Weekly sailing capacity on key routes

Exhibit 53: Weekly vessel capacity, Asia to North EU (k TEU), 2023-24

Weekly capacity remains low

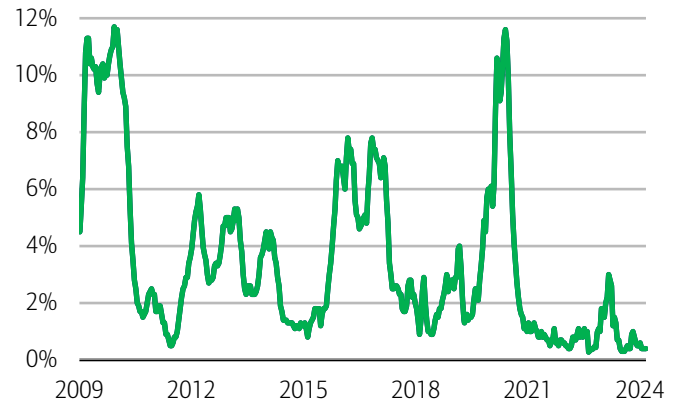


Source: Linerlytica

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Exhibit 52: Global container vessel idling rate (% of fleet), 2009-24

Idling rate well below 1% of the fleet

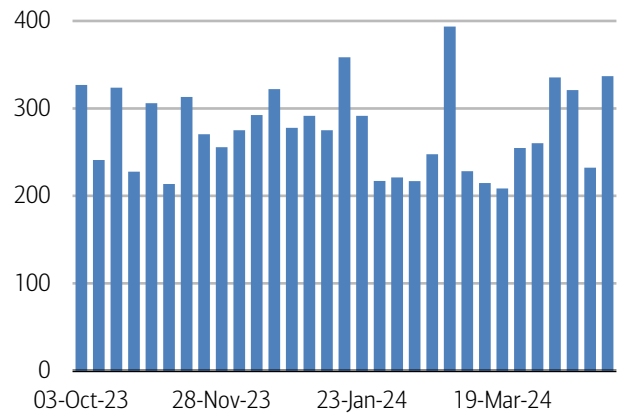


Source: Linerlytica, Alphaliner

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Exhibit 54: Weekly vessel capacity, Asia to USWC (k TEU), 2023-24

Capacity remains weak and trending down in Feb-Mar



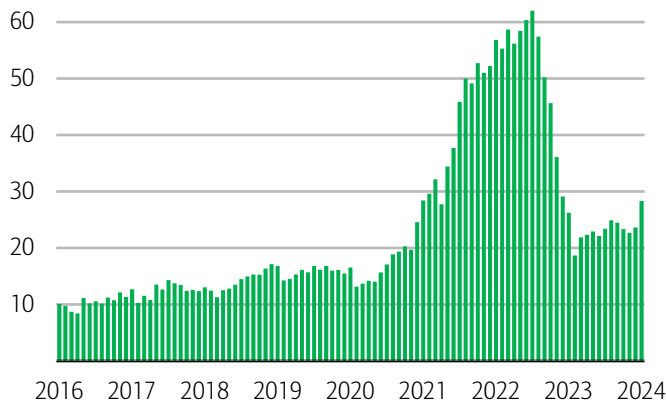
Source: Linerlytica

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Container liner monthly revenue

Exhibit 55: Evergreen – monthly revenue, 2016-24 (NT\$ bn)

Evergreen January monthly revenues: +8% YoY, +20% MoM

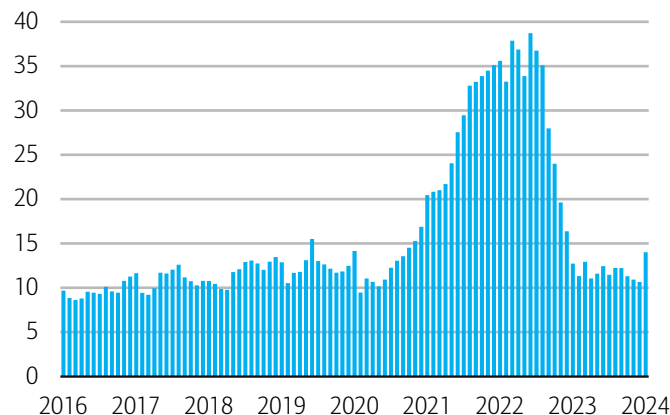


Source: Company reports

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Exhibit 56: Yang Ming – monthly revenue, 2016-24 (NT\$ bn)

Yang Ming January monthly revenues: +10% YoY, +31% MoM



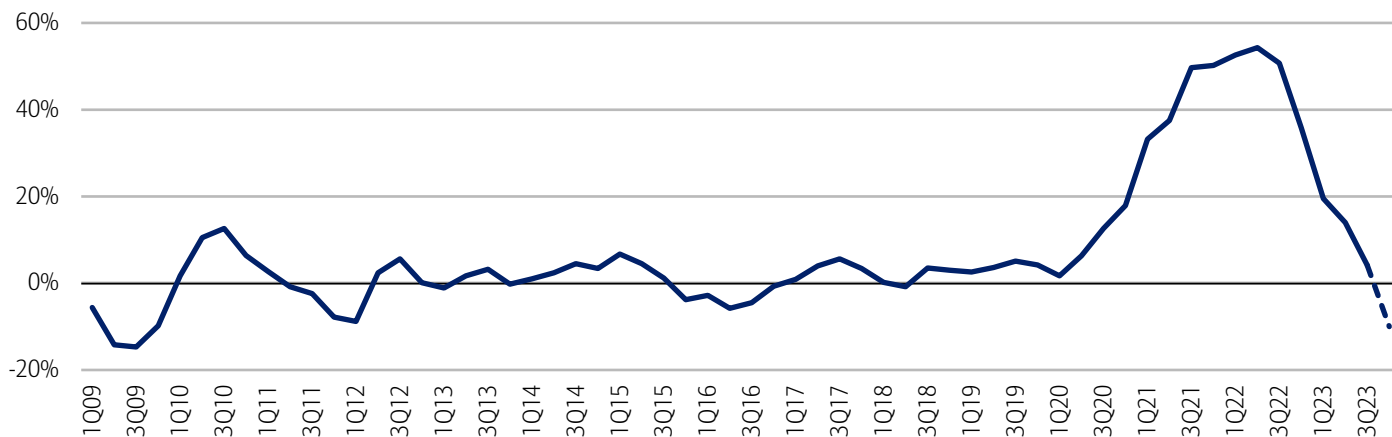
Source: Company reports

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Container liner average EBIT margins

Exhibit 57: Container liner average quarterly EBIT margin, 2009-23

Operating profit margin of expected to come down to -10% over time



Source: Linerlytica

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Vessel supply-side trends

Exhibit 58: Container shipping orderbook to fleet, 1996-24

Container shipping orderbook stands at around 25% of fleet

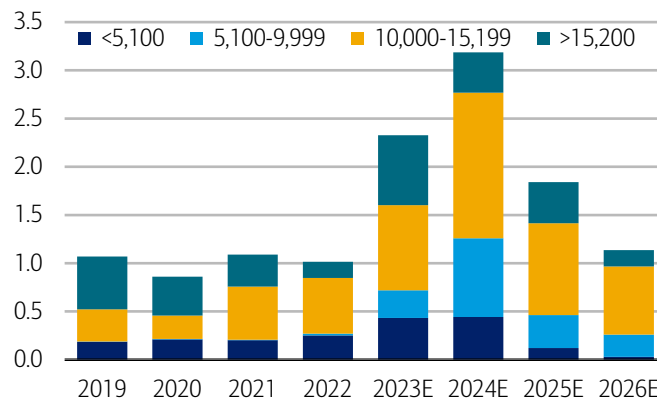


Source: Clarksons

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Exhibit 59: Delivery by vessel size (mn TEU), 2019-26E

Deliveries ramping into 2024 with ~3.2mn TEU for delivery

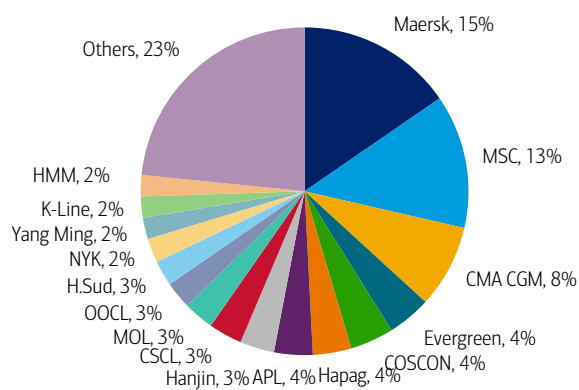


Source: Linerlytica

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Exhibit 60: Container liner capacity share in 2013

Top 10 carriers in 2013 = ~60% market share

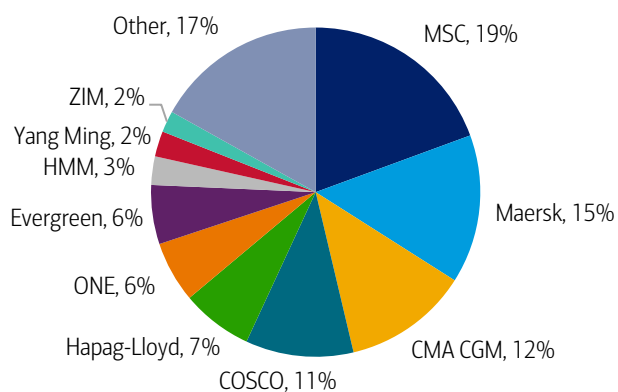


Source: Alphaliner

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Exhibit 61: Container liner capacity share in 2023

