Qoncept

Global Trade Flows, Fragilities, and the Baltic Dry Index

If you've been following the news lately, chances are you've heard a lot about the Strait of Hormuz. It pops up every time there's geopolitical tension, oil price volatility, or market jitters.

But here's the real question: Why does a narrow stretch of water thousands of kilometers away matter to your fuel bill, your investments, or even the price of everyday goods?

Because global trade, despite all its scale and sophistication, runs through a few Checkpoints. And Hormuz is one such critical passage.

The Strait of Hormuz (SoH): The Pressure Valve of Energy

At just 29 nautical miles wide, the Strait of Hormuz handles a fairly outsized share of the world's energy supply:

- Nearly 20 million barrels of crude oil per day[1]
- Around 20% of global LNG trade[2]
- Close to 30% of LPG flows[3]
- Plus fertilizers and key industrial inputs

> This makes SoH more than a shipping lane... It is synonymous to a pressure valve for the global economy. Even minor disruptions can trigger spikes in insurance premiums, energy prices, and supply chain stress.

Even when **alternatives exist,** they fall well short of replacing the Strait of Hormuz. Pipelines in Saudi Arabia and the UAE can together carry only about **6 - 7 million barrels per day,** compared to the roughly **20 million barrels** that normally pass through Hormuz[4], **meaning only a third can realistically be rerouted.**

Shipping around Africa via the Cape of Good Hope adds **10-15 days** to journeys, raises fuel costs by **30-50%,** and increases insurance and charter expenses[5]. For LNG, the constraints are even tighter - countries like Qatar have **virtually no alternative routes,** leaving most of their exports heavily dependent on Hormuz.

Which brings us to a bigger realization: Hormuz isn't the exception - it's part of a larger pattern. To understand why such chokepoints are so critical, lets first examine **how global trade actually moves...**

Global trade flows through **three primary modes of transport,** each serving a distinct role. In dollar terms, the scale is even clearer. With global trade now reaching **~$35 trillion in 2025** [6]

• Maritime shipping (sea freight):

Roughly 80-90% of global trade volume and about 70% of trade value which roughly translates to $24 trillion[6]. It carries bulk commodities like crude oil, coal, iron ore, and grain, as well as containerized goods. It is the backbone of long-distance, cost-efficient trade.

• Air freight:

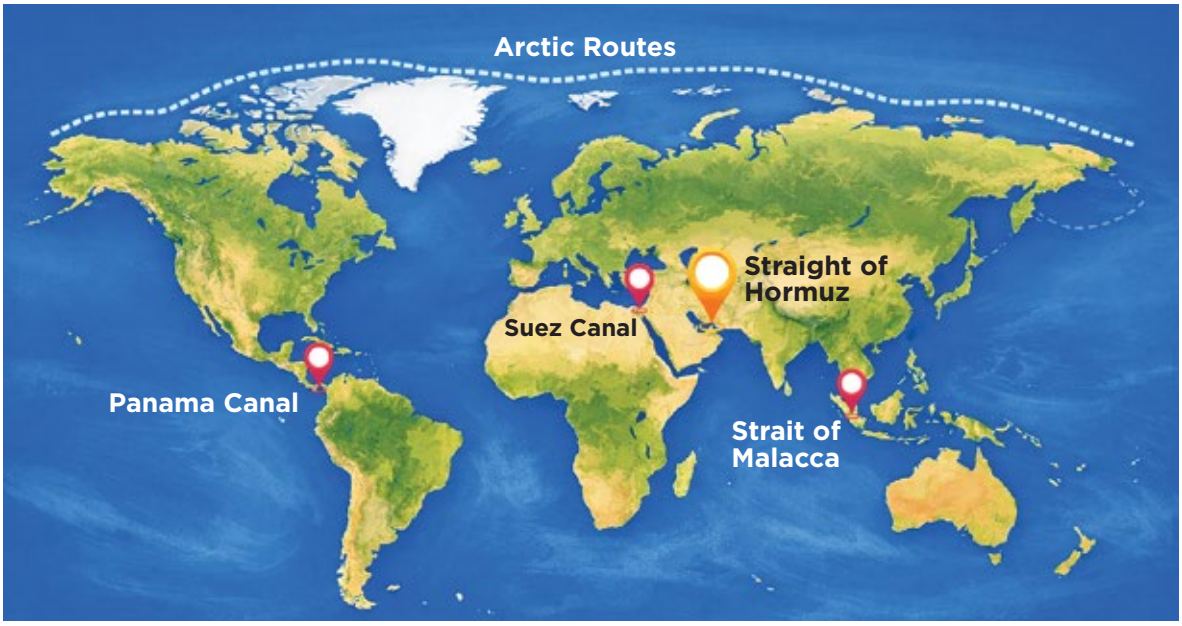
Only about 1% of trade volume but 35-40% of trade value ~ $12 trillion[6]. It moves high-value, time-sensitive goods such as electronics, pharmaceuticals, and luxury items. Fast but expensive, it is the "value king" of logistics.

