

Transport Tracker

Issue #1102, week ending Dec. 06, 2023; STAARS Conf next wk; LTL mid-4Q update

Industry Overview

Hoexter's Thought of the Week

STAARS Conf. to host drone operator; autonomous trucker

Next Wed., Dec 13, we are co-hosting BofA's 4th Annual Space, Transportation, and Aviation Research Summit (STAARS), along with BofA Aerospace & Defense analyst Ron Epstein. We have 25 companies set to discuss the Future of Mobility & Transportation. This unique virtual one-day summit, the only of its kind, will have a variety of panels, including: eVTOL (electric vertical takeoff and landing), Future of Aviation, Space Infrastructure, Space Launch, Drone Delivery, Autonomous Mobility (incl. Autonomous Trucking), Hydrogen in Aviation, Hypersonics, and Earth Observation (Space Imagery). Our speakers are predominantly CEO's, CFO's, and founders of their respective companies, and should help investors understand where the industry is headed.

From Transports, we host Autonomous Trucking company Kodiak Robotics and drone operator Matternet. Unmanned drone delivery developer Matternet CEO & Founder Andreas Raptopoulos and CFO Jason Secore aim to discuss commercial drone logistics. Matternet is the only operator in the US with an active Part 135 Certificate from the Federal Aviation Administration (FAA), allowing it to operate commercially as a non-scheduled cargo carrier. It has partnered with UPS since 2019 to test flights within UPS' network. Matternet's drone tech can carry 2.0kg (4.4lbs) over 20 kilometers (12.4 miles).

Autonomous Trucking Operator Kodiak Robotics Founder & CEO Don Burnett will update the state of the autonomous market and Kodiak's progress. Kodiak has focused on improving its perception technology. Its HD Maps was able to map the Dallas-Houston Lane in weeks compared to 9 months for competitors, aided by its hardware stack of 4 LiDAR and 4 radar sensors. COO James Reed highlighted at our May Transport Conference that its autonomous trucking tech has proven to work.

Watch Dry Van Truckload Spot rates – jump to \$1.34/mile

Dry Van Truckload spot rates ex-fuel jumped to \$1.34/mile this week, up from \$1.29/mi last week, and moving further above the \$1.21-\$1.25/mi band it trended in for 12 weeks between mid-August to mid-November (per Truckstop.com). Concurrently, DAT Load to Truck ratio was 3.53, up 126% sequentially from 1.56. The Truckload market is beginning to show signs of inflection, mirroring our BofA Truck Shipper Survey's bounce last week, to 49 from 44, creates improving backdrop for carriers such as KNX and JBHT.

Less-than-Truckload Nov updates signal macro softness

Less-than-Truckload (LTL) tonnage growth decelerated in Nov, as weak demand weighed on volumes. XPO, Old Dominion, ArcBest reported Nov LTL tons/day down -0.4%, -2.3%, and -10.0% year-year, from +3.8%, -1.9%, and -4.0% in Oct, respectively. Saia was a notable exception as daily tonnage grew 9.2% year-year, accelerating from +7.8% in Oct, as its capacity investments bear fruit. ArcBest highlighted a weaker Nov. given softness at Manufacturing & Industrial shippers. Temporary gains from Estes' Oct cyberattack was a headwind to sequential growth. Pricing remains disciplined since Yellow's exit, with yields (rev/hundredweight) up 1.8% and 6.0% at ODFL and ARCB in November, respectively, despite challenging fuel comps. XPO also saw accelerating ex-fuel yields.

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Key Data This Week:

- **Week 48 Rail Carloads: Up 1.9% Y-Y vs Week 47: -0.1% Y-Y**
(Up for the 6th time in 43 weeks)

- **Dry Van spot rates ex-fuel = \$1.34/mile vs \$1.29 last week**, down 18% from \$1.64 on Dec 31, 2022. Spot rates with fuel were \$1.88 vs. \$1.85 last week, and down 17% from \$2.28 on Dec 31, 2022.

- **DAT Load to Truck Ratio – 3.53 for the week of December 3, up 126% seq.** from 1.56 last week.

- **Top 10 Ports in October: +2.8% Y-Y, LA/LB +13.0% Y-Y vs September's +3.1%, LA/LB +17%**

- **November ISM Manufacturing Index 46.7 vs 46.7 in October**

- **Prelim. October Class 8 Net Orders at 41,700 vs 32,287 in October)**

- **IATA Freight Vols: +3.8% Y-Y in October, North America -1.8%**

Exhibit 1: Airfreight & Surface Transportation

Rails, Trucks, Airfreight, Other Transports Summary Valuation Table

Rating	Company	Price 12/06/23	Mkt Cap. (\$ bil.)	P/E '24e EPS	1-Wk Perf	Price Perf YTD %
B-2-7	Canadian National Railway (CNI)	117.81	76.4	19.9x	3%	-1%
B-1-7	Canadian Pacific Kansas City (CP)	73.97	68.9	23.5x	4%	-1%
B-1-7	CSX Corp. (CSX)	33.52	66.2	16.4x	6%	8%
B-1-7	Norfolk Southern Corp. (NSC)	228.08	51.6	17.5x	6%	-7%
B-1-7	Union Pacific Corp. (UNP)	232.97	142.0	20.8x	5%	13%
NR	Grupo México Trans (GMXT*MM)(3)	MXN 36.66	9.3	--	4%	-3%
Rail Avg (ex GMXT for P/E)						
Intermodal / Container Lessors:						
B-1-7	J.B. Hunt Transport Svcs (JBHT)	188.08	19.4	21.5x	3%	8%
NR	Hub Group (HUBG)	80.62	2.6	14.8x	8%	1%
NR	Textainer (TGH)	49.16	2.0	10.1x	0%	59%
Intermodal Average						
Less-than-Truckload (LTL) Carriers:						
C-3-7	ArcBest Corp. (ARCB)	107.88	2.6	10.4x	-8%	54%
B-1-7	Old Dominion Freight Line (ODFL)	372.89	40.7	28.4x	-3%	31%
B-1-9	Saia Inc. (SAIA)	390.06	10.4	24.2x	2%	86%
B-2-7	TFI International (TFII)	114.90	9.8	13.9x	-2%	15%
C-1-9	XPO, Inc. (XPO)	81.46	9.4	25.1x	-5%	145%
LTL Average						
Truckload (TL) Carriers:						
B-1-7	Knight-Swift Transportation (KNX)	56.47	9.1	16.1x	6%	8%
B-2-7	Schneider National (SNDR)	23.67	4.2	14.8x	3%	1%
B-3-7	Werner Enterprises (WERN)	40.44	2.6	16.9x	2%	0%
NR	Covenant Logistics (CVLG)	42.22	0.5	9.7x	-1%	22%
NR	Heartland Express (HTLD)	13.62	1.1	37.8x	2%	-11%
NR	Marten Transport (MRTN)	19.31	1.6	18.3x	3%	-2%
NR	P.A.M. Transport (PTSI)	19.25	0.4	11.3x	1%	-26%
NR	Universal Logistics Holdings (ULH)	25.37	0.7	--	2%	-24%
TL Average						
Autonomous trucks						
NR	TuSimple (TSP)	1.07	0.2	--	15%	-35%
NR	Aurora Innovation (AUR)	2.47	3.8	--	7%	104%
Autonomous trucks Average						
Airfreight Companies:						
B-1-7	FedEx Corp. (FDX)	267.21	67.2	14.2x	5%	54%
B-2-7	UPS (UPS)	155.29	132.3	15.8x	2%	-11%
NR	Deutsche Post (DHL GY) (2)	€ 44.87	59.9	--	6%	28%
Airfreight Average						
Freight Forwarders / Logistics:						
B-3-7	C.H. Robinson Worldwide (CHRW)	85.51	10.0	21.1x	5%	-7%
C-1-9	RXO (RXO)	20.98	2.5	43.8x	1%	0%
NR	Landstar System (LSTR)	178.99	6.4	22.6x	5%	10%
NR	Expeditors International (EXPD)	120.62	17.5	24.7x	1%	16%
B-3-8	Kuehne + Nagel Intl (KHNGF) (2)	CHF 261.30	36.5	29.0x	2%	21%
B-1-7	DSV Panalpina A/S (DSV DC) (2)	DKK 1,093.0	33.9	2.5x	6%	0%
NR	Forward Air Corp. (FWRD)	63.93	1.6	14.3x	1%	-39%
NR	Ryder System, Inc. (R)	105.74	4.7	8.9x	-1%	27%
NR	Air Transport Services Group (ATSG)	15.36	1.0	9.5x	-3%	-41%
NR	Fortress Transportation (FTAI)	41.45	4.1	19.4x	2%	142%
B-3-7	World Kinect (WKC)	20.62	1.2	9.5x	-2%	-25%
Freight Forwarder Avg.						
Rail Equipment:						
C-3-7	The Greenbrier Companies (GBX)	38.28	1.2	11.1x	3%	14%
NR	Freightcar America Inc. (RAIL)	2.36	0.0	9.4x	0%	-26%
NR	GATX Corporation (GATX)	110.98	3.9	15.7x	3%	4%
NR	Koppers Holdings Inc. (KOP)	44.75	0.9	9.5x	0%	59%
NR	Trinity Industries Inc. (TRN)	25.58	2.1	13.3x	4%	-13%
B-2-7	Wabtec Corp. (WAB)	118.29	21.2	18.2x	3%	19%
Rail Equipment Avg.(ex-RAIL)						
Transport Average						
S&P 500						
		4,549.34	943.7	21.1x	0%	18%

Source: BoFA Global Research estimates, Bloomberg, and First Call Estimates (for stocks not covered by BoFA Global Research).

Covered by: (2) Muneeba Kayani, (3) Carlos Peyrelongue - NR: Not Rated.

BoFA GLOBAL RESEARCH

Exhibit 2: Marine Matters

Crude, Product, Container, Dry Bulk, LNG, Jones Act Summary Valuation Table

Rating	Company	Price 12/06/23	Mkt Cap. (\$ bil.)	P/E '24e EPS or Yield	1-Wk Perf	Price Perf YTD
Marine Matters						
Tanker Companies						
C-2-7	Teekay Tankers, Ltd. (TNK)	48.13	1.6	0.0%	-2%	56%
NR	Teekay Shipping Corp. (TK)	6.69	0.6	--	-3%	47%
NR	Euronav (EURN)	€ 16.64	3.9	8.8%	2%	6%
NR	DHT Maritime (DHT)	9.92	1.6	19.3%	2%	12%
NR	Frontline Ltd. (FRO)	19.19	4.3	16.4%	-9%	58%
NR	Tsakos Energy Navigation (TNP)	19.72	0.6	--	0%	16%
NR	Nordic American Tanker (NAT)	3.91	0.8	12.1%	0%	28%
NR	Ship Finance Limited (SFL)	11.05	1.4	9.2%	-2%	20%
NR	KNOT Offshore Partners (KNOP)	5.50	0.2	--	-1%	-43%
Tanker Average						
Product Tankers						
C-2-7	Scorpio Tankers (STNG)	54.14	2.9	3.3%	0%	1%
NR	Capital Products (CPLP)	13.53	0.3	4.4%	-3%	-1%
NR	Ardmore Shipping (ASC)	13.76	0.6	6.7%	1%	-5%
Product Tankers Average						
LNG / LPG						
NR	Golar LNG (GLNG)	20.78	2.2	--	-4%	-9%
NR	Dynagas LNG Partners (DLNG)	2.65	0.1	15.1%	3%	1%
NR	StealthGas (GASS)	6.36	0.2	--	-5%	137%
LNG / LPG Average						
Container Ship Lessors						
NR	Costamare (CMRE)	9.74	1.1	4.7%	1%	5%
NR	Danaos (DAC)	68.94	1.3	4.6%	0%	31%
NR	Global Ship Lease (GSL)	18.17	0.6	8.3%	1%	9%
Container Average						
Dry Bulk						
NR	Navios Maritime L.P. (NMM)	25.59	0.8	3.5x	0%	-1%
NR	Safe Bulkers, Inc. (SB)	3.72	0.4	5.5x	0%	28%
NR	Diana Shipping (DSX)	3.02	0.3	6.2x	-11%	-19%
NR	Eagle Bulk Shipping (EGLE)	44.08	0.4	9.4x	0%	-12%
NR	Navios Maritime (NM)	2.24	0.1	--	0%	28%
NR	Eneti Inc (NETI)	9.96	0.4	--	-6%	-1%
NR	Golden Ocean Group (GOGL)	8.75	1.8	10.4x	-6%	1%
C-1-7	Pacific Basin Shipping (PCFBF)(1)	HKD 2.45	1.7	6.0x	6%	-7%
U.S. Dry Bulk Average						
Jones Act Carrier/Other						
B-1-9	Kirby Corp. (KEX)	73.17	4.3	14.1x	-3%	14%
NR	Matson Inc. (MATX)	96.25	3.4	13.1x	2%	54%
NR	Tidewater Inc. (TDW)	56.78	3.0	8.9x	-3%	54%
Jones Act Carrier/Other Average						
Container Shipping / Diversified Companies						
B-3-8	AP Moeller-Maersk (AMKBF) (2)	DKK 10,600	26.8	--	-2%	-32%
B-2-8	COSCO Shipping Holding Co (CICOF)(1)	HK\$7.07	7.5	--	0%	-11%
C-3-8	K-Line (KAKKF)(1)	¥5,473.00	8.9	13.2x	5%	96%
B-3-8	Mitsui O.S.K. Lines (MSLOF)(1)	¥4,157.00	10.2	7.1x	1%	26%
B-3-8	NYK Line (NYUKF)(1)	¥4,060.00	14.1	8.3x	2%	31%
NR	Wan Hai Lines (WHILF)	TWD 51.30	4.6	--	10%	-36%
NR	Yang Ming Marine (YMGXF)	TWD 44.65	5.0	--	5%	-32%
C-2-8	Evergreen Marine Corp (EVGQF)(2)	TWD 117.00	7.9	--	4%	-28%
NR	Hapag LLOYD ADR (HLA GY) (2)	€ 110.80	21.0	--	-6%	-38%
C-3-9	ZIM Integrated Shipping Svcs (ZIM)	7.26	0.9	--	5%	-58%
Container & Diversified Average						
Shipping Mkt Cap / Shipping Avg						
S&P 500						
		4,549.34	115.0	21.1x	0%	18%

Source: BoFA Global Research estimates, Bloomberg, (for stocks not covered by BoFA Global Research)

Covered by: (1) Nathan Gee, (2) Muneeba Kayani

NR: Not Rated.