Top 10 carrier in 2023 = ~83% market share

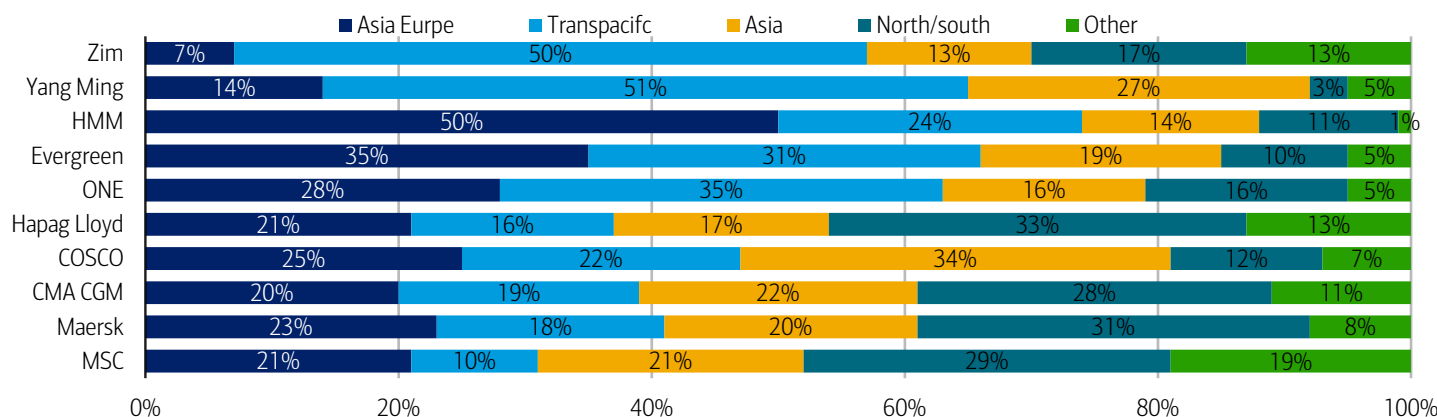


Source: Linerlytica

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Exhibit 62: Container liner capacity by route

Container liner capacity deployment by route

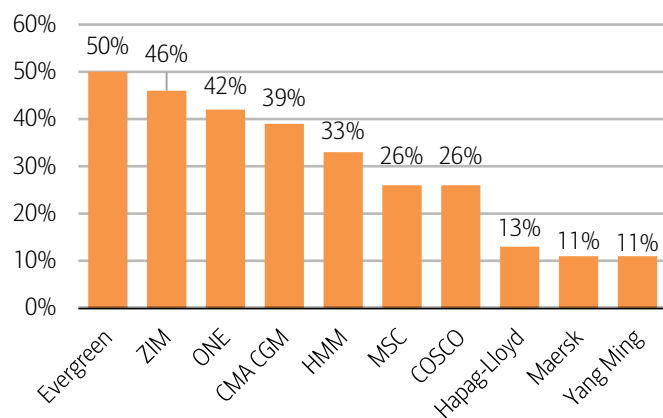


Source: Alphaliner. *Asia includes Middle East, India

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Exhibit 63: Container liners – orderbook to fleet

Larger orderbooks for Evergreen, ZIM, and ONE

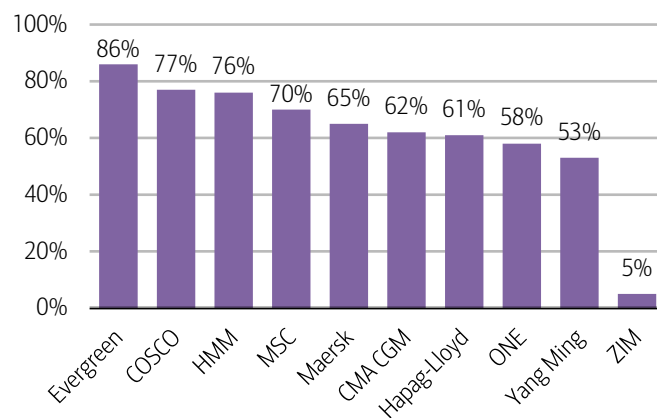


Source: Linerlytica

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Exhibit 64: Container liners - % of fleet which is owned/finance lease

Liners own or finance lease more than half their fleet on average



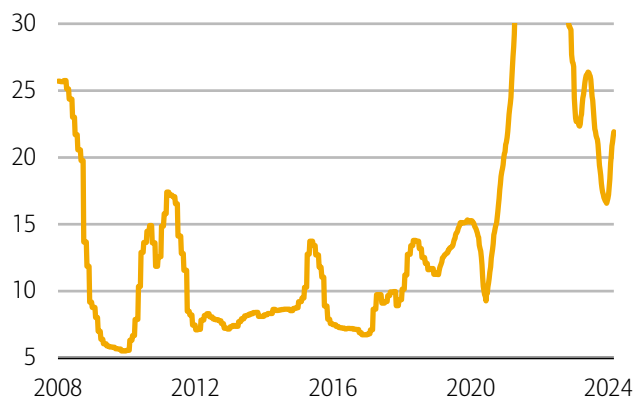
Source: Linerlytica

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Container shipping costs

Exhibit 65: Average containership charter rate (US\$ k/day), 2008-24

Average charter rates now around US\$20K/day

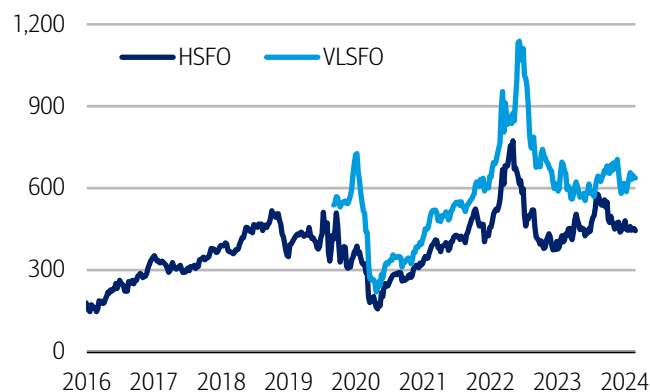


Source: Clarksons

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Exhibit 66: Singapore bunker price (US\$/ton), 2016-24

VLSFO ~US\$630/ton and HSFO ~US\$450/ton



Source: Clarksons

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Container vessel speeds & scrapping

Exhibit 67: Container vessel average sailing speed (knots), 2013-24

Container vessels sailing speed below 14 knots

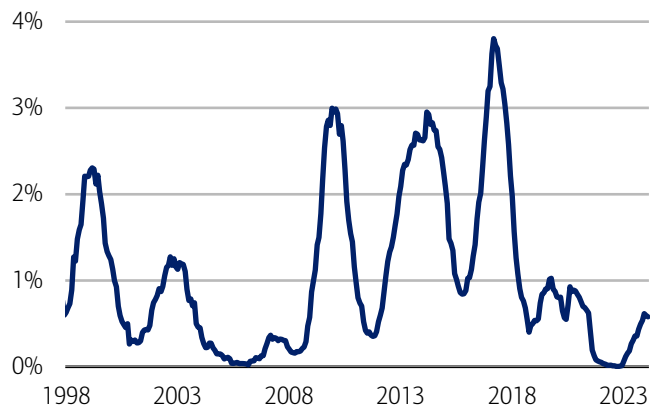


Source: Clarksons

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Exhibit 68: Container scrap rate (% of fleet), 1998-2024

Scrapping rate around 0.6% of fleet



Source: Clarksons

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Container shipping - demand & supply outlook

Exhibit 69: Container shipping demand & supply outlook, 2014-25E

Container shipping faces heavy oversupply into 2023-24

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E
Demand growth (TEU)	5.3%	1.3%	3.0%	6.6%	5.2%	2.5%	-0.7%	6.7%	0.8%	0.3%	3.4%	3.5%
New vessel deliveries	8.6%	9.4%	4.7%	5.9%	6.1%	4.7%	3.7%	4.5%	4.4%	8.7%	10.2%	5.9%
Demolition	-2.1%	-0.1%	-2.9%	-2.0%	-0.2%	-0.9%	-0.7%	-0.1%	-0.1%	-0.7%	-2.5%	-2.0%
Net Slot Capacity Growth	6.5%	9.4%	1.7%	3.9%	5.9%	3.9%	3.0%	4.4%	4.3%	8.0%	7.7%	3.9%
Impact of change in idle rate	1.4%	-0.7%	-3.5%	2.9%	1.6%	-1.3%	-2.9%	5.2%	0.0%	-0.4%	0.0%	0.0%
Impact of change in congestion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.9%	-5.2%	-4.8%	5.8%	0.9%	0.0%
"In service" capacity growth (TEU)	7.9%	8.7%	-1.7%	6.7%	7.5%	2.6%	-1.8%	4.4%	-0.5%	13.4%	8.6%	3.9%
Effective Demand / Supply balance	-2.6%	-7.4%	+4.7%	-0.1%	-2.3%	-0.1%	+1.1%	+2.3%	+1.3%	-13.1%	-5.2%	-0.4%