• Land freight (road and rail):

Around 10-15% of trade volume and 20–30% of trade value ~ $8 trillion[6]. It ensures regional and cross-border connectivity, acting as the "glue" that binds supply chains.

Despite its scale, this system is astonishingly dependent on a few narrow passages - chokepoints that act like valves in the global economy. And The Strait of Hormuz is not alone. Several other chokepoints play equally vital roles...

Chokepoints: Fragile Arteries of Global Trade



• Suez Canal:

A key link between Europe and Asia. The 2021 Ever Given incident blocked an estimated $9 billion in trade per day, highlighting its fragility.

• Panama Canal:

Connects the Atlantic and Pacific, but falling water levels in Gatun Lake - driven by climate change are reducing capacity.

• Strait of Malacca:

Carries about 25% of global trade[7], including critical energy supplies to China and Japan. It faces congestion, piracy risks, and geopolitical tensions.

• Arctic Routes:

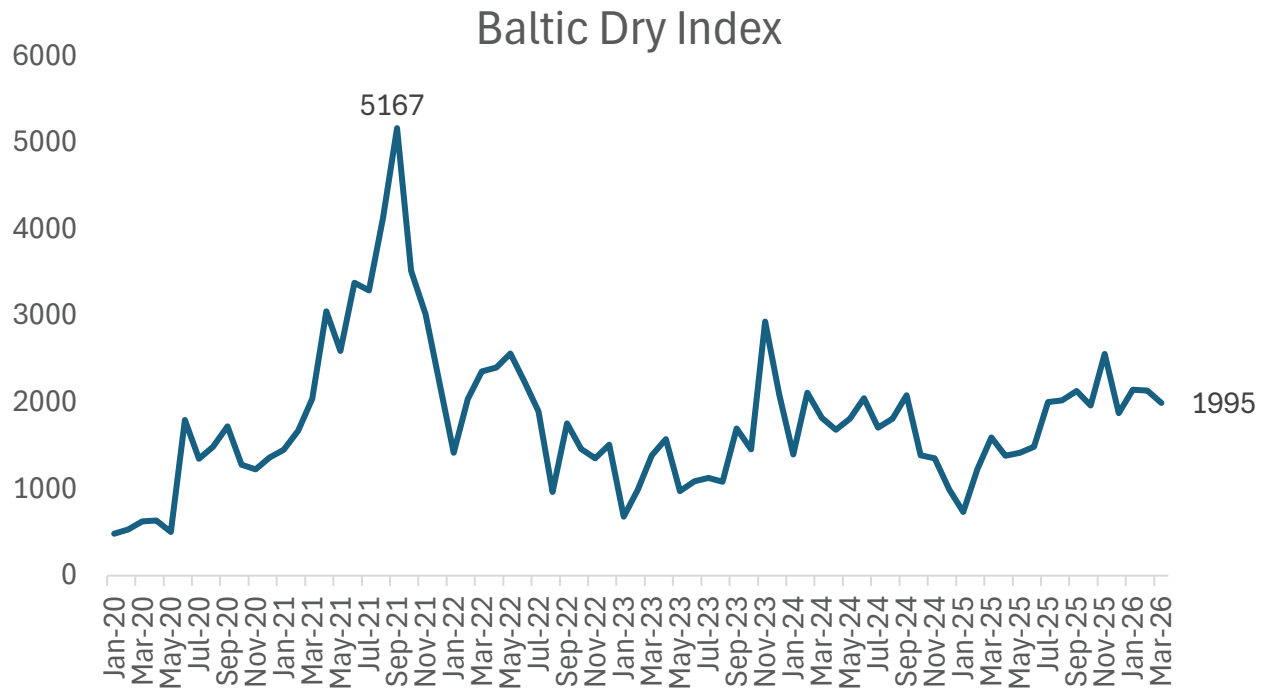
Melting ice is opening seasonal shipping lanes along Russia's northern coast. While shorter, they face harsh conditions, limited infrastructure, and geopolitical sensitivities.