BoFA GLOBAL RESEARCH

Airfreight and Surface Transportation Weekly Movers

Best: TSP (+15%) HUBG (+8%) AUR (+7%)
Worst: ARCB (-8%) XPO (-5%) ODFL (-3%)

Marine Transportation Weekly Movers

Best: WHILF (+10%) PCFBF (+6%) KAKKF (+5%)
Worst: DSX (-11%) FRO (-9%) NETI (-6%)



Upcoming Calendar of Events

Dec 7	BofA hosted UPS and NSC headquarters visit, Atlanta
Dec 13	BofA STAARS Summit (Space, Transport & Aviation Research), Virtual
Jan 9-11, 2024	Midwest Assoc. of Rail Shippers Meeting, Westin Chicago Lombard
Feb 28-29	Southeast Association of Rail Shippers Spring Meeting, Atlanta
Mar 3-6	Rail Equipment Finance (REF) Conference, La Quinta
Mar 3-6	TPM'24 – Transpacific Maritime Conference, Long Beach
Mar 13	World Kinect Corp (WKC) Investor Day, NYC
Mar 19-21	BofA Global Industrials Conference, London
Mar 26	UPS Investor Day, Atlanta
Apr 30-May 2	National Assoc of Rail Shippers (NARS) Ann Mtg, Chicago
May 14-16	BofA's 31st Annual Transport, Airline, & Industrials Conf, NYC

BofA Global Research Reports

Title: Subtitle	Primary Author	Date Published
ODFL: Mid-4Q revenue trends in-line as vols offset decelerating yields	Ken Hoexter	05 December 2023
Trucking: LTL 4Q: XPO grabs YELL sites; ARCB tons/yield short of tgts	Ken Hoexter	05 December 2023
Trucking: YELL terminal auction bid winners announced	Ken Hoexter	05 December 2023
SAIA: Mid-4Q Update; Nov tons, shipments/day accelerate; PO to \$468	Ken Hoexter	04 December 2023
NSC: Raise to Buy; Overcoming service setbacks; PO \$248	Ken Hoexter	01 December 2023
Trucking: Survey Says: Demand ticks higher yet not going anywhere	Ken Hoexter	01 December 2023
Transport Tracker: Issue #1101, week ending Nov. 29, 2023	Ken Hoexter	30 November 2023

Company News

Saia provided an interim 4Q23 update, with November tons/day up 9.2% year-year, accelerating from 7.8% in October, to average +8.5% quarter-to-date. November LTL shipments/day were up 18.9%, accelerating from +18% in October, to average 18.5% for 4Q-to-date. November weight/shipment was down 8.1% year-year, moderating slightly from -8.6% in October, to average -8.4% for 4Q-to-date. Saia targets its 4Q operating ratio to deteriorate 150-200 bps, outperforming normal seasonality of 200 bps.

Yellow Corp's terminal auction bid winners on its real estate facilities were announced on December 4 on 128 of its 174 owned properties and 2 of its 145 leased properties. Among the auctioned properties, 70% (91 sites) were won by less-than-truckload (LTL) carriers and the rest (30%, or 39 sites) were distributed to commercial real estate lessors, warehousing operators, asset-light & truckload carriers, and alternative asset managers. **XPO** won 28 sites (26 owned, 2 leased) for \$870 million. Its list of properties won include premier sort centers such as Yellow Corp's Carlisle facility (281 doors) based in Harrisburg, PA near the I-81 Interstate and a Nashville, TN facility (213 doors) near highway I-40. **Estes** and **Saia** won 24 and 17 properties for \$245 million and \$236 million, respectively. **XPO**, **Estes**, and **Saia** accounted for 53% of the winning bids, while **Knight-Swift** (13 sites for \$51 million), **ArcBest** (3 sites for \$30 million), **A. Duie Pyle** (4 sites for \$29 million), and **TFI International** (2 sites for \$16 million) won bids as well. **Old Dominion Freight Line** was noticeably absent in the auction bid winners list as it aims to approach winning bidders selectively for assets it sees as accretive to its 258-terminal network.

XPO posted a mid-4Q update, with November less-than-truckload (LTL) tons/day down 0.4% year-year, following a +3.8% increase in October. The moderate deceleration in tons/day was driven primarily by shipments, as shipments/day were up +3.8% year-year in November from +6.2% in October. While it did not disclose revenue trends, management noted momentum in yields is exceeding its expectations. The company also noted improving service levels, with damage frequency setting new records in October and November. Following our mid-4Q update, we slightly adjust our European EBITDA and Corporate EBITDA (Loss) targets. We target costs from its pending \$985 million deal (\$585 million 8-year senior unsecured bond and a \$400 million term loan) to occur in 1Q24 (slight shift from our prior late 4Q23). We maintain our 4Q23, 2024, and 2025 adjusted EPS targets of \$0.59, \$3.25, and \$4.50.



Old Dominion Freight Line posted its mid-4Q update, with less-than-truckload (LTL) November revenue/day down 0.9% year-year from +2.0% in October (up 0.6% on average 4Q-to-date). LTL revenue/hundredweight (cwt) was up 3.1% year-year in 4QTD and 7.6% year-year ex-fuel. This implies revenue/cwt was up 1.8% in November and LTL yields ex-fuel decelerated to +7.1% from +8.1% in October. November tons/day was down 2.3% year-year from -1.9% in October (-2.1% on avg 4Q-to-date). November shipments/day were up 0.6% from +2.7% in October.

Canadian National agreed to acquire Iowa Northern Railway, which operates 275 track miles in Iowa, and connects to CN's US rail network. The transaction closed into an independent voting trust and is pending regulatory review by the US Surface Transportation Board in 2024. The Iowa Northern Railway serves upper Midwest agricultural and industrial markets covering many goods, including biofuels and grain.

Ryder System secured its first two Ryder ChoiceLease customers under the RyderElectric+ turnkey fleet solution. Ryder will support the customers' charging and infrastructure to enable the operation of the multiple light-duty electric cargo vans that are included in the agreements.

Landstar System's Board of Directors increased the number of shares of its common stock that the company is authorized to purchase under its stock purchase program to 3.0 million. Separately, Landstar named Frank Lonegro to replace retiring CEO and President James Gattoni on February 2, 2024. Mr. Lonegro is currently the EVP and CFO of Beacon Building Products and previously worked at CSX for nearly 20 years.

Autonomous Trucking

TuSimple Holdings Inc. previously announced a broad restructuring plan to rebalance the company's cost structure. The company also disclosed its strategy to pause freight revenue operations in the U.S. and the sale of certain U.S. assets, as the company aims to shift its focus to the Asia-Pacific region. Its Board of Directors authorized an additional restructuring plan, which includes a reduction in the company's U.S. workforce by approximately 150 employees, or 75%, and 19% of the company's U.S. and global workforces, respectively. The company estimates that it will incur one-time charges of approximately \$7 million to \$8 million in connection with the Restructuring Plan.

Shipping

Safe Bulkers authorized a repurchase program of up to 5.0 million shares of the company's common stock. The purchases will be funded using the company's existing cash resources.

Star Bulk Carriers Corp., a global shipping company focusing on the transportation of dry bulk cargoes, repurchased 10 million of its common shares from Oaktree Shareholders. As a result of the closing, the aggregate ownership of Oaktree Dry Bulk Holding LLC and its affiliated funds was reduced from approximately 17.1% of the company's outstanding common stock to approximately 7.2%.

Dividends Declared

	Amount	Record Date	Payable Date
LSTR	\$2.00	01/03/24	01/19/24

Week 48 Rail Carload Data: Up 1.9% Y-Y

Key Takeaways – Up 1.9% (from -0.1% last week): Total carloads for week 48 of 2023 were up 1.9% year-year, to 625,225 (BNSF has not reported yet), reversing last week's 0.1% decrease (or 550,007 Thanksgiving impacted carload level). Carloads were up for just the sixth time over the last 43 weeks and were above the past 10-week average of +0.1%. 4Q23 Carloads compare against a 1.6% year-year increase in 4Q22. Coal was up (+4.9% year-year), in line with last week's 5.4% increase. Coal was up for the ninth time over the past 11 weeks. Nat Gas prices remained flat with last week at \$2.71/MMBtu. The absolute level of Coal carloads was 61k, up from 55k last week, and above the past 10-week avg of 60k. Chemical volumes were up 6.1% year-year, decelerating from last week's 1.0% increase. Chemicals posted an uptick for the 13th time over the past 14 weeks. Grain (-13.7%) was down, moderating from last week's 21.1% decrease. Grain declined for the 18th time over the past 19 weeks. Petroleum (+5.0%) was up, improving from last week's 4.2% increase. This was the 13th uptick in the last 14 weeks for Petroleum. Intermodal (+5.5%) was up, improving from last week's 2.0% increase. It was the third consecutive uptick, while absolute volumes were 284k, above 248k last week, and the 281k past 10-week avg. Auto (+9.5%) was up, improving from last week's 7.4% increase. Auto posted its 87th uptick over the last 88 weeks.

Overall Carloads: Week 48 carloads were up 1.9% year-over-year, as increases at CPKC (+3.5%), UP (+3.2%), NS (+2.9%), and CSX (+1.1%) more than offset a decrease at CN (-1.6%). Quarter-to-date, carloads are up 0.3% year-over-year, as increases at NS (+2.6%), UP (+1.7%), CSX (+0.3%), and CPKC (+0.1%) more than offset a decrease at CN (-4.4%). The 4Q23 carload trend of +0.1% is in line with our +0.4% full quarter target for the Class I rails, on average. The average carrier is trending only slightly below our target (-40 bps), with UNP the best at +120 bps vs. our target (+1.7% vs. our +0.5%), vs CPKC the worst at -220 bps (+0.1% vs. our +2.3%).

Revenue Ton Miles: Week 48 RTMs: CN's RTMs are up 0.4% y-y 4QTD. CPKC's RTM are up 3.8% y-y 4QTD.

Specifics: Intermodal carloads (45.5% of total) were up 5.5% year-over-year, as increases at UP (+10.7%), NS (+8.1%), CSX (+3.3%), and CPKC (+1.2%) more than offset a decrease at CN (-0.9%). **Coal carloads (9.8% of total)** were up 4.9% year-over-year, as increases at CPKC (+40.4%), CN (+13.2%), and CSX (+9.1%) more than offset decreases at NS (-1.6%) and UP (-11.0%). **Chemical carloads (9.7% of total)** were up 6.1% year-over-year, as increases at CN (+23.4%), CPKC (+9.4%), UP (+3.5%), and CSX (+1.4%) more than offset a decrease at NS (-2.1%). **Grain carloads (4.5% of total)** were down 13.7% year-over-year, as all rails declined, led by: CN (-31.6%), CSX (-18.7%), CPKC (-9.7%), UP (-4.6%), and NS (-3.6%). **Petroleum carloads (3.8% of total)** were up 5.0% year-over-year, as increases at UP (+16.9%), NS (+11.7%), and CPKC (+4.3%) more than offset decreases at CN (-0.6%) and CSX (-7.0%). **Auto carloads (5.4% of total)** were up 9.5% year-over-year, as all rails increased, led by: CPKC (+23.1%), CSX (+14.5%), UP (+9.9%), CN (+3.6%), and NS (+0.4%).

Exhibit 3: Carloads Week 48 2023 vs. 2022; and 4QTD volumes

Week 48 Rail Carload Data: Up 1.9% Y-Y

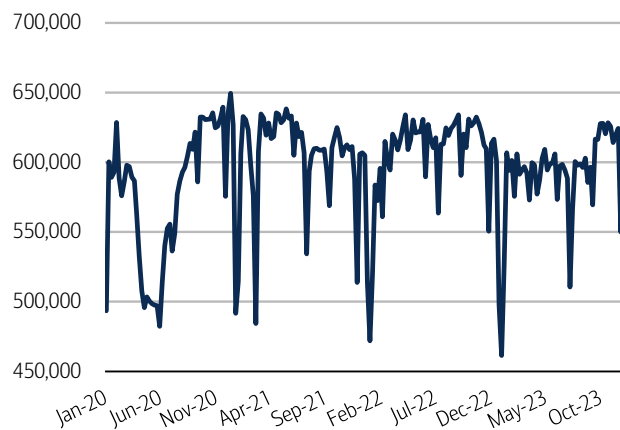
	% of total	2023 Wk 48	2022 Wk 48	% Δ	4Q23 QTD	% Δ
Intermodal	45.5%	284,452	269,673	5.5%	2,529,219	-0.4%
Coal	9.8%	61,238	58,381	4.9%	544,414	4.9%
Chemicals	9.7%	60,395	56,920	6.1%	497,035	4.2%
Auto	5.4%	33,804	30,865	9.5%	290,852	7.3%
Grain	4.5%	28,000	32,451	-13.7%	251,054	-6.7%
Forest Prod.	3.5%	21,836	22,740	-4.0%	182,436	-4.3%
Petrol. Prod.	3.8%	<u>23,567</u>	<u>22,437</u>	<u>5.0%</u>	<u>203,157</u>	<u>5.7%</u>
Total Carloads		625,225	613,582	1.9%	5,536,214	0.3%

Source: BofA Global Research and AAR

BofA GLOBAL RESEARCH

Exhibit 4: Total Weekly Carload Volumes

Total volumes were 625,225 for Week 48

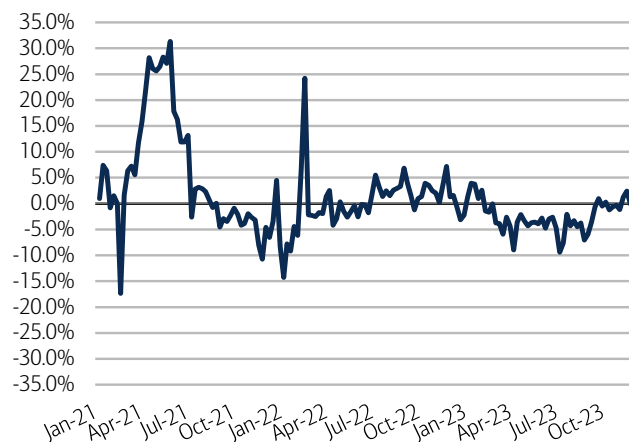


Source: BofA Global Research and Association of American Railroads.

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Exhibit 5: Total Weekly Carload Growth Y-o-Y

Total volume growth was +1.9% y-y for Week 48



Source: BofA Global Research and Association of American Railroads.

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Exhibit 6: Total Quarterly Carload Growth Y-o-Y

Total Carloads Forecast Up 0.4% in 4Q23

	3Q19a	4Q19a	1Q20a	2Q20a	3Q20a	4Q20a	1Q21a	2Q21a	3Q21a	4Q21a	1Q22a	2Q22a	3Q22a	4Q22a	1Q23a	2Q23a	3Q23a	4Q23e
BNSF	-2.5%	-6.2%	-5.2%	-17.9%	-8.3%	2.6%	4.8%	24.5%	4.4%	-3.1%	-3.3%	-5.6%	-5.0%	-9.2%	-10.3%	-11.1%	-4.8%	-
CNI	0.4%	-7.3%	-5.9%	-15.9%	-5.9%	7.1%	7.2%	13.5%	-0.9%	-10.0%	-5.9%	0.3%	2.9%	2.5%	0.5%	-7.1%	-9.7%	-3.2%
CPKC							-1.1%	19.6%	-0.5%	-5.7%	-4.0%	0.1%	10.1%	7.5%	5.7%	-2.3%	-4.9%	2.3%
CSX	-5.3%	-6.6%	-1.1%	-20.5%	-3.0%	3.9%	1.0%	26.6%	2.7%	-1.8%	-2.0%	0.2%	1.5%	-1.8%	-0.8%	-3.0%	-2.3%	-0.1%
NSC	-5.8%	-9.2%	-11.4%	-25.6%	-7.0%	-1.2%	2.9%	25.5%	-0.3%	-3.6%	-4.5%	-3.3%	-2.1%	-1.3%	-0.1%	-5.6%	-2.2%	2.6%
UNP	-8.1%	-11.1%	-7.0%	-19.6%	-4.0%	2.9%	-0.7%	21.9%	0.0%	-3.9%	4.1%	-1.4%	3.2%	0.8%	-1.4%	-1.8%	-2.7%	0.5%
Total	-4.1%	-7.7%	-1.2%	-16.2%	-1.9%	6.9%	2.5%	22.3%	1.2%	-4.4%	-2.4%	-2.1%	0.8%	-1.5%	-2.2%	-5.6%	-4.3%	0.4%

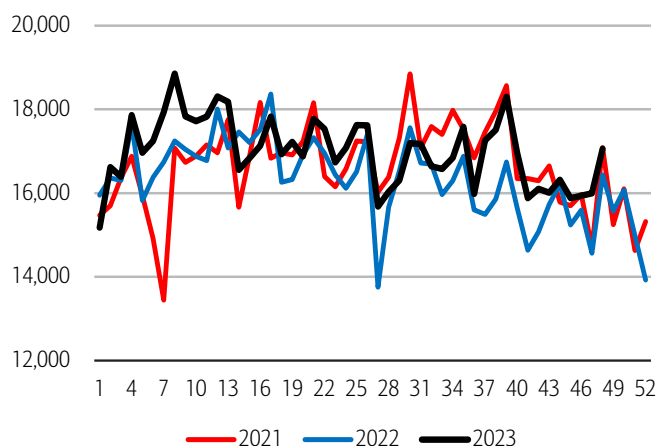
Source: BofA Global Research and Association of American Railroads.

