

IBKRWEBINARS.COM



October 29, 2021

# Drawing Capital

# Understanding Global Supply Chain

---

**Sagar Joshi**

Managing Partner  
Drawing Capital

**Jugal Lodaya**

Managing Partner  
Drawing Capital

Exchange and Industry Sponsored Webinars are presented by unaffiliated third parties. Interactive Brokers LLC is not responsible for the content of these presentations. You should review the contents of each presentation and make your own judgment as to whether the content is appropriate for you.

Interactive Brokers LLC does not provide recommendations or advice. This presentation is not an advertisement or solicitation for new customers. It is intended only as an educational presentation.



## Disclosure:

Options involve risk and are not suitable for all investors. For information on the uses and risks of options, you can obtain a copy of the Options Clearing Corporation risk disclosure document titled [Characteristics and Risks of Standardized Options](#) by calling (312) 542-6901.

Futures are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading futures, please read the [CFTC Risk Disclosure](#). For a copy visit [interactivebrokers.com](http://interactivebrokers.com).

Security futures involve a high degree of risk and are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading security futures, please read the [Security Futures Risk Disclosure Statement](#). For a copy visit [Interactivebrokers.com](http://Interactivebrokers.com).

There is a substantial risk of loss in foreign exchange trading. The settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets.

The Order types available through Interactive Brokers LLC's Trader Workstation are designed to help you limit your loss and/or lock in a profit. Market conditions and other factors may affect execution. In general, orders guarantee a fill or guarantee a price, but not both. In extreme market conditions, an order may either be executed at a different price than anticipated or may not be filled in the marketplace.

There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

- IRS Circular 230 Notice: These statements are provided for information purposes only, are not intended to constitute tax advice which may be relied upon to avoid penalties under any federal, state, local or other tax statutes or regulations, and do not resolve any tax issues in your favor.
- Interactive Brokers LLC is a member of [NYSE FINRA SIPC](#)



# drawingcapital

---

## **A Shocked Global Supply Chain**

Presented by:

Sagar Joshi and Jugal Lodaya



# Disclosure

This presentation may not be reproduced in whole or in part without the express consent of Drawing Capital Group, LLC (“Drawing Capital”). This presentation is not an offer to sell securities of any investment fund nor a solicitation of offers to buy, sell, or hold any securities. Past performance of these strategies is not necessarily indicative of future results. There is the possibility of loss and all investments involve risk, including the loss of principal. Drawing Capital may own securities discussed in this presentation.

The information in this presentation was prepared by Drawing Capital and is believed by Drawing Capital to be reliable and has been obtained from sources believed to be reliable. Drawing Capital makes no representation as to the accuracy or completeness of such information. Opinions, estimates, and projections in this presentation constitute the current judgment of Drawing Capital and are subject to change without notice.

Any projections, forecasts, and estimates contained in this presentation are speculative in nature and are based upon certain assumptions. In addition, opinions and investment topics described herein are subject to known and unknown risks, uncertainties, and other unpredictable factors, many of which are beyond Drawing Capital’s control. No representations or warranties are made as to the accuracy of such forward-looking statements. It can be expected that some or all of such forward-looking assumptions will not materialize or will vary significantly from actual results. Drawing Capital has no obligation to update, modify or amend this presentation or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Due to various factors, investments that seek to track indices may lead to different performance compared to the performance of the underlying benchmark index.

Drawing Capital is not affiliated with Interactive Brokers LLC. Drawing Capital receives trade execution, custody, clearing, and other services from Interactive Brokers LLC.



# About

Drawing Capital is an innovation-focused private investment firm headquartered in Silicon Valley, CA.

Drawing Capital aims to capture the expansion of a technology-forward world by investing in leaders that we believe carry undervalued growth. Our expertise in finance and data science enables us to participate in investment opportunities in public markets not captured by passive investing.

# Table of Contents



Intro to Supply Chains



Bullwhip Effect



Freight Industry



Impact of Freight Logistics



Sample Companies



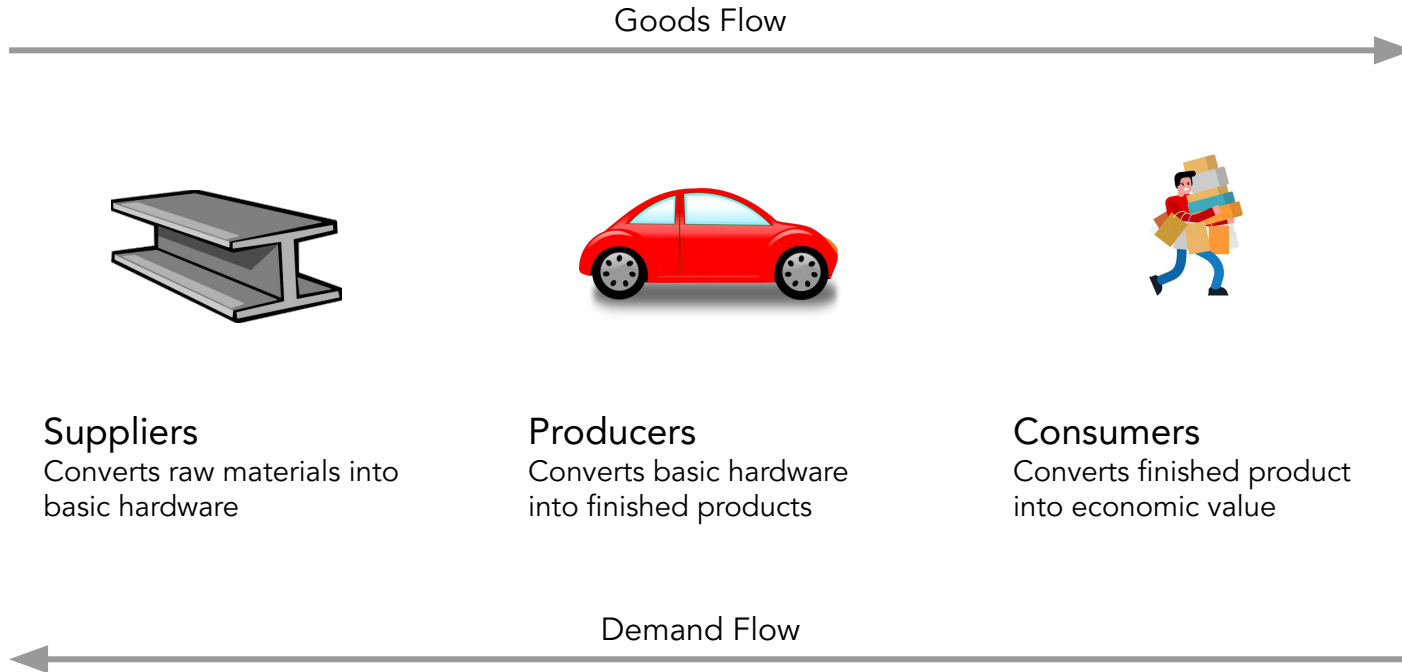
Summary & Resources

# Intro to Supply Chains

---

- Flow of supply chains
- Supply chain example
- Insights in supply chain dynamics