These chokepoints are critical bottlenecks. When disrupted, they could create cascading effects across supply chains, commodity markets, and national economies.

So given these vulnerabilities, how does one monitor the health of global trade?

Beyond headlines and geopolitics, analysts rely on hard data, most notably the **Baltic Dry Index (BDI).**

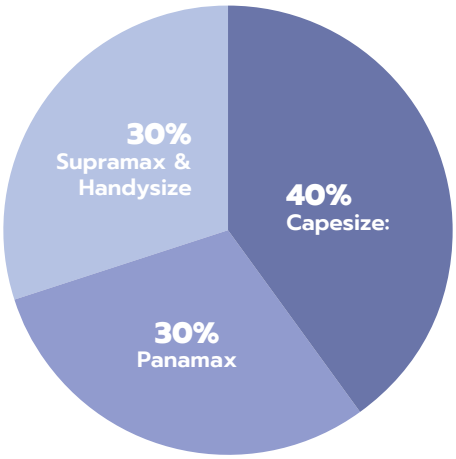
The BDI tracks the cost of shipping bulk raw materials such as iron ore, coal, grain, and fertilizers across major sea routes. Because it is based on real shipping contracts rather than forecasts, it provides a **near real-time pulse of global trade activity.**



When the index rises, it signals strong demand for ships and robust trade activity. When it falls, it can reflect weaker demand, excess shipping capacity, or broader economic slowdown.

What makes the BDI unique is its foundation in **real shipping contracts** and not projections or estimates.

How the Baltic Dry Index is Calculated



The BDI is calculated from daily charter rates across vessel categories:

- **Capesize:**

Massive carriers for iron ore and coal, too large for canals.

- **Panamax:**

Sized for the Panama Canal, often carrying grain and coal.

- **Supramax & Handysize:**

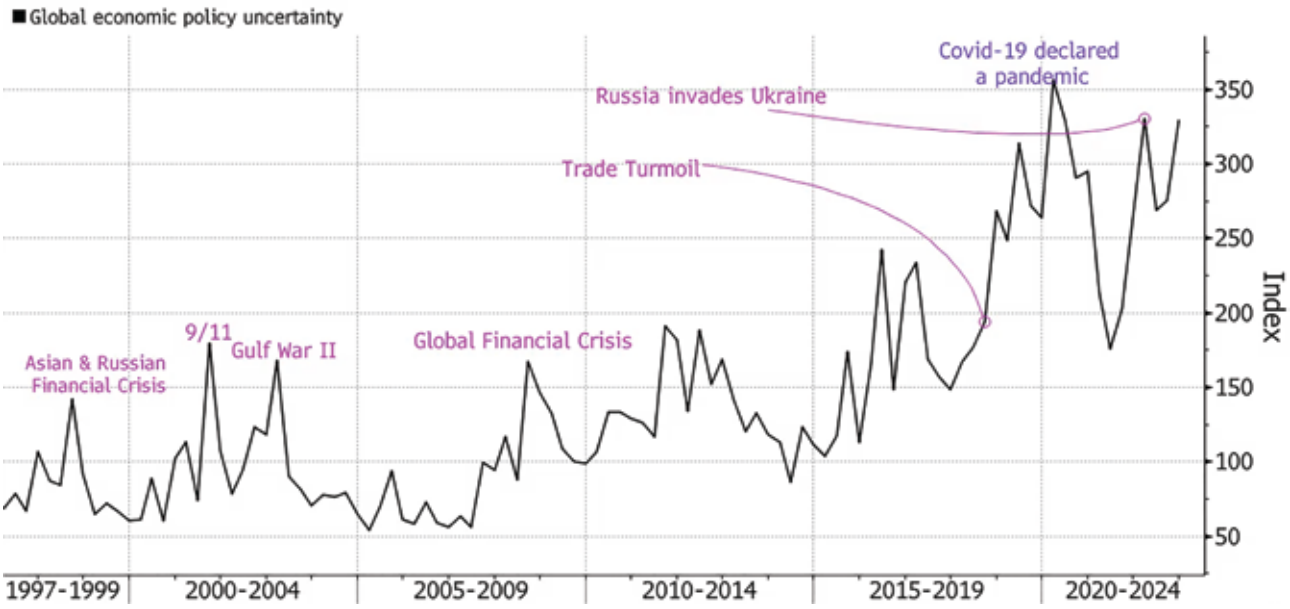
Smaller, versatile ships serving flexible routes.