Note: The total for 4Q23 is an average of the estimates; CPKC Reinstated data from 2020.

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Selected Segments Weekly Carloads**Exhibit 7: Metal Carloads**

Metal Carloads were 17,060 in Week 48, up 3.8% Y-Y

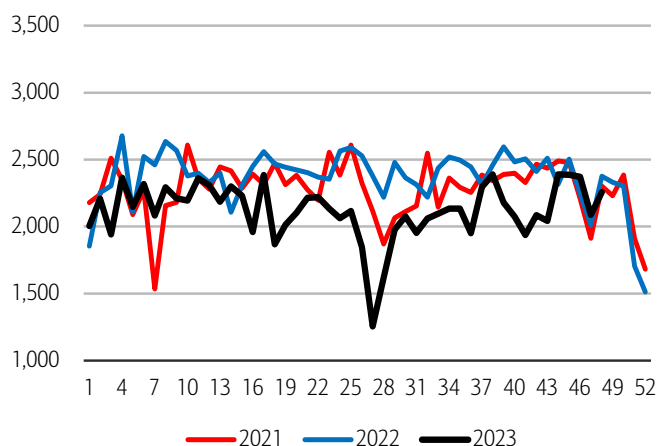


Source: BofA Global Research and Company data.

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Exhibit 8: Forest Product Carloads

Forest Product Carloads were 2,257 in Week 48, down 5.0% Y-Y



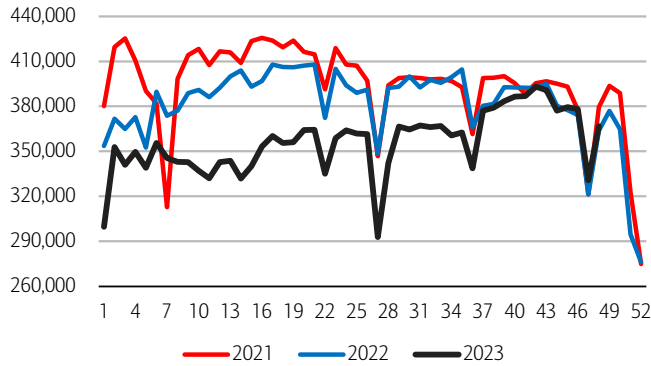
Source: BofA Global Research and Company data.

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Selected Segments Weekly Carloads

Exhibit 9: Intermodal Carloads

Intermodal Carloads were 366,690 in Week 48, up 0.8% Y-Y

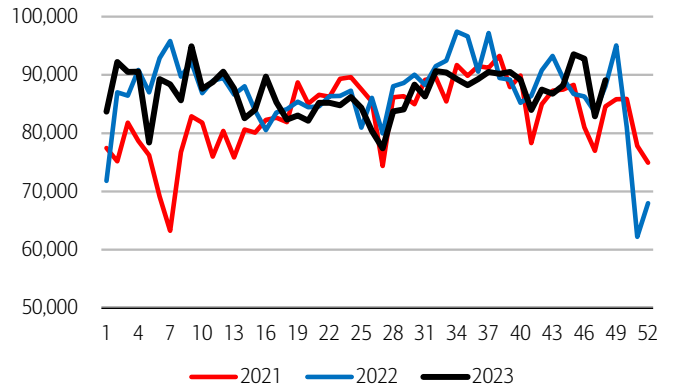


Source: BofA Global Research and Company data.

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Exhibit 10: Coal Carloads

Coal Carloads were 89,120 in Week 48, up 1.2% Y-Y

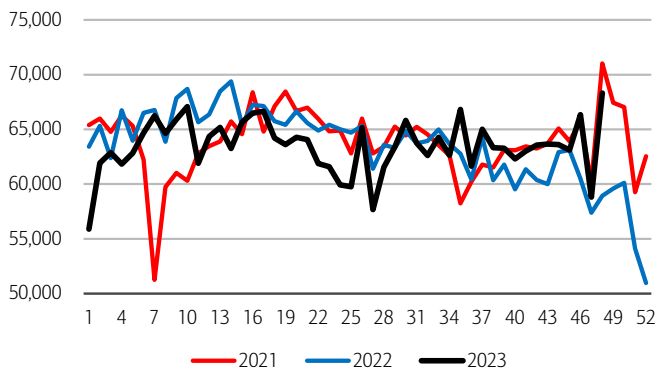


Source: BofA Global Research and Company data.

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Exhibit 11: Chemical Carloads

Chemical Carloads were 68,310 in Week 48, up 15.9% Y-Y

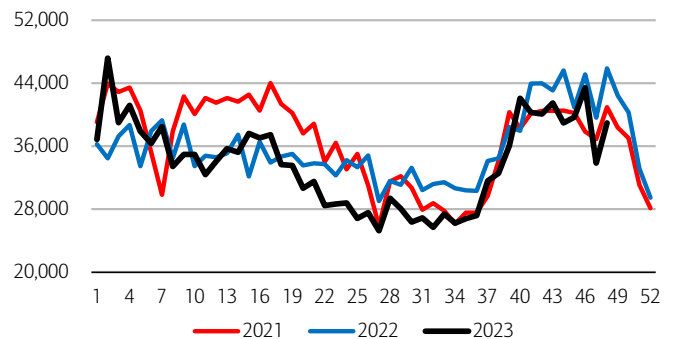


Source: BofA Global Research and Company data.

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Exhibit 12: Grain Carloads

Grain Carloads were 38,950 in Week 48, down 15.1% Y-Y

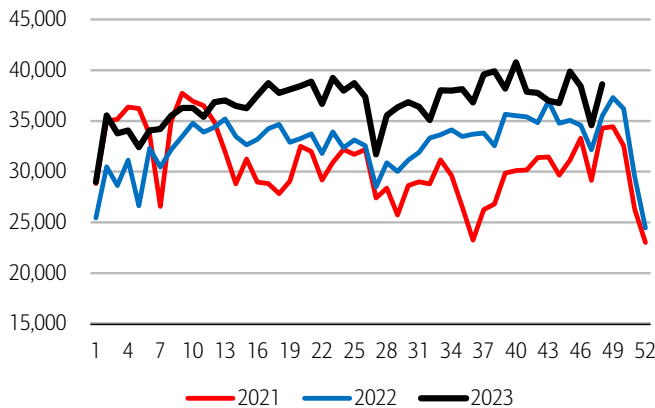


Source: BofA Global Research and Company data.

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Exhibit 13: Auto Carloads

Auto Carloads were 38,623 in Week 48, up 8.8% Y-Y

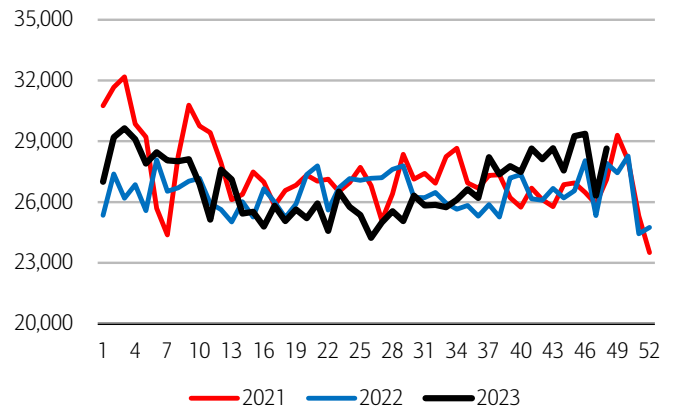


Source: BofA Global Research and Company data.

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Exhibit 14: Petroleum Products Carloads

Petroleum Products Carloads were 28,635 in Week 48, up 2.6% Y-Y



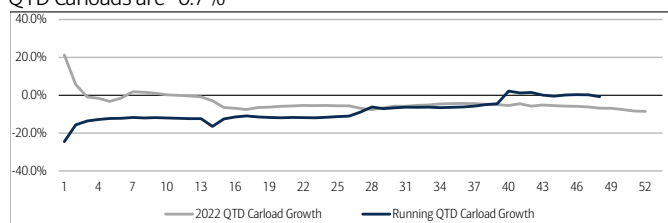
Source: BofA Global Research and Company data.

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Selected Segments Weekly Carloads

Exhibit 15: BNSF Carloads

QTD Carloads are -0.7%

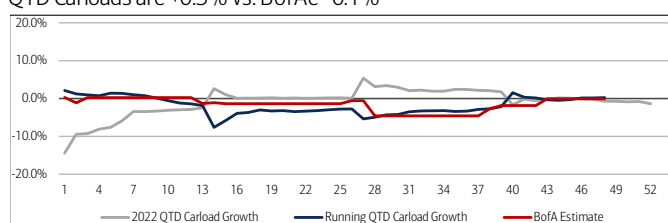


Carloads	Intermodal	Automotive	Industrial	Coal	Agriculture	Total Carloads
2023 Week 48	82,238	4,819	26,747	27,882	20,245	161,931
2022 Week 48	94,077	4,628	27,389	29,699	21,456	177,249
4Q23 QTD	859,964	50,817	271,094	249,663	197,001	1,628,539
4Q22 QTD	849,918	43,666	271,914	270,630	204,283	1,640,411
4Q QTD yoy % Chng	1.2%	16.4%	-0.3%	-7.7%	-3.6%	-0.7%

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Exhibit 17: CSX Carloads

QTD Carloads are +0.3% vs. BofAe -0.1%

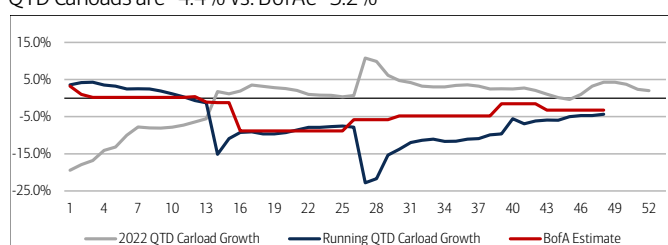


Carloads	Coal	Intermodal	Automotive	Food Products	Metals & Equipment	Forest Products	Chemicals & Petrol.	Fertilizers	Total Carloads
2023 Week 48	15,676	56,276	8,342	8,405	6,026	4,894	14,949	1,642	123,983
2022 Week 48	13,965	54,497	7,286	10,222	5,380	5,558	14,964	2,289	122,620
4Q23 QTD	136,202	501,955	68,893	77,665	51,024	40,804	126,523	16,080	1,092,461
4Q22 QTD	128,550	513,787	62,935	80,747	47,918	43,623	126,042	18,431	1,089,674
4Q QTD yoy % Chng	6.0%	-2.3%	9.5%	-3.8%	6.5%	-6.5%	0.4%	-12.8%	0.3%
4Q BofA estimate	-0.5%	-4.0%	12.0%	3.0%	-1.0%	-3.0%	3.0%	3.0%	-0.1%

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Exhibit 19: CNI Carloads

QTD Carloads are -4.4% vs. BofAe -3.2%

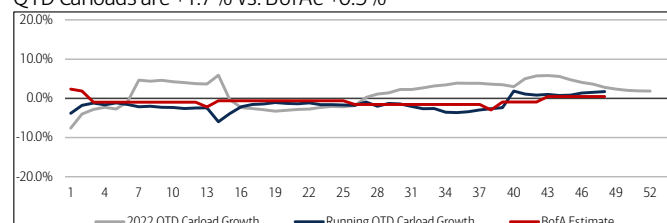


Carloads	Grain & Fertilizer	Forest & Paper	Coal & Coke	Intermodal	Automotive	Petrol. & Chemicals	Metals & Minerals	Total Carloads
2023 Week 48	12,661	6,336	10,686	42,442	4,741	14,116	17,633	108,615
2022 Week 48	15,529	6,589	9,129	42,824	4,577	12,840	18,924	110,413
4Q23 QTD	127,393	54,916	90,771	357,596	42,979	123,817	166,677	964,148
4Q22 QTD	138,761	59,275	92,541	402,089	37,806	111,851	165,961	1,008,283
4Q QTD yoy % Chng	-8.2%	-7.4%	-1.9%	-11.1%	13.7%	10.7%	0.4%	-4.4%
4Q BofA estimate	-5.0%	-10.0%	-1.0%	-10.0%	15.0%	8.0%	3.5%	-3.2%

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Exhibit 16: Union Pacific Carloads

QTD Carloads are +1.7% vs. BofAe +0.5%



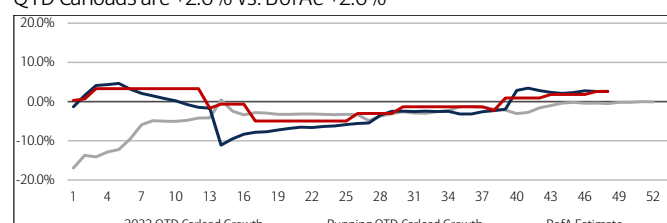
Carloads	Grain & Grain Products	Fertilizer	Coal & Renewable	Industrial Chemicals & Plastics	Metals & Minerals	Forest Products	Energy Specialized Markets	Automotive	Intermodal	Total Carloads
2023 Week 48	16,042	3,885	16,355	12,965	12,983	4,681	13,169	16,545	63,665	164,051
2022 Week 48	16,489	3,776	18,006	12,638	14,846	4,491	12,178	14,925	57,610	158,990
4Q23 QTD	140,426	33,835	151,365	108,197	125,757	39,074	115,246	141,672	547,507	1,439,592
4Q22 QTD	141,995	32,443	155,638	107,656	131,840	38,984	106,202	137,467	527,867	1,415,133
4Q QTD yoy % Chng	-1.1%	4.3%	-2.7%	1.4%	-4.6%	0.2%	8.5%	3.1%	3.7%	1.7%
4Q BofA estimate	3.0%	-0.5%	-9.0%	0.3%	-4.0%	2.0%	7.0%	4.0%	1.5%	0.5%

