

## Shipping - Global

## Red Sea disruption FAQs

## Industry Overview

## Red Sea disruptions – frequently asked questions

Red Sea disruptions are having a substantial impact on shipping and supply chains causing a surge in freight rates and shipment delays. In this note, we provide our answers to investor frequently asked questions on this evolving situation. Below are our short answers – please see inside for our more comprehensive answers:

*Q. Are ships diverting from the Red Sea?* ~50% of ships are now taking the long route via Africa. Most container services have shifted, but bulk & tankers are slower to shift.

*Q. How much of trade used the Red Sea?* Container is most impacted with 28% of trade via the Red Sea. Tanker and bulk trades are less impacted at <15% of trade.

*Q. Is this just a problem for Europe?* European imports are most impacted but US East Coast imports are also impacted. Also watch broader disruption from tighter supply.

*Q. Is there a risk to exports?* Diversions reduce container ship supply by ~8.5%, but there is spare slack to meet demand from excess 2023-24 ship deliveries + faster speeds.

*Q. What about the risks to supply chains?* One-off capacity crunch from 2H January as ships are delayed returning to Asia. Also 1-2 week delays to Asia-Europe shipping times.

*Q. What's the impact on shipping rates?* Spot rates are up +90% since 1 Dec, with more upside into pre-CNY peak. But spot likely fading from Jan-Feb peak on weaker post-CNY demand, easing supply shocks and new deliveries (even if Red Sea disruptions linger).

*Q. Could this be as bad as COVID?* Unlikely. COVID saw multiple disruptions with factory closures, surging stay-at-home demand, long vessel queues & inland logistics gridlock.

*Q. What's our base case?* The post-CNY demand lull gives supply chains a chance to normalize, while the security situation could stabilize in coming months allowing some liners to resume Red Sea sailings incentivized by super-normal profits.

*Q. How much profit windfall for the liners?* Very fluid, but liners could see net income of up to 10-20% of market cap at 20-30% EBIT margins from 1-2 months of disruption.

*Q. How does this disruption normalize?* Operation Prosperity Guardian needs to “show it” around improving security in the region. But liners now have a higher threshold to resume Red Sea sailings after the Maersk Hangzhou experience.

*Q. How can the situation get worse?* Closure of Strait of Hormuz could impact tanker demand & bunker price & macro, but container supply disruptions can't get worse.

*Q. What about rush air cargo shipments?* Air cargo demand boost could arrive during pre-CNY peak (although no boost seen so far). But unclear if the air cargo boost sustains, with customers possibly back to ocean once networks stabilize to longer sailing times.

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# Red Sea disruption FAQs

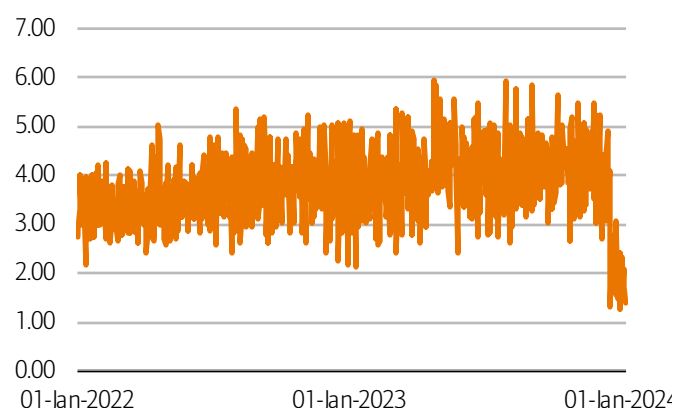
## Q. Are ships still sailing through the Red Sea?

Around half of the vessels are still sailing through the Red Sea with the remaining half already diverting the long way around. Container ships have largely diverted out of the Red Sea already in response to the deteriorating security situation.

Dry bulk and tanker have been slower to divert away from the Red Sea – although diversions have increased a little in the past week for crude tankers. We suspect a slower rate of diversion for bulk and tanker given Russian cargos which are still using the Red Sea, and with bulk and tanker customers (rather than owners) having the discretion around routing and opting to take the faster route through the Red Sea.