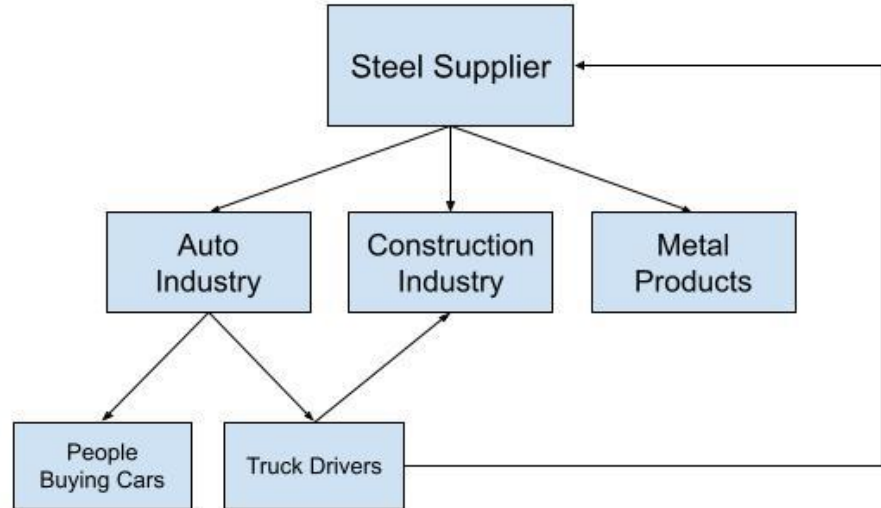
# What is a Supply Chain





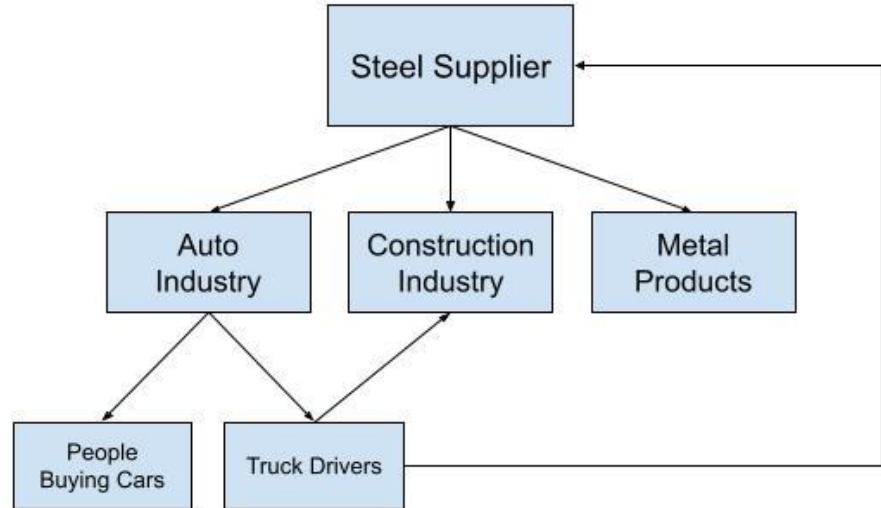
## Example Supply Chain - Steel Industry

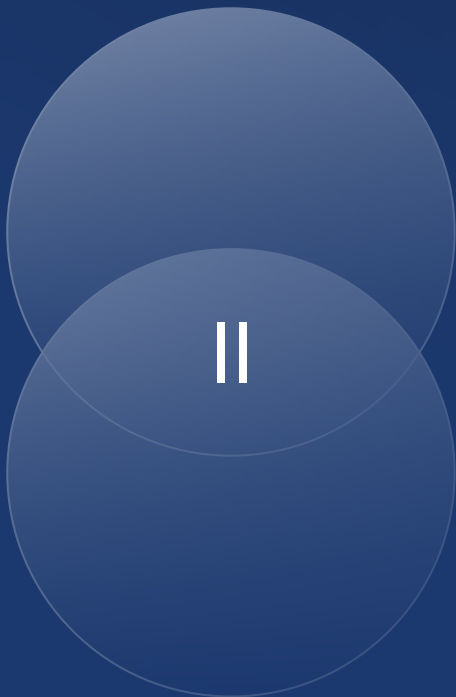
- Supplier sells to producers, which sells to consumers
- Suppliers and producers can also be consumers
- A chain of buyers and sellers adding value along the way
- Cycles can exist (e.g. steel is needed to build trucks which transport steel to truck factories)



## Further Insights on Steel Supply Chain

- A supply chain delegates bite-sized responsibilities to each entity
- Some companies may want vertical integration to reduce complexity and logistical costs
- Uncertainty in steel supply & chips can cause chaos to car buyers