Source: BofA Global Research estimates, Linerlytica

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Tanker shipping

Freight rates

Exhibit 70: Average quarterly tanker rates (US\$/day), 2023-24

Average quarterly tanker rates still mostly positive growth

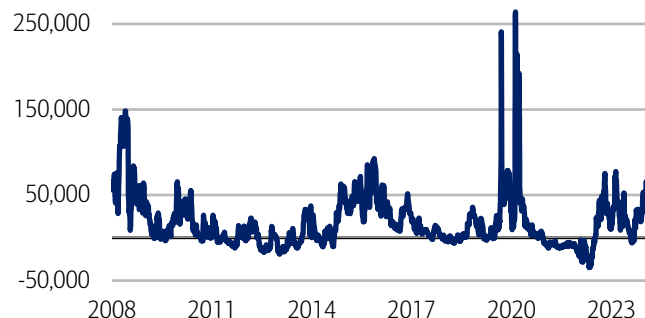
Date	1Q23	2Q23	3Q23	4Q23	1Q24
VLCC	34,498	25,984	8,747	20,792	44,535
Suezmax	74,764	49,350	17,655	49,911	46,770
Aframax	64,833	45,616	18,800	45,969	47,705
MR	29,143	25,574	24,610	28,467	32,042
LR2	50,462	48,135	33,058	39,923	50,125
% YoY					
VLCC	-295%	-220%	-10%	-51%	29%
Suezmax	244%	38%	-65%	-44%	-37%
Aframax	197%	28%	-60%	-42%	-26%
MR	199%	-24%	-38%	-31%	10%
LR2	149%	78%	-2%	-14%	-1%
% QoQ					
VLCC	-19%	-25%	-66%	138%	114%
Suezmax	-16%	-34%	-64%	183%	-6%
Aframax	-18%	-30%	-59%	145%	4%
MR	-30%	-12%	-4%	16%	13%
LR2	9%	-5%	-31%	21%	26%

Source: Clarksons, Note: 1Q24 numbers are average of monthly data

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Exhibit 72: VLCC freight rates (US\$/day), 2008-24

Baltic VLCC rates up in 1Q

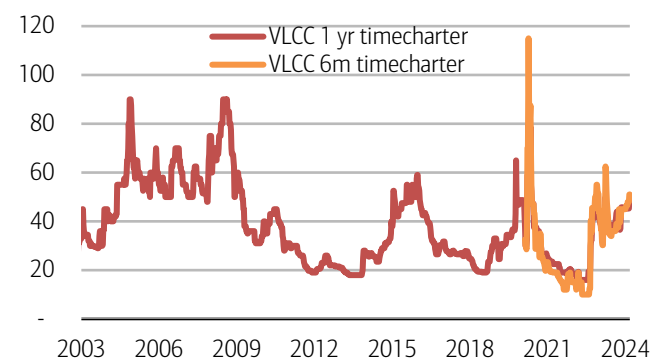


Source: Clarksons

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Exhibit 74: VLCC time charter rates (US\$ k/day), 2003-24

One year VLCC time charter rates around US\$48.5k per day

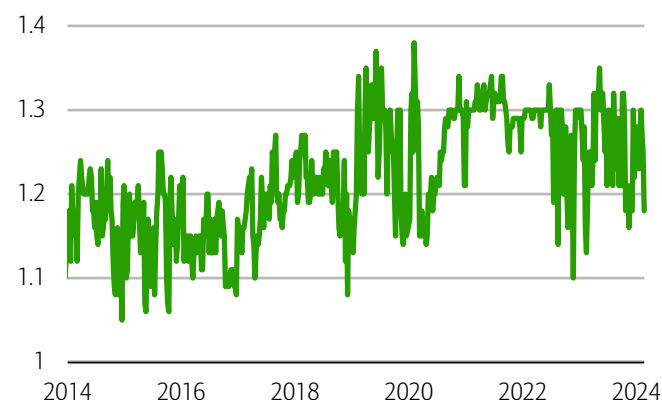


Source: Clarksons

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Exhibit 71: VLCC supply vs demand in Middle East #, 2014-24

VLCC supply vs demand in Middle East #

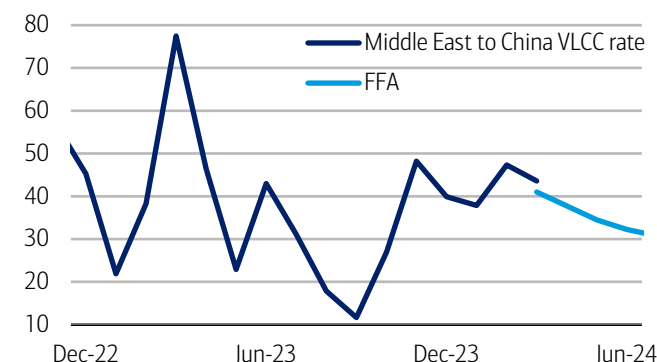


Source: Bloomberg. # 1 indicates equal number of VLCC supply vs demand for next 30 days, 1.1 indicates 10% surplus of VLCC relative to demand in coming 30 days,

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Exhibit 73: VLCC freight forward agreement rates (US\$/day)

Forward curve pointing down into 1Q and 2Q

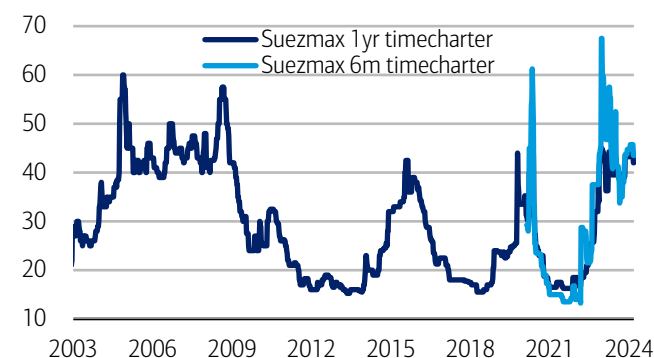


Source: Clarksons, Baltic Exchange

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Exhibit 75: Suezmax time charter rates (US\$ k/day), 2003-24

One year Suezmax time charter rates around US\$42k per day



Source: Clarksons

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Crude oil demand

Exhibit 76: Seaborne crude oil volumes (% YoY), 2015-23

Seaborne crude tanker volume YoY growth slowed on OPEC cuts

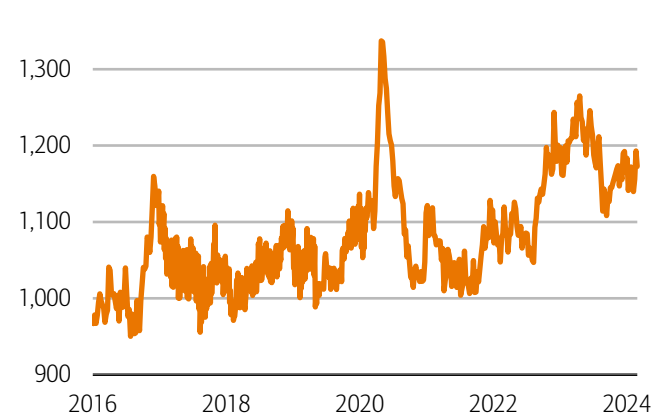


Source: Clarksons

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Exhibit 77: Crude tanker barrels on the water (mn bbl), 2016-24

Crude tanker demand has sequentially improved



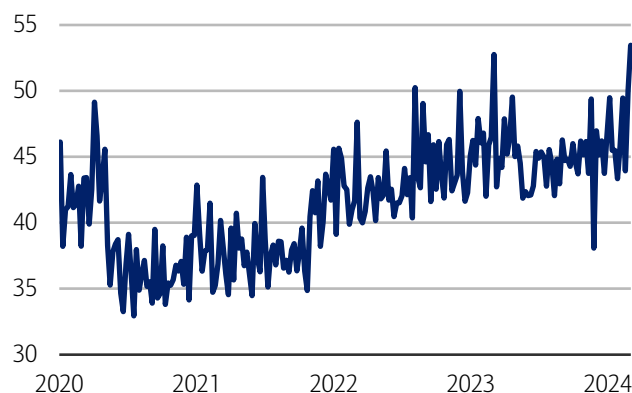
Source: Clarksons

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Crude oil exports

Exhibit 78: Global weekly crude oil exports (mn b/d), 2020-24

Global crude oil exports remain high

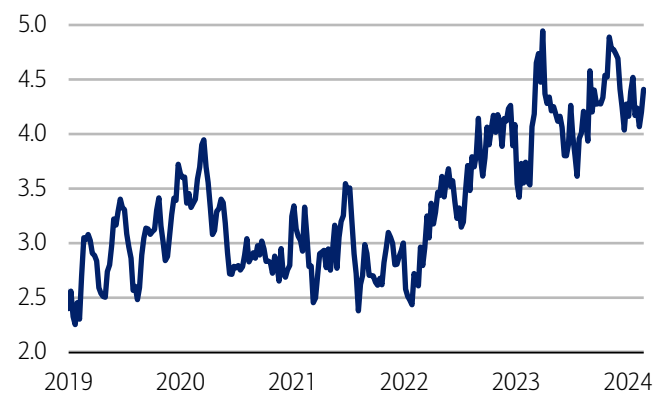


Source: Bloomberg

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Exhibit 79: US crude exports (mn b/d) – 4w MA, 2019-24