### Exhibit 1: Red Sea vessel arrivals (GT mn), 2022-24

Vessel capacity arriving in the Red Sea has roughly halved

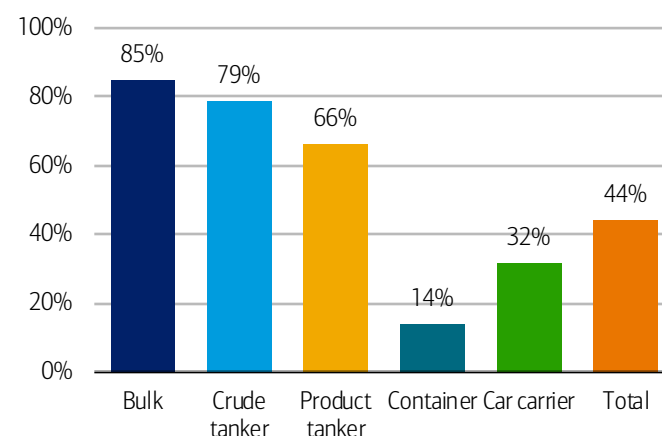


Source: Clarksons

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### Exhibit 2: Red Sea vessel arrivals vs 1H December levels (%), 7D MA

Container and car carrier look most disrupted for now



Source: Clarksons

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## Q. How much of world trade is impacted?

- **Container:** Container is most impacted at around 28% of world container trade passing through the Red Sea with the majority of cargo to/from Europe.
- **Crude tanker:** Around 10-15% of crude tanker volumes pass through the Red Sea (largely European northbound imports, but also growing Russian exports).
- **Dry bulk:** Around ~5% of dry bulk world trade was historically through the Red Sea although this has moved higher in recent years on growing Russian exports. Red Sea dry bulk flows are mainly grain and coal carried on small to mid-sized vessels.

## Q. Is this just a problem for Europe?

Europe is most impacted by the Red Sea disruptions given the importance of the Red Sea for European imports from Asia via the Suez Canal. But the USA is not immune to Red Sea disruptions which are impacting container services from Asia to the US East Coast as well as US grain & coal exports to Asia.

## Q. Could supply constraints impact container exports?

Near term container exports in 2H January could see some short-term impact from lost export shipping capacity caused by vessels returning late as routes have been adjusted. But beyond these temporary route adjustment factors, we think shipping capacity should remain sufficient to support exports even if disruptions persist.

We estimate all Red Sea services diverting around the Cape of Good Hope represents an effective loss of global container supply of ~8.5%. However we think there is sufficient slack in the system to offset this loss given: (1) container slot capacity grew 8% ahead

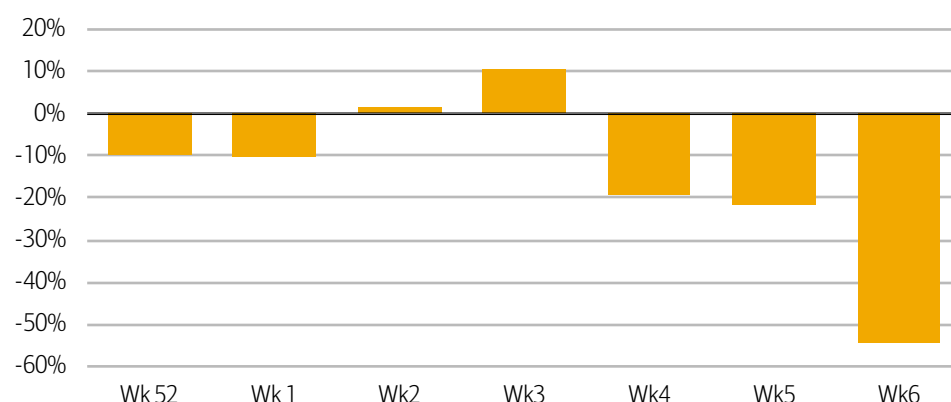
of demand in 2023; (2) another 10% new deliveries in 2024; and (3) scope for vessels to increase vessel speeds to offset lost capacity.

## Q. What supply chain disruptions are expected?

- **Longer shipping delivery times:** Vessels sailing the alternative way via the Cape of Good Hope have an average of 30% longer sailing distance adding 1-2 weeks to transit times for goods shipped between Asia and Europe.
- **Tighter vessel & box supply:** Longer sailing times will tighten supply of container vessels and container boxes driving up the cost of doing business.
- **One-off capacity shock:** Initial vessel diversions will also create a one-off capacity shock in Asia in 2H January and 2H February as vessels scheduled to arrive back in Asia are delayed causing extremely tight supply for a few weeks.
- **Port congestion:** Schedule disruptions likely to cause some bunching of vessel arrivals causing congestion in ports.

