The Impact of Trade Conflicts on the Global Economy:

A Case Study using the Red Sea Trade Disruption

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Introductio

The recent escalation of trade tensions between major economies has disrupted global supply chains, increased tariffs, and heightened market uncertainty.

In late 2023 and early 2024, events such as the attack by Hamas on Israel and subsequent military responses, along with Houthi rebel attacks on international shipping in the Red Sea and Bab al-Mandab Strait, have significantly impacted trade.

The importance of these waterways, such as the Suez Canal and Bab al-Mandab Strait, in facilitating global trade is underscored by their role in connecting major trade routes.

Houthi attacks targeted merchant vessels, initially claimed to be related to Israel but later expanded to include ships of nations supportive of Israel. The situation escalated further with military actions by the US and UK forces against Yemen territory in response to Houthi attacks.

The Origins of the Red Sea Crisis

1

Houthi Movement Emergence

The current crisis in the Red Sea has been brewing for some time,with its origins in the ongoing civil war in Yemen.The Houthi movement emerged in northern Yemen in the 1990s, partly as a reaction to rising Saudi financial and Sunni religious influence.

2

Seize of Power

In 2014, the Houthi rebellion seized power over the northern part of Yemen and the capital city of Sana'a and gained power and access to attack the Bab-El-Mandeb Strait.

3

Focus on Merchant Vessels

While the Houthi initially claimed to target merchant vessels traveling to or from Israel or of Israeli ownership, it soon became evident that also ships of countries supportive of Israeli were being attacked.

Starting from mid-November 2023, the Houthi militia started to focus more on attacking merchant vessels, leading to significant disruptions in the region.

Research Methodology

- The paper delves deeply into the world of trade and conflicts, analyzing the political and economic instability particularly in the Red Sea.
- The data was primarily collected from various credible sources like IMF PortWatch, SCFI and Clarksons Research. Additionally, the Shanghai Containerized Freight Index (SCFI) is utilized to analyze fluctuations in freight charges.
- The dataset includes information on vessel arrivals, departures, and cargo throughout the Suez Canal, and the Cape of Good Hope. The data covers a period preceding (upto 6 months) and following Houthi attacks (till March 2024) to capture any significant changes in trade dynamics
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Findings of the Study

The Red Sea serves as a crucial trade route connecting two oceans, facilitated by two main passages: the Suez Canal to the north and the Bab al-Mandab Strait to the south. Approximately 8.8 million barrels of oil are transported through the Bab al-Mandab strait daily, constituting 8.7% of the global demand.

The study aims to assess the impact of the Red Sea Blockage through the examination of the following aspects:

a) Alterations in ship traffic patterns along the Suez Canal and the Bab-El-Mandeb Strait compared to routes via the Cape of Good Hope.

b) Changes in shipping and freight costs resulting from the blockage.

c) Environmental consequences and increased fuel consumption due to rerouting from the Suez Canal to the Cape of Good Hope, which extends the voyage distance by approximately 30% or 7000 nautical miles.

Impact on Ship Traffic, Distance and Shipping Volumes:

1. Decrease in Suez Canal Traffic

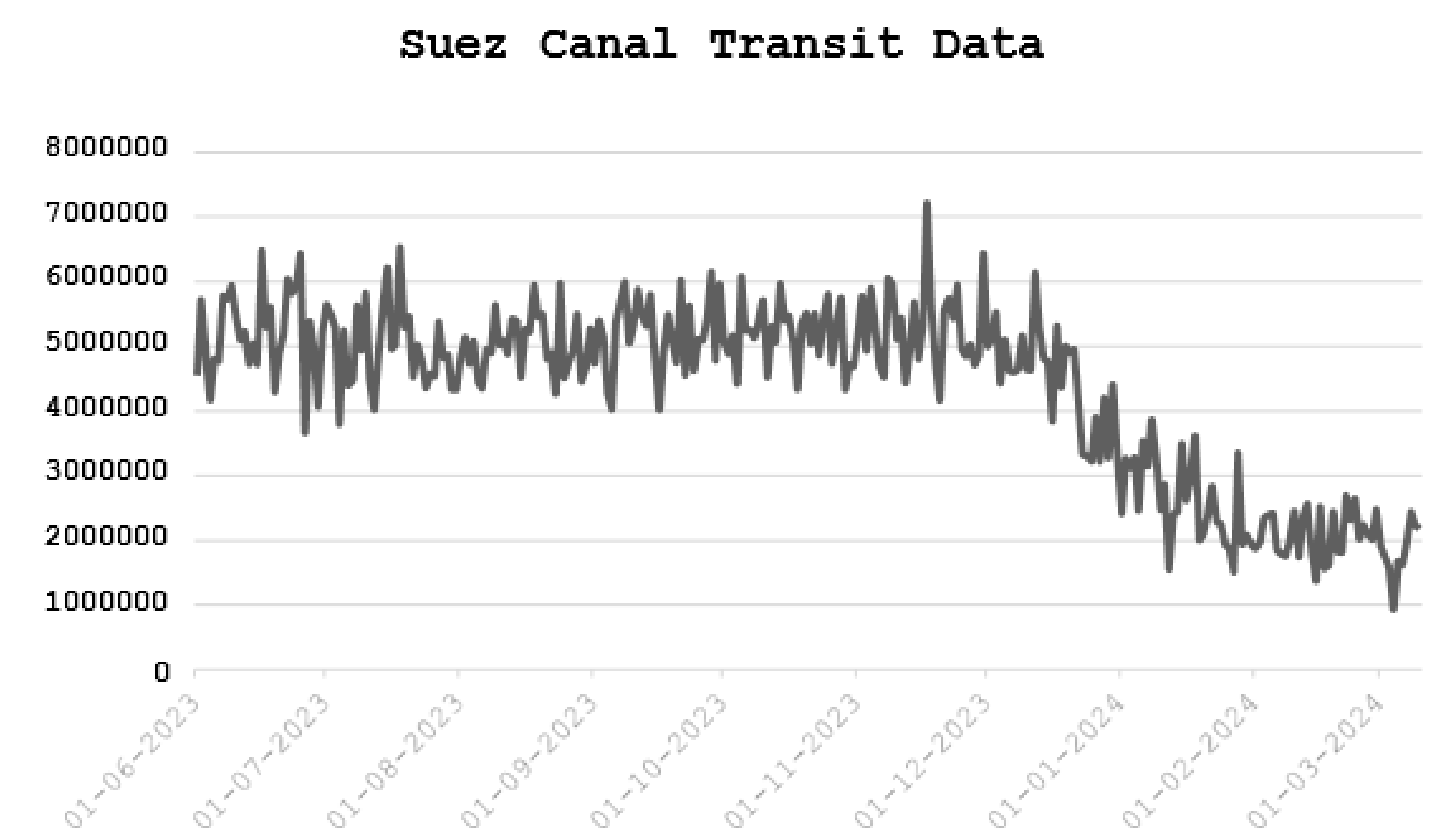
The attacks by the Houthi militia have significantly decreased trade activity through the Suez Canal, with vessels choosing to reroute towards the Cape of Good Hope. This diversion raises the total sailing distance by 29% and extends the overall round voyage time by 17% between Shanghai and Rotterdam, an extension of almost 16 days.