US crude oil exports slightly bounced back

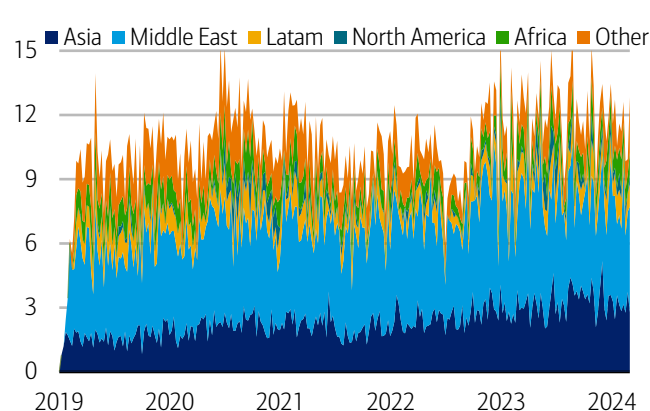


Source: Bloomberg

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Exhibit 80: Chinese weekly crude imports (mn b/d), 2019-24

Chinese imports strengthened in recent weeks

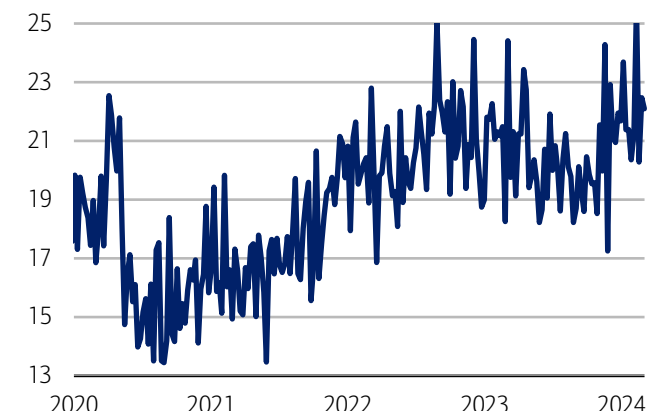


Source: Bloomberg

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Exhibit 81: Middle east crude exports (mn bbl / week), 2020-24

Middle East exports came down but still remain relatively high

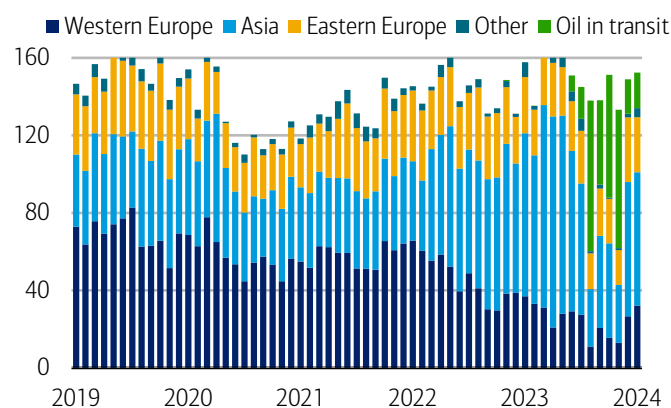


Source: Bloomberg

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Exhibit 82: Russian seaborne crude exports (mn bbl / month), 2019-24

Total Russian crude exports still robust



Source: Bloomberg

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Exhibit 83: Med Urals crude oil price (US\$/bbl), 2015-24

Urals crude oil price ~US\$70/bbl

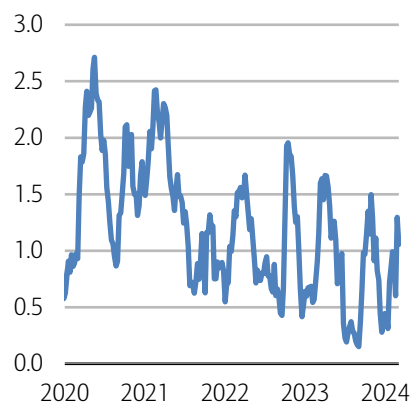


Source: Bloomberg

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Oil refinery outage**Exhibit 84: Europe (k bbl/ day)**

Outage around 0.5-1.0k bbl/day

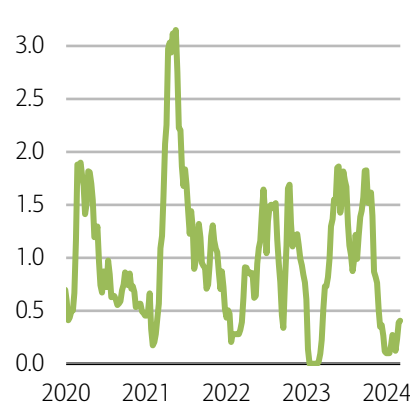


Source: Bloomberg. Note: Europe include Mediterranean

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Exhibit 85: Asia Pacific (k bbl/ day)

Very little outage in 1Q 2024

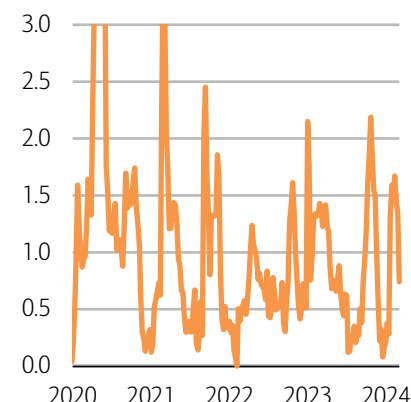


Source: Bloomberg. Note: Asia Pacific includes Japan & China

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Exhibit 86: North America (k bbl/ day)

Outage picked up in early 2024



Source: Bloomberg

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Tanker supply**Exhibit 87: Crude tanker orderbook as % of fleet, 1996-24**

Crude tanker orderbook to fleet ~6%

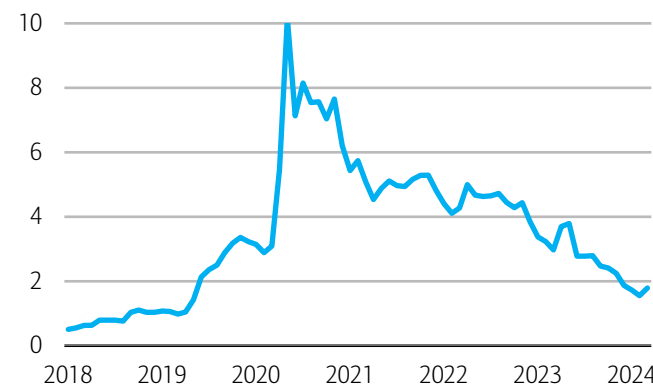


Source: Clarksons

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Exhibit 88: Crude tanker storage as % of fleet, 2018-24

Tanker storage now just below 2% of fleet



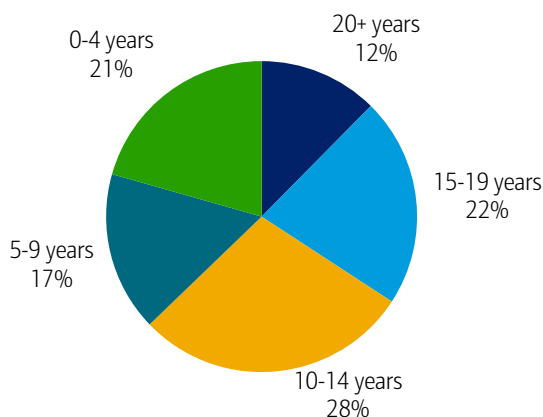
Source: Clarksons

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Tanker age and scrap rate

Exhibit 89: Crude tanker – age distribution, 2023

34% of fleet is older than 15 years

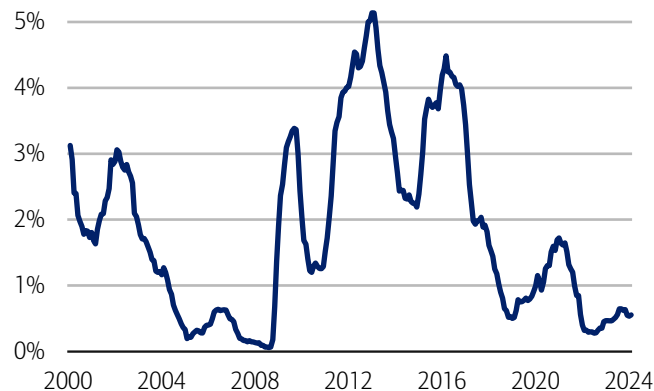


Source: Clarksons

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Exhibit 90: Tanker scrap rate (%) – 1999-2024

Scrapping rate down to still around 0.5% of fleet



Source: Clarksons

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Crude tanker demand & supply

Exhibit 91: Crude tanker demand & supply growth forecasts (% YoY), 2014-25E

Crude tanker market fundamentals look positive in the years ahead

Crude tanker	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E
Demand Growth	-0.2%	2.9%	4.0%	5.0%	3.4%	1.1%	-6.7%	-3.7%	7.0%	6.8%	5.0%	1.5%
Effective Fleet Growth	0.4%	1.0%	5.9%	5.9%	1.1%	6.0%	0.9%	-0.1%	3.2%	2.6%	0.4%	0.8%
Demand / supply balance	-0.6%	+1.9%	-1.9%	-0.9%	+2.3%	-4.8%	-7.6%	-3.6%	+3.8%	+4.2%	+4.6%	+0.7%
Crude tanker fleet (mn dwt)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Fleet, beginning	339.5	340.8	347.5	367.6	386.3	388.5	417.0	430.7	442.4	446.4	452.6	454.2
New delivery	9.3	8.4	20.8	27.8	20.9	28.2	17.1	16.6	9.3	10.7	3.2	5.0
Scrapping rate	(6.0)	(1.3)	(1.4)	(9.0)	(17.1)	(2.6)	(3.4)	(9.0)	(5.3)	(4.5)	(1.6)	(1.6)
Others	(2.1)	(0.4)	0.7	(0.2)	(1.7)	3.0	0.0	4.0	0.0	0.0	0.0	0.0
Fleet, Ending, Dwt mn **	341	347	368	386	388	417	431	442	446	453	454	458
Growth	0.4%	2.0%	5.8%	5.1%	0.6%	7.4%	3.3%	2.7%	0.9%	1.4%	0.4%	0.8%
Floating storage adjustment	0.0%	-1.0%	0.1%	0.8%	0.6%	-1.4%	-2.4%	-2.8%	2.3%	1.2%	0.0%	0.0%
Effective supply growth	0.4%	1.0%	5.9%	5.9%	1.1%	6.0%	0.9%	-0.1%	3.2%	2.6%	0.4%	0.8%
Delivery ratio	58%	72%	59%	91%	68%	91%	100%	87%	90%	100%	100%	100%
Scrapping rate	1.8%	0.4%	0.4%	2.4%	4.4%	0.7%	0.8%	2.1%	1.2%	1.0%	0.4%	0.4%
Gross delivery rate	2.7%	2.5%	6.0%	7.6%	5.4%	7.2%	4.1%	3.9%	2.1%	2.4%	0.7%	1.1%