### Exhibit 3: Asia Europe estimated capacity relative to pre-Red Sea schedules, 2023-24

Capacity disruptions ramping into 2H Jan and 1H February



Source: Linerlytica

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## Q. What's the impact on container freight rates?

Container spot rates as proxied by the Shanghai Containerized Freight Index are up ~90% since 1 December. Look for more upside to spot rates with a peak into January-early February as the pre-Chinese New Year rush meets the capacity crunch caused by ships arriving back late.

### Exhibit 4: Shanghai Containerized Freight Index, 2009-24

SCFI is up ~90% since 1 December 2023

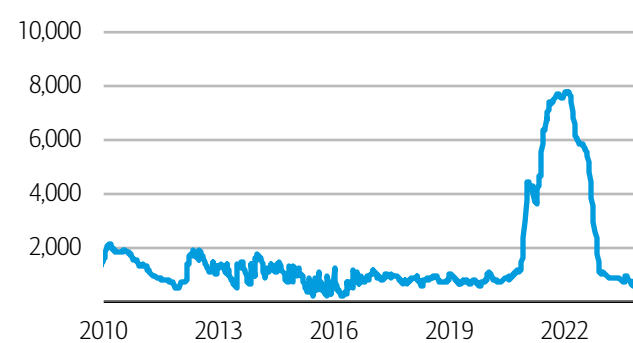


Source: Shanghai Shipping Exchange

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### Exhibit 5: SCFI Europe (US\$/TEU), 2009-24

SCFI Europe up +240% since 1 December 2023



Source: Shanghai Shipping Exchange

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But we see container spot rates likely to fade beyond Chinese New Year given:



- **Demand seasonality:** Export demand tends to seasonally weaken during the post-CNY period as factory workers are slow to return from holidays implying 1-2 months of slower exports. But Red Sea disruptions might create some temporary backlog of goods to ship meaning demand might be higher than usual this year.
- **Easing capacity crunch:** Container ships being re-routed via the Cape of Good Hope creates a temporary capacity crunch from 2H January as ships are delayed returning to Asia for new export cargos. But this crunch is temporary and should impact export capacity mainly in 2H January and 2H February only.
- **2024 new deliveries:** We estimate a demand/supply disruption from the Red Sea of 8.5% if all container ships continue to divert the long way. But the container shipping industry will receive ~10% new deliveries this year and this should drive gradual unwind of peak tightness.

The pace of decline in spot rate will depend on Red Sea disruptions – look for a faster decline if the security situation improves to allow services to be restored to the Red Sea, while a more gradual decline driven by temporary factors initially (demand seasonality & easing capacity crunch) followed by ongoing gradual pressure from new deliveries.

### Q. Is this as bad as COVID for supply chains?

Red Sea disruptions are unlikely to drive disruptions to supply chain or freight rates to the same level as COVID. Remember COVID saw a series of compounding disruptions for demand and supply. Initial disruptions were caused by Chinese factory closures on lockdowns prompting global inventory drawdowns. At the same time, global lockdowns caused surge in stay-at-home goods demand driving a surge in world trade. COVID illness caused further congestion in supply chains leading to supply-side disruptions across terminal and inland logistics creating congestion. And underinvestment in container boxes led to shortages as boxes were stuck in the wrong spot.

By contrast – Red Sea closures are certainly disruptive and add to demand/supply through longer distance sailings. But industry is better supplied around boxes/vessels now than in 2020, while world trade is unlikely to be as strong with the pivot to services. Also COVID supply disruptions unlikely with the world having moved on from lockdowns.

### Q. What's our base case for how this plays out?

The Red Sea remains an extremely fluid situation. But our base case is that the post-Chinese New Year lull period gives supply chains a chance to reset from the disruptions (i.e. reposition vessel and boxes) even assuming some demand deferral. We see peak supply disruptions passing in January-February 2024 as the impact of initial vessel rediversions causes a capacity crunch but things should smooth out as

Our base case also assumes that Operation Prosperity Guardian can improve the security situation in the Red Sea in the coming months. We see prospects for both improved defensive measures and attacks on Houthis launch sites allowing some liners to return sailings (given the incentive to capture market share with super normal profits available).

