KUEHNE+NAGEL

Sea Logistics Update for USDA

Bill Rooney

February 23rd, 2023

Basically…..A dumpster fire

KUEHNE+NAGEL

Agenda: Current State of Sea Logistics

a) Labor

b) Cargo Volume

c) Congestion

d) Rates

e) Government

f) A look forward

a. Labor

US West Coast Issues

→ Irreconcilable issues prolonging West Coast longshore labor talks

Source: JOC 11.2.22

- **ILWU/PMA Contract:**
  - Contract expired 7.1.22. Negotiations since 5.10.22
  - Automation
  - Jurisdiction
  - Wages & benefits

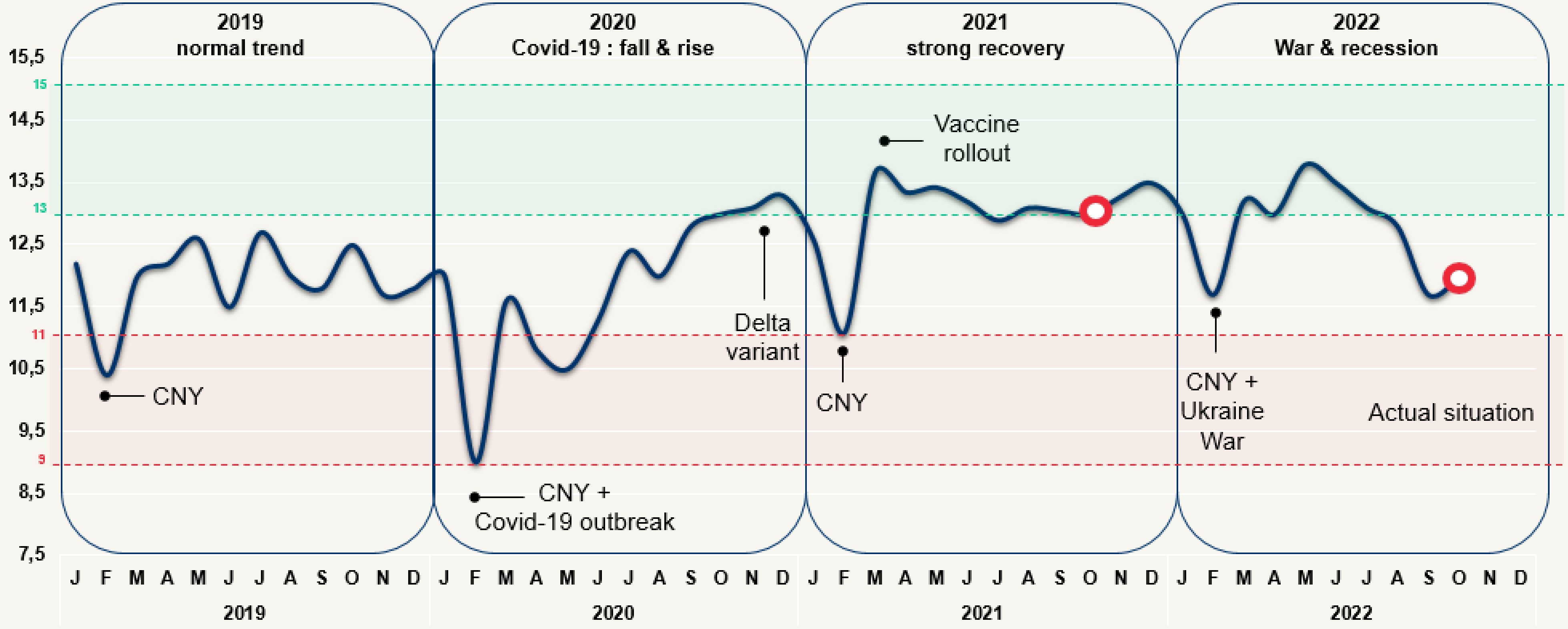
- **Strategic/Industry US west coast Issues:**
  - A union with monopoly power
  - Local population & political attitudes toward the transport industry
  - California regulation (business & environmental)
  - No apparent acceptable way to increase terminal capacity

- **OCU contract expires June 30, 2023**

b. Cargo volume

Global container traded volume [2019 – 2022]