Source: Clarksons, BofA Global Research estimates

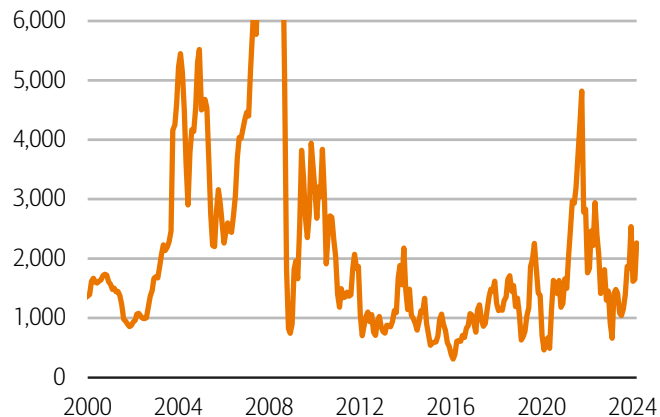
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Dry bulk shipping

Freight rates

Exhibit 92: Baltic Dry Index, 2000-24

BDI over 2,000



Source: Clarksons

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Exhibit 93: Baltic average rates (US\$/day), 2023-24

Dry bulk quarterly rates up YoY

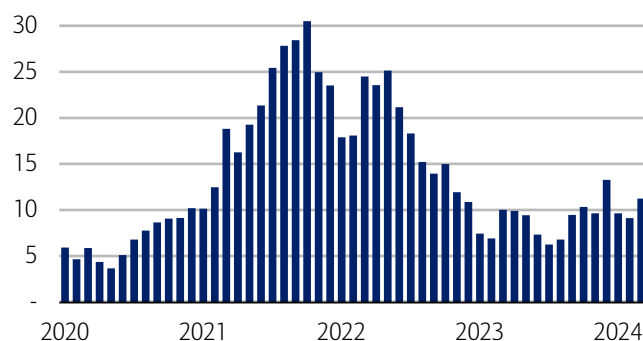
Date	1Q23	2Q23	3Q23	4Q23	1Q24
BDI	1,011	1,313	1,194	2,033	1,675
Capesize	9,144	15,561	13,407	28,128	21,900
Panamax 82	11,326	12,248	11,890	16,117	14,311
Supramax 58	10,171	10,763	10,028	14,148	12,304
Handysize 38	9,702	10,414	8,863	12,851	11,244
% YoY					
BDI	-49%	-48%	-36%	33%	66%
Capesize	-38%	-28%	-21%	89%	140%
Panamax 82	-51%	-58%	-35%	0%	26%
Supramax 58	-60%	-61%	-53%	-5%	21%
Handysize 38	-60%	-61%	-59%	-14%	16%
% QoQ					
BDI	-34%	30%	-9%	70%	-18%
Capesize	-39%	70%	-14%	110%	-22%
Panamax 82	-29%	8%	-3%	36%	-11%
Supramax 58	-31%	6%	-7%	41%	-13%
Handysize 38	-35%	7%	-15%	45%	-13%

Source: Clarksons

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Exhibit 94: Handysize spot monthly average (US\$ k/day), 2020-24*

Spot handysize averaged ~US\$11k/day



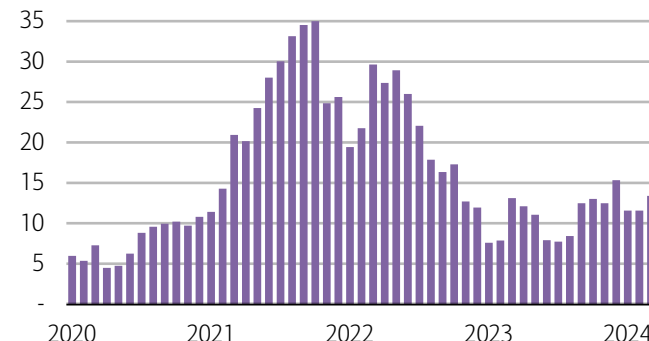
Source: Clarksons, BofA Global Research estimates

*Size and commission adjusted to be comparable to PacBasin average handy rates

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Exhibit 95: Supramax spot monthly average (US\$ k/day), 2020-24*

Spot supramax averaged ~US\$13k/day



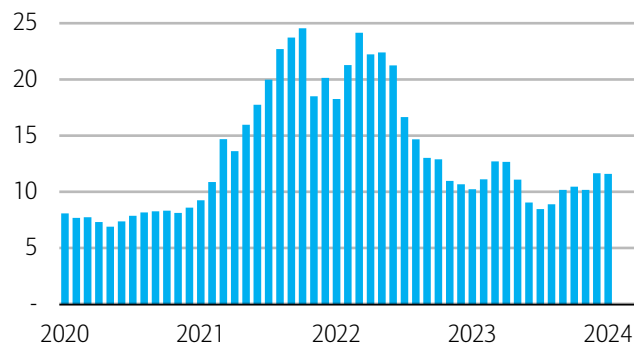
Source: Clarksons, BofA Global Research estimates

* Commission adjusted to be comparable to PacBasin achieved rates

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Exhibit 96: Handysize 1yr TC monthly average (US\$ k/day), 2020-24*

1yr time charter handysize averaging ~US\$11.5k/day



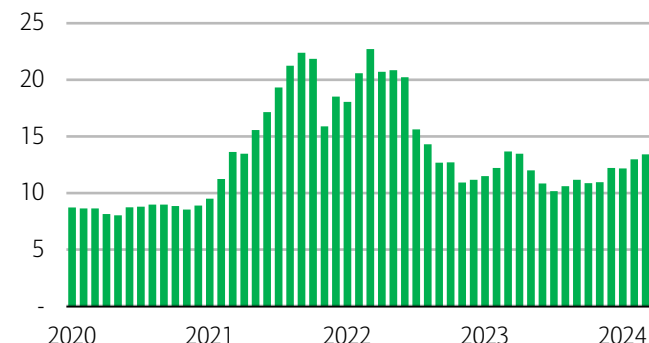
Source: Clarksons, BofA Global Research estimates

*Size and commission adjusted to be comparable to PacBasin average handy rates

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Exhibit 97: Supramax 1yr TC monthly average (US\$ k/day), 2020-24*

1yr time charter supramax averaging ~US\$12-13k/day



Source: Clarksons, BofA Global Research estimates

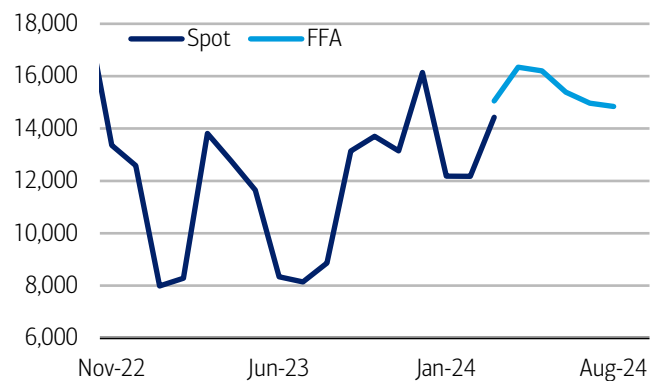
*Size and commission adjusted to be comparable to PacBasin average handy rates

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Handysize & Supramax FFA outlook

Exhibit 98: Supramax - Freight Forward Agreement, 2023-24

Supra forward curves pointing up and stay elevated into summer

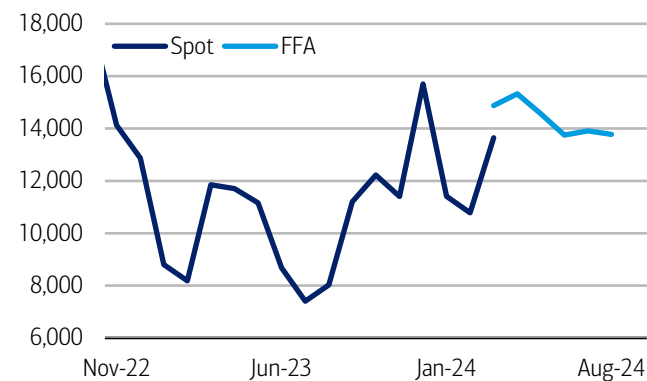


Source: Bloomberg, Braemar

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Exhibit 99: Handysize - Freight Forward Agreement, 2023-24

