

What is happening with supply chains

ESPO conference

June 2, 2022

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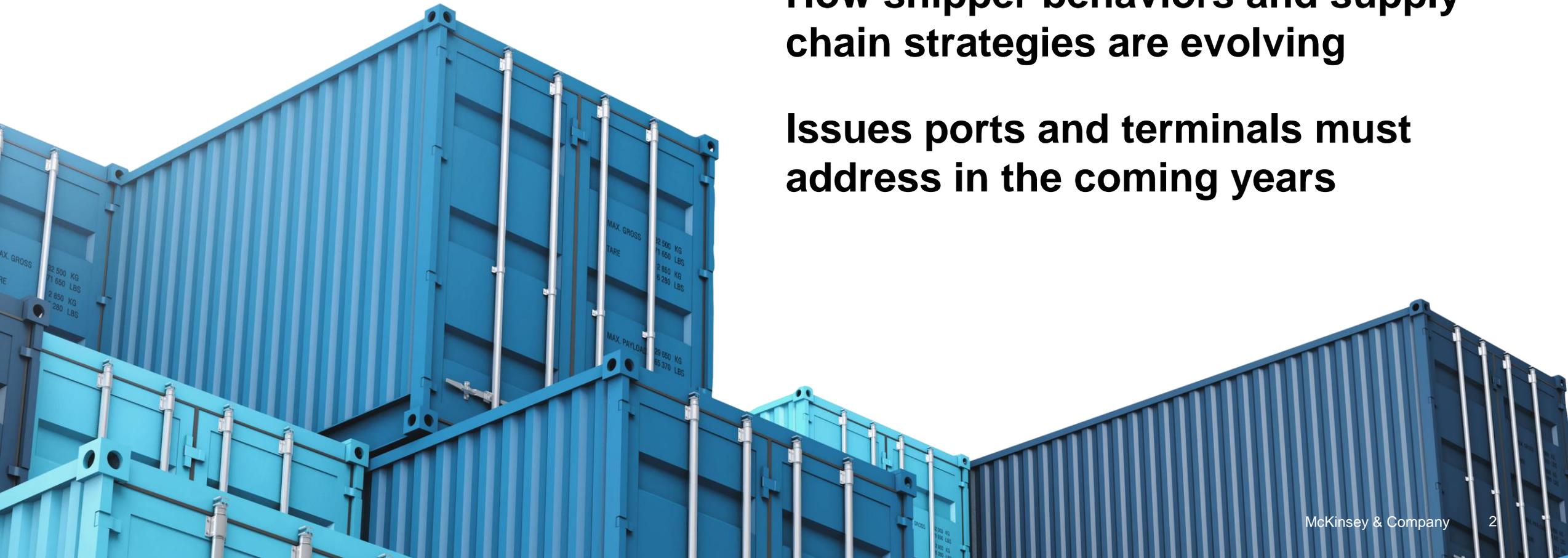
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Overview

Perspective on the major factors driving change in maritime related supply chains

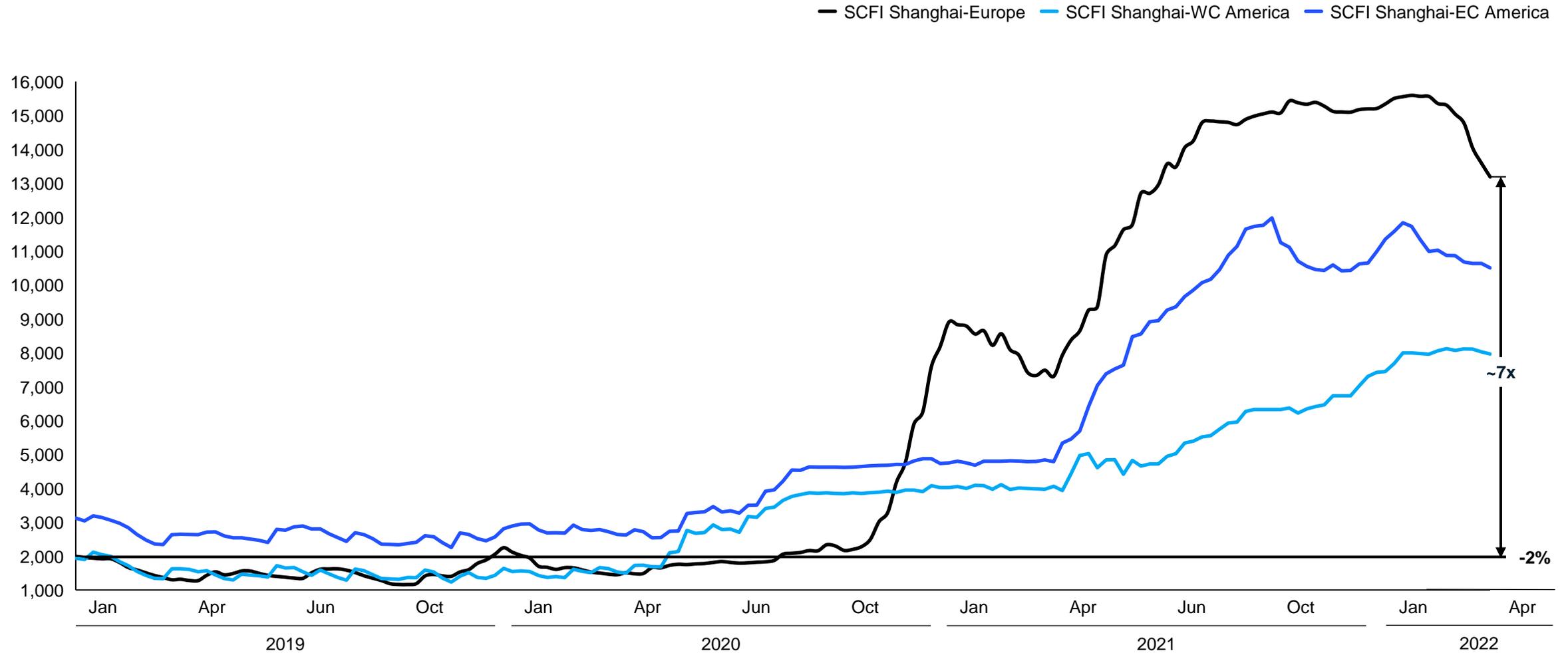
How shipper behaviors and supply chain strategies are evolving