Million TEU per month



source: CTS, Seabury, Drewry and Kuehne+Nagel market intelligence

US Exports

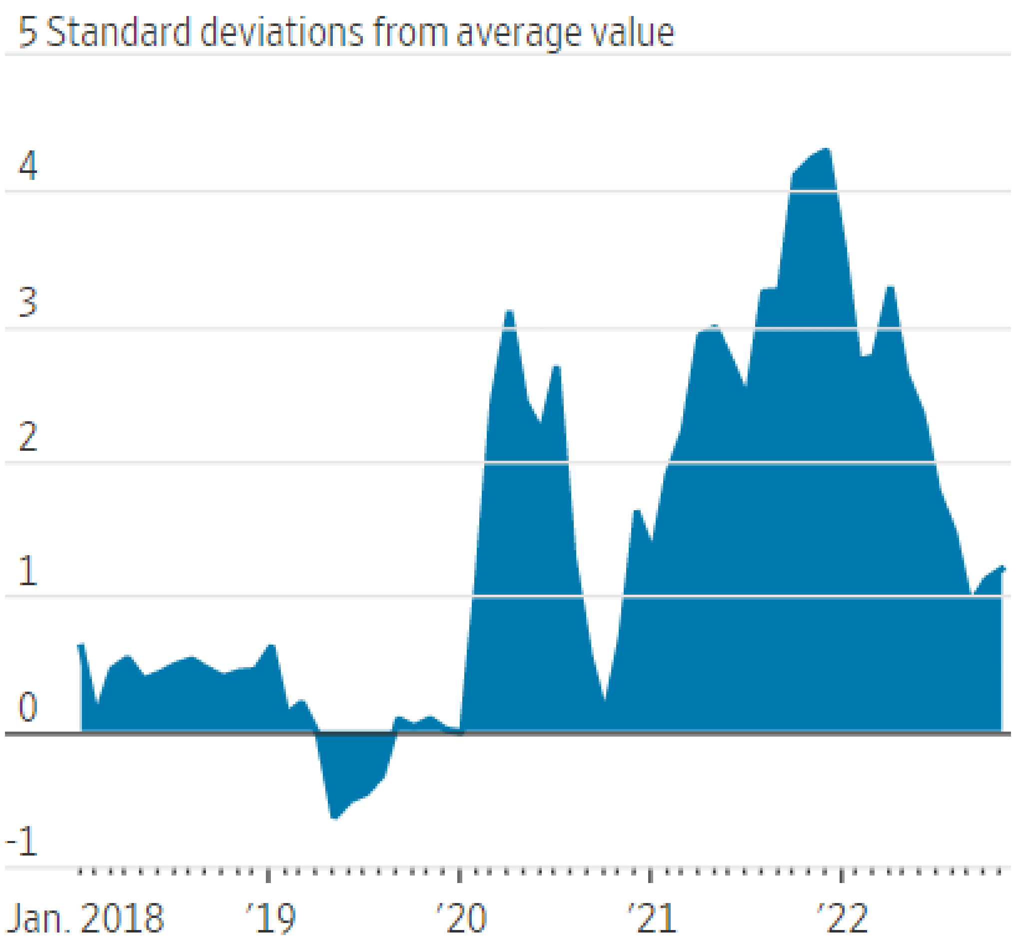
Source: USDA

c. Congestion

Congestion: Is it over?