Handy forward curves point to up but come down into summer



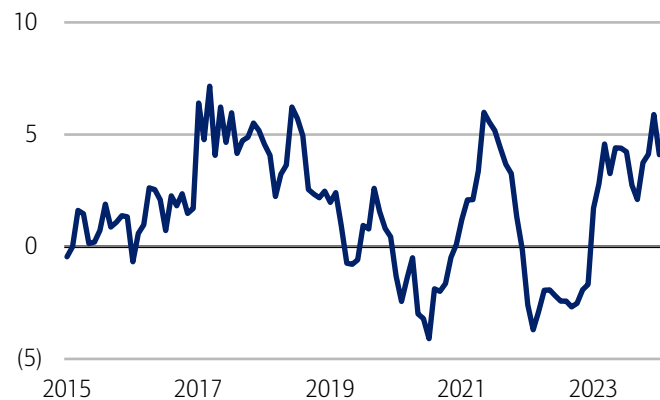
Source: Bloomberg

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Dry bulk demand reads

Exhibit 100: Dry bulk demand growth (% YoY), 2015-24

Dry bulk demand improved in 2023

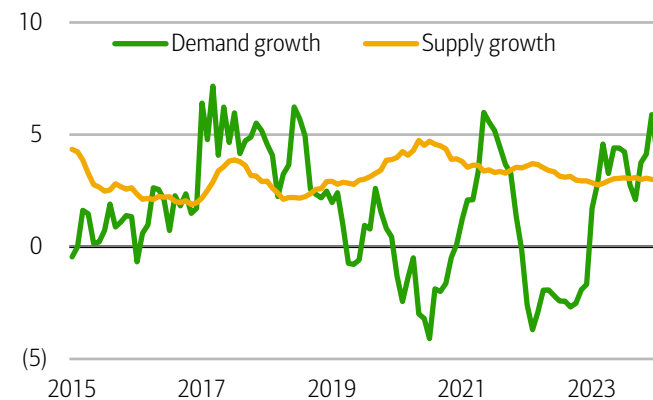


Source: Clarksons

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Exhibit 101: Bulk demand & supply growth (% YoY), 2015-24

Bulk demand growth above supply growth



Source: Clarksons

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Exhibit 102: Iron ore demand growth (% YoY), 2015-24

Iron ore demand growth remain around 5%

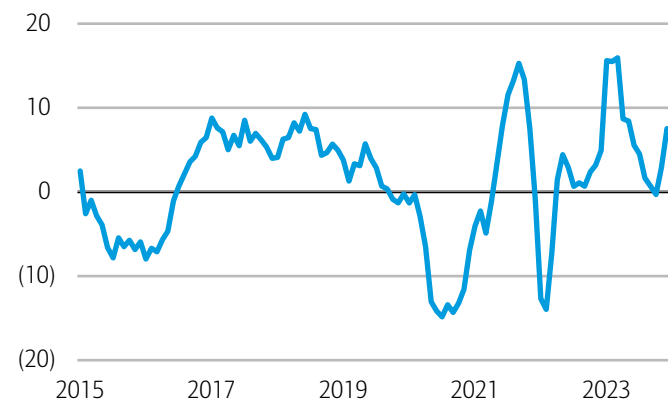


Source: Clarksons

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Exhibit 103: Coal demand growth (% YoY), 2015-24

Coal demand growth picked up in January

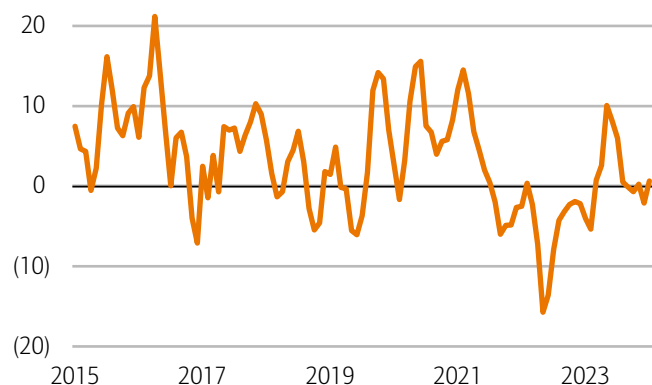


Source: Clarksons

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Exhibit 104: Grain demand growth (% YoY), 2015-24

Grain demand to show small sign of improvement

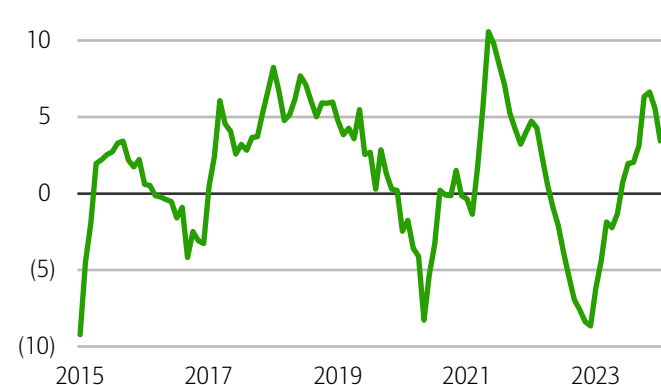


Source: Clarksons

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Exhibit 105: Minor bulk demand growth (% YoY), 2015-24

Minor bulk demand growth trending up

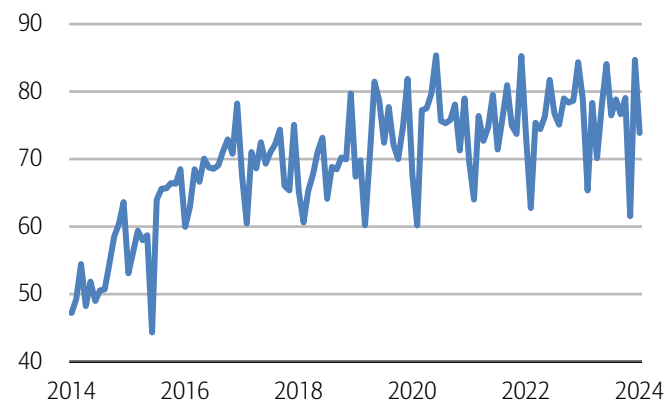


Source: Clarksons

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Iron ore monthly shipments**Exhibit 106: Australia iron ore monthly shipments (tn ton), 2014-24**

Australia iron ore exports recovering off cyclone disruptions

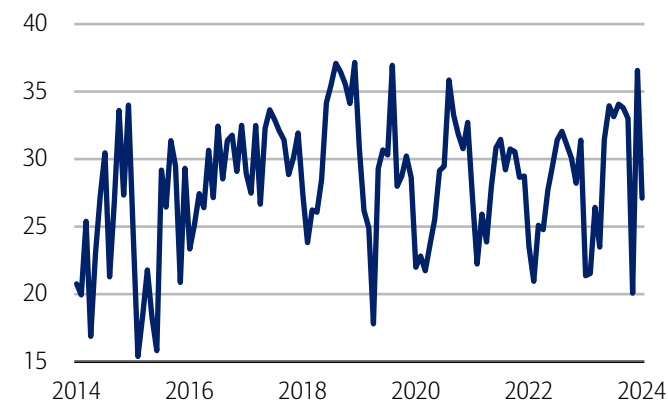


Source: Bloomberg

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Exhibit 107: Brazil iron ore monthly shipments (tn ton), 2014-24

Brazil iron ore exports relatively stable

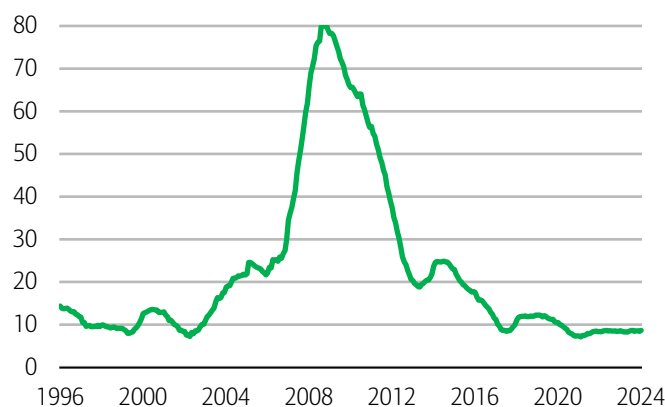


Source: Bloomberg

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Vessel supply**Exhibit 108: Dry bulk orderbook to fleet (%), 1996-2024**

Orderbook to fleet still below 10%

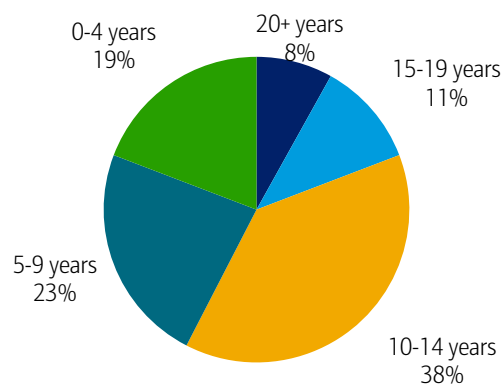


Source: Clarksons

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Exhibit 109: Dry bulk vessel age distribution, 2023