Issues ports and terminals must address in the coming years



Rates have increased up to 7x pre-pandemic levels but showing a slight decline and plateauing trend in the the past few weeks

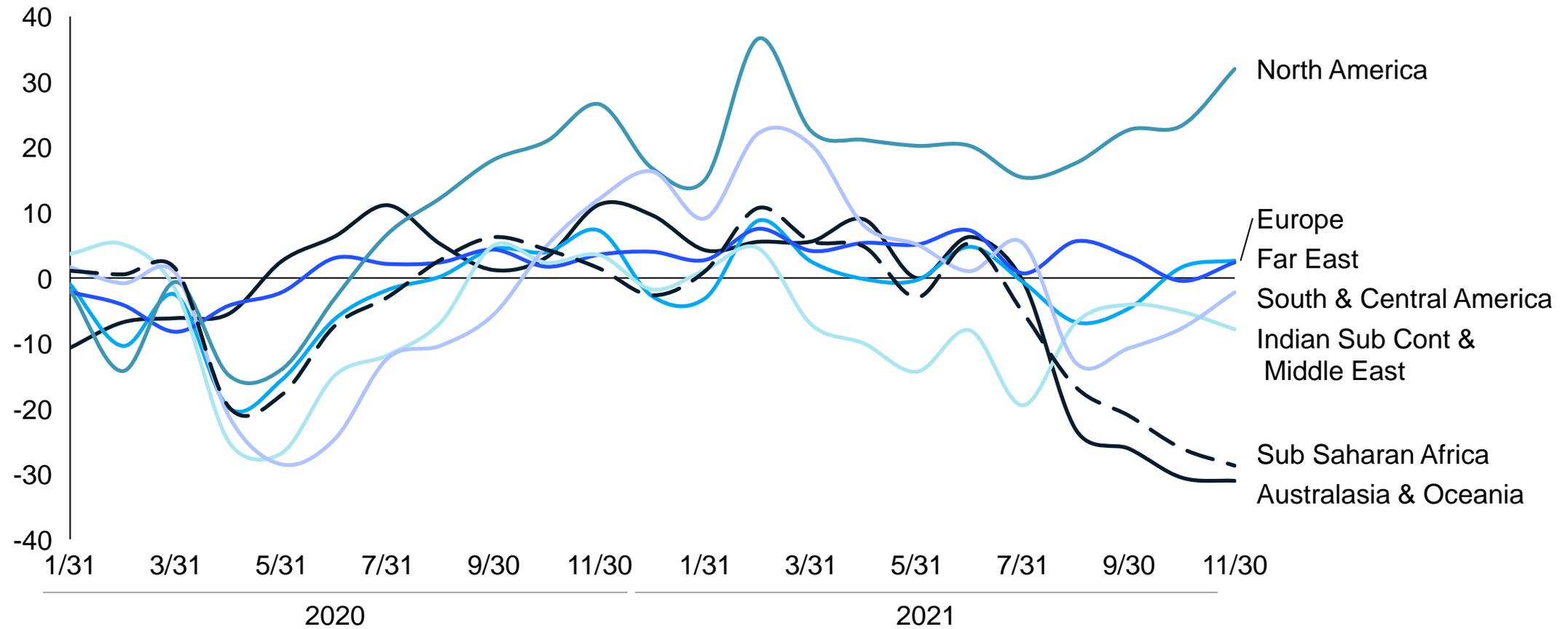
Rate development by trade lane, USD/FEU



1. Additional surcharges (\$100-\$1000 per TEU) driving prices higher than quoted prices, e.g. Hapag Lloyd \$100, CMA CGM peak season charge of \$300, MSC peak season surcharge of \$1,000 for TEU containers to/from Indian subcontinent

But it's not driven by global demand – only North America sees a peak

Monthly global import growth vs, 2019, Percent

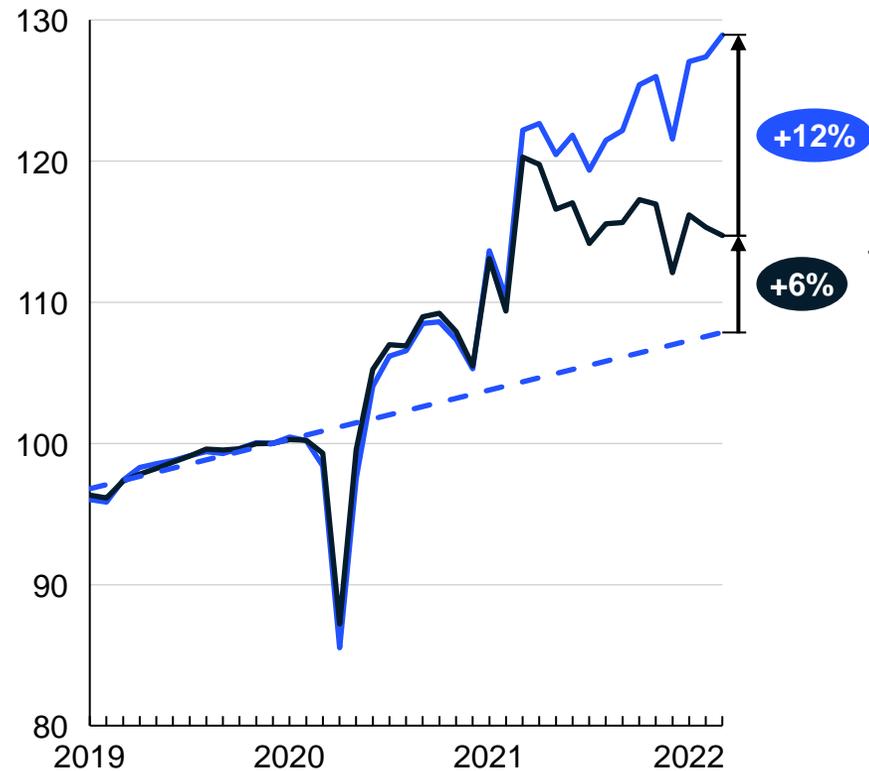


US spending on goods increased significantly stretching supply chains to the limit