### Q. What's the profit windfall for the container liners?

Asia Europe spot rates have already tripled and this could translate into the CCFI index hitting 1,500-2,000 as this crisis moves on. We acknowledge that unit costs on Asia-Europe services have moved higher (say 10-20%) on the longer distance sailings adding to bunker and vessel costs – but this has been more than offset by higher spot rates.

We estimate 1-2 months of elevated rates could add up to 10-20% of net income relative to container shipping market cap based on our COSCO model with EBIT margins up to 20-30% during this period of elevated rates.

**Exhibit 6: COSCO incremental net income as % of market cap at various levels of CCFI and duration of disruption**

Red Sea disruptions could generate profits of up to 10-20% of market cap

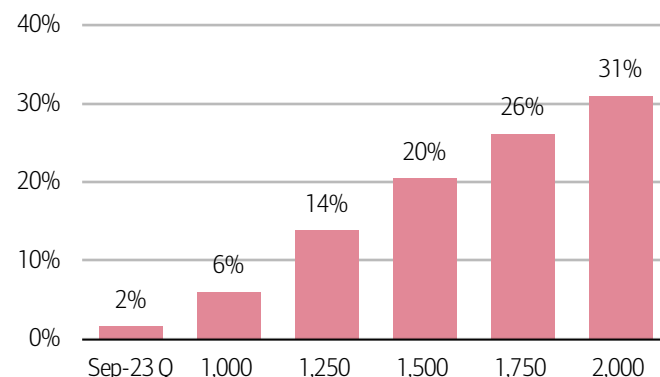
		Months of disruption			
		1	2	3	4
CCFI average	1,000	1%	3%	4%	5%
	1,250	4%	8%	12%	16%
	1,500	7%	13%	20%	26%
	1,750	9%	18%	27%	37%
	2,000	12%	24%	35%	47%

Source: BofA Global Research estimates

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**Exhibit 7: ONE estimated EBIT margin (%) at various levels of CCFI**

Red Sea disruptions could drive EBIT margins up to 20-30% EBIT margins



Source: BofA Global Research estimates

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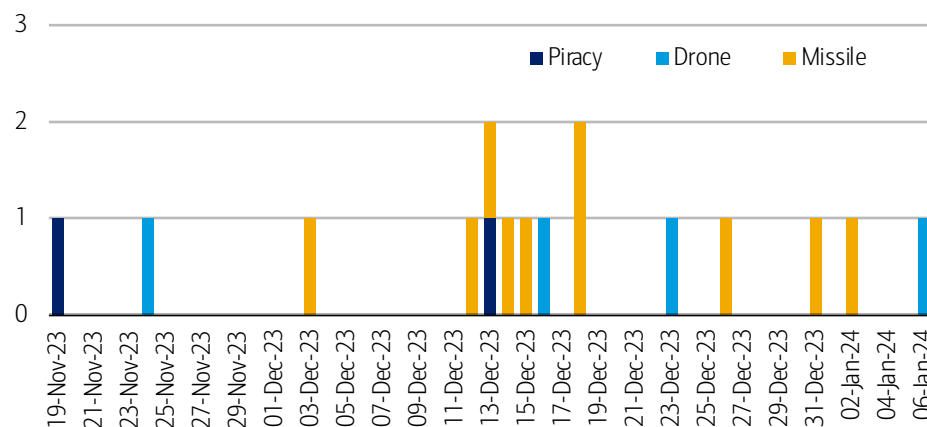
**Q. What will it take for liners to return to the Red Sea?**

Overall liners will be looking for signs that Operation Prosperity Guardian “showing it” around improving security in the region. This could come from more comprehensive defensive measures or even offensive strikes against the enemy. Key metric to watch will be frequency of attacks – if this starts to come down there will be some liners who break ranks and return to the Red Sea to capture super normal profits.

But the bar is now higher for liners to return capacity to the Red Sea following the Maersk Hangzhou attacks with incentives for liners to continue to divert to keep the market tight.