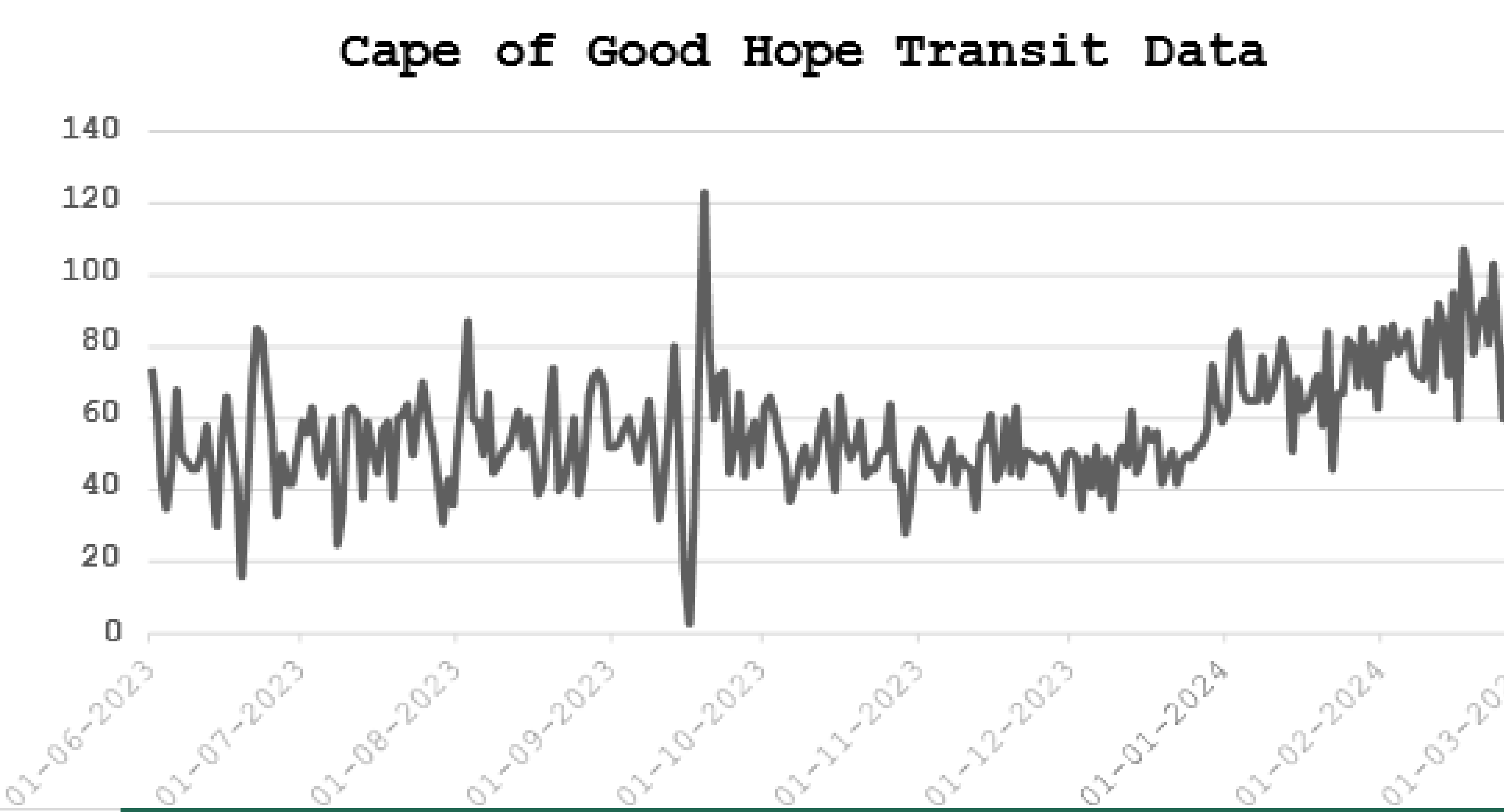
2. Decrease in Trade Volumes

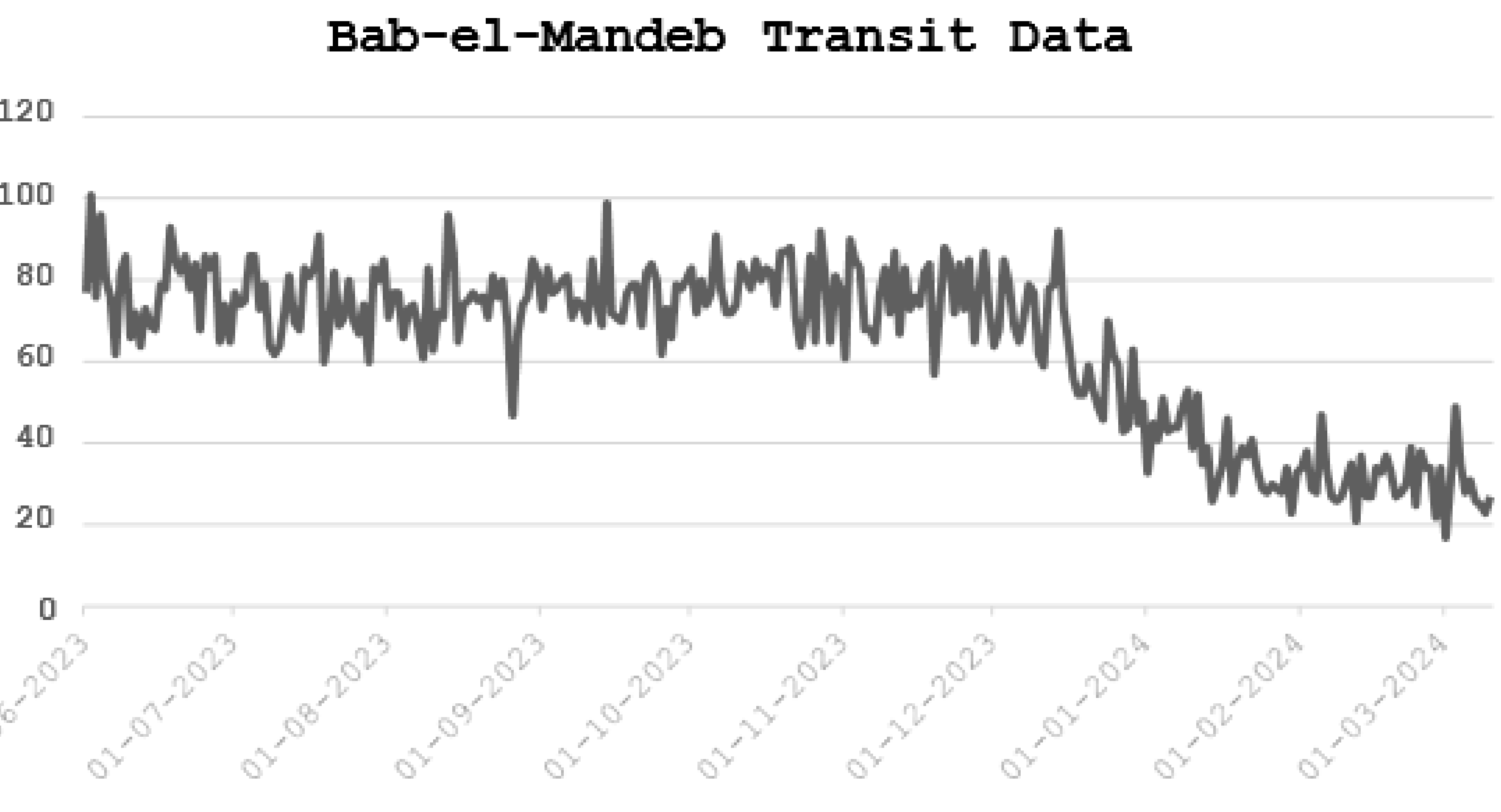
The average transit volume from December 14th to March 10th dropped by approximately 47.5% (IMF PortWatch, 2024). According to UNCTAD, transit through both major canals,the Bab-El-Mandeb strait and the Suez Canal, has nearly halved, while transit through the Cape of Good Hope has risen by an estimated 74% compared to last year

3. Effects on Container Shipping Movement

The Houthis have effectively disrupted trade in the Red Sea region, as evidenced by the decrease in ship transit through the Bab-el-Mandeb strait from 88 ships per day to 17 ships per day.