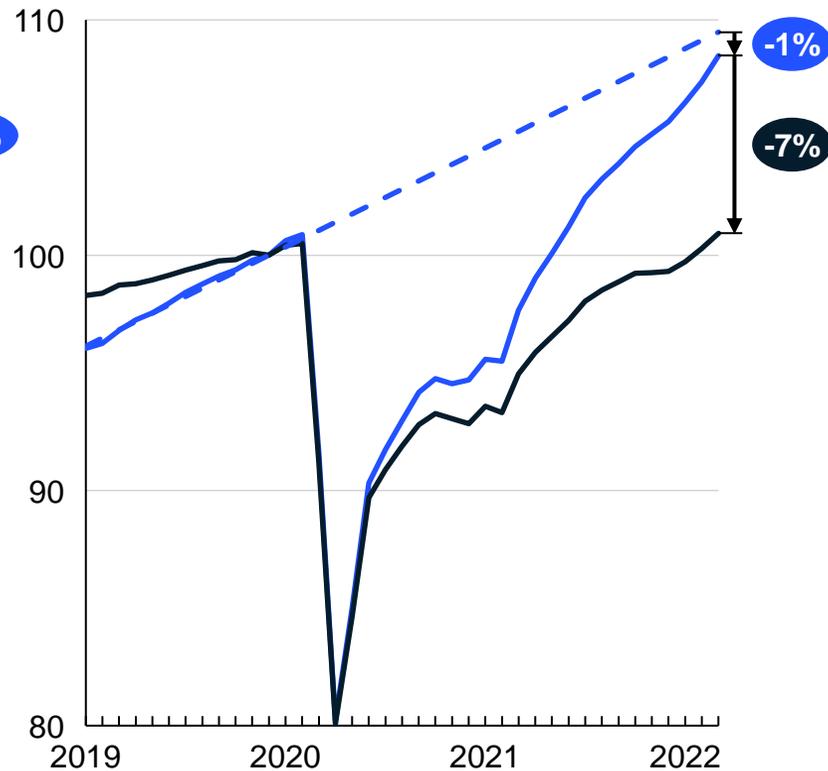
Goods spending remains up in value/volume vs. pre-COVID-19 trend

● Volume ● \$ Value - - 2010-2019 trend

US consumer spending, goods
Index, monthly through March 2022



US consumer spending, services
Index, monthly through March 2022



+\$911B

Cumulative nominal spending on goods above trend since January 2020

-\$1,596B

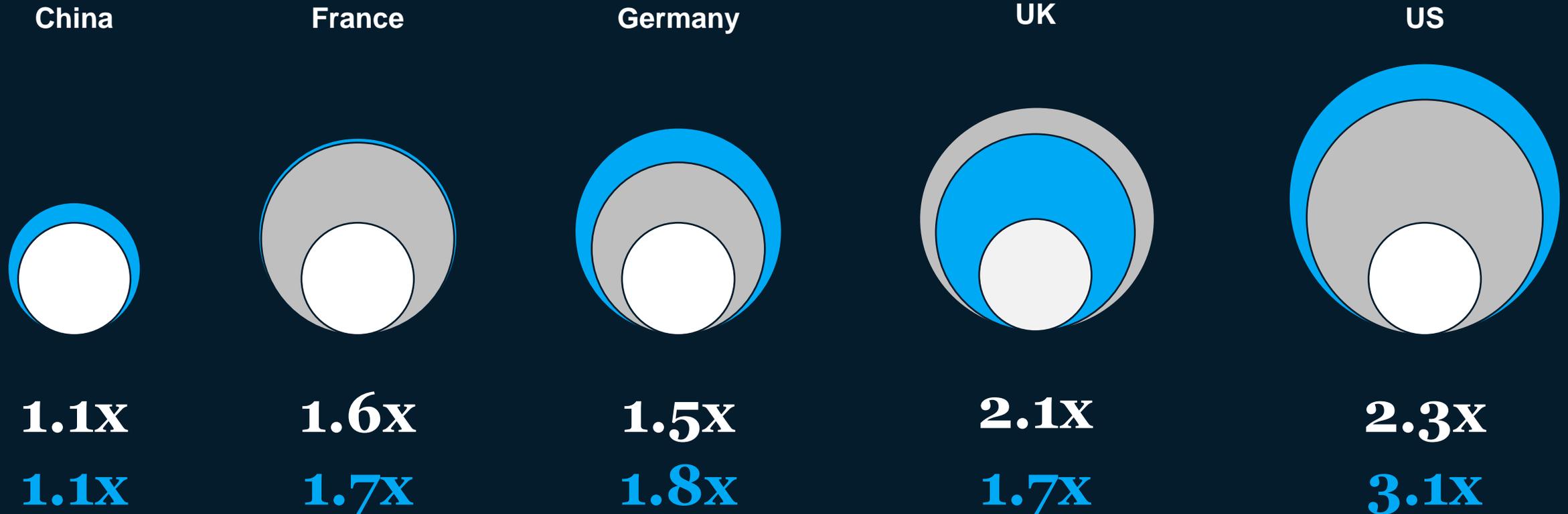
Cumulative nominal spending on services below trend since January 2020