KUEHNE+NAGEL

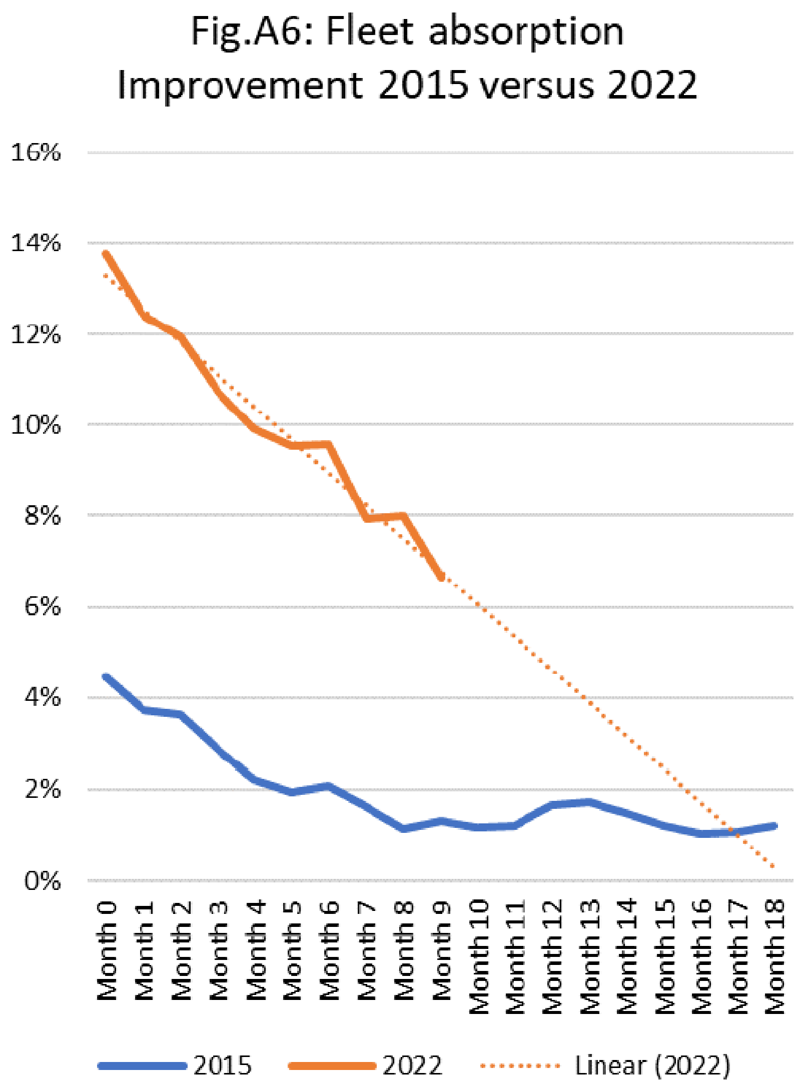
Global Supply Chain Pressure Index



Source: Federal Reserve Bank of New York

Source: WSJ 12.23.22

Vessel Capacity Absorbed by Congestion



Source: SeaIntelligence 12.4.22

Train Fluidity (6 Class 1 RR)

KUEHNE+NAGEL

Train speed & car dwell wk 41 to wk 5 2022/3 vs. 2021/2	Weekly vol. variance wks. 42 to 6, 2022/3 vs. 2021/2
(0.8%)	2.3%
(1.9%)	1.4%
(0.1%)	(1.7%)
0.2%	(2.6%)
(2.4%)	3.4%
0.6%	5.2%
1.3%	(1.7%)
0.9%	(1.6%)
(0.4%)	(3.8%)
0.9%	(5.4%)
(4.0%)	4.0%
(6.5%)	(5.0%)
9.1%	(1.7%)
6.3%	(2.7%)
3.7%	(3.4%)
4.4%	(1.0%)
4.5%	(5.9%)

Trains are 20% slower in 2021/22 vs. 2015/16. 20.2 MPH vs. 25.5 MPH A mixed bag for 2021/2 vs. 2020.

Intermodal volume in Q2 2021 was 25% to 30% higher in 2021 vs. 2020 & overwhelmed the network