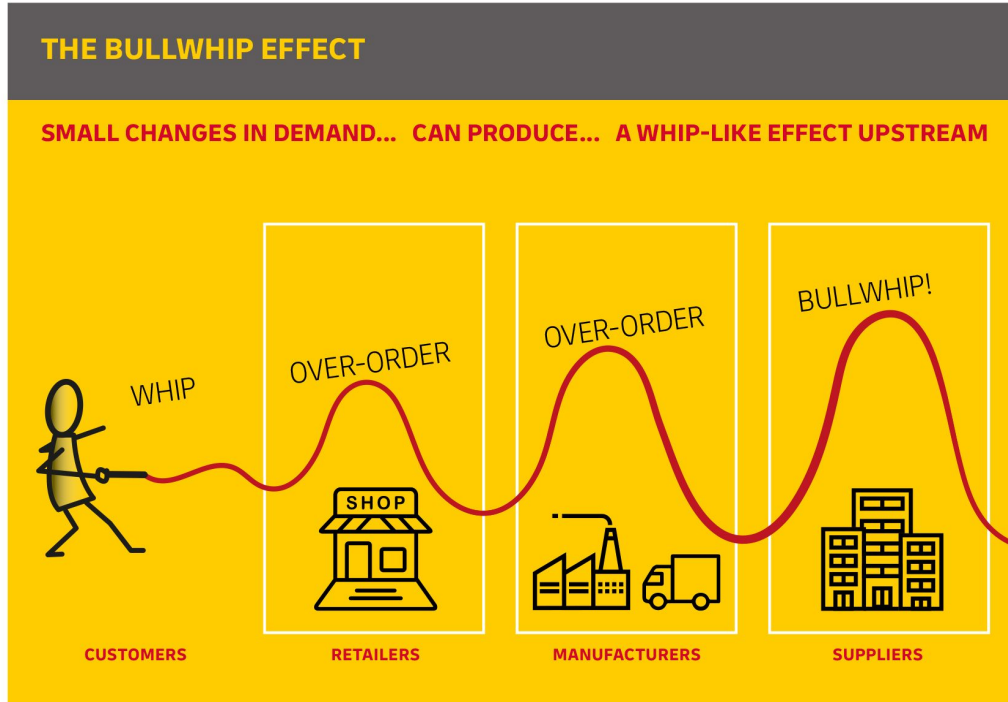


## The Bullwhip Effect

---

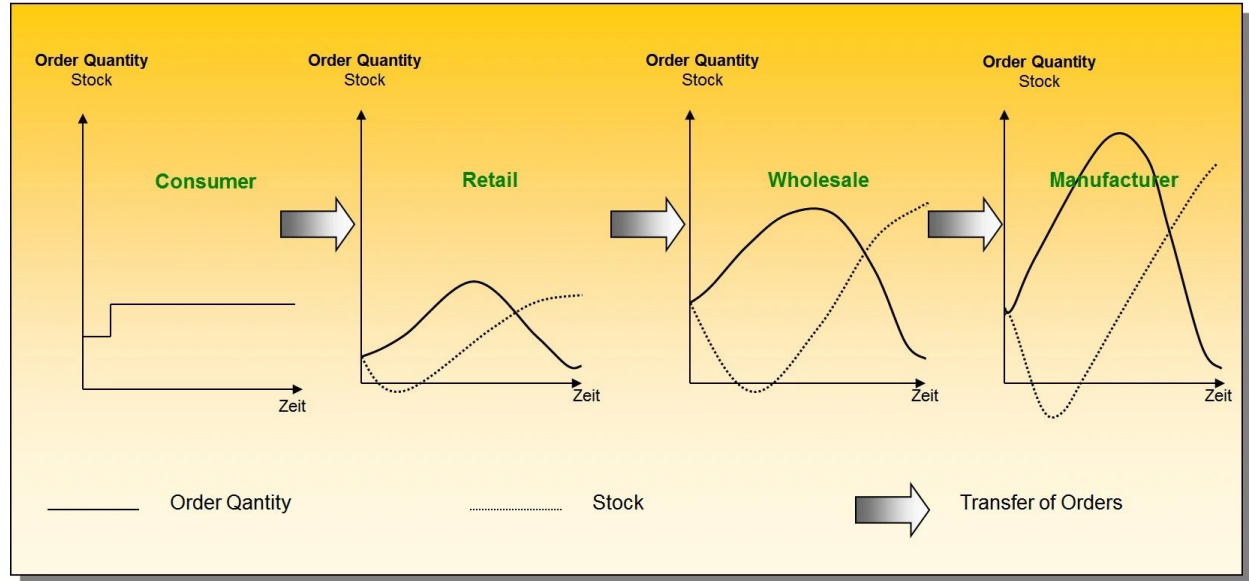
- The Bullwhip Effect causes cascading impacts across various channels.
- Shortages impact prices, and sustained shortages contribute to inflation.

# The Bullwhip Effect



# Order Quantity & Stock vs Time

- Spread of supply and demand increases upstream
- Consumer demand can be unpredictable
- Manufacturer has the most chaos in predicting supply vs demand curves
- Pricing becomes volatile



## Shortages across the board impact prices everywhere

- 1 Semiconductor shortage → Automobile prices increase
- 2 Shipping container shortage → Import prices increase
- 3 Lumber shortage → Home prices increase
- 4 Labor shortage → Employee salaries increase

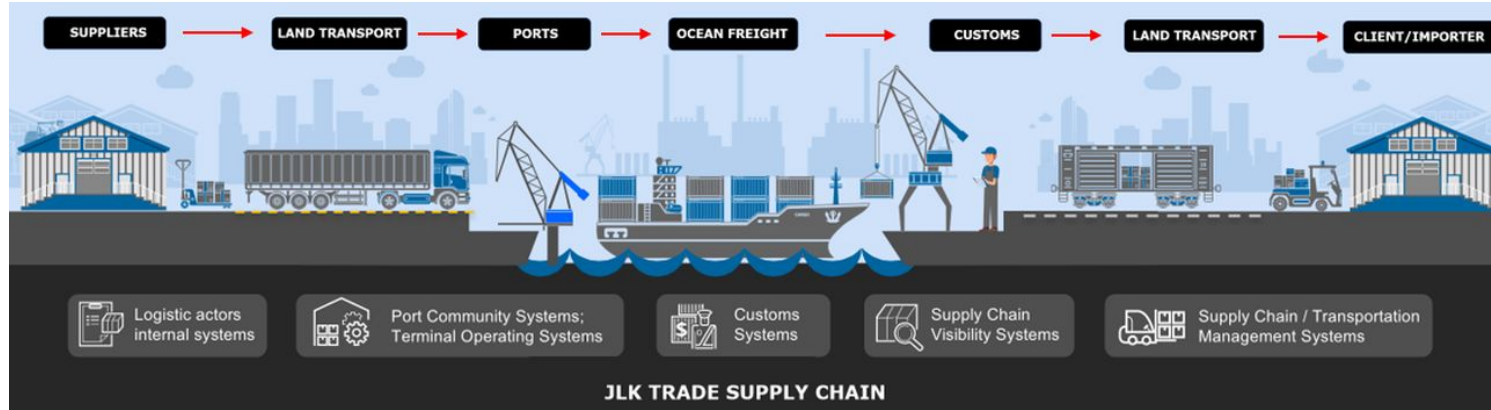


## Freight Industry

---

- How Freight Shipping Works
- Types of Containers
- Top Ports and Shipping Routes
- Largest Shipping Companies