19% of fleet is older than 15 years

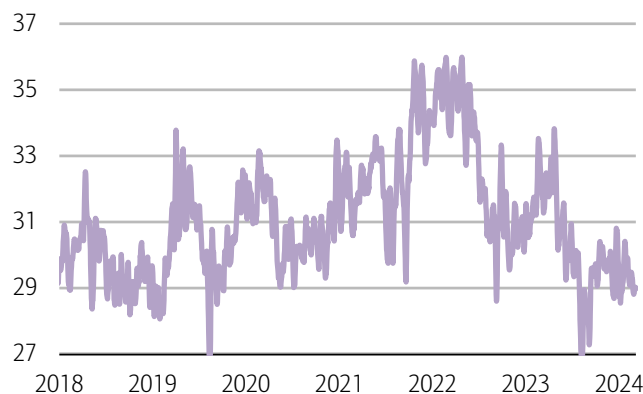


Source: Clarksons

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Port congestion

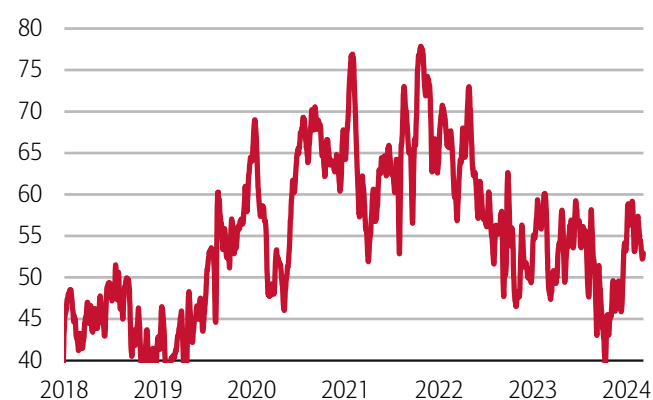
Exhibit 110: Daily dry bulk fleet at port (anchor or berth) (%), 2018-24
~30% of dry bulk fleet at port



Source: Clarksons

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Exhibit 111: Daily dry bulk fleet at Chinese ports (mn DWT 7D MA)
Rebounded in early January, now around 60 mn DWT

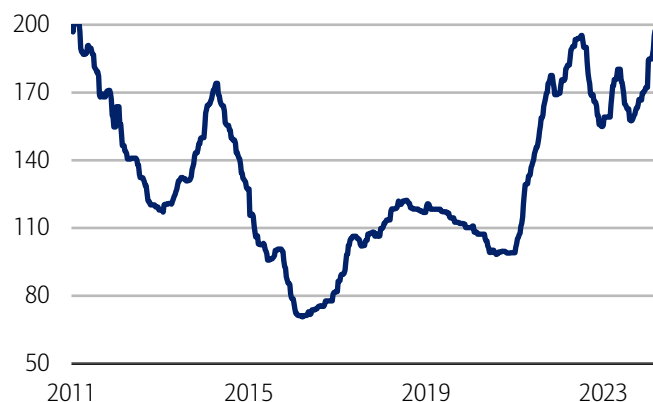


Source: Clarksons

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Bulk carrier price & scrap rate

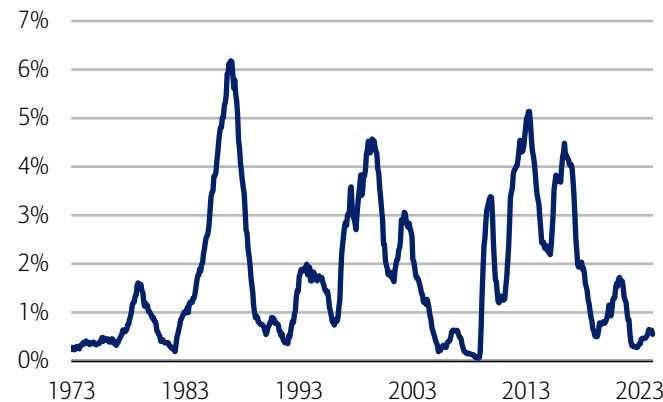
Exhibit 112: Bulk carrier secondhand vessel price index, 2011-24
Secondhand vessel prices started come down but still at higher end



Source: Clarksons

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Exhibit 113: Bulk carrier scrap rate (%) – 1973-2024
Scraping rate down to around 0.55% of fleet

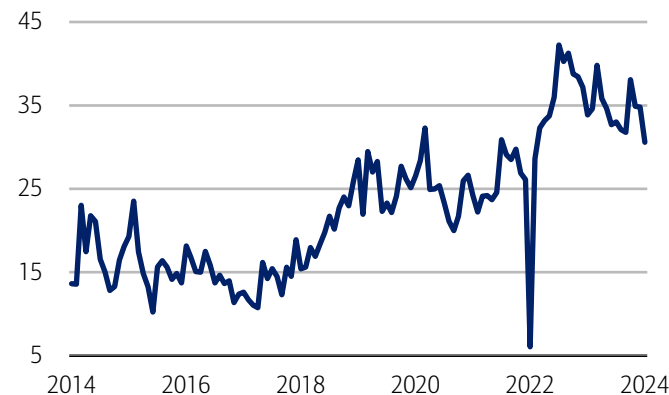


Source: Clarksons

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Coal monthly shipments

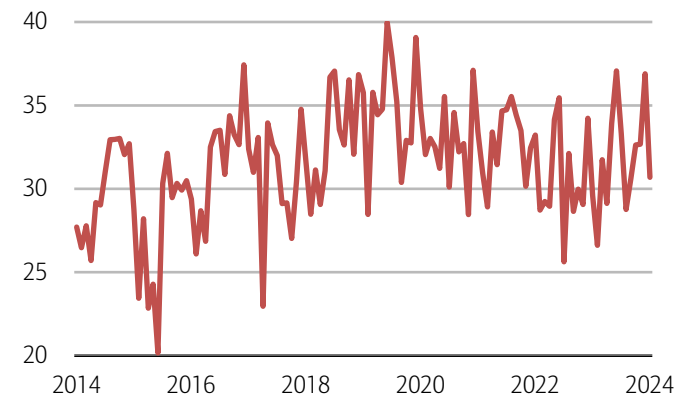
Exhibit 114: Indonesian coal monthly shipments (tn ton), 2014-24
Indonesian exports fading from recent peaks



Source: Bloomberg

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Exhibit 115: Australian coal monthly shipments (tn ton), 2014-24
Aussie coal shipments remain strong



Source: Bloomberg

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Dry bulk demand & supply

Exhibit 116: Dry bulk shipping demand & supply growth (% YoY), 2016-25E

Dry bulk demand/supply outlook

Dry Bulk	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E
Demand	2.3%	3.9%	3.4%	0.7%	0.0%	3.5%	-1.8%	4.5%	1.9%	2.2%
Fleet Growth	2.3%	3.1%	2.7%	3.0%	4.1%	3.9%	2.9%	2.9%	2.0%	1.4%
Demand / Supply Balance	0.0%	0.8%	0.7%	-2.2%	-4.1%	-0.4%	-4.7%	1.6%	-0.1%	0.8%
Dry Bulk Fleet, Dwt mn	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E
Fleet, beginning	780	798	823	845	879	916	949	976	1,005	1,024
New delivery	47	38	28	41	49	38	32	34	30	26
Demolition	(29)	(15)	(4)	(8)	(15)	(5)	(4)	(6)	(10)	(11)
Others	(0)	1	(1)	0	3	-	-	-		
Fleet. Ending, Dwt mn	798	823	845	879	916	949	976	1,005	1,024	1,039
Growth	2.3%	3.1%	2.7%	4.0%	4.2%	3.6%	2.9%	2.9%	2.0%	1.4%
Adjustment factor				-1.0%	-0.1%	0.3%	0.0%	0.0%	0.0%	0.0%
Adjusted fleet growth				3.0%	4.1%	3.9%	2.9%	2.9%	2.0%	1.4%
Gross delivery rate	6.1%	4.8%	3.4%	4.9%	5.6%	4.2%	3.3%	3.5%	3.0%	2.5%
Scrapping Rate	3.7%	1.8%	0.5%	0.9%	1.8%	0.6%	0.4%	0.6%	1.0%	1.1%

Source: BofA Global Research, Clarksons

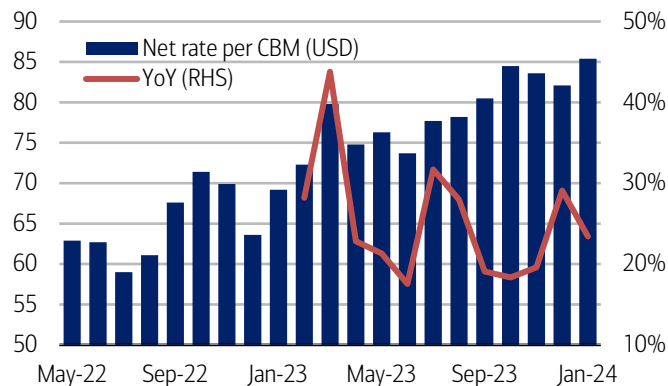
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Car carrier