Spending restrictions and stimulus payments boosted savings

Estimated 2020 and Q1 2021 savings, as a ratio of corresponding 2019 savings

■ 2020 vs. 2019

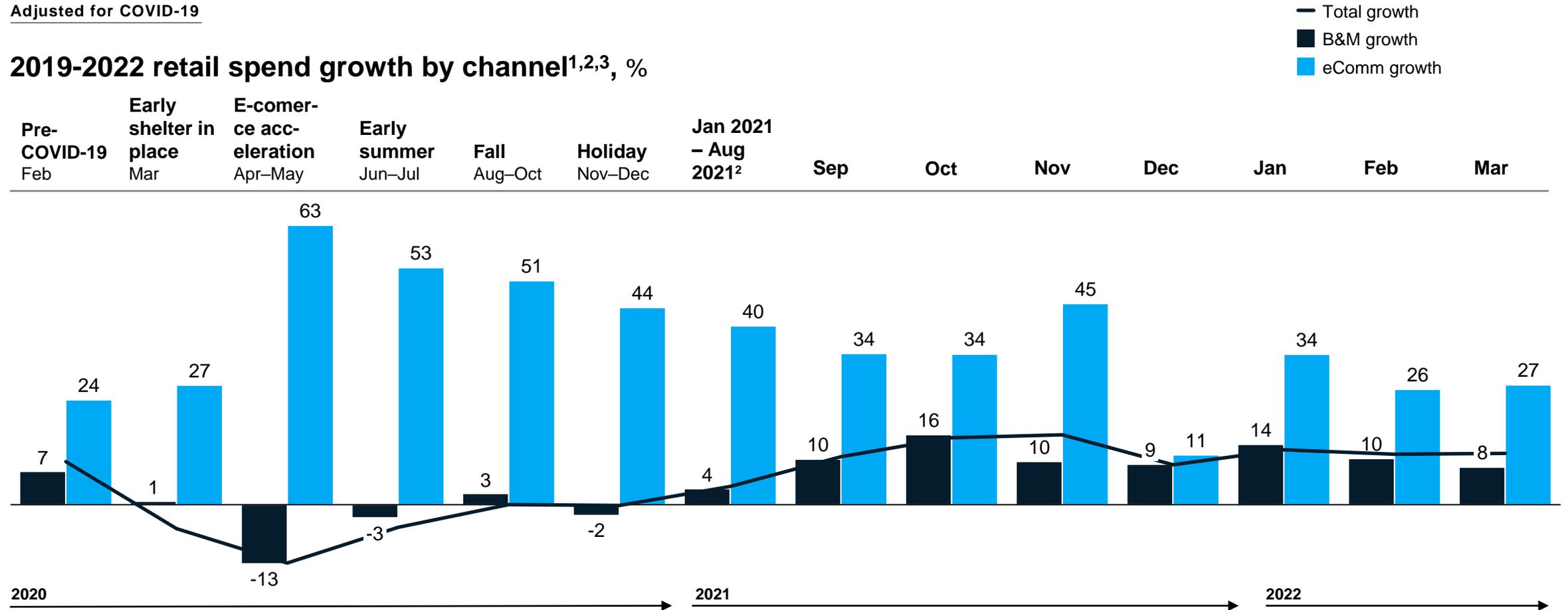
■ 2021 Q1 vs. 2019 Q1



US consumers continued to spend more money online, but they also returned to physical stores through 2021 and early 2022

Adjusted for COVID-19

2019-2022 retail spend growth by channel^{1,2,3}, %



1. Includes data on credit card spending and some debit card spending among banked consumers. Year-over-year growth in monthly sales during current period (Feb 2020–Mar 2022) compared with monthly sales in prior period (Feb 2019–Mar 2021)
2. Re-forecasted spending from Mar 2020 to Mar 2021 calculated by growing Feb 2020 to Mar 2021 spending by the same 1-month growth rates observed between Feb 2019 and Feb 2020
3. Includes Amazon sales, apparel, software and electronics, cosmetics; pet supplies; home stores; mass stores; club stores; restaurants; grocery stores; drugstores; discount stores; auto and cable/telecom and experiences (out-of-home entertainment and travel)

Shipper transport budgets have increased 2-4x from supply chain snarls

Problems shippers are facing in recent years

20-30% higher contracted rates vs. pre-COVID levels with limited committed capacity

Growing inventory costs resulting from longer/disrupted supply chains

Higher accessorial costs caused by too few service providers

Solutions shippers are looking to acquire



Consolidation/de-consolidation activities to maximize equipment utilization



Ability to steer cargo at busy network nodes; either by re-routing cargo or switching modes of transport



Near port facilities to deliver logistics services (e.g., customs, maintenance, storage, etc) faster and cheaper

Impact on shippers

Heading into contracting negotiations, shippers are feeling like they are price takers and willing to pay whatever it takes to secure capacity. Transportation budgets are an average of 2-4x higher than prior year.

Consequently, shippers are actively sourcing new supply chain services to reduce costs while simultaneously adding resiliency to their networks

Increase in transport budgets compared to prior years

2-4X

Leaders are responding by making supply chains more resilient



Network

Dual-sourcing and regionalization gained significant momentum since May 2021.

Inventories further increased since 2021 and we can expect a large revision of inventory management policies across industries.



SC planning

Master data quality was a fundamental driver of planning performance.

Most popular resilience measures were E2E dashboards and supplier collaboration.

The future IT landscapes will focus on E2E solutions rather than point solutions.

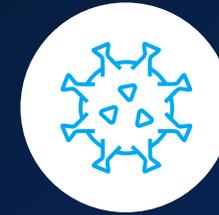


Digitization

SC digitization targets were reached across industries since May 2021.

Digitization focus is shifting from SC visibility to demand and supply planning, as SC visibility was established.

Digital talent remains a challenge, shifting from reskilling to external hiring.



SC risk mgmt.

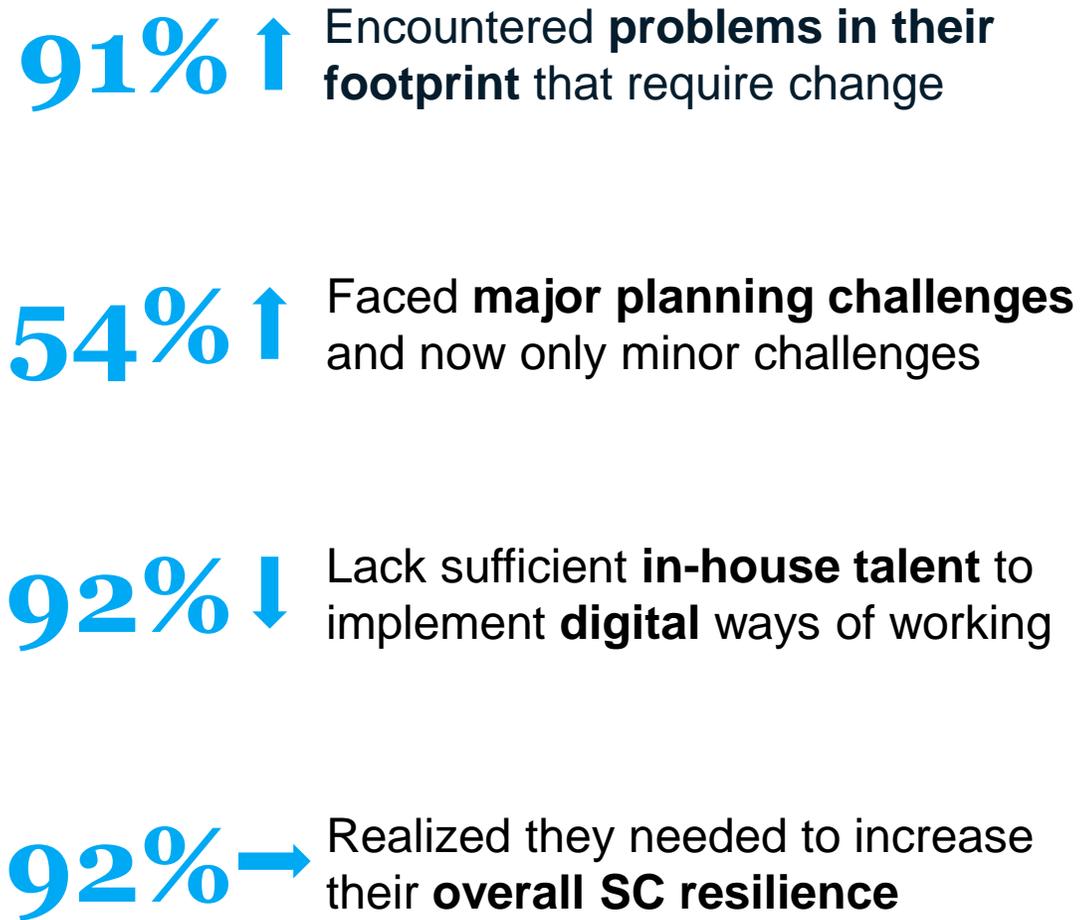
Overall posture towards SC risk management has not changed in past 3 years.