# Intro to Freights



Source → Trucks → Ports → Ships → Ports → Trucks → Destination

Bottlenecks & Factors Affecting Freight Supply Chain				
Inventory	Labor	Weather	Containerization	Traffic
Customs	Pricing	Bullwhip Effect	Port Logistics	***Covid-19



# Types of Containers

Container Type	Description
Dry Storage Container	Standard container; Comes in 20ft and 40ft lengths.
Insulated Container	Great for produce, pharmaceuticals, chemicals, electronics, leather, etc
Tank Container (ISO)	For shipping liquids, fuels, gases, and powders
Car Container	Fits 2-4 cars depending on size.
Special Purpose Container	For special cargo including military, confidential, or top-secret items



#### 20 ft. Dry Container

Length: 5.90 m  
Width: 2.35 m  
Height: 2.39 m

Door Width: 2.34 m  
Door Height: 2.27 m  
Max Payload: 28.19 Ton



#### 20 ft. Open Top Container

Length: 5.90 m  
Width: 2.35 m  
Height: 2.35 m

Door Width: 2.34 m  
Door Height: 2.24 m  
Max Payload: 21.55 Ton



#### 20 ft. Flat Rack Container

Length: 5.96 m  
Width: 2.02 m  
Height: 2.08 m

Max Payload: 27.76 Ton



#### 40 ft. Dry Container

Length: 12.03 m  
Width: 2.35 m  
Height: 2.39 m

Door Width: 2.34 m  
Door Height: 2.27 m  
Max Payload: 26.19 Ton



#### 40 ft. High Cube Dry Container

Length: 12.03 m  
Width: 2.35 m  
Height: 2.69 m

Door Width: 2.34 m  
Door Height: 2.58 m  
Max Payload: 26.49 Ton



#### 40 ft. High Cube Reefer Container

Length: 11.67 m  
Width: 2.29 m  
Height: 2.54 m

Door Width: 2.29 m  
Door Height: 2.44 m  
Max Payload: 27.70 Ton



#### 40 ft. Open Top Container

Length: 12.02 m  
Width: 2.35 m  
Height: 2.38 m

Door Width: 2.34 m  
Door Height: 2.24 m  
Max Payload: 26.46 Ton



#### 40 ft. Flat Rack Container

Length: 11.99 m  
Width: 2.24 m  
Height: 1.97 m

Max Payload: 39.02 Ton



#### 45 ft. High Cube Dry Container

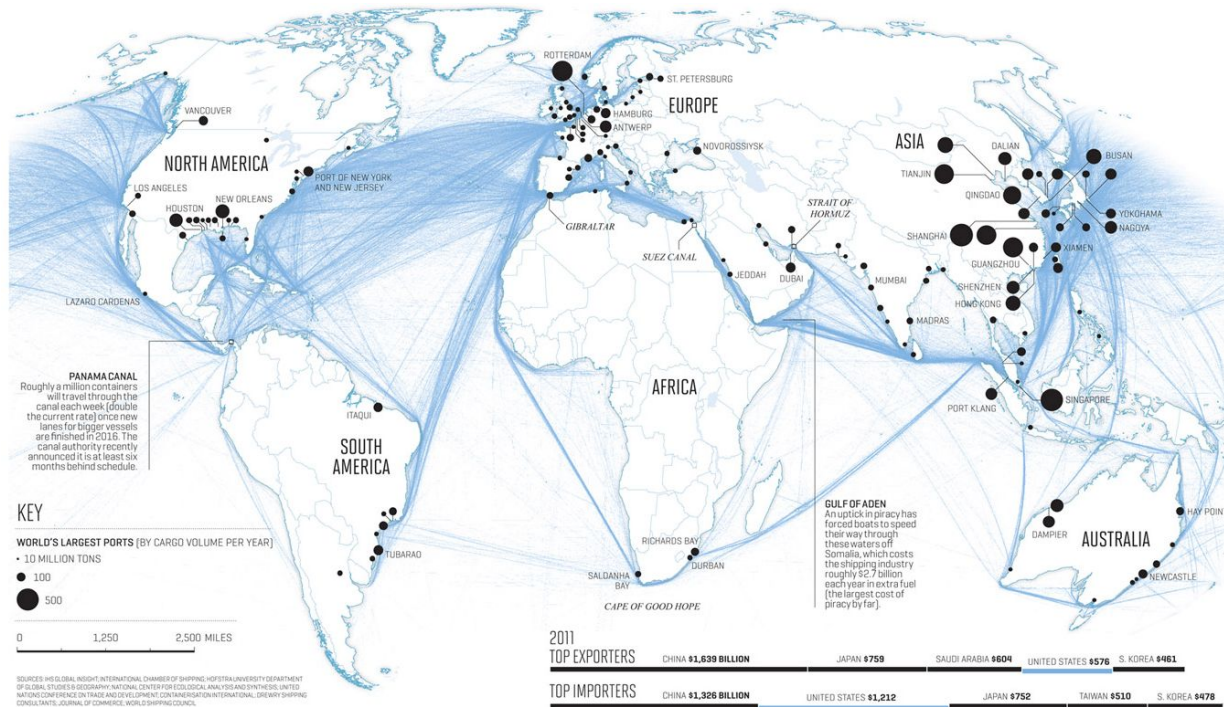
Length: 13.58 m  
Width: 2.34 m  
Height: 2.69 m

Door Width: 2.34 m  
Door Height: 2.58 m  
Max Payload: 26.18 Ton

# Most Shipping Ports and Routes are Anchored Around East Asia

**Top 10 busiest ports in the world as of 2021 are as follows.**

1. Shanghai Port, China
2. Singapore Port
3. Shenzhen Port, China
4. Ningbo Port, China
5. Port of Busan, South Korea
6. Port of Hong Kong, China
7. Port of Guangzhou, China
8. Port of Qingdao, China
9. Port of Dubai
10. Port of Tianjin, China