**Exhibit 8: Houthi Red Sea attacks (# of attacks), November 2023 to January 2024**

Houthi attacks ramped into 2H December



Source: Company reports, Bloomberg

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**Q. Could the disruptions worsen for container from here?**

Nearly all container shipping capacity has already reddiverted away from the Red Sea so it is hard for demand/supply disruptions to get worse than what is already being seen.

But an escalation of Middle East tensions still could have negative secondary impacts on container shipping either around a possible economic shock or a closure of the Strait of Hormuz which could drive bunker costs higher and disrupt crude tanker exports.

**Q. Will air cargo get a boost from Red Sea disruptions?**

Air cargo has yet to see a boost from Red Sea disruptions. Global air cargo volumes seasonally faded into 2H December (-17% relative to 1H December) while air cargo yields also seasonally declined during the 2H December.

We see good prospects for stronger air cargo demand during the pre-Chinese New Year rush in the coming two months as longer transit times and capacity shortages due to delayed vessel returns prompt some rush air cargo shipments. However beyond this rush boost during the pre-Chinese New Year peak – it is unclear whether air cargo demand could get a sustained boost from Red Sea disruptions with ocean transit times likely to become more stable post-CNY removing the need for rush shipments.

#### Exhibit 9: Baltic Airfreight Index – Global, 2018-24

Seasonal downturn in freight rates into 2H December



Source: Baltic Exchange

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#### Exhibit 10: Baltic Airfreight Index – Shanghai-Europe, 2018-24

Shanghai-Europe has followed the seasonal downturn in rates



Source: Baltic Exchange

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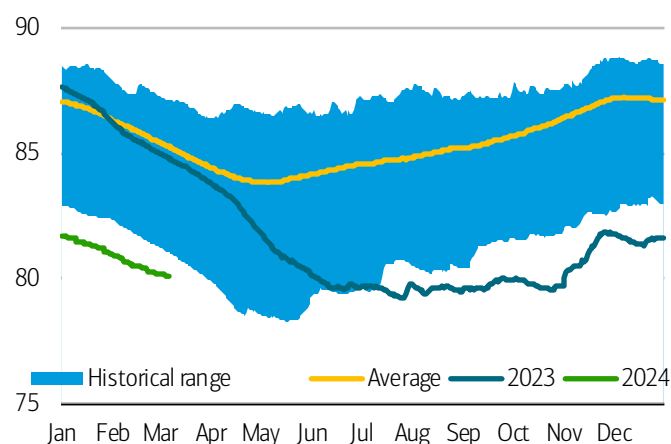
## Q. What about the Panama Canal drought?

Panama Canal water levels remain extremely low with further declines expected in 1H24 during the dry season. This is prompting some container liners to detour away from the Panama Canal for Asia US East Coast trades to instead sail via the Red Sea or Cape of Good Hope.

But Red Sea restrictions have exacerbated the Panama Canal disruptions. We see this combined with risks around US east coast port worker labor negotiations in 2024 prompting more US imports to shift back to the US West Coast ports in 2024.

#### Exhibit 11: Panama Canal Gatun Lake water levels (ft), 1965-2024 #

Water levels extremely low versus history at this time of the year

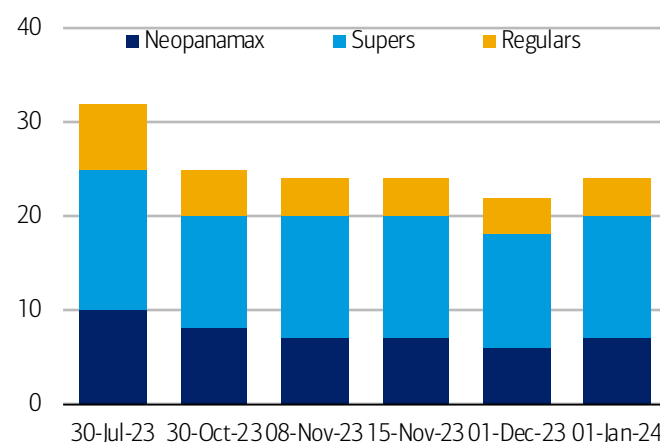


Source: Panama Canal Authority # water levels to March based on projections

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#### Exhibit 12: Panama Canal max transits per day (#), 2023-24

Panama Canal transits have been cut relative to normal on drought issue



Source: Panama Canal Authority

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