Food&Refrig is up 1.3% for 4QTD vs 1% BofA Estimate
Bulk is down -1.1% for 4QTD vs -2.5% BofA Estimate
Industrial is up 1.2% for 4QTD vs 0.6% BofA Estimate
Premium is up 3.6% for 4QTD vs 2% BofA Estimate

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Exhibit 18: NSC Carloads

QTD Carloads are +2.6% vs. BofAe +2.6%

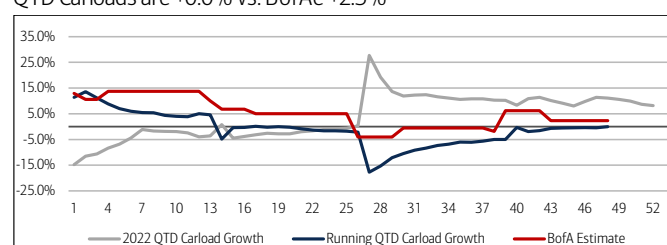


Carloads	Coal	Intermodal	Automotive	Ag, Forest & Consumer Prod.	Metals & Construction	Chemicals	Total Carloads
2023 Week 48	14,126	77,795	7,241	15,059	10,877	11,854	136,952
2022 Week 48	14,521	71,968	7,227	15,826	11,781	11,724	133,047
4Q23 QTD	119,658	713,033	63,855	124,210	97,862	99,705	1,218,324
4Q22 QTD	114,553	679,825	61,847	128,506	100,052	102,627	1,187,409
4Q QTD yoy % Chng	4.5%	4.9%	3.2%	-3.3%	-2.2%	-2.8%	2.6%
4Q BofA estimate	5.5%	4.5%	3.7%	-3.0%	-1.7%	-3.3%	2.6%

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Exhibit 20: CPKC Carloads

QTD Carloads are +0.0% vs. BofAe +2.3%



Carloads	Grain	Coal	Potash	Fertilizer & Sulphur	Forest Products	Chem/Plastics	Minerals/Consumer	Automotive	Intermodal	Total Carloads
2023 Week 48	11,410	10,322	4,485	1,476	3,039	11,569	10,321	4,886	34,116	91,624
2022 Week 48	13,200	7,829	2,984	1,527	3,200	11,700	10,382	4,024	33,666	88,512
4Q23 QTD	105,463	93,728	29,001	12,364	25,139	99,102	93,075	42,306	321,511	821,689
4Q22 QTD	117,132	77,201	25,530	11,530	26,837	100,321	93,738	37,877	331,415	821,681
4Q QTD yoy % Chng	-10.0%	21.4%	13.6%	7.2%	-6.7%	-1.2%	-0.7%	11.7%	-3.0%	0.0%
4Q BofA estimate	3.0%	17.0%	11.0%	2.5%	-2.0%	1.0%	2.0%	9.5%	-2.0%	2.3%

Source: BofA Global Research estimates, Association of American Railroads, and Company reports
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Diesel Fuel Prices: -1.3% sequentially

Diesel fuel prices were down 1.3% from last week, to \$4.09 for week 48 of 2023. Prices were above \$4.00 for the 19th consecutive week, while posting the ninth downtick over the last eleven weeks. The 4Q23 average for on-highway diesel is at \$4.36/gallon, down 14% y-y from \$5.07 in 4Q22, while up 3% y-y sequentially from 3Q23's \$4.24.

WTI crude oil futures closed at \$72.32, down 5.4% from last week's \$76.41. It was the ninth weekly downtick in 11 weeks, as WTI closed at its lowest level QTD and remains below \$80 for the fifth consecutive week. The 4Q23 average is \$80.89, down 2% from 4Q22's \$82.53 average, and down 1% from 3Q23's \$82.08. We target \$88 and \$90 for 4Q23 and 2024.

Brent crude oil futures closed at \$77.20, down 5.5% from last week's \$81.68. The 4Q23 average is \$84.90, down 4% from 4Q22 average of \$88.56, and down 1% from 3Q23's average of \$85.92.

The Brent to WTI gap is \$4.88, down from last week's \$5.27. The current spread is down 19% from the 4Q22 avg. of \$6.03.

Natural Gas futures closed at \$2.71 on December 5th, flat with last Tuesday's level. Nat Gas trends below \$3.00 for the third consecutive week. The 4Q23 average is \$3.05, down 50% from the 4Q22 average of \$6.13.

Exhibit 21: Fuel surcharges

Surcharges were mixed across the board (TL, LTL, Air)

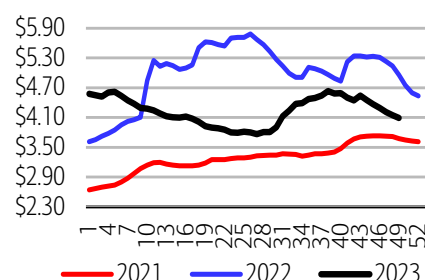
	Week 47 11/22/23	Week 48 11/29/23	Week 49 12/6/23
ARCB - LTL	34.8%	34.0%	33.5%
XPO - LTL	36.8%	36.3%	35.3%
ARCB - TL	69.6%	68.0%	67.0%
XPO - TL	73.5%	72.5%	70.5%
FDX - Express	16.50%	16.50%	16.25%
UPS - Express	21.00%	21.00%	20.25%
FDX - Ground	15.50%	15.25%	15.00%
UPS - Ground	15.00%	14.75%	15.25%
	Sep-23	Oct-23	Nov-23
UP (standard)	\$0.36	\$0.46	\$0.50
y-y % change	-47%	-22%	-14%
UP (coal)	\$0.36	\$0.46	\$0.50
y-y % change	-47%	-22%	-14%
CSX	\$0.48	\$0.60	\$0.65
y-y % change	-45%	-21%	-13%
CPKC	\$0.44	\$0.56	\$0.61
y-y % change	-48%	-22%	-15%

Source: BofA Global Research and company reports.

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Exhibit 22: National Diesel Fuel Prices

Diesel fuel prices: \$4.09 for week 47 of 2023

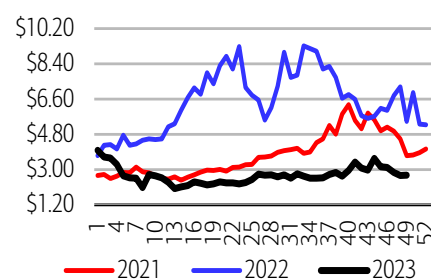


Source: BofA Global Research, DOE, Bloomberg

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Exhibit 23: US Nat Gas Price Per MMBtu.

Futures closed at \$2.71 on December 5th



Source: BofA Global Research, DOE, Bloomberg

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Exhibit 24: Brent to WTI Spread

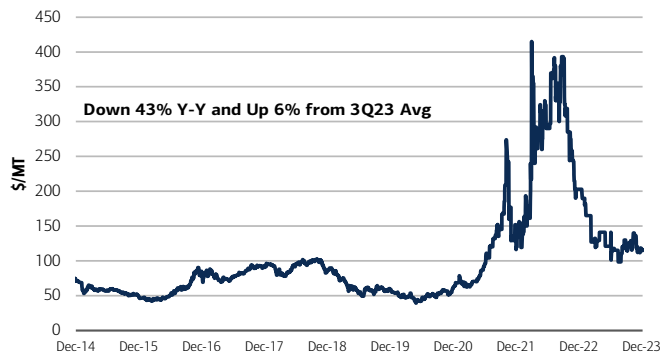
The Brent to WTI gap is \$4.88



Source: BofA Global Research, DOE, Bloomberg

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Exhibit 25: Thermal Coal, Europe Coal 6000kcal CIF ARA ForwardPrice = \$116.50 on December 6th

Source: BofA Global Research and Bloomberg.

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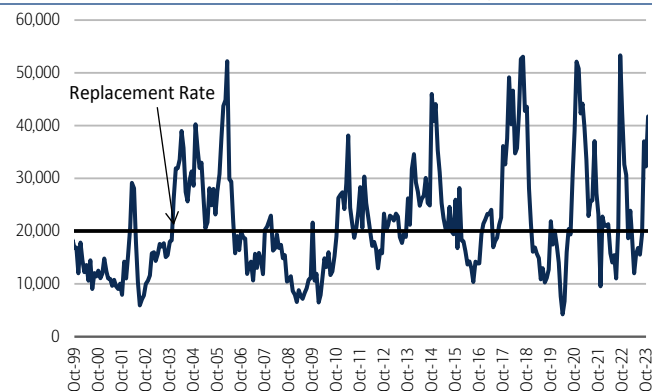
Exhibit 26: Australian Premium Coking Coal FuturesPrice = \$333.00 on December 6th

Source: BofA Global Research and Bloomberg.

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Exhibit 27: Class 8 Truck net orders

Prelim. November Class 8 Net Orders at 41,700 vs 32,287 in October



Source: BofA Global Research estimates and American Commercial Transportation Research (ACT)

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Prelim. October Class 8 Net Orders at 41,700 (from 32,287 in October)

Preliminary Class 8 Net Orders were 41,700 in November, well above the 20k replacement level for the third consecutive month and fourth time YTD. This was the highest number of orders since October 2022. November orders were up 28% year-over-year, reversing October's 24% decline. On a sequential basis, orders were up 29%, reversing October's 13% decrease. Orders are now up 83% from the past 12-month average.

Exhibit 28: Class 8 Truck net orders

Final Class 8 Net Orders at 32,287 in October (Preliminary was 31,900)

October Class 8 Final Net Orders at 32,287**CLASS 8 NET ORDERS**

	2018	2019	2020	2021	2022	2023
JAN	49,136	16,105	17,204	42,307	21,041	18,624
FEB	40,271	16,854	14,040	44,190	21,006	23,790
MAR	46,593	15,783	7,632	40,049	21,301	19,010
APR	34,735	14,859	4,251	33,353	15,820	12,016
MAY	35,721	10,886	6,690	23,072	14,081	15,623
JUN	42,213	12,979	16,010	25,824	15,444	16,773
JUL	52,618	10,298	20,359	25,876	11,025	15,573
AUG	53,040	11,119	19,389	37,096	20,892	19,513
SEP	42,781	12,692	30,768	27,323	53,271	36,974
OCT	43,526	21,864	39,089	23,391	42,359	32,287
NOV	28,114	17,483	52,104	9,902	32,630	
DEC	21,381	20,073	50,760	20,651	30,623	
Year Total	490,129	180,995	278,296	353,034	299,493	210,252

Source: American Commercial Transportation Research (ACT)

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Exhibit 29: Class 8 Truck production

Class 8 Truck Production at 27,999 in October

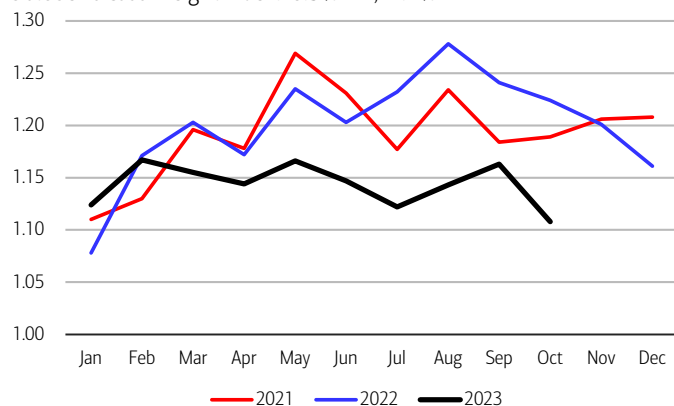


Source: BofA Global Research estimates and American Commercial Transportation Research (ACT)
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Class 8 Truck Production at 27,999 Down 1% Sequentially

Exhibit 30: Cass Freight Shipments Index

October's Cass Freight Index: -9.5% Y-Y, -4.7% M-M



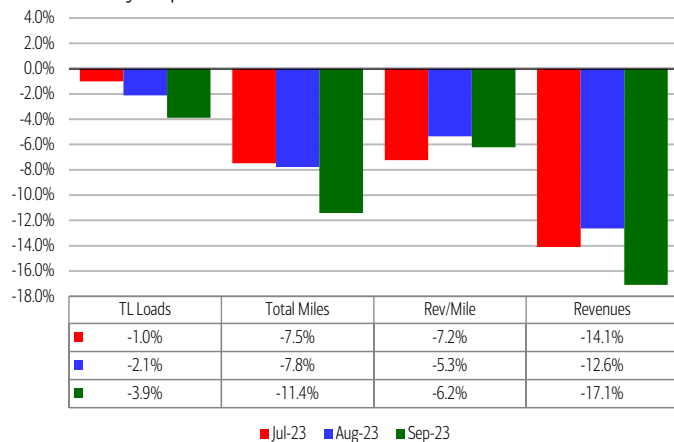
Source: Cass Information Systems, Inc.

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Cass Freight Index: -9.5% Y-Y, -4.7% M-M

Exhibit 31: Truck Activity

Truck Activity: September Loads -3.9% Y-Y



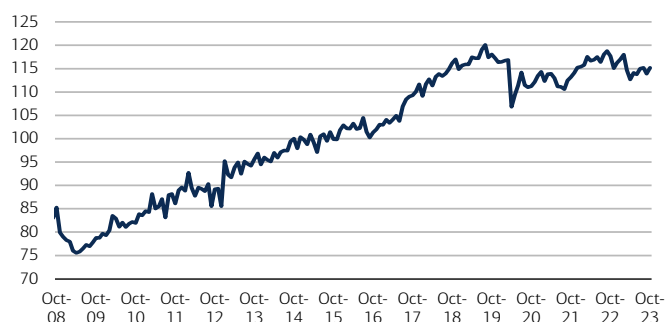
Source: American Trucking Association

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Truck Activity September Loads -3.9% Y-Y

Exhibit 32: Historical ATA Truck Tonnage Index

Preliminary October Truck Tonnage: -2.1% Y-Y, +1.1% M-M



Source: American Trucking Association

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Exhibit 33: Historical ATA Truck Tonnage Index

September Truck Tonnage: -4.1% Y-Y, -1.1% M-M

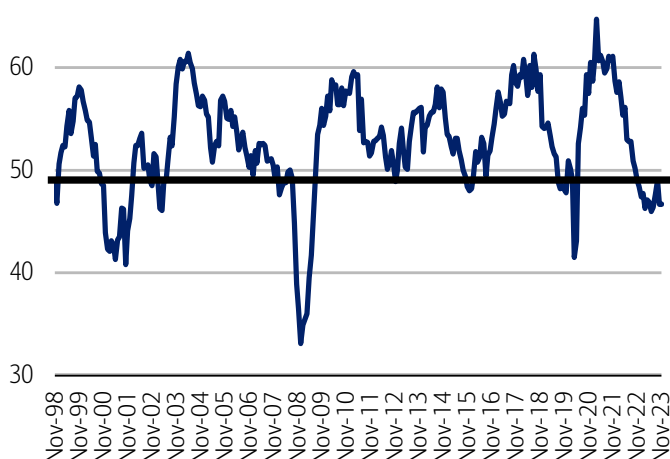
	2017	2018	2019	2020	2021	2022	2023
JAN	103.2	109.5	116.1	117.0	114.2	115.5	117.0
FEB	104.2	111.9	116.1	116.9	112.5	116.1	118.0
MAR	103.5	112.7	116.7	117.9	114.5	118.8	114.7
APR	104.3	111.9	117.6	107.3	113.7	116.5	112.7
MAY	105.0	113.3	117.4	109.7	112.9	117.1	114.1
JUN	103.7	113.8	117.1	111.1	111.3	117.5	113.8
JUL	106.9	113.0	118.3	113.1	110.6	115.8	115.0
AUG	108.2	113.7	119.7	110.9	110.8	118.2	115.2
SEP	108.8	114.7	117.3	111.0	112.7	119.1	113.9
OCT	109.2	116.0	117.9	111.1	113.1	117.6	
NOV	109.9	116.8	116.9	111.8	113.8	114.8	
DEC	111.6	114.7	116.1	113.1	114.9	116.2	
Avg.	106.5	113.5	117.3	112.6	112.9	116.8	114.9

Source: American Trucking Association

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Exhibit 34: ISM Manufacturing Index

November ISM Manufacturing Index 46.7, Flat sequentially



Source: BofA Global Research and Bloomberg.