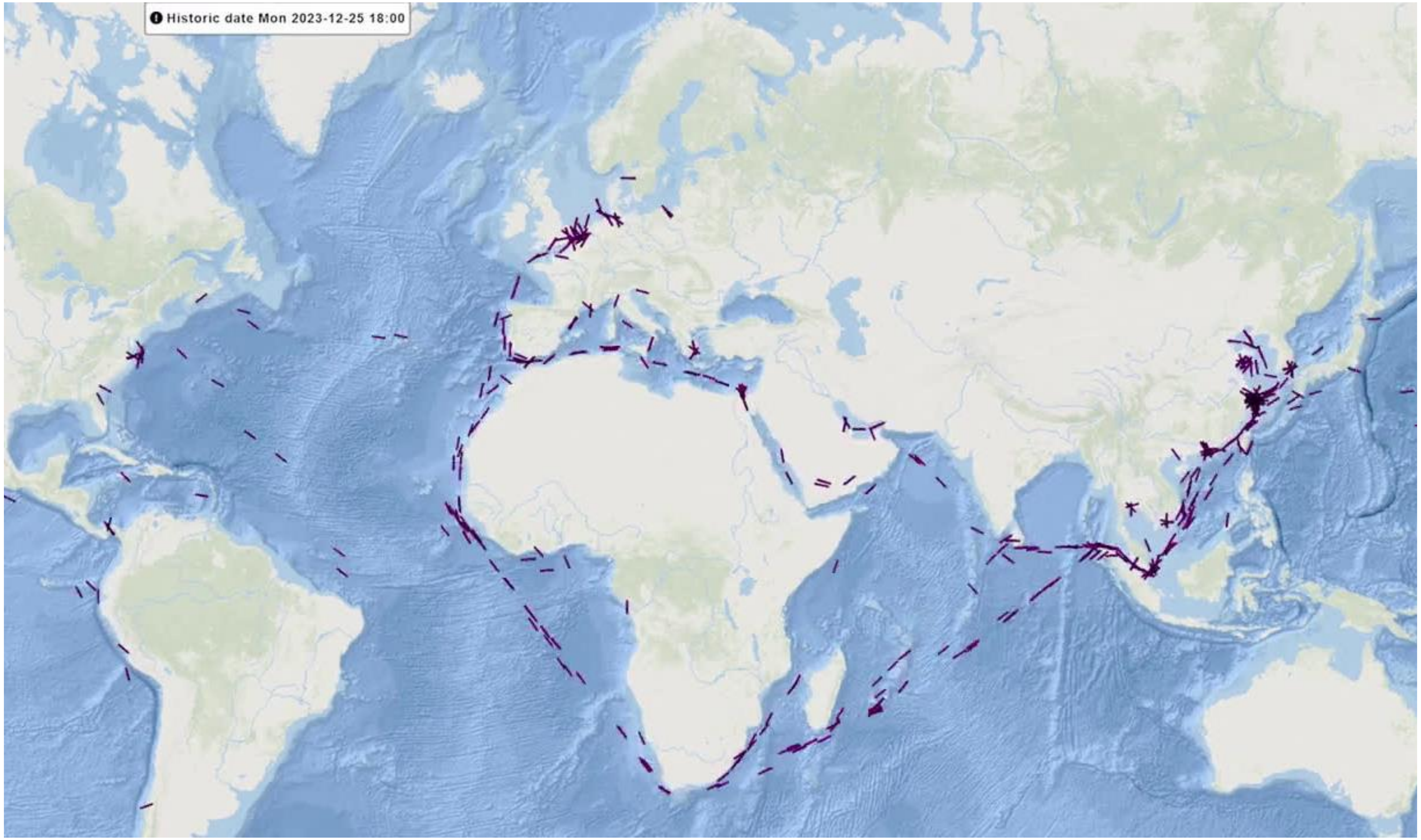






Data shows that with a fall in transit in the Suez canal and the Bab-El-Mandeb Strait, the Cape of good Hope has seen a rise in traffic, owing to the blockage of the waterways due to the crisis.

A Glimpse of the Rerouting of Vessels



Source: Marine Benchmark, data collected from December to March

Impact on shipping rates, the container business and the supply chain.

1

Impact on Shipping rates

Rates for container shipping from Asia–Pacific to Europe routes surged significantly since November 2023. In the last week of December 2023, average spot freight rates for containers spiked by $500, marking the highest weekly increase on record. Spot rates from Shanghai more than doubled (+122%) between early December 2023 and early February 2024, with rates to Europe jumping by 256%, more than tripling (SCFI, 2024)

2

War risk premiums

War risk insurance premiums for shipments through the Red Sea are climbing due to heightened attacks by Yemen's Houthi movement on merchant vessels, particularly those with UK or U.S. affiliations. Bloomberg (2024) reports that vessel insurance for transiting the Bab-El-Mandab Strait has increased to
0.75–1% of the vessel's value by the third week of January 2024 (Alex Longley, 2024) .