Primary focus is on managing supplier risks.

Multi-tier supplier transparency is still low across industries and lowest in Commodity and Automotive.

COVID-19 surfaced several issues in current supply chains ...

% of total respondents



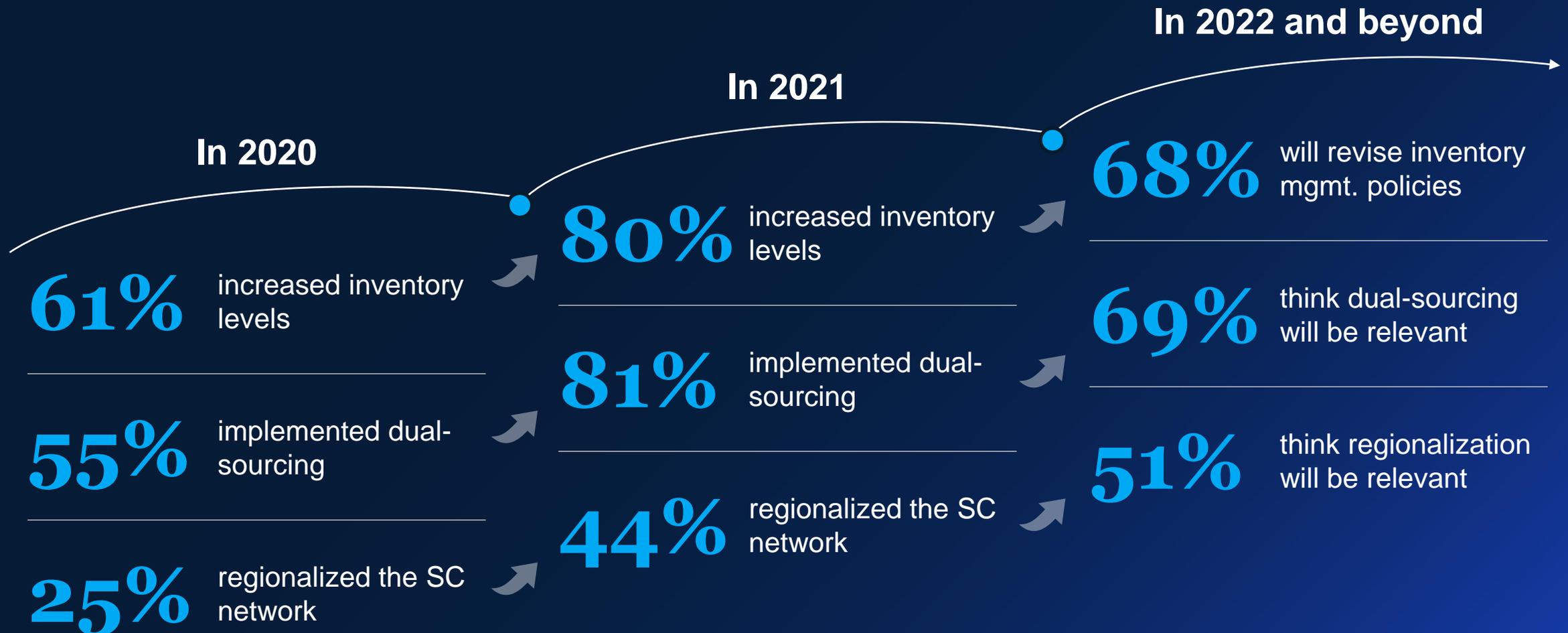
... that led to transformative actions since May 2021

↑ ↓ Trend vs. 2021 survey



Top 3 footprint resilience measures are and continue to be inventory optimization, dual-sourcing and regionalization