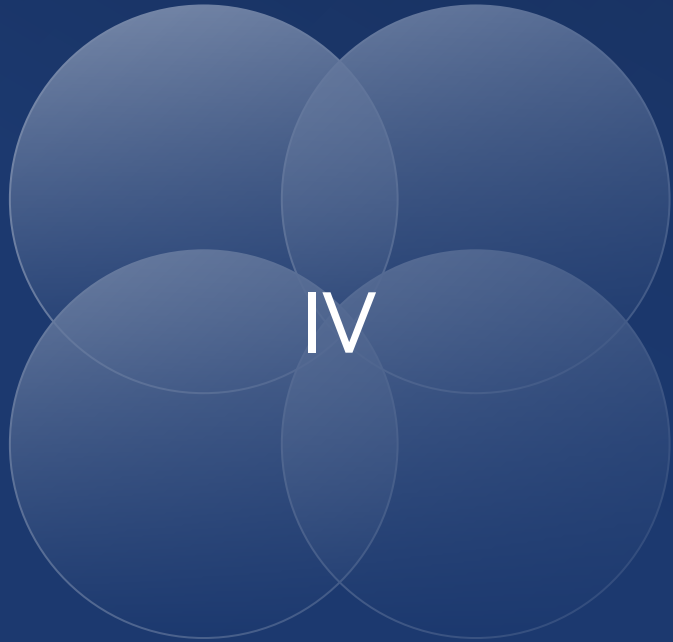


# World's Largest Shipping Companies

1. P. Moller–Maersk – 4.1m TEU
2. Mediterranean Shipping Company – 3.8m TEU
3. COSCO Shipping Lines – 3.1m TEU
4. CMA CGM Group – 2.7m TEU
5. Hapag-Lloyd – 1.7m TEU
6. Ocean Network Express – 1.5m TEU

Source: <https://www.ship-technology.com/features/the-ten-biggest-shipping-companies-in-2020/>

Any trading symbols, entities or investment products displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



## Impact on Freight Logistics

---

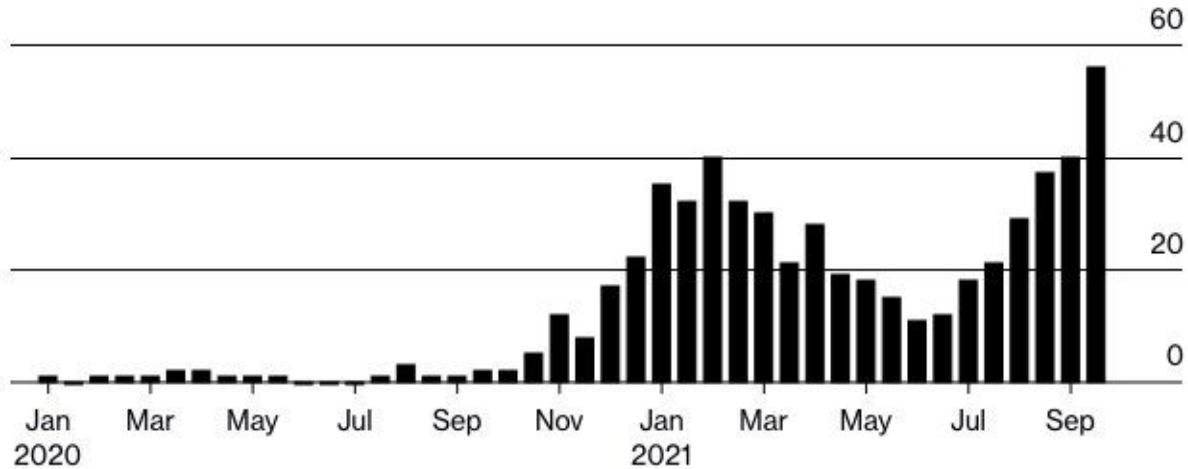
- Why traffic jams occur at ports
- Rising container prices result in artificial inflation



# Port of Los Angeles has seen drastic rises in anchored ships

## Container Ships at Anchor

Ports of Los Angeles and Long Beach



Data are bimonthly.

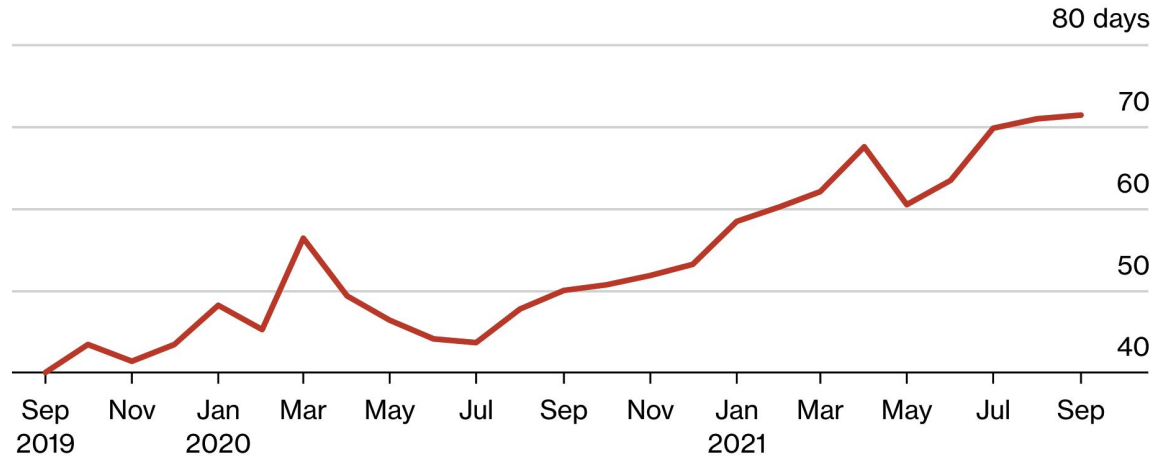
Data: Marine Exchange of Southern California