3

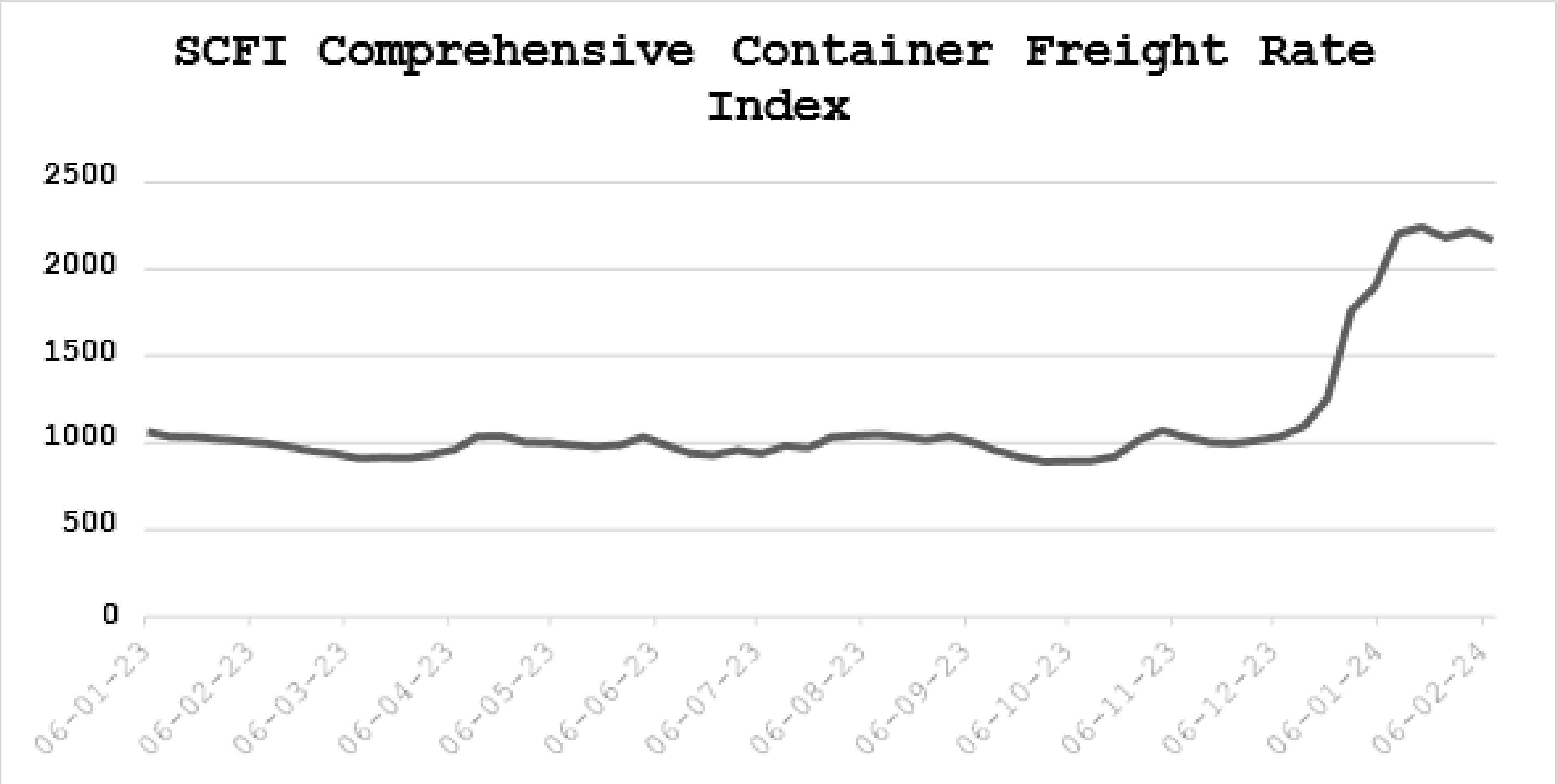
Implications for Global Economic supply chains