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Prelim. October Truck Tonnage: -2.1% Y-Y, +1.1% M-M**September Truck Tonnage: -4.1% Y-Y, -1.1% M-M****ISM Manufacturing Index 46.7, Flat seq.**

Unchanged, 46.7 from 46.7: The Institute of Supply Management's Manufacturing Index was 46.7 in November, flat with October's report. Economic activity in the manufacturing sector contracted for the 13th consecutive month, and the overall economy remained in contraction for the second month after one month of weak expansion according to ISM. Prices Index (+4.8 to 49.9) indicates decreasing raw materials prices for the seventh consecutive month, while Production Index (-1.9 to 48.5) indicates contraction. New orders Index (+2.8 to 48.3) indicates order contractions for the 15th consecutive month, and the Employment Index (-1.0 to 45.8) indicated contraction for the fifth month over the last six. Exports Index (-3.4 to 46.0) indicates contraction, and the Imports Index (-1.7 to 46.2) indicates contraction for the 13th consecutive month. Customer Inventories Index (+2.2 at 50.8) indicates levels are now perceived as too high, and Backlog of orders Index (-2.9 to 39.3) indicates contraction for the 14th consecutive month. The ISM had 3 upticks and 5 downticks in November and also in October, 5 upticks and 3 downticks in September, and 5 upticks, 2 downticks and 1 flat post in August.

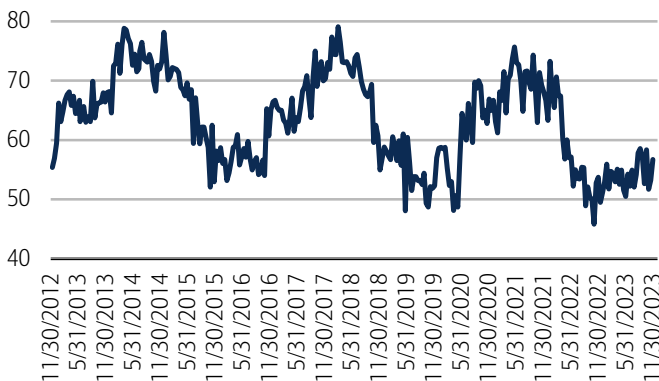
Exhibit 35: BofA Truckload Diffusion IndicatorDemand Indicator at 49.0 from 44.4 (bi-weekly Issue #297 on Nov 30th)

Source: BofA Global Research estimates

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Exhibit 36: Shippers' 6-12 months outlook for freight demand

L-T Demand Indicator at 56.7, up 7% sequentially

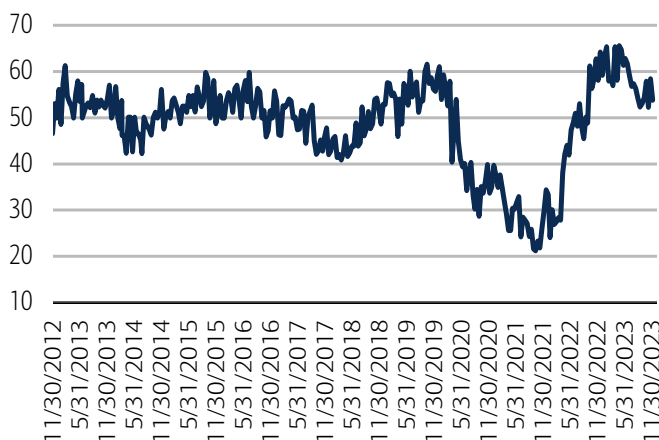


Source: BofA Global Research estimates

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Exhibit 37: Shippers' view of inventory levels

Inventory Indicator at 53.8, down 8% sequentially from last issue.



Source: BofA Global Research estimates

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**BofA TRUCK SHIPPER SURVEY
Survey Says: Demand (49.0)**

This week, our proprietary bi-weekly **BofA Truckload Demand Indicator** for shippers' 0- to 3-month freight demand outlook **increased to 49.0 from 44.4** last survey, rebounding from last issue, which was the 3rd lowest level since 2020. The Demand Indicator remains at/below 50 for the 22nd time over the past 27 issues and is well below the 54.2 average level of the '12, '15, '19 Freight Recession periods. The Demand Indicator was up 10% sequentially and 3% year-year, its 6th year-year uptick in 8 issues. Rail carloads fell 0.1% year-year this week, its 37th downtick in 42 weeks. Dry van spot rates ex-fuel was \$1.29/mile, up from \$1.28/mi last week, and still above the \$1.21-\$1.26 band it had been in for 12 weeks prior. Of the respondents, 15% had a positive short-term demand outlook, up from 13% last survey; Neutral outlooks were 63%, up from 54%, and Negative outlooks were 21%, down from 33% last survey. In the week of Nov 30th, we surveyed 52 shippers for views on demand, supply, pricing, inventory.

Inventory view decreases 8% after Black Friday

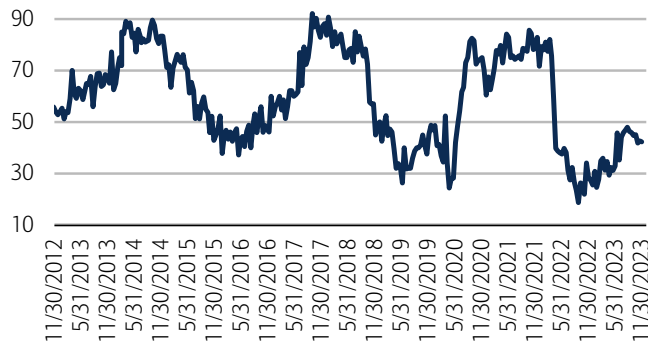
The Rate Indicator, or shippers' view on truck rates, was flattish at 42.3 from 42.6, down 1% sequentially, as expectations of rate increases was relatively unchanged. **The Inventory Indicator** decreased to 53.8 from 58.3 last issue, down 8% sequentially, as shippers see lower inventories after Black Friday sales. **The Truck Capacity Indicator**, which measures shippers' views of available truckload capacity, was down slightly at 62.5 from 63.0 last survey, as shippers see slightly lower carrier capacity.

Rates view flat

With respect to rates, 25% of shippers expect rates to fall, from 26% last issue, 65% expect flat pricing, from 63% last issue, and 10% expect rates to rise, from 11% last issue. On capacity, 35% expect capacity to rise, from 37% last issue, 56% expect capacity to remain flat, from 52% last issue, 10% expect capacity to be lower, from 11% last issue. **SHIPPER COMMENTS:** An Industrial Shipper noted holiday tightness in the Southeast. It believes it may see slight increases in spot market rates in 1Q. A Consumer Shipper sees contract rates staying flat, however sees increases in spot rates. A Retail Shipper noted that its general merchandise sales are very soft, yet food is staying consistent. An Industrial Shipper noted the market remains flat. (See survey for additional commentary).

Exhibit 38: Shippers' view of Trucking rates over the next 3 months

Rate Indicator at 42.3, -1% sequentially

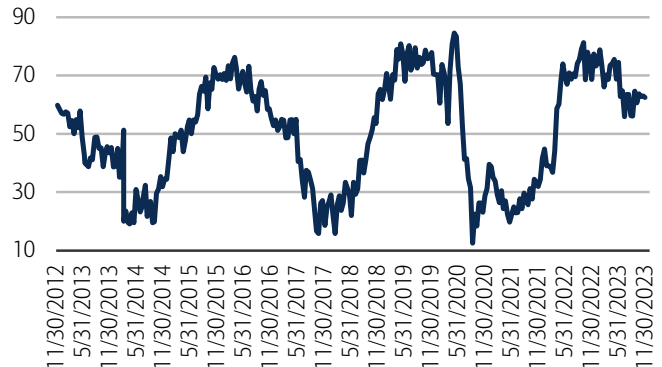


Source: BofA Global Research estimates.

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Exhibit 39: Shippers' view of Capacity over the next 3 months

Capacity Indicator slightly higher at 62.5, above its historic 50 avg



Source: BofA Global Research estimates.

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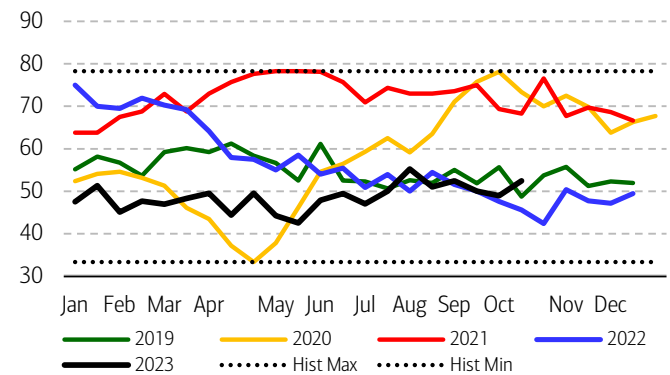
Exhibit 40: BofA Truckload 0-3 month Demand (Diffusion) Indicator

Diffusion indicator month-by-month levels

	2019		2020		2021		2022		2023	
Jan	1/3	55.1	1/2	52.3	1/14	63.8	1/13	75.0	1/12	47.5
	1/17	58.1	1/16	54.1	1/28	63.8	1/27	70.0	1/26	51.3
Feb	1/31	56.7	1/30	54.6	2/11	67.5	2/10	69.5	2/9	45.1
	2/14	53.7	2/13	53.1	2/25	68.8	2/24	71.9	2/23	47.6
Mar	2/28	59.2	2/27	51.3	3/11	72.9	3/10	70.3	3/9	46.9
	3/14	60.1	3/12	46.1	3/25	68.8	3/24	69.2	3/23	48.3
Apr	3/28	59.2	3/26	43.5	4/8	73.0	4/7	64.1	4/6	49.5
	4/11	61.2	4/9	37.2	4/22	75.7	4/21	58.0	4/20	44.4
May	4/25	58.3	4/23	33.3	5/6	77.6	5/5	57.5	5/4	49.5
	5/9	56.6	5/7	37.8	5/20	78.3	5/19	55.0	5/18	44.3
	5/23	52.5	5/21	46.2	6/3	78.3	6/2	58.5	6/1	42.6
Jun	6/6	61.1	6/4	54.6	6/17	78.1	6/16	54.0	6/15	47.9
	6/20	52.5	6/18	56.4	7/1	75.7	6/30	55.5	6/29	49.4
Jul	7/4	52.3	7/2	59.3	7/15	70.9	7/14	50.9	7/13	47.1
	7/18	50.6	7/16	62.5	7/29	74.3	7/28	53.9	7/27	50.0
Aug	8/1	52.6	7/30	59.1	8/12	73.0	8/11	50.0	8/10	55.2
	8/15	51.9	8/13	63.5	8/26	73.0	8/25	54.5	8/24	51.0
Sep	8/29	55.0	8/27	71.1	9/9	73.6	9/8	51.6	9/7	52.4
	9/12	51.9	9/10	75.8	9/23	75.0	9/22	50.0	9/21	50.0
Oct	9/26	55.6	9/24	78.1	10/7	69.4	10/6	47.6	10/5	48.9
	10/10	48.7	10/8	73.3	10/21	68.3	10/20	45.6	10/19	52.5
	10/24	53.8	10/22	70.0	11/4	76.6	11/3	42.4	11/2	47.7
Nov	11/7	55.7	11/5	72.5	11/18	67.7	11/17	50.4	11/16	44.4
	11/21	51.3	11/19	69.9	12/2	69.7	12/1	47.8	11/30	49.0
Dec	12/5	52.3	12/3	63.8	12/16	68.6	12/15	47.2	12/14	
	12/19	51.9	12/17	66.3	12/30	66.7	12/29	49.4	12/28	
			12/31	67.7						

Source: BofA Global Research estimates

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Exhibit 41: Demand (Diffusion) Indicator for 0-3-month demand outlook on stack basis (2019-2023)Demand Indicator to 49.0 (bi-weekly Issue #297 on November 30th)

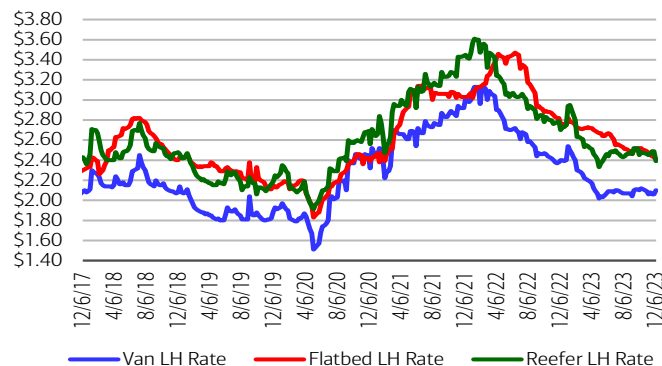
Source: BofA Global Research estimates

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Disclaimer: The indicator identified as BofA Truckload Diffusion Indicator in this report is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

Exhibit 42: Month-to-Dated Run Rate

Van Rate = \$2.10 Flatbed Rate = \$2.41 & Reefer Rate = \$2.39

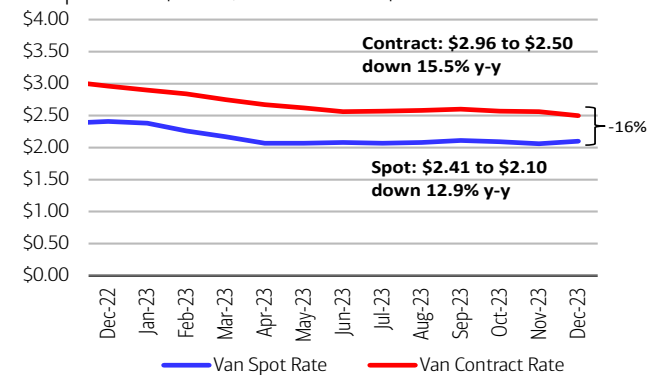


Source: DAT (Dial-A-Truck)

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Exhibit 43: Monthly Van Spot Rate vs. Contract Rate