# China-US Transit Times Surged from 40 to 71 Days in 2 Years

## Transpacific Traffic

China-to-U.S. transit times for ocean freight reached 71 days door to door

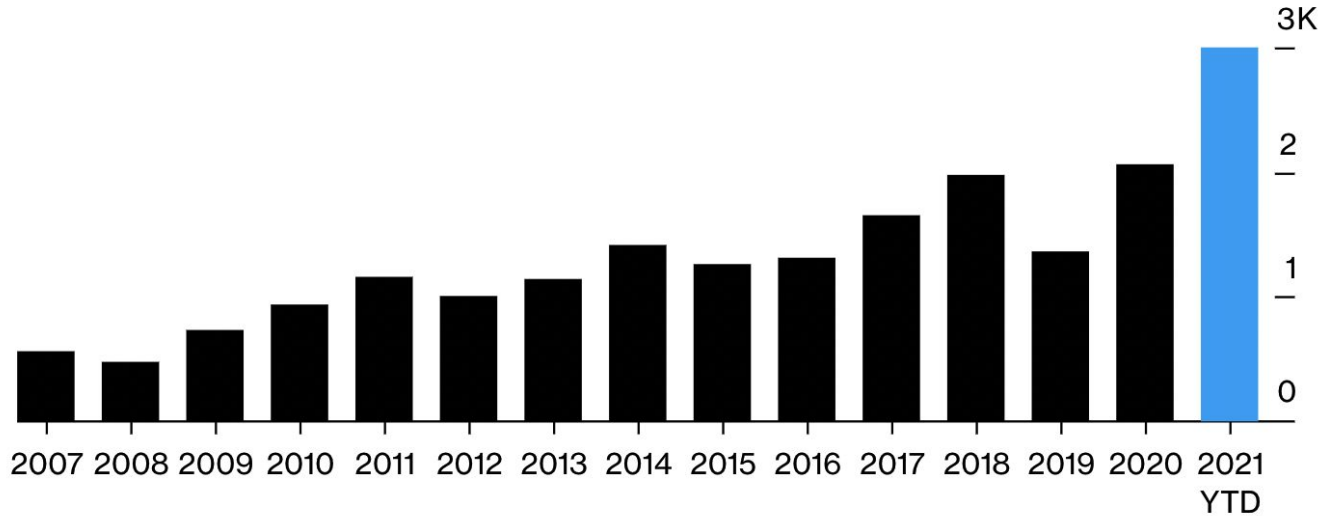


# Current Supply Chain Dynamics Are Gaining Investor Popularity

## Chain Reaction

Supply-chain bottlenecks have become a hot topic of investor calls this year

■ Mentions of "supply chain" on earnings/investor calls

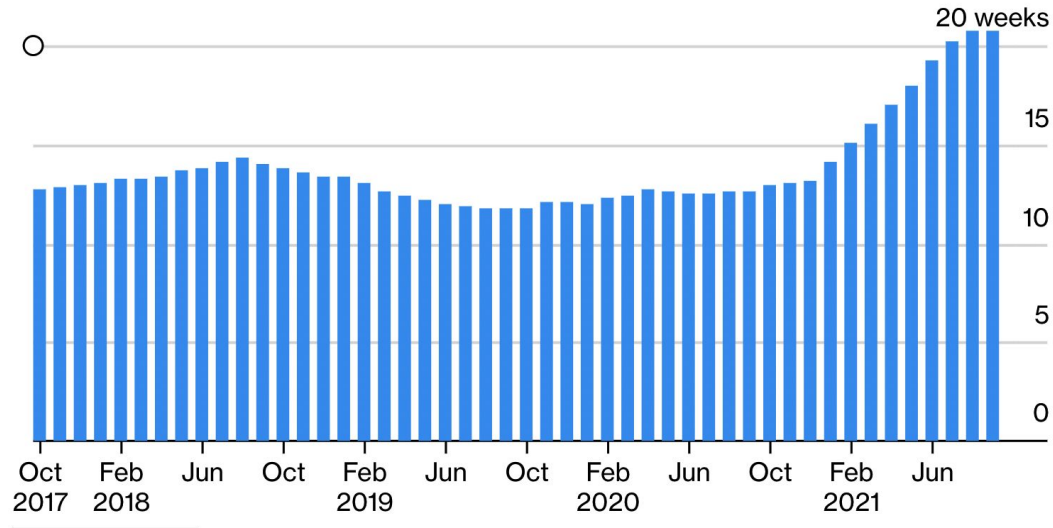


Source: Bloomberg Transcript Analyzer

# Semiconductor Delays in Chip Delivery Times

## Waiting Game

The gap between ordering a chip and delivery hit a record 21.7 weeks

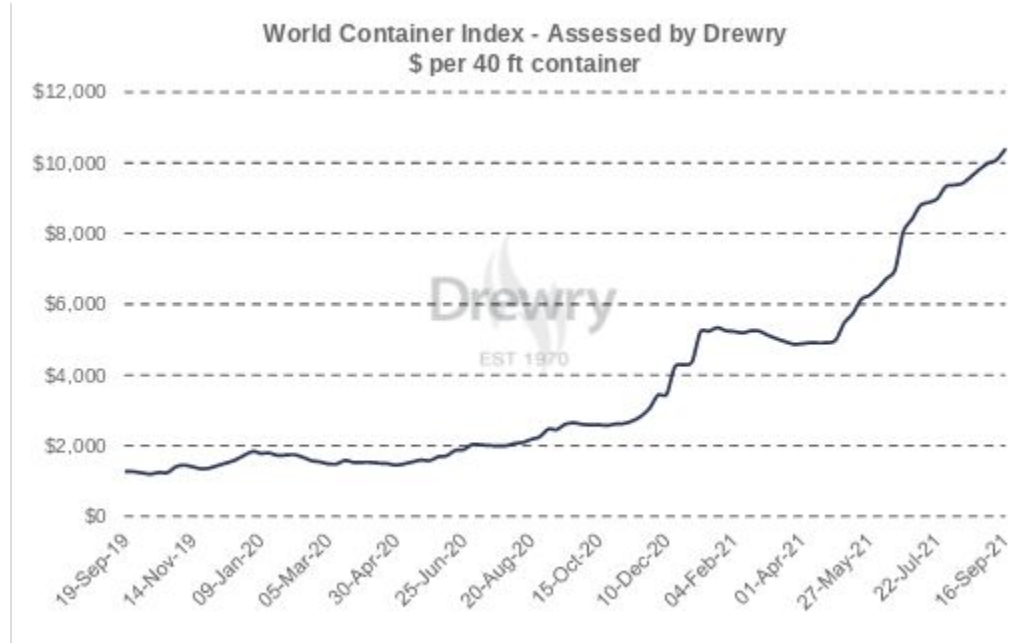




# Reasons for traffic build up

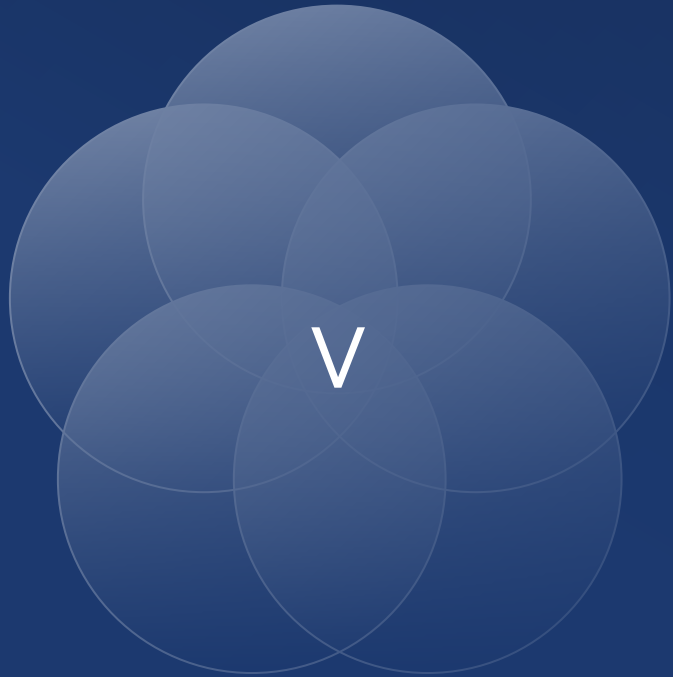
- 1 Inefficient response to trends and emerging technology
- 2 “Force majeure” occurrences like the COVID-19 pandemic
- 3 Poor planning and forecasting
- 4 Changes in regulations or policy
- 5 Changes in transport costs

From 2019 to 2021, 40ft container prices rose from under \$2,000 to above \$10,000.



## Price of some of the more popular freight routes have changed up to 7% in just one week

Route	2-Sep-21	9-Sep-21	16-Sep-21	Weekly change (%)	Annual change (%)
<b>Composite Index</b>	\$9,987	\$10,084	\$10,375	3% ▲	323% ▲