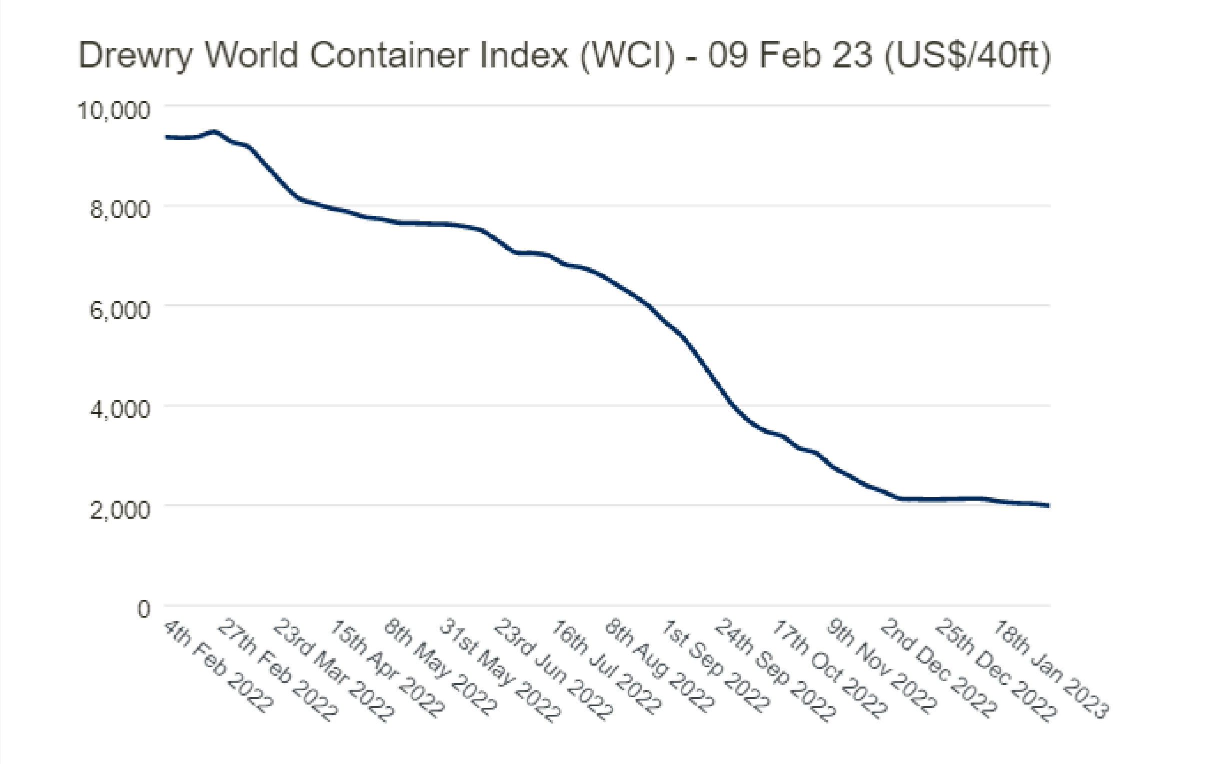
Source: Wolfe Research

d. Rates

Drewry World Container Index

(Index as of February 9th 2023 for 8 large trades)

Drewry's composite World Container Index decreased by 2% to $1,997.22 per 40ft container this week.



KUEHNE+NAGEL

Facts:

- Carriers responded to early Covid-19 lack of demand with massive vessels lay-ups
- As economies re-started carriers cautiously re-instated capacity
- In many regions (example North America) consumption spiked due to more disposable income available to consumers: less spending on services such as vacation travel, but higher spending's on consumer durables boost container shipping and rates
- Spike led to equipment imbalance and shortages which drove up rates
- Government involvement & inquiries evident in the US, Europe & Asia

Sources: Drewry (freight rate assessments on eight major East-West trades) and Kuehne+Nagel data

US Export Rates: An Example

Something to Keep in Mind

In the past 5 years, for example, container rates from Europe to the US have averaged 6.7 times the rates from the US to Europe

e. Government

Regulatory Issues

- **OSRA 2022/FMC Fact Finding 29**
  - Detention/Demurrage
  - Refusal to deal & retaliation
  - Chassis
  - FMC oversight & enforcement on cost
  - Clarification of certain industry practices
- **IMO 2023 Environmental Regulations**
  - A slower fleet?
  - Impact on vessel capacity
  - Impact on cost
- **A National AB5?**
- **FMC Admin Law Judge Chassis Ruling**
- **EU Block Exemption?**

KUEHNE+NAGEL

f. A look forward

2023 Outlook

KUEHNE+NAGEL

Latest World Economic Outlook Growth Projections

(real GDP, annual percent change)	ESTIMATE 2022	PROJECTIONS 2023	PROJECTIONS 2024
World Output	3.4	2.9	3.1
Advanced Economies	2.7	1.2	1.4
United States	2.0	1.4	1.0
Euro Area	3.5	0.7	1.6
Emerging Market and Developing Economies	3.9	4.0	4.2
Emerging and Developing Asia	4.3	5.3	5.2
China	3.0	5.2	4.5
India	6.8	6.1	6.8