Van Spot Rate = \$2.10 & Contract Rate = \$2.50

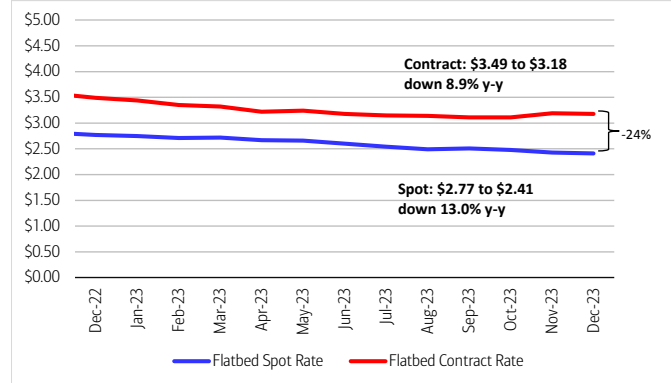


Source: DAT (Dial-A-Truck)

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Exhibit 44: Monthly Flatbed Spot Rate vs. Contract Rate

Flatbed Spot Rate = \$2.41 & Contract Rate = \$3.18

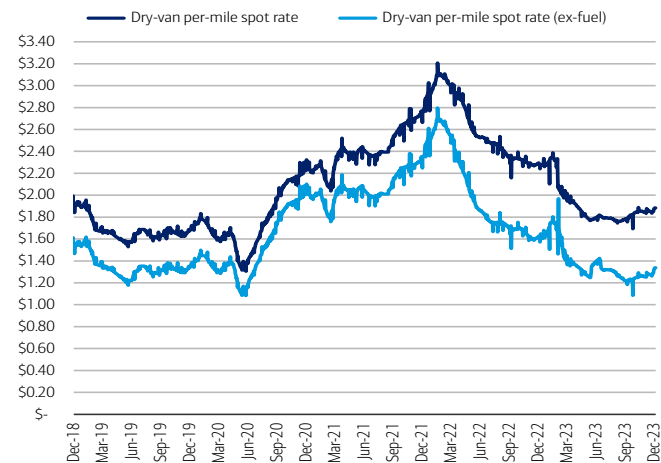


Source: DAT (Dial-A-Truck)

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Exhibit 46: Truckstop.com Spot Rates

Dry-Van Spot = \$1.88 Dry-Van (ex-fuel) = \$1.34

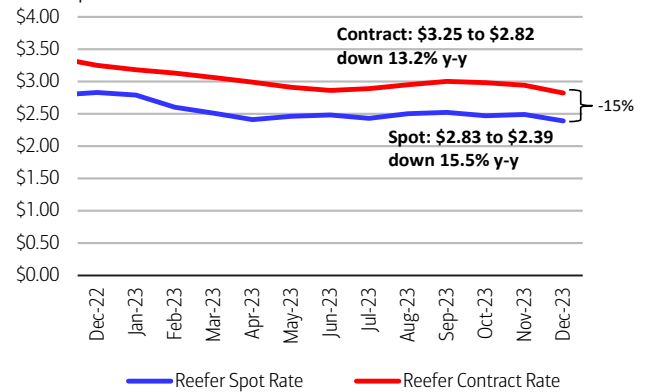


Source: Truckstop.com, Bloomberg

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Exhibit 45: Monthly Reefer Spot Rate vs. Contract Rate

Reefer Spot Rate = \$2.39 & Contract Rate = \$2.82



Source: DAT (Dial-A-Truck)

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TruckStop Spot Rates: Dry-Van Spot = \$1.88, Dry-Van (ex-fuel) = \$1.34

Truckstop.com's Dry van spot rates ex-fuel were \$1.34/mi for the week ending December 6, from \$1.29/mi the prior week (November 29) and are down 18% YTD (from \$1.64/mi on Dec 31).

Truckstop.com's Dry van spot rates (fuel included) were \$1.88/mi for the week ending December 6, from \$1.85/mi the prior week (November 29) and are down 17% YTD (from \$2.28/mi on Dec 31).

Fuel represented \$0.55/mi, down from last week's \$0.56/mi and down from \$0.64 on Dec 31.

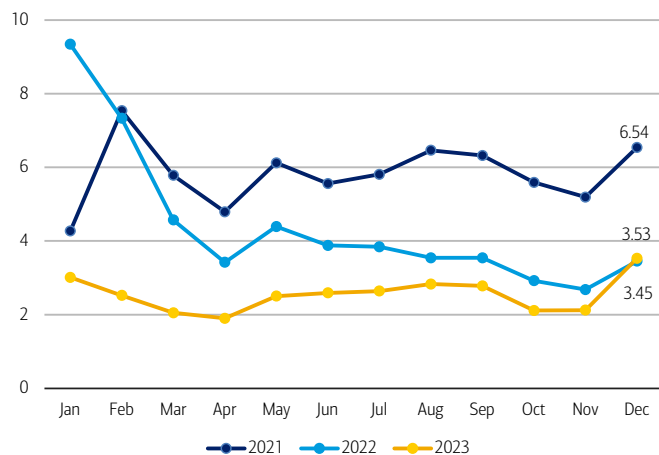
DAT Spot Dry-Van Load/Truck Ratio = 3.53

Weekly Update: DAT's (Dial-a-Truck) dry-van spot load-to-truck ratio was 3.53 for the week ended December 3, up from 1.56 (+126%) the prior week (November 26), and down from 4.49 (-21%) a year prior. Note the week ending November 26 included Thanksgiving Holiday.

Monthly Update: DAT's (Dial-a-Truck) dry-van spot load-to-truck ratio was 2.12 on average for the month of November, flat with 2.11 in October, and down from 2.68 (-21%) a year prior. December's Ratio stands at 3.53, first month up year-year since January 2022.

Exhibit 47: Van Load to Truck Ratio

November Load-to-Truck Ratio on average was 2.12, Flat M-M



Source: DAT (Dial-A-Truck), Bloomberg

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Exhibit 48: Top 10 US Ports Loaded Volumes

Top 10 Ports in October: +2.8% Y-Y, LA/LB +13.0% Y-Y

Top 10 U.S. Ports	2023 TEU's	2023 YTD Chg.	Sep-23 Y-Y %	Oct-23 Y-Y %	Sep-23 TEU's	Oct-23 TEU's
Los Angeles (18%)	4,750,717	-11%	22%	16%	513,244	493,731
Long Beach (16%)	4,185,642	-17%	12%	10%	510,174	453,373
Total LA/LB (35% of total US)	8,936,359	-14%	17%	13%	1,023,418	947,104
New York (17%)	4,408,300	-16%	-17%	-1%	439,412	492,780
Savannah (13%)	3,098,192	-13%	0%	-13%	311,423	332,072
Houston (11%)	2,650,898	0%	0%	0%	280,900	300,940
Norfolk (9%)	2,184,088	-8%	-7%	2%	211,588	238,788
Seaport Alliance (6%)	1,372,196	-11%	32%	13%	196,509	155,388
Charleston (7%)	1,603,838	-7%	-6%	-1%	153,627	181,674
Oakland (5%)	1,300,281	-13%	1%	-2%	134,185	142,255
Maryland (1%)	588,679	1%	1%	n/a	62,320	-
Total Top 10 (91.5% of US)	26,142,831	-9.5%	3.1%	2.8%	2,813,38	2,791,001
Vancouver	1,927,330	-12%	-10%	-4%	203,535	203,535
Prince Rupert	408,694	-28%	-28%	-25%	41,589	41,589

Source: Ports of Los Angeles, Long Beach, New York, Savannah, Norfolk, Oakland, Houston, Charleston, Vancouver, Maryland, and BofA Global Research estimates

Note: Due to Maryland's reporting schedule numbers are not included in Chgs. % and YTD metrics.

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Exhibit 49: Port of Los Angeles/Long Beach Vessels waiting to dock

On one-week moving average, vessels at anchor and loitering (given new queue system) were 9.8 on 12/06/23 (vs 9.4 on 11/29/23). On day-of-basis: 11 vs 9 (includes 11 vs 8 vessels at dock), or 0 vs 1 in queue alone.

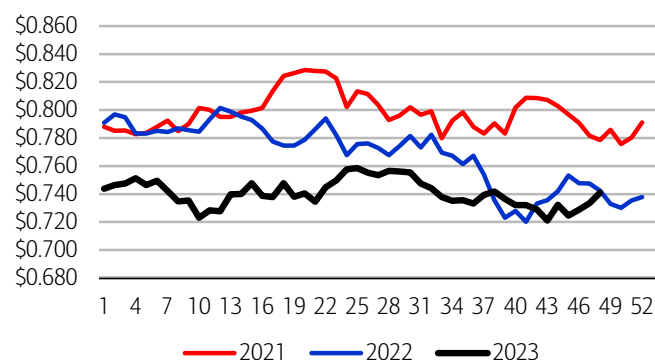


Source: BofA Global Research and Port of LA/Long Beach

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Canadian Dollar and Mexican Peso FX Rates**Exhibit 50: Price of 1 Canadian Dollar in US\$**

1 CAD = 0.741 US\$



Source: Bloomberg

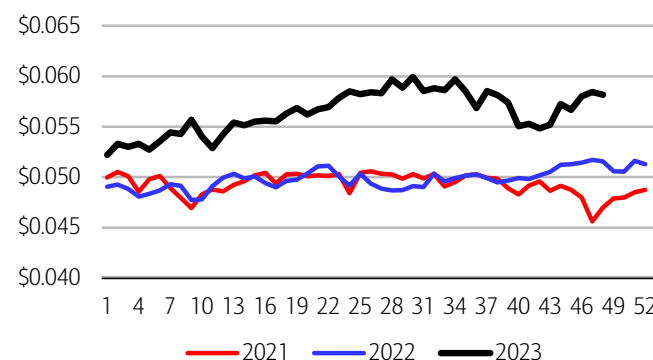
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Top 10 Ports in October: +2.8% Y-Y, LA/LB +13.0% Y-Y

October container volumes were up 2.8% year-year, in line with September's 3.1% increase at 9 of the 10 largest US ports that have reported volumes to-date (Maryland not incl.). Overall Port volumes were up for the second consecutive month, after 12 consecutive downticks. Of the 4 largest US ports, Savannah and New York were up sequentially, while Long Beach and Los Angeles declined. Savannah (Oct: 332.4k, up from Sep: 303.9k) and New York (492.7k, up from 439.4k) were up seq. Port of LB (Oct: 453.3k, down from Sep: 510.1k) and Port of LA (493.7k, down from 513.2k) were down seq. Of the 9 of 10 ports reporting to date, four declined year-year: Savannah (-13%), Oakland (-2%), Charleston (-1%), and New York (-1%). Despite The West Coast ports posting sequential downticks, both were still positive on a y-y basis, LA was up 16% and LB 10% y-y. On the East Coast, New York declined for the 13th consecutive month, yet this result improved vs. its average decline of 17%/month this year. Inclusive of October's increase, overall loaded container volumes year-to-date remain down 9.5%. For the Canadian ports, Vancouver (-4%) and Prince Rupert (-25%) declined.

Port of LA/Long Beach – Ships in queue – 0 on 12/06/23 (from 1 a week prior)**Exhibit 51: Price of 1 Mexican Peso in US\$**

1 MXN = 0.058 US\$



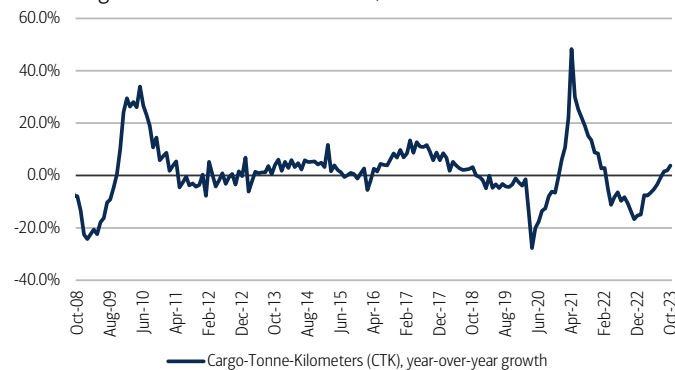
Source: Bloomberg

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Exhibit 52: IATA Volume year-over-year growth

IATA Freight Vols: +3.8% Y-Y in October, North America -1.8%

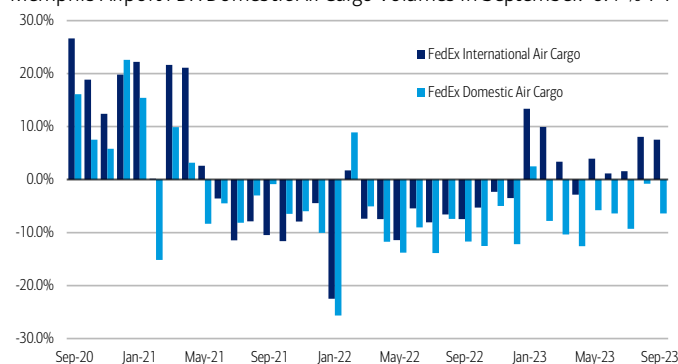


Source: International Air Transport Association

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Exhibit 53: FedEx Air Cargo Volumes at Memphis International Airport

Memphis Airport FDX Domestic Air Cargo Volumes in September: -6.4 % Y-Y

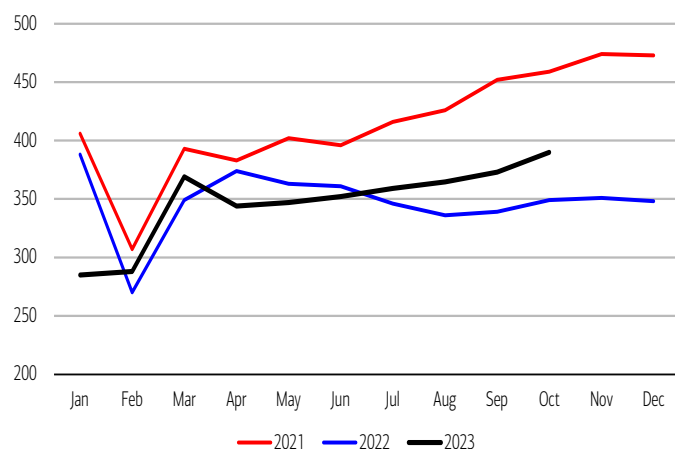


Source: BofA Global Research and Memphis International Airport Statistics

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Exhibit 54: Hong Kong Airport cargo (000 tons)

HKIA in October: +11.7% Y-Y, +4.6% M-M



Source: Hong Kong International Airport

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IATA Freight Vols: +3.8% Y-Y in October, North America -1.8%

Total air freight volumes (both domestic and international) as reported by global air freight carriers to the International Air Transport Association (IATA) were up 3.8% year-over-year in October, improving from September's 1.9% increase. This was the third consecutive uptick in volumes, following 17 months of declines. IATA remarked that the sustained annual growth in volumes since August highlights the ongoing recovery of the global air cargo market. All but one region, were up year-year, as Middle East (+10.9%), Asia Pacific (+7.6%), Latin America (+4.0%), Africa (+2.9%) and Europe (+1.0%) posted upticks. North America was the only region that declined (-1.8%) in October, and overall, the region posted the 20th downturn in the past 39 months.

Memphis Airport FDX Air Cargo Volumes in September: -6.4% Y-Y**Hong Kong Airport (HKIA): +11.7% Y-Y, +4.6% M-M**

Rail Performance Measures

Overall Takeaway: The 3 main service level metrics for Class I Rails improved both sequentially and on a year-over-year basis this week, as Velocity, Cars-On-Line, and Dwell Time all posted upticks. Compared to last year, metrics were up for the 28th time over the last 31 weeks. NSC (+8.8%) led the group in velocity this week, reversing last week's -1.0% decrease. CPKC (-1.1%) trailed the group for the second week, in line with last week's 1.6% decrease. BNSF has not reported yet.