Several companies, such as IKEA, anticipate delays in product deliveries and are exploring alternative freight options, while Danone disputes reports of short-term supply chain disruptions (Sarah Butler, 2023). Ocean freight prices soared within hours due to increased vessel diversions from the Red Sea, reaching $10,000 per 40-foot container from Shanghai to the U.K

Capacity and Shipping Rates

Increased Freight Costs

- The Shanghai Container Freight Index (SCFI) reported rates of $2,648 per TEU for the Shanghai–Northern Europe route on February 9, 2024, marking a 3 time increase from early November 2023.
- The Drewry World Container Index for transporting an FEU from China to North Europe surged to USD 4,406 in mid-January 2024 (+282% compared to mid-November 2023)



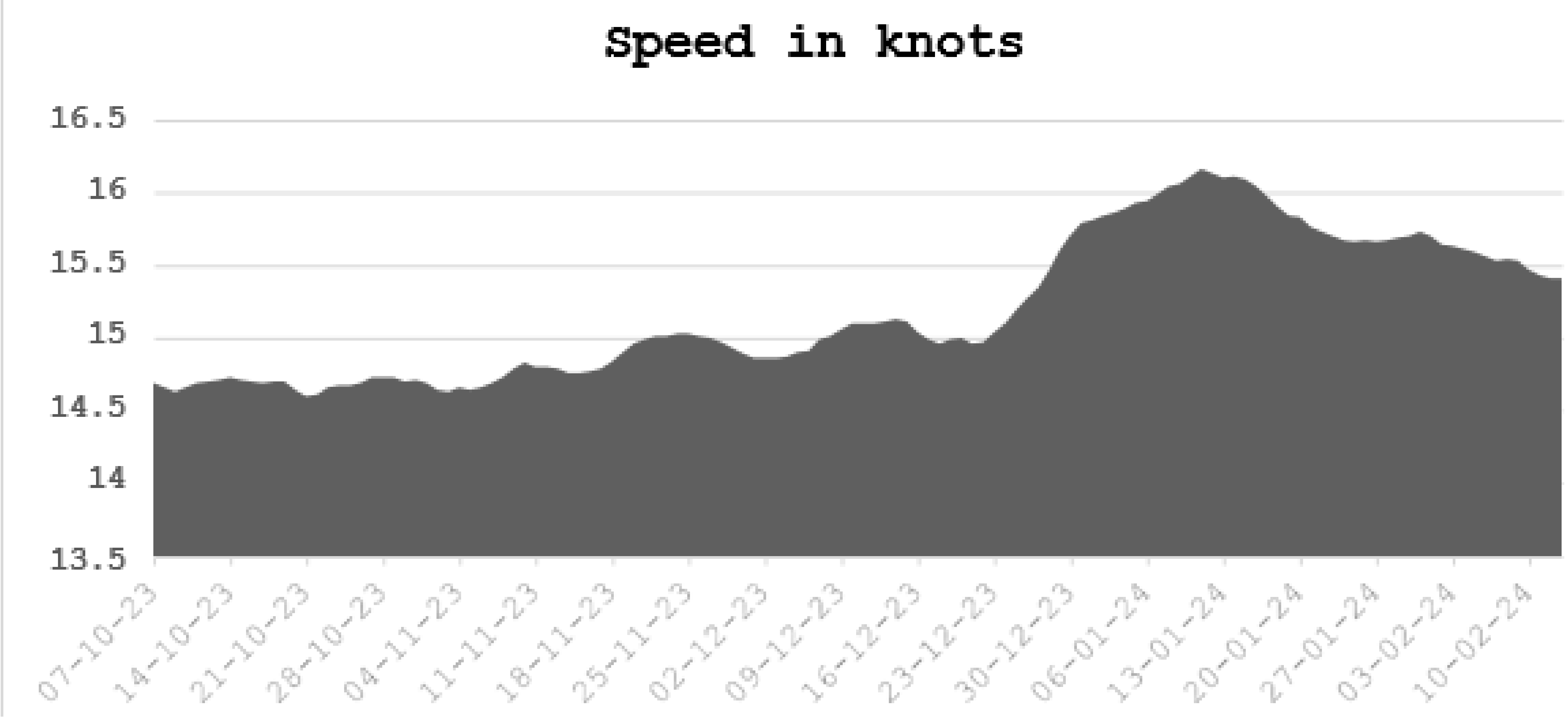
Freight rate increases are also in part a result of growing fears of insufficient shipping capacity and containers.