% of respondents



Dual-sourcing will be more relevant than near-shoring and regionalization

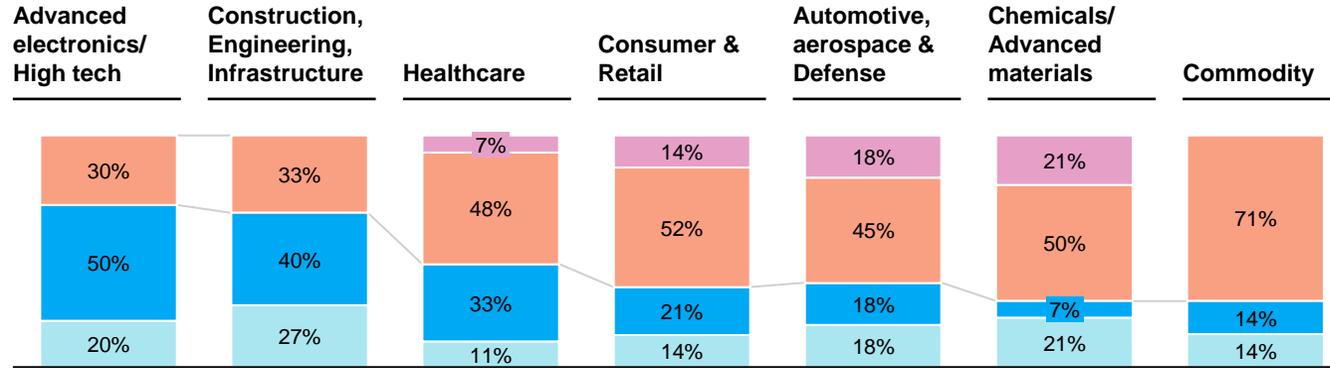
% of respondents per industry sector

Very relevant Relevant Partially relevant Not relevant at all

Relevance in the next 3 years

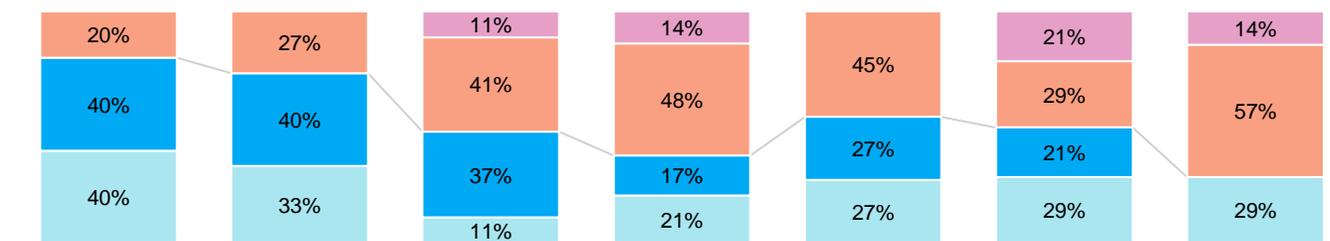
Near-shoring

(= sourcing from suppliers near sites OR producing in sites near customers)



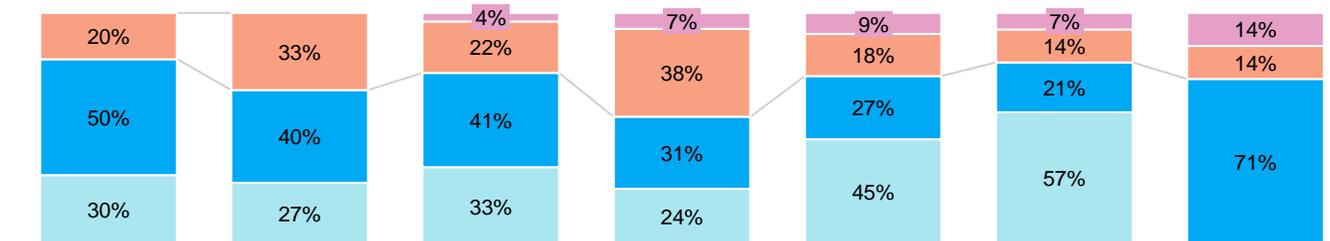
Regionalization

(= sourcing, producing, distributing within the region)



Dual-sourcing

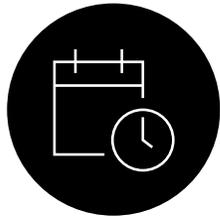
(= sourcing from 2 different suppliers AND producing in 2 different sites)



Key insights

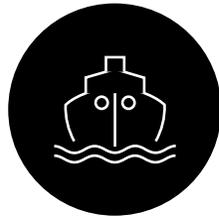
- > Dual-sourcing is highly relevant across all industries and highest in chemicals
- > Near-shoring and regionalization are mostly concentrated on high tech and construction
- > Commodity, chemicals and automotive will primarily focus on regionalization and dual-sourcing
- > Healthcare and consumer show a relatively even distribution across all 3 resilience measures

Ports and terminals will face 4 challenges in the coming years



Continued supply chain disruptions

Terminal delays and/or port interruptions will continue to affect networks and global trade flows



Changes to capacity deployments and industry structure

Demand on tradelanes will evolve as shippers rebalance and redesign their supply chains



Labor costs and availability

Wages may continue to increase and shortages could grow within the transportation market



Ports and terminals leading data exchange

Because of their position as the nexus of data flows, ports and terminals will need to lead efforts to improve interoperability of digital ecosystems

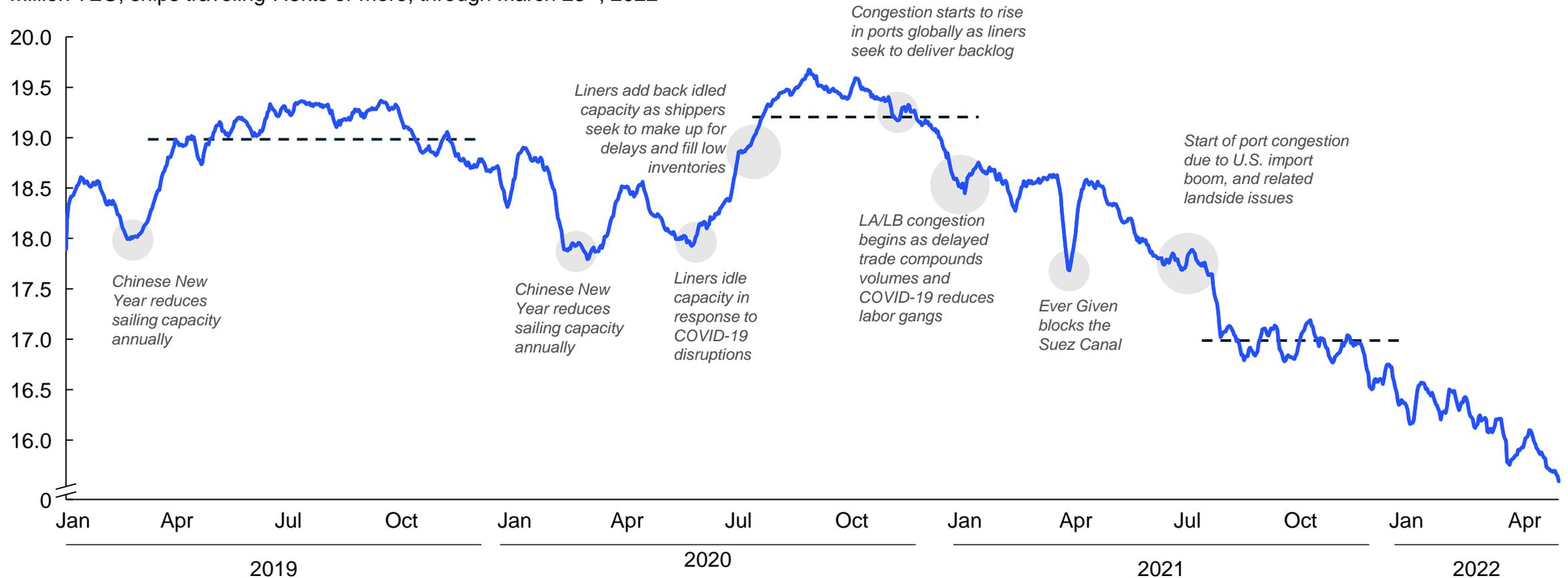
Global supply chains continue to experience major congestion—delays are not a shipping capacity problem