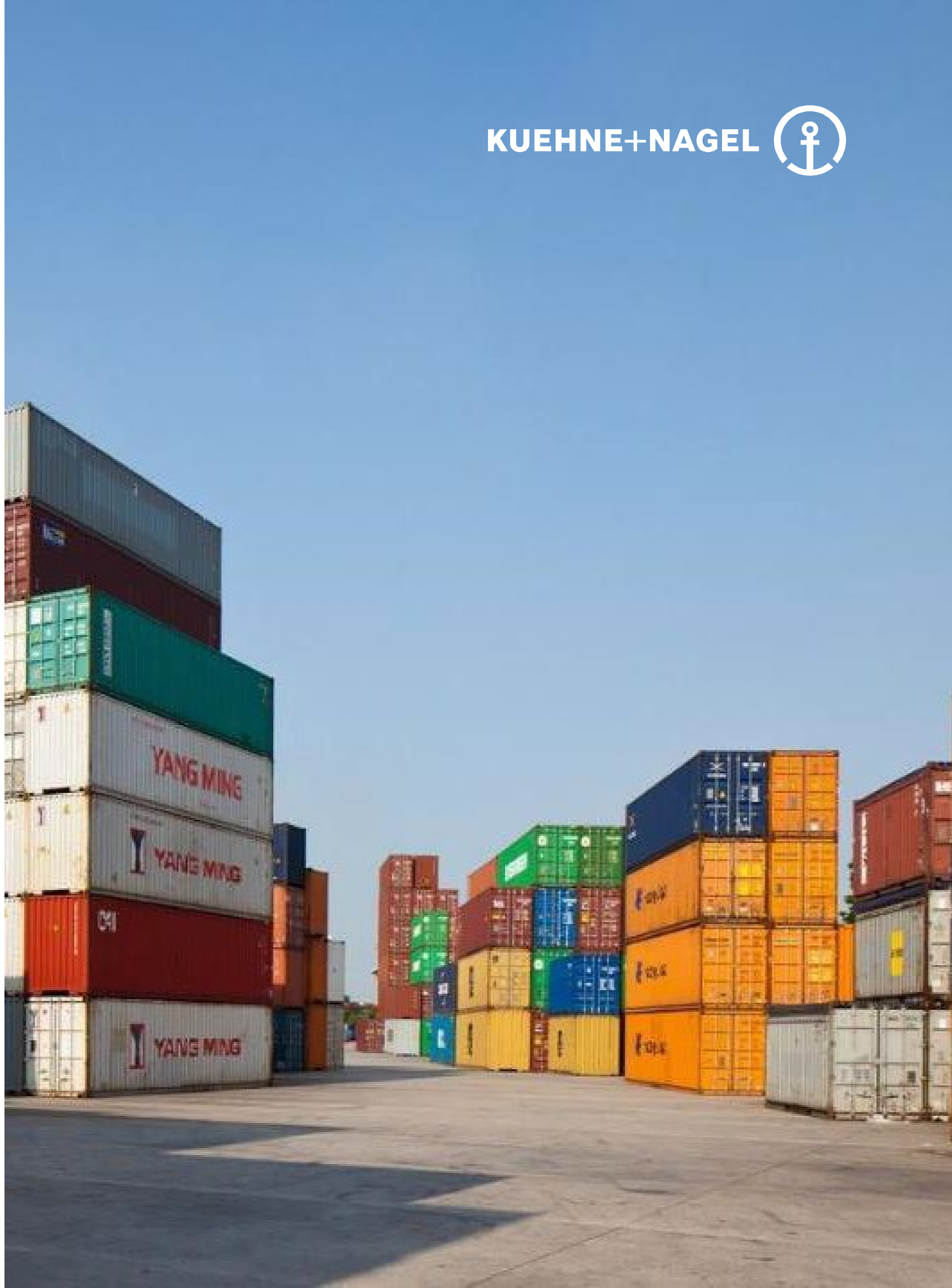
Source: IMF 1.30.23

2023 Sea Logistics Market Highlights

A Tale of 2 Halfs

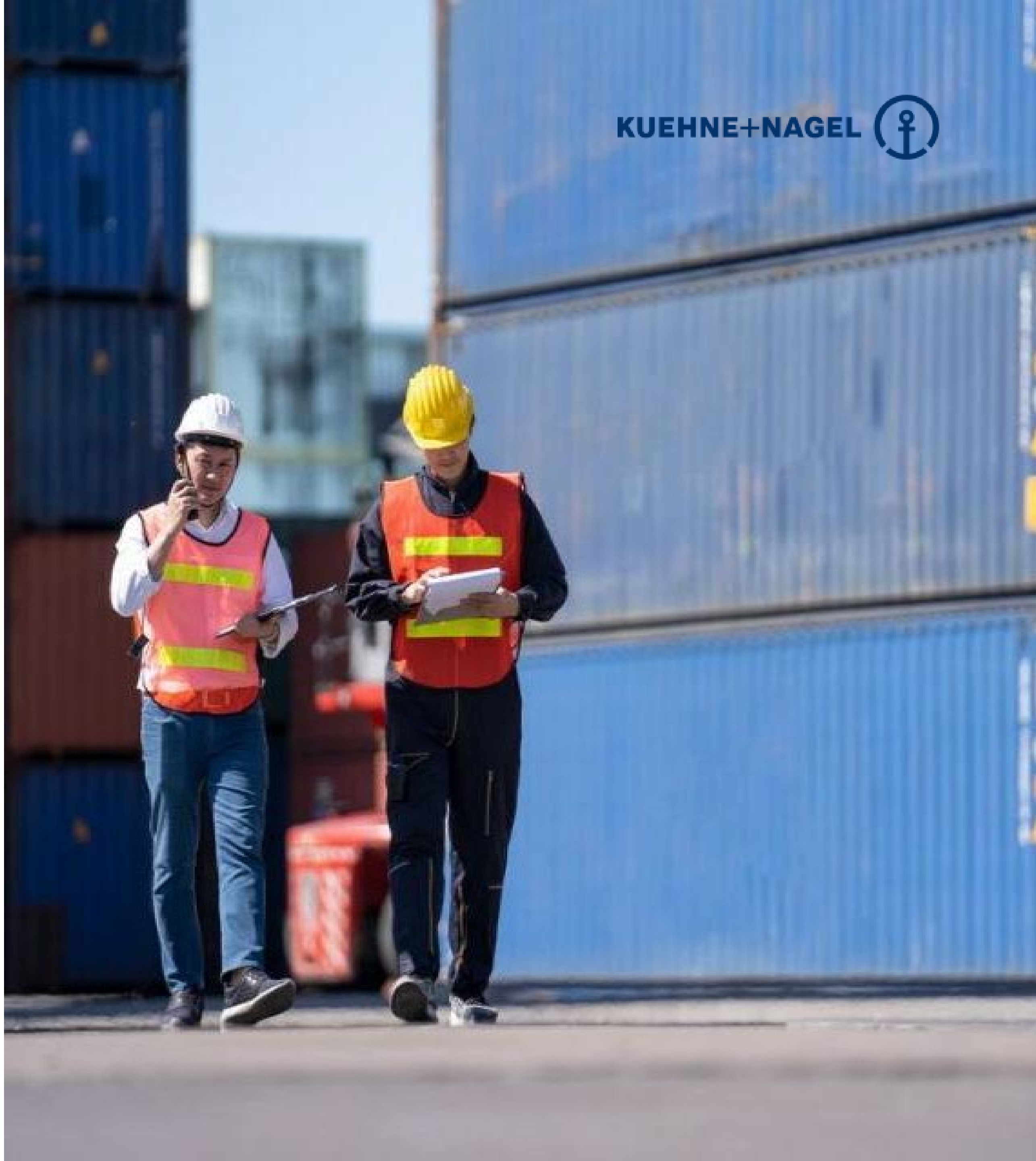
- **1st Half of 2023:**
  - Weak global economy
  - A weak cargo market
  - Drawdown of high inventories
  - Rates either back to pre-Covid levels or lower or drifting down from Covid highs
  - Probably a good time to negotiate contracts
  - Operations continue to move toward normal

- **2nd Half of 2023**
  - Better economic conditions
  - An improving cargo market
  - Inventories being replenished
  - Maybe a traditional peak season
  - Firmer or increasing spot rates
  - Operations back to normal



Will the future of containerized shipping be different from it's past?

- Yes:
  - Fewer carriers controlling more of the business
  - Fewer & larger alliances
  - Better capacity management (e.g. blank sailings)
  - More diversified revenue & earnings streams (from acquisitions in other adjacent industries)
- No:
  - Still a commodity business where supply/demand determine rates
  - Still almost entirely family or government owned or controlled & therefore not always driven by shareholder value
  - Look what happened to Asia to North America & Asia to Europe rates this year



Disclaimer

KUEHNE+NAGEL

- This document has been prepared and approved by Kuehne+Nagel or one of its affiliated companies and is for informational purpose only.
- The information presented in this document is intended for the recipient to whom it was delivered. Reproduction or distribution of this document in whole or in part is not permitted without the express written consent of Kuehne+Nagel or one of its affiliated companies.
- This document contains forward-looking statements. We caution the reader that forward-looking statements are no guarantees of future performance. Past returns are no indication of future returns. The development of the industry and markets described in this document may differ materially from the forward-looking statement contained herein.
- Information and opinions contained in this document have been compiled from sources believed to be reliable. Unless otherwise stated, any statements herein are based on our own estimates at the time of publication.
- Kuehne+Nagel or any of its affiliated companies make no representation as to the accuracy or completeness of any of the information contained herein and accept no liability for loss arising from the use of the information provided.
- This document is not an offer of any kind and of educational nature only. It had been prepared separately from any proposed offering of any security.

KUEHNE+NAGEL

Thank you

Bill Rooney

Vice President Strategic Development

bill.rooney@kuehne-nagel.com

201-693-0183