Data provided by Xeneta indicates that ocean freight rates from the Far East to North Europe have surged by
124% since the escalation of the crisis in mid-December 2023.

Change in Freight rates from November 2023 to March 2024 at different Base Ports

Sea Port Country	Freight Rates in November/ Mid-December	Current Freight Rates
European Base Ports	**USD 450-500**	**USD 2100-2200**
Mediterranean Base Ports	**USD 500-550**	**USD 2200-3500**
US East Coast Base Ports	**USD 1250-1350**	**USD 2000-2700**
West Africa Base Ports	**USD 900-1000**	**USD 2500-2800**
East/South Africa Base Ports	**USD 450-500**	**USD 1300-1400**

Shipping Speed increase due to rerouting



Operational Adjustments

The recent rerouting of ships around the Cape of Good Hope and the resultant increase in sailing distances have led to a rise in total bunker fuel consumption and ship emissions.

The world's largest furniture company, IKEA has rerouted more than 100 container ships towards the Cape route joining the likes of the major freight firms Evergreen, OOCL, Maersk

Environmental Consequences of Speed Increase

Increased Fuel Consumption

For large container vessels, even a modest 1% increase in speed typically corresponds to a 2.2% surge in fuel consumption. For instance, elevating the speed from 14 to 16 knots would escalate the ship's fuel consumption per mile by 31%.

The extended distances Speed in knots travelled due to bypassing the Suez Canal in favour of the Cape of Good Hope imply a substantial surge in greenhouse gas emissions for each round trip, potentially exceeding 70% (Robert Wright, 2024).

The table showcases the data for an Average Asia-North Europe Voyage along the Red Sea vis-à-vis the Cape of Good Hope

Heading	Red Sea	Cape of Good Hope	UoM	Change (%)
Total round voyage sailing distance	24000	31000	Nautical Miles	29%
Total round voyage time	77.8	91.3	Days	17.30%
Total sailing time	62.5	76	Days	21.60%
Average sailing speed	16	17	Knots	6%

Global and Indian Economic Consequences

Cost Surge for Importers and Exporters

Indian businesses have experienced a sharp increase in container costs and longer transit times due to rerouted shipping routes, leading to heightened uncertainty and challenges for exporters. The surge in container costs, extending up to 400%, and the need to redirect routes around Africa have led to challenges for exporters in absorbing the increased expenses

Revenue Decline for Egypt

The decline in Suez Canal transits has led to a sharp decline in revenues for the Egyptian government which owns the Suez Canal, affecting an already crisis-ridden economy. Revenues collected from the Suez Canal account for 2% of Egypt's GDP and the total revenue collected during the fiscal year 2022-23 have dropped around 40-50% hurting the Egyptian economy.

Rise in Air Freight Rates

Following the Houthi attacks, global air freight rates have risen for the first time in seven weeks. The Baltic Air Freight Index, increased by 6.4%. Global air freight rates have increased due to rising anxiety among companies and shippers about the Red Sea crisis, resulting in significant impacts on trade volumes and logistics parameters.

Conclusion and Future Outlook

Need for Greater Flexibility

The crisis in the Red Sea highlights the need for greater flexibility in the global transportation network, prompting initiatives to bypass bottlenecks and ensure smooth operations in the face of disruptions. Prolonged interruptions in the Suez gateway, especially for container shipping, pose direct threats to global supply chains, potentially resulting in delays, increased expenses, and inflation.

Challenges for Developing Nations

Developing nations are especially susceptible to shipping network disruptions and shifts in trade patterns, elevating costs and altering market access, necessitating measures to ensure connectivity and market stability. If the security situation in the Red Sea does not notably improve by the second quarter of 2024, there could be an increased risk of inflationary pressures, depending on the duration of the disruption and potential emergence of additional disruptions.

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