By averaging rates across these classes, the index captures the overall cost of moving raw materials by sea.

What does the Baltic Dry Index Imply?

- **Short term spikes** often reflect seasonal demand or logistical bottlenecks.
- **Long term trends** reveal structural shifts in global trade, such as sustained industrial growth or prolonged slowdowns.

How does it link to Global GDP?



Source: Bloomberg

The BDI is often seen as a **leading indicator of economic activity.** It correlates strongly with steel production, construction, and energy demand. Rising values suggest industrial expansion; falling values can foreshadow slowdown.

Limitations however include - Exclusion of containerized trade (finished goods) and Sensitivity to fleet supply dynamics (too many ships can depress rates).

Hence, for a fuller picture, analysts pair the BDI with the WTO Global Trade Monitor, the Air Cargo Index, and the Shanghai Container Freight Index.

Strategic Implications of the Baltic Dry Index:

- **Policymakers:**

Use the BDI to anticipate inflationary pressures, as shipping costs feed into commodity prices.

- **Investors:**

Spot opportunities in shipping stocks, commodities, or emerging markets.

- **Businesses:**

Monitor the BDI alongside chokepoints like Hormuz, Malacca, Suez, and Panama to manage supply chain risks.

- **Geopolitics:**

Control of chokepoints translates into leverage in trade negotiations, making the BDI a subtle but powerful indicator of global power dynamics.

Although Global trade is a vast, interconnected system - its resilience is constantly tested by fragile chokepoints and shifting geopolitical realities.

Chokepoints like Hormuz remind us how geography and politics can converge to test resilience, while the Baltic Dry Index quantifies those pressures in real time.

Together, they form the dual lens through which policymakers, investors, and businesses must navigate an increasingly volatile global economy.

Source: 1/2/3/4/5/7 Bloomberg, 6 Values are calculated using UNCTAD's projection of $35 trillion global trade in 2025 as the baseline (UNCTAD's - United Nations Conference on Trade and Development)

Disclaimer

The views expressed here in this article are for general information and reading purpose only and do not constitute any guidelines and recommendations on any course of action to be followed by the reader. Quantum AMC / Quantum Mutual Fund is not guaranteeing / offering / communicating any indicative yield on investments made in the scheme(s). The views are not meant to serve as a professional guide / investment advice / intended to be an o_er or solicitation for the purchase or sale of any financial product or instrument or mutual fund units for the reader. The article has been prepared on the basis of publicly available information, internally developed data and other sources believed to be reliable.

Whilst no action has been solicited based upon the information provided herein, due care has been taken to ensure that the facts are accurate and views given are fair and reasonable as on date. Readers of this article should rely on information/data arising out of their own investigations and advised to seek independent professional advice and arrive at an informed decision before making any investments.

Mutual Fund investments are subject to market risks, read all scheme related documents carefully.