<b>Shanghai - Rotterdam</b>	\$14,074	\$14,287	\$14,294	0%	570% ▲
<b>Rotterdam - Shanghai</b>	\$1,647	\$1,626	\$1,628	0%	31% ▲
<b>Shanghai - Genoa</b>	\$13,473	\$13,543	\$13,502	0%	509% ▲
<b>Shanghai - Los Angeles</b>	\$11,509	\$11,569	\$12,424	7% ▲	222% ▲
<b>Los Angeles - Shanghai</b>	\$1,433	\$1,448	\$1,448	0%	180% ▲
<b>Shanghai - New York</b>	\$15,035	\$15,124	\$16,138	7% ▲	252% ▲
<b>New York - Rotterdam</b>	\$1,168	\$1,180	\$1,198	2% ▲	117% ▲
<b>Rotterdam - New York</b>	\$5,776	\$6,160	\$6,162	0%	155% ▲



## Sample Companies

---

- Revenues and EBITDA of many shipping companies have risen from the supply chain crisis
- A number of shipping stocks have had extraordinary 12 month returns

## Some Shipping Stocks Saw 200%+ Revenue Growth

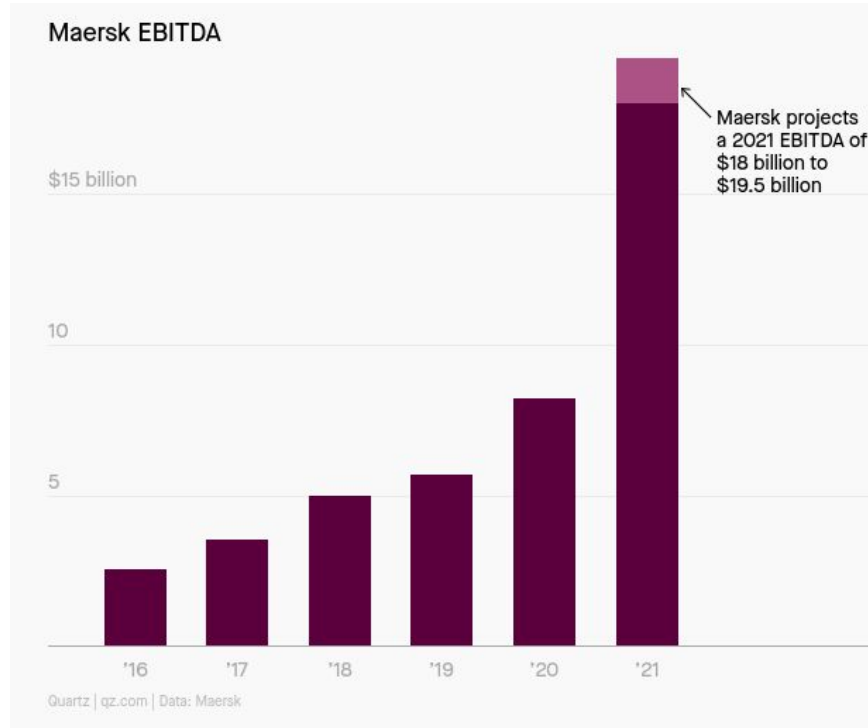
### Fastest Growing Shipping Stocks

	Price (\$)	Market Cap (\$B)	EPS Growth (%)	Revenue Growth (%)
Navios Maritime Partners LP (NMM)	31.45	0.8	N/A (see company description)	226.6
A.P. Møller-Mærsk A/S (AMKBY)	15.17	57.5	823.8	58.2
Golden Ocean Group Ltd. ( <a href="#">GOGL</a> )	11.65	2.3	N/A (see company description)	137.2

Source: <https://www.investopedia.com/top-shipping-stocks-for-q4-2020-5078985>

Any trading symbols, entities or investment products displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.