Port congestion due to U.S. import boom and related landside issues continues to drive congestion

7-day moving average

Global containership capacity actively sailing

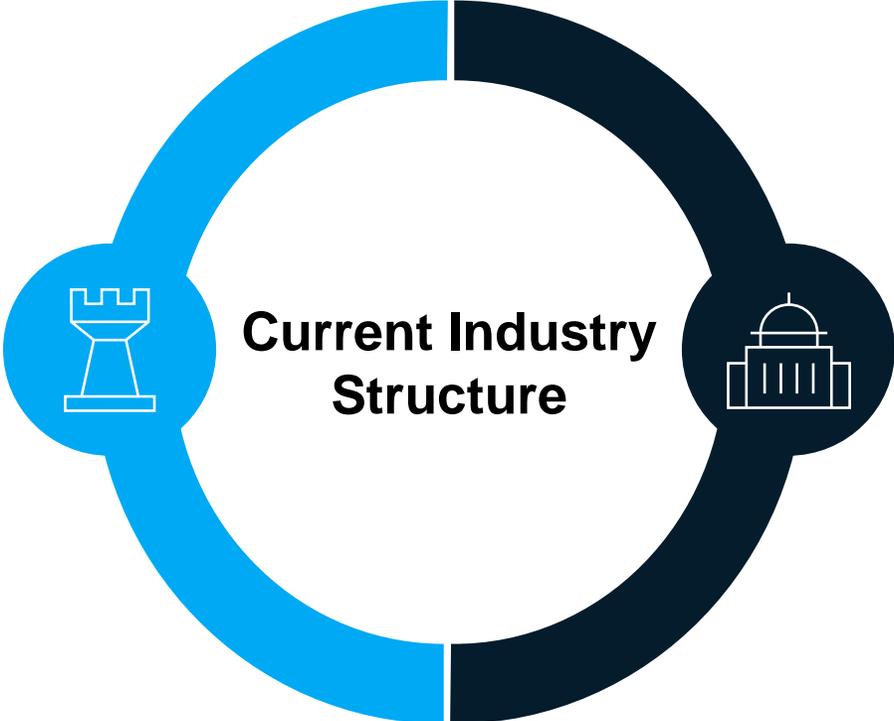
Million TEU, ships traveling 7.5kts or more, through March 23rd, 2022



The current industry structure is under pressure from carrier strategic priorities and renewed regulatory scrutiny

Carrier Strategic Priorities

The strategic priorities of the different shipping lines have evolved since the alliances were conceived. Within the alliances, individual shipping lines are pursuing different objectives making it harder for the alliance to make it a wining environment for every participant

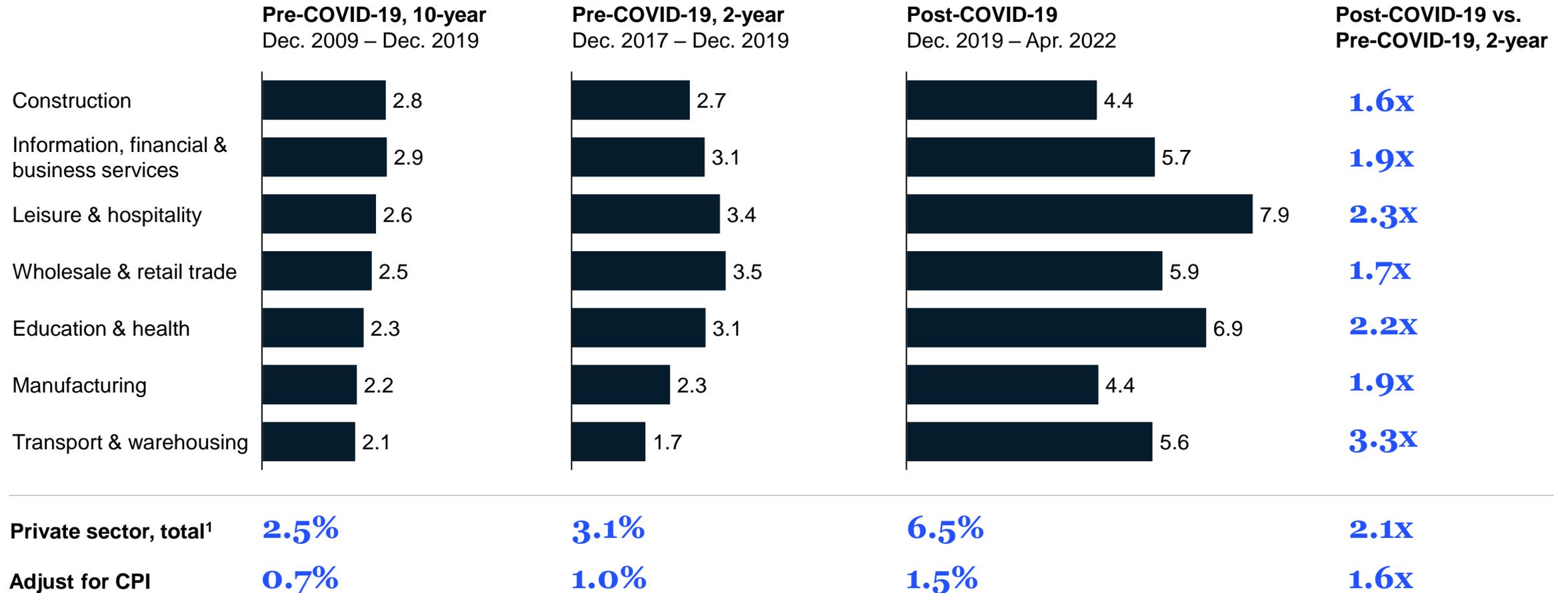


Renewed regulatory scrutiny

The disruption caused by COVID-19 in the container shipping market led to increased shippers' cost pressure, which provoked US authorities to propose additional regulations targeting the liners. The proposed regulatory environment could end up disrupting the current industry structure