Velocity (avg. speed of rail network, faster is better): Improved sequentially (+3.2%) and improved year-over-year (+3.7%).

Cars-on-Line (fewer cars-on-line is better): Improved sequentially (-1.2%) and improved year-over-year (-2.7%).

Terminal Dwell (lower is better): Improved sequentially (-4.0%) and improved year-over-year (-5.5%).

Exhibit 55: Rail Performance Metrics

Service levels improved sequentially and on a year-over-year basis

Rail Performance Measures

Velocity (avg. speed of rail network, faster is better)

	2023	2023	2022			% Seq Chg	% y-y Chg
(miles per hour)	Week 48	Week 47	Week 48	% Seq Chg	% y-y Chg		
CNI	19.9	19.9	19.6	0.0%	1.5%		
CPKC	18.7	18.9	17.4	-1.1%	7.5%		
CSX	18.7	18.0	18.1	3.9%	3.3%		
NSC	22.3	20.5	22.2	8.8%	0.5%		
UNP	26.1	25.1	24.6	4.0%	6.1%	Faster	Faster
BNSF (1)	26.8	26.8	26.9	0.0%	-0.4%	3.2%	3.7%
Average	21.1	20.5	20.4	3.2%	3.7%		

Cars On Line (fewer cars-on-line is better)

	2023	2023	2022			% Seq Chg	% y-y Chg
(no. of cars)	Week 48	Week 47	Week 48	% Seq Chg	% y-y Chg		
CNI	80,835	82,578	85,286	-2.1%	-5.2%		
CPKC	90,210	90,581	96,306	-0.4%	-6.3%		
CSX	121,132	122,614	127,852	-1.2%	-5.3%		
NSC	169,708	171,088	166,702	-0.8%	1.8%		
UNP	300,937	305,471	307,838	-1.5%	-2.2%		
BNSF (1)	246,739	246,739	251,361	0.0%	-1.8%	Better	Better
Average	152,564	154,466	156,797	-1.2%	-2.7%	-1.2%	-2.7%

Terminal Dwell Time (lower is better)

	2023	2023	2022			% Seq Chg	% y-y Chg
(time in hours)	Week 48	Week 47	Week 48	% Seq Chg	% y-y Chg		
CNI	6.7	6.6	7.1	1.5%	-5.6%		
CPKC	8.7	8.6	10.3	1.2%	-15.5%		
CSX	9.5	9.9	9.9	-4.0%	-4.0%		
NSC	24.0	25.7	23.4	-6.6%	2.6%		
UNP	21.5	22.5	23.8	-4.4%	-9.7%		
BNSF (1)	25.8	25.8	27.2	0.0%	-5.1%	Better	Better
Average	14.1	14.7	14.9	-4.0%	-5.5%	-4.0%	-5.5%

(1): Due the BNSF reporting schedule the reported data is delayed by one week and not included on the averages.

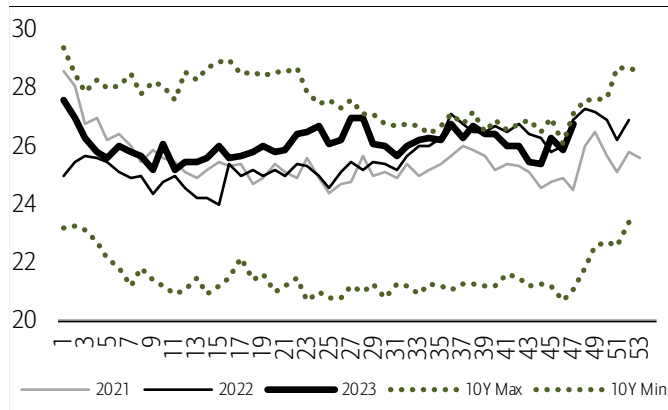
Source: BofA Global Research, company reports

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Weekly Rail Velocity Monitor

Exhibit 56: BNSF Velocity

BNSF velocity was 26.8 mph for week 47

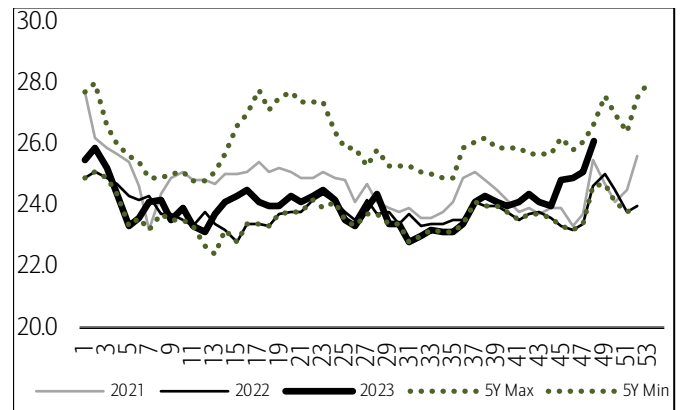


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 57: Union Pacific Velocity

UNP velocity was 26.1 mph for week 48



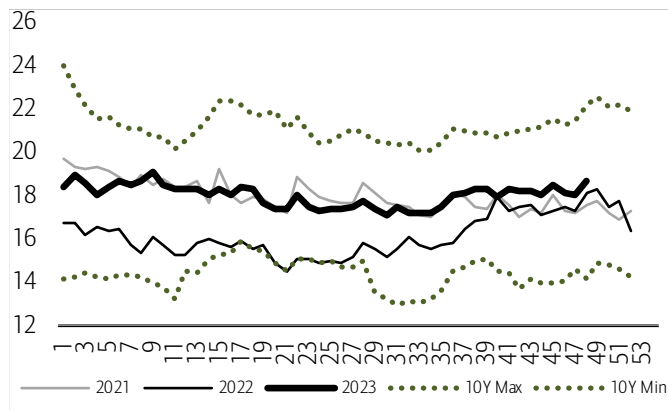
Source: Company reports, and Association of American Railroads.

UNP restated performance metrics, historical data available from 03/24/17

BofA GLOBAL RESEARCH

Exhibit 58: CSX Velocity

CSX velocity was 18.7 mph for week 48

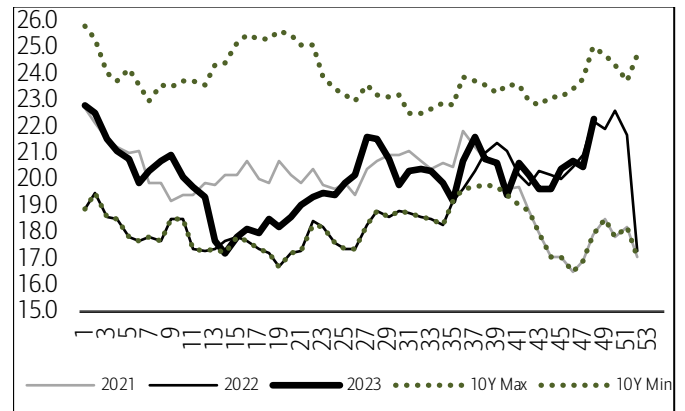


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 59: Norfolk Southern Velocity

NSC velocity was 22.3 mph for week 48

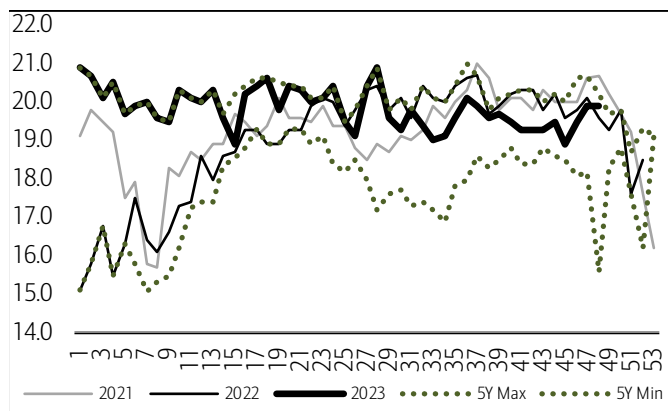


Source: Company reports, and Association of American Railroads.

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Exhibit 60: Canadian National Velocity

CNI velocity was 19.9 mph for week 48



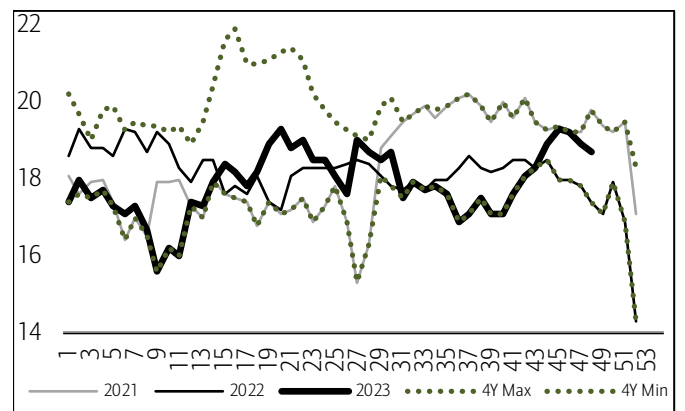
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 61: Canadian Pacific Kansas City Velocity

CPKC velocity was 18.7 mph for week 48



Source: Company reports, and Association of American Railroads.

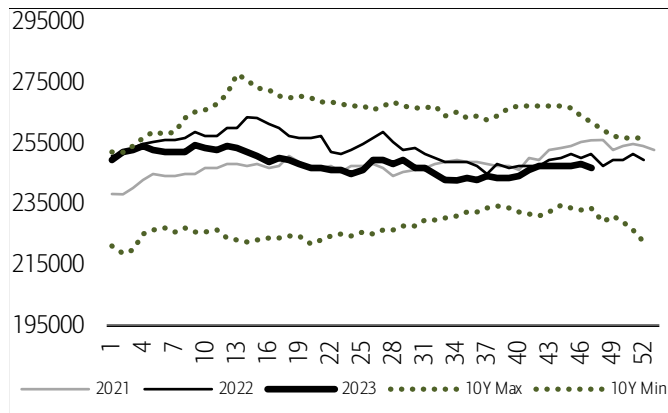
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Cars On-Line Monitor

Exhibit 62: BNSF Cars-On-Line

BNSF cars on line were 246,739 for week 47

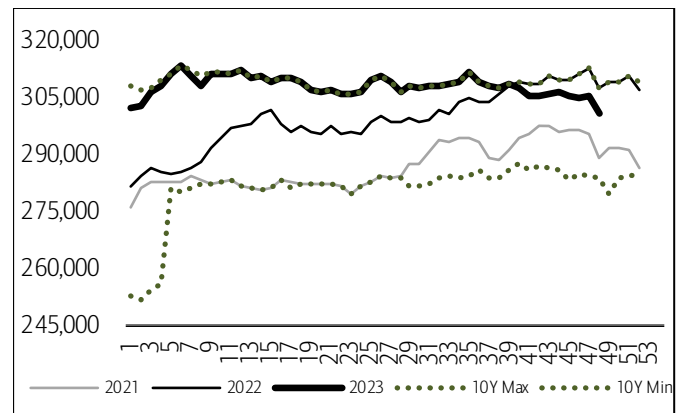


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 63: Union Pacific Cars-On-Line

UNP cars on line were 300,937 for week 48



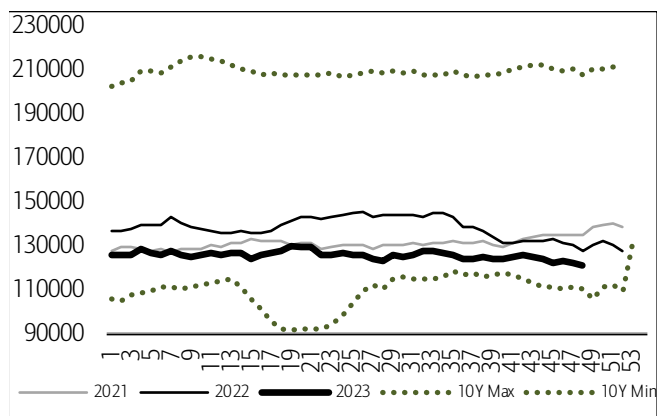
Source: Company reports, and Association of American Railroads.

UNP restated performance metrics, historical data available from 03/24/17

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Exhibit 64: CSX Cars-On-Line

CSX cars on line were 121,132 for week 48

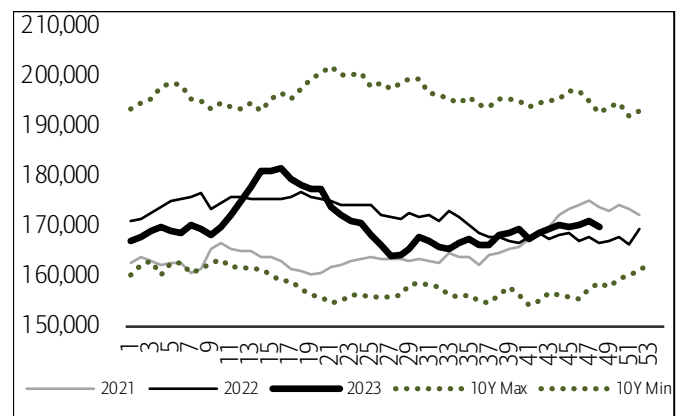


Source: Company reports, and Association of American Railroads.

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Exhibit 65: Norfolk Southern Cars-On-Line

NSC cars on line were 169,708 for week 48

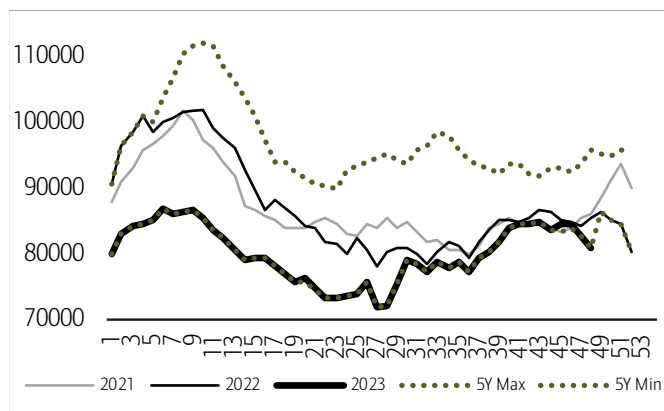


Source: Company reports, and Association of American Railroads.

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Exhibit 66: Canadian National Cars-On-Line

CNI cars on line were 80,835 for week 48



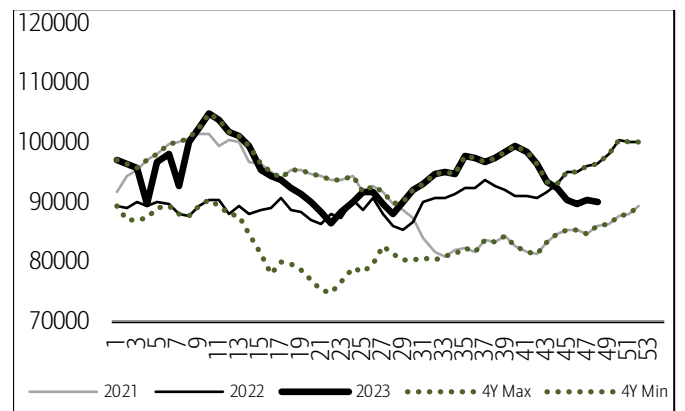
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 67: Canadian Pacific Kansas City Cars-On-Line

CPKC cars on line were 90,210 for week 48



Source: Company reports, and Association of American Railroads.