# Maersk more than doubling its EBITDA in 2021

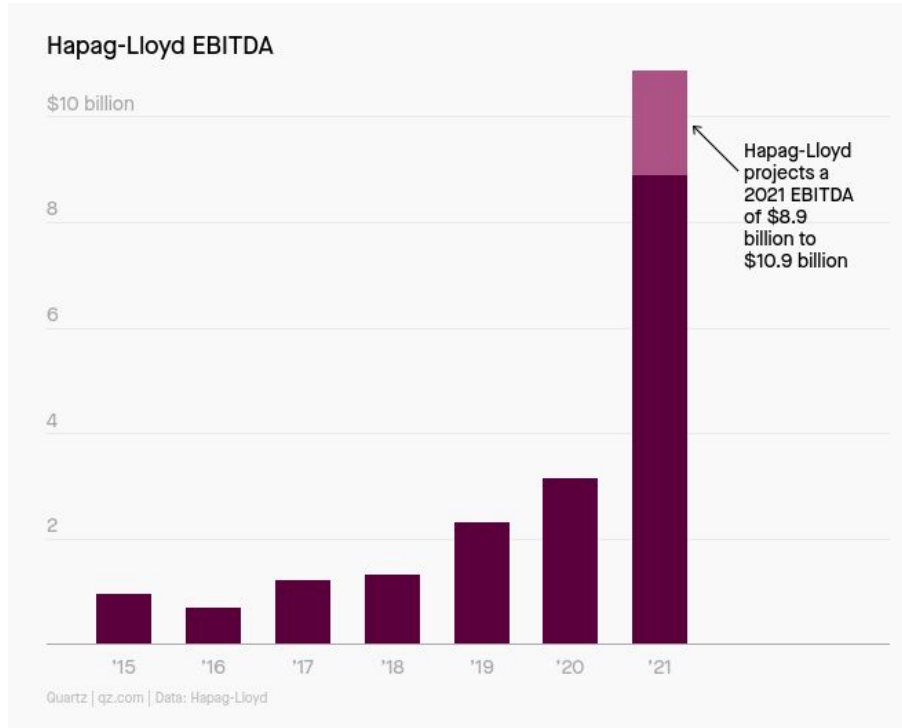


Source: Quartz

Any trading symbols, entities or investment products displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



# Hapag-Lloyd seeing over a 300% growth in EBITDA



Source: Quartz

Any trading symbols, entities or investment products displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



# Surging Shipping Stocks

Danaos Corporation  
(\$DAC)

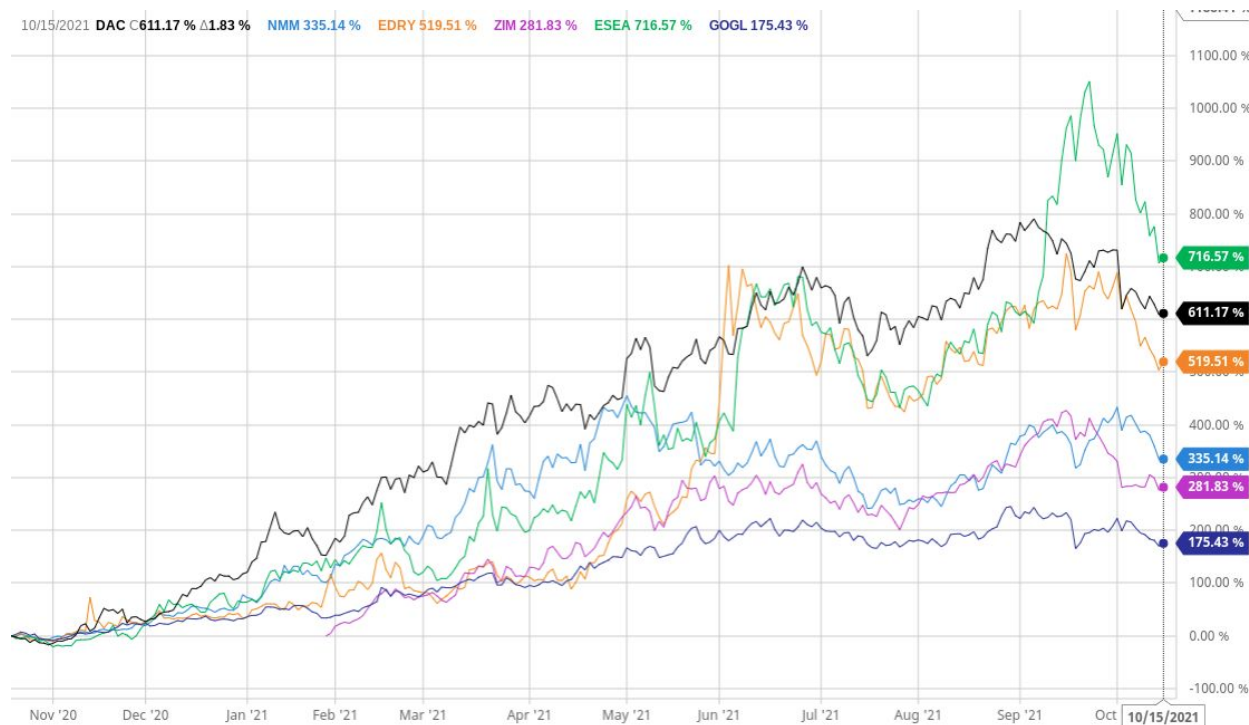
Navios Maritime  
Partners L.P. (\$NMM)

EuroDry Ltd (\$EDRY)

ZIM Integrated Shipping  
Services Ltd (\$ZIM)

Euroseas Ltd. (\$ESEA)

Golden Ocean Group  
Ltd (\$GOGL)



Source: Barchart.com

Any trading symbols, entities or investment products displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.





# Summary

- 1 The Bullwhip Effect causes cascading effects across various channels.
- 2 Sustained supply chain shortages can reduce economic growth and cause inflation.
- 3 Companies with larger balance sheets are increasingly looking to partner with or vertically integrate supply chain management, logistics, and shipping operations.
- 4 Tracking data displays the current state of ports, shipping containers, and supply chain dynamics. Often, these tracking datasets are updated more frequently and can serve as leading indicators for global economic trade data releases.
- 5 Several shipping companies have experienced surging revenues and stock prices over the past year.

## Resources



CONTACT US

[invest@drawingcapital.com](mailto:invest@drawingcapital.com)



NEWSLETTER

[drawingcapital.substack.com](https://drawingcapital.substack.com)

---

[drawingcapital.com](https://drawingcapital.com)

---