Post-COVID private sector wages are rising more than ~2x Pre-COVID rates

Average weekly earnings, compound annualized growth, percent



1. Private production and non-supervisory workers, all industries; sector detail for Mining & Logging, Utilities, and Other Services, not shown

Many factors potentially impacting current job market decisions across countries

Future of labor force participation remains uncertain



Demand shifts

Displacement of jobs as demand shifted to goods, services no see shortages



Job preferences

Work-from-home options has scrambled views on what job to take



Lifestyle changes

Could lead to permanent shifts in labor supply as households reprioritize



Job openings

Large supply of job openings driving high quit rates/job switching



Health concerns

May have longer term effects; depends on vaccine and therapeutics roll-out



Return of 65+?

65+ saw the greatest labor force participation decline; Will older workers retire?



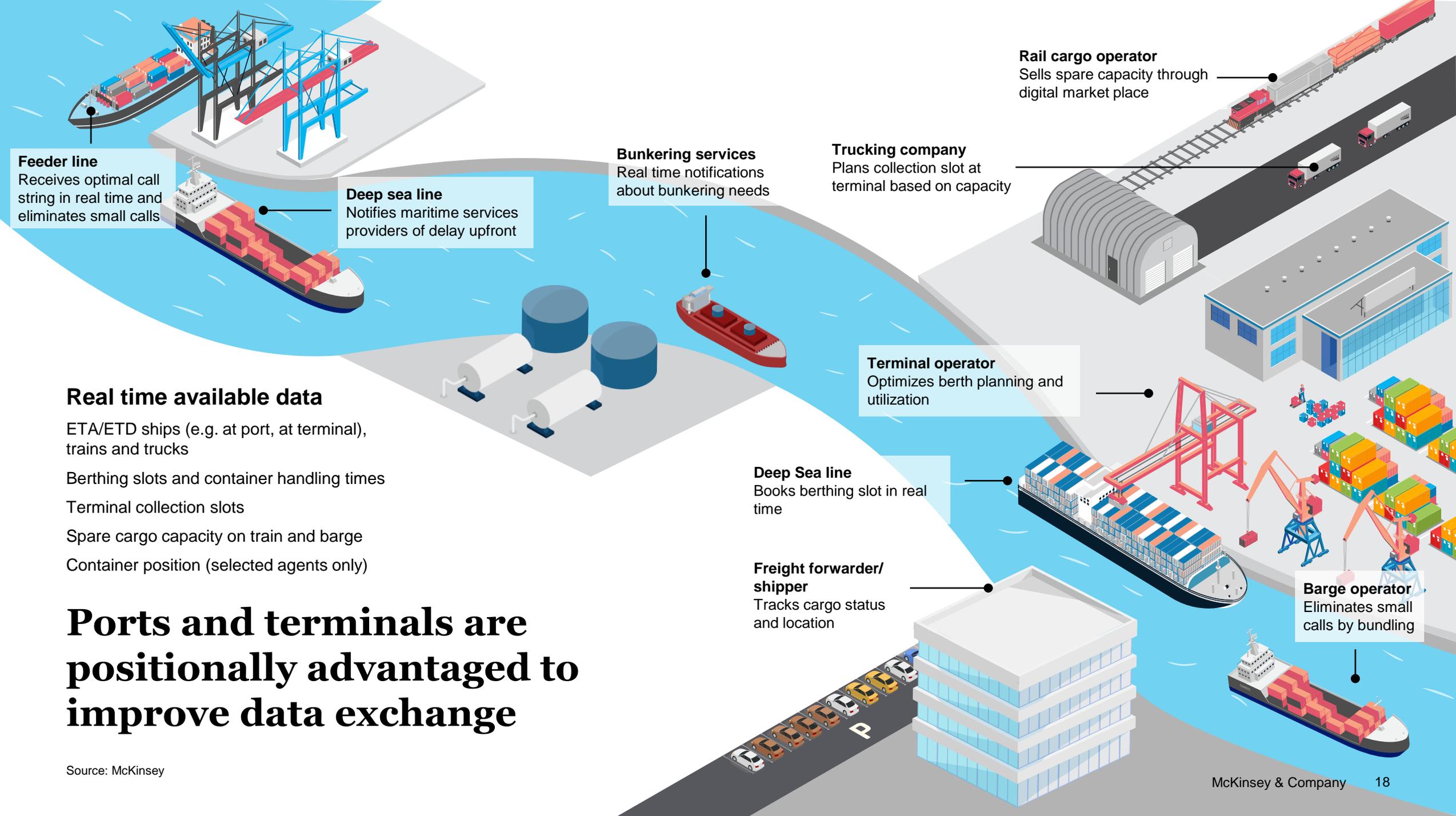
Care giving

Women with/without kids have both seen large drops in participation rates



Duration of benefits

Likely only impacting workers on low end of the wage scale



Feeder line
 Receives optimal call string in real time and eliminates small calls

Deep sea line
 Notifies maritime services providers of delay upfront

Bunkering services
 Real time notifications about bunkering needs

Trucking company
 Plans collection slot at terminal based on capacity

Rail cargo operator
 Sells spare capacity through digital market place

Terminal operator
 Optimizes berth planning and utilization

Deep Sea line
 Books berthing slot in real time

Freight forwarder/shipper
 Tracks cargo status and location

Barge operator
 Eliminates small calls by bundling

Real time available data

- ETA/ETD ships (e.g. at port, at terminal), trains and trucks
- Berthing slots and container handling times
- Terminal collection slots
- Spare cargo capacity on train and barge
- Container position (selected agents only)

Ports and terminals are positionally advantaged to improve data exchange

Source: McKinsey