Car carrier shipping freight rates

Exhibit 117: Hoegh Autoliners - net rate per cbm (US\$), 2022-24

Continue to stay high – above US\$85 per cbm



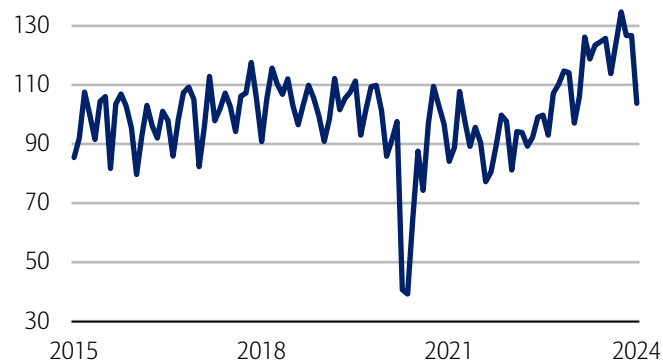
Source: hoeghautoliners

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Car carrier demand

Exhibit 119: Global seaborne car trade indicator, 2015-2023

Came off from the peak but remain strong



Source: Clarksons

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Car carrier supply & scrap

Exhibit 121: Pure car carrier orderbook % of fleet (%), 1996-2024

Orderbook now above 35% of fleet

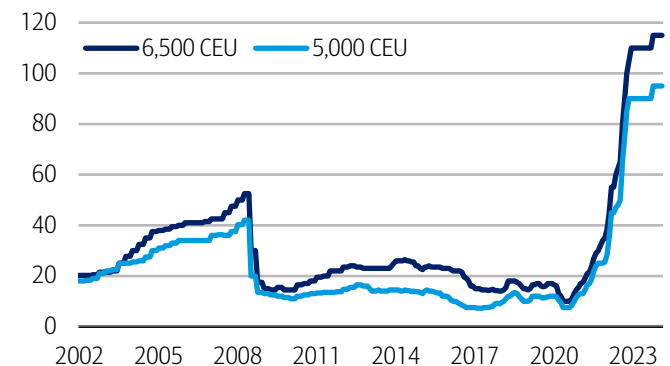


Source: Clarksons

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Exhibit 118: Car carrier 1 year time charter rate (US\$ k/day), 2002-24

Rates rapidly increased starting in spring, 2021

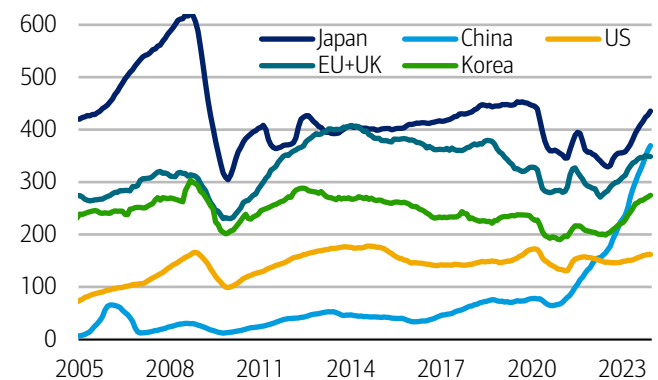


Source: Clarksons

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Exhibit 120: Global seaborne car exports TTM ('000's), 2005-23

Chinese car export have drastically increased post-COVID

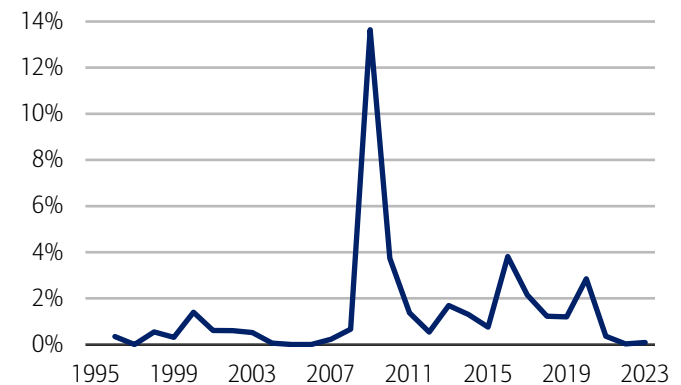


Source: Clarksons

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Exhibit 122: Car carrier scrap rate (%), 1995-2024

Scrap rate has been close to zero for the past couple of years



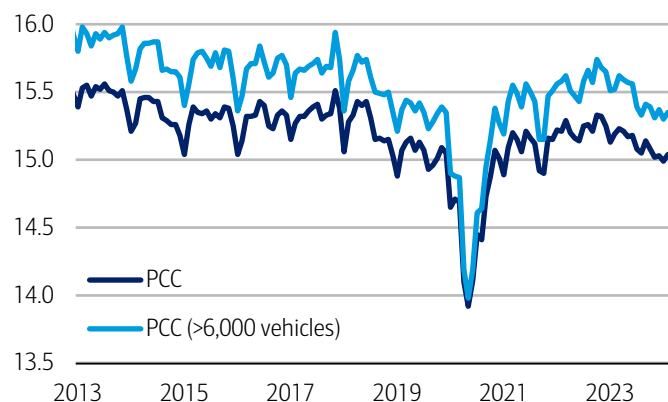
Source: Clarksons

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Car carrier speeds & secondhand prices

Exhibit 123: Pure car carrier average speed (knots), 2013-24

Average speed has been 15-15.5knots

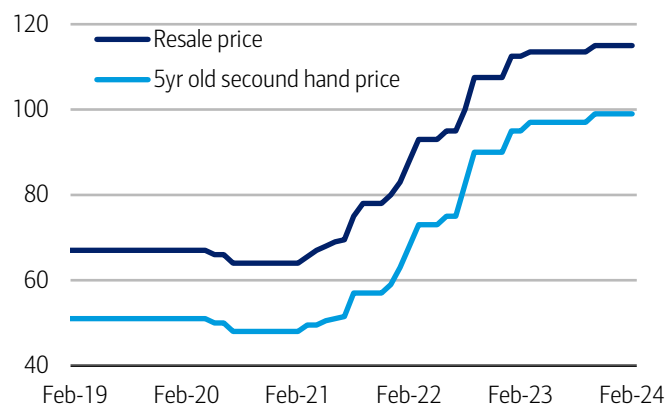


Source: Clarksons

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Exhibit 124: Pure car and truck carrier prices (US\$ mn), 2019-24

Both resale price and secondhand prices have increased since spring, 2021



Source: Clarksons. Note: Pure car and truck carrier size = 6,500 CEU

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Car carrier shipping - demand & supply outlook

Exhibit 125: Car carrier demand & supply outlook

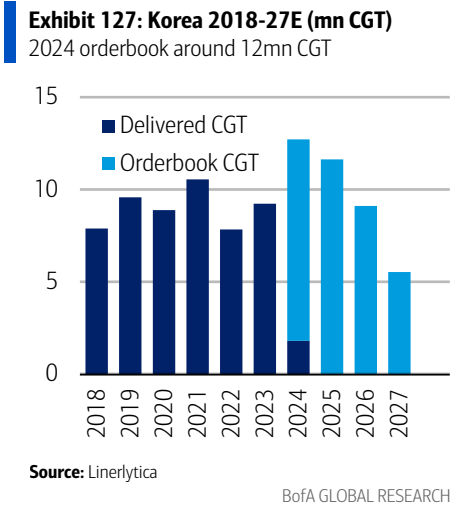
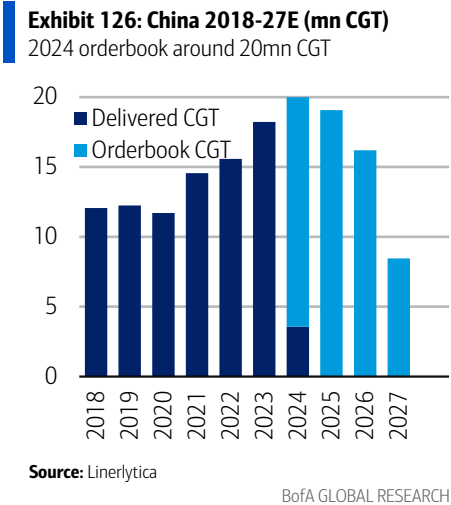
Car carrier tightness set to unwind from 2024-25E as new deliveries arrive

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 E	2025 E	2026 E	2027 E
Demand growth (% p.a.)	2.0%	-0.5%	0.8%	-0.3%	6.5%	2.5%	0.1%	-20.1%	7.1%	7.0%	14.3%	4.1%	3.7%	3.1%	3.2%
Net supply growth (% p.a.)	5.0%	1.6%	2.6%	3.1%	-0.3%	2.0%	1.2%	-0.6%	-1.6%	1.2%	0.4%	8.1%	10.0%	6.2%	0.7%
Demand/(supply) imbalance	-3.0%	-2.1%	-1.8%	-3.4%	6.8%	0.5%	-1.1%	-19.5%	8.7%	5.9%	14.0%	-4.0%	-6.3%	-3.2%	2.5%
Gross deliveries (% p.a.)	3.5%	4.0%	4.0%	3.6%	4.1%	2.4%	0.8%	1.4%	1.5%	0.5%	1.9%	8.6%	10.5%	6.7%	1.2%
Scrapping (% p.a.)	1.8%	1.3%	0.8%	3.9%	2.1%	1.2%	1.2%	2.8%	0.4%	0.0%	0.1%	0.5%	0.5%	0.5%	0.5%

Source: Clarksons, BofA Global Research estimates

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Shipyard vessel delivery schedule



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Readers should be aware that although the BAC datasets utilized in our analysis represent a significant number of data points, they nevertheless present a degree of selection bias, including but not limited to income levels and geographies. In addition, the data is limited to debit and credit cards and does not include other payment methods such as cash or checks.

Data regarding merchants who receive payments are identified and classified by the Merchant Categorization Code (MCC) defined by financial services companies. The data are mapped using proprietary methods from the MCCs to the North American Industry Classification System (NAICS), which is also used by the Census Bureau, in order to classify spending data by subsector. Spending data may also be classified by other proprietary methods not using MCCs.

BAC data used in this report include spending from active US households only. Spending from corporate cards are excluded.

Our methodology for calculating the growth rates for daily data: we calculate the %y/y growth rate and the 4-year % change by matching calendar days (Jan 1 2023 is matched to Jan 1 2022, and Jan 1, 2019, respectively). The % change is calculated based on the 7-day moving average of spending levels.

Additional information about the methodology used to aggregate the data is available upon request.

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