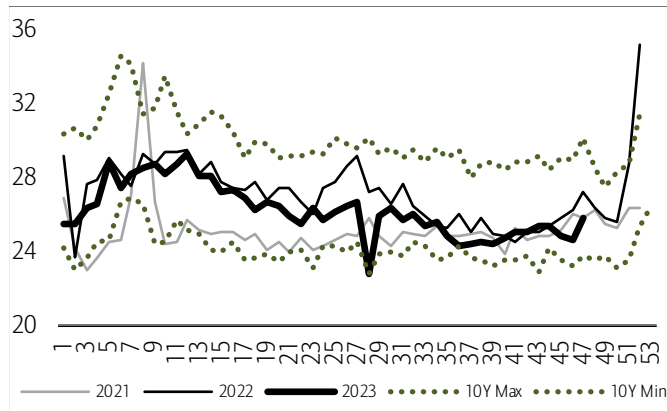
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Dwell Time Monitor

Exhibit 68: BNSF Dwell Time

BNSF dwell time was 25.8 hrs for week 47

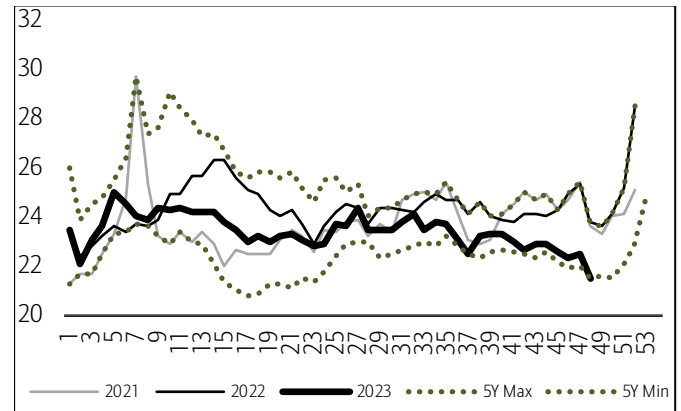


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 69: Union Pacific Dwell Time

UNP dwell time was 21.5 hrs for week 48



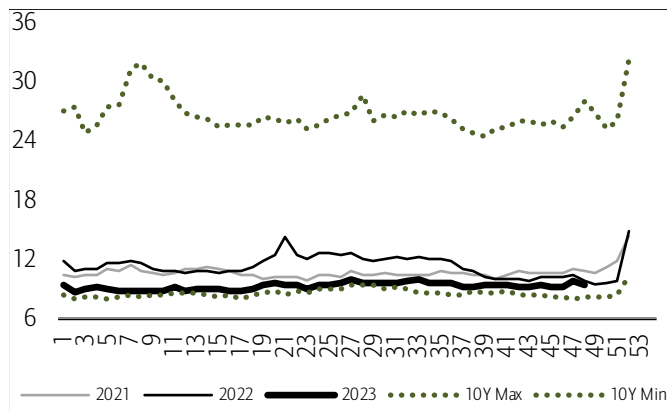
Source: Company reports, and Association of American Railroads.

UNP restated performance metrics, historical data available from 03/24/17

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Exhibit 70: CSX Dwell Time

CSX dwell time was 9.5 hrs for week 48

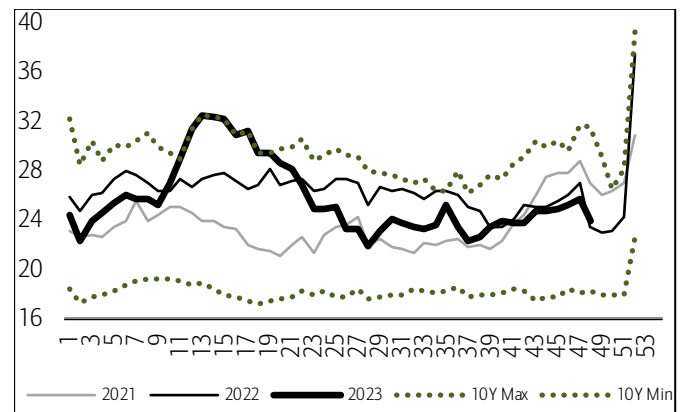


Source: Company reports, and Association of American Railroads.

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Exhibit 71: Norfolk Southern Dwell Time

NSC dwell time was 24.0 hrs for week 48

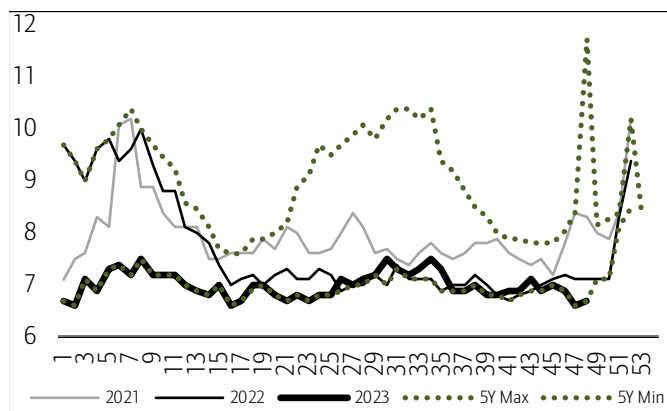


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 72: Canadian National Dwell Time

CNI dwell time was 6.7 hrs for week 48



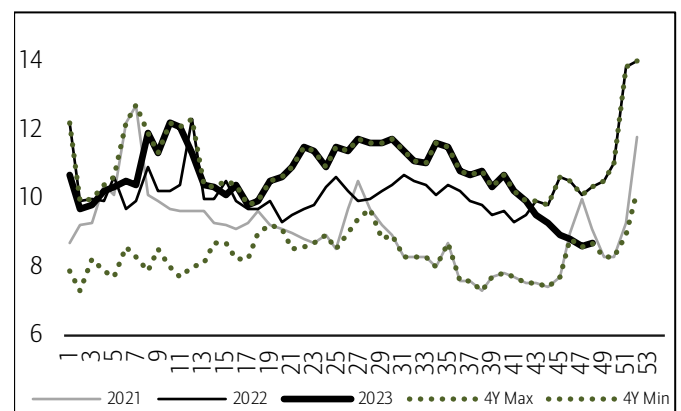
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 73: Canadian Pacific Kansas City Dwell Time

CPKC dwell time was 8.7 hrs for week 48



Source: Company reports, and Association of American Railroads.

CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Less-than-Truckload Data Update and Rail Employment

Exhibit 74: Less-than-Truckload Tons/Day Y-Y%

LTL Tons/Day is down 0.9% on avg y-y in Nov. (among peers that disclose)

	ODFL	YELL	ARCB	SAIA	XPO
Nov-22	-8.6%	-24.8%	-3.0%	-7.7%	
Dec-22	-11.5%	-27.1%	-9.4%	-13.2%	
Jan-23	-7.8%	-17.2%	1.6%	-3.7%	2.8%
Feb-23	-12.4%	1.3%	2.1%	-7.6%	-2.0%
Mar-23	-15.8%	-16.9%	4.3%	-5.2%	-5.5%
Apr-23	-14.5%	-16.4%	1.3%	-1.1%	-2.0%
May-23	-14.4%	-16.3%	2.0%	-2.0%	-2.3%
Jun-23	-13.3%	-18.3%	-0.2%	-2.2%	-4.0%
Jul-23	-11.1%		-5.2%	3.4%	4.2%
Aug-23	-6.0%		-7.1%	6.8%	3.3%
Sep-23	-3.7%		-6.6%	9.7%	2.2%
Oct-23	-1.9%		-4.0%	7.8%	2.5%
Nov-23	-2.3%		-10.0%	9.2%	-0.4%

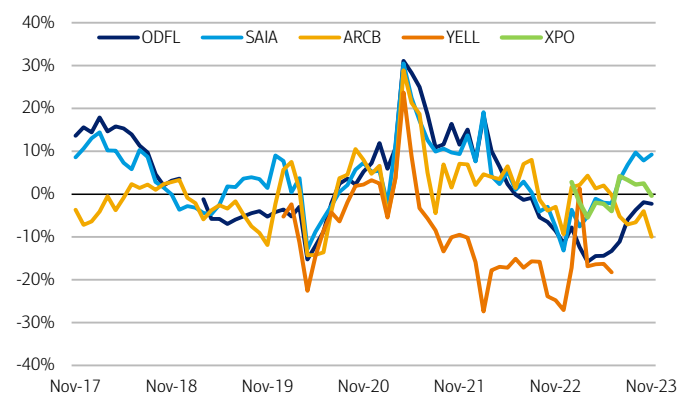
No data provided (BofA quarterly average)

Source: BofA Global Research estimates and company reports

BofA GLOBAL RESEARCH

Exhibit 75: Less-than-Truckload Tons/Day Y-Y%

LTL Tons/Day is down 0.9% on avg y-y in Nov. (among peers that disclose)



Source: BofA Global Research estimates and company reports

BofA GLOBAL RESEARCH

Exhibit 76: Less-than-Truckload Shipments/Day Y-Y%

Shipments/Day is up 4.6% on avg y-y in Nov. (among peers that disclose)

	ODFL	YELL	ARCB	SAIA	XPO	FDX
Nov-22	-7.3%	-23.2%	4.0%	-8.6%		-11.0%
Dec-22	-10.9%	-25.0%	-3.2%	-12.3%		-11.0%
Jan-23	-5.9%	-18.1%	7.1%	-4.0%	5.0%	-10.0%
Feb-23	-10.1%	-2.5%	9.5%	-7.6%	1.1%	-14.0%
Mar-23	-12.9%	-19.3%	7.3%	-9.4%	-0.5%	-19.0%
Apr-23	-11.8%	-15.4%	4.7%	-5.7%	3.1%	-17.0%
May-23	-11.4%	-13.8%	2.0%	-4.2%	1.8%	-17.0%
Jun-23	-11.2%	-16.4%	5.4%	-1.8%	0.9%	-16.0%
Jul-23	-8.5%		1.4%	6.0%	8.8%	-14.0%
Aug-23	-1.2%		2.1%	14.2%	8.3%	-8.0%
Sep-23	1.0%		0.9%	16.3%	6.6%	
Oct-23	2.7%		3.7%	18.0%	6.2%	
Nov-23	0.6%		-5.0%	18.9%	3.8%	

No data provided (BofA quarterly average)

Source: BofA Global Research estimates and company reports

BofA GLOBAL RESEARCH

Exhibit 77: STB employment data

October STB employment: 122,393, up 3.5% Y-Y



Source: STB

BofA GLOBAL RESEARCH

Exhibit 78: STB quarter to date data vs BofAe labor estimates

Data as of October 2023

2023	4Q Avg #	4Q Avg. chg. %	BofAe	Diff	4Q Vols
UNP	33,242	0.9%	1.5%	-0.6%	0.5%
CSX	19,156	5.6%	3.3%	2.3%	-0.1%
NSC	20,610	6.3%	7.0%	-0.7%	1.8%
CN	6,537	2.8%	4.6%	-1.8%	-3.2%
CP	2,907	0.9%	1.0%	-0.1%	2.3%
KSU	2,921	-0.9%	-	-	-
BNSF	37,020	2.4%	-	-	-
Total	122,393	3.0%	-	-	-

Note: Monthly average quarter-to-date; 4Q Volumes are estimates

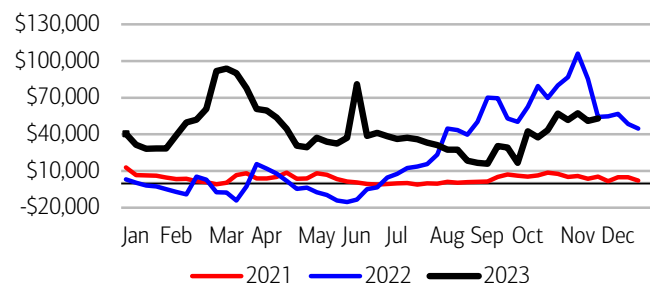
Source: STB, BofA Global Research estimates

BofA GLOBAL RESEARCH

Weekly Shipping Rates

Exhibit 79: VLCC Spot Rates

VLCC Spot Rates at \$52,883 as of 12/01/2023

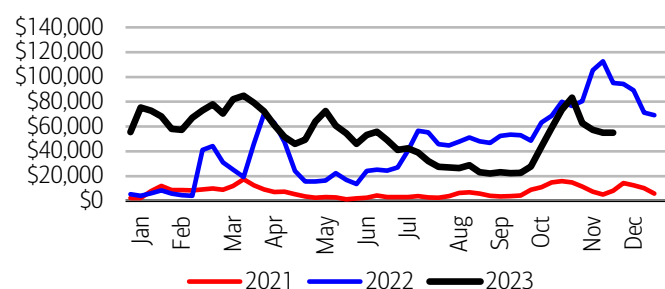


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 81: Suezmax Spot Rates

Suezmax Spot Rates at \$55,141 as of 12/01/2023

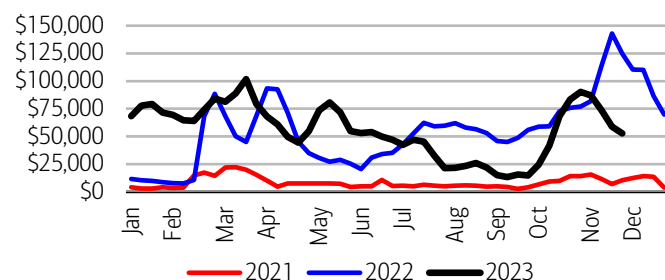


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 83: Aframax Spot Rates

Aframax Spot Rates \$52,674 as of 12/01/2023

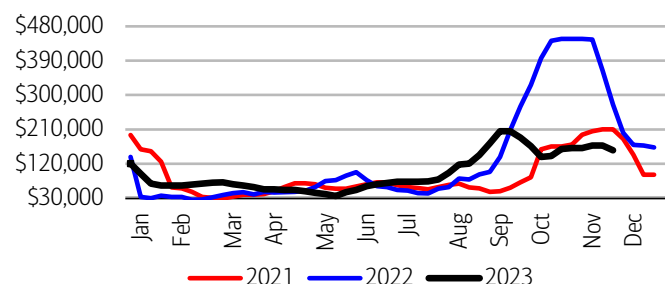


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 85: LNG TFDE Spot Rates

LNG TFDE Spot Rates at \$155,000 as of 12/01/2023

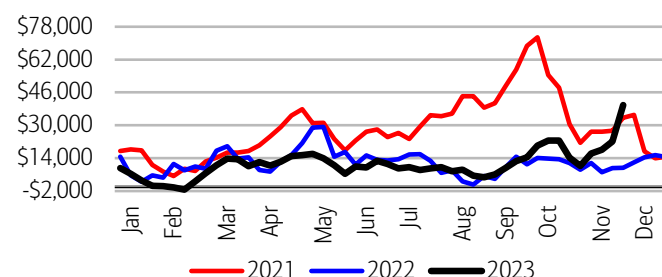


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 80: Capesize spot Rates

Capesize Spot rates at \$39,821 as of 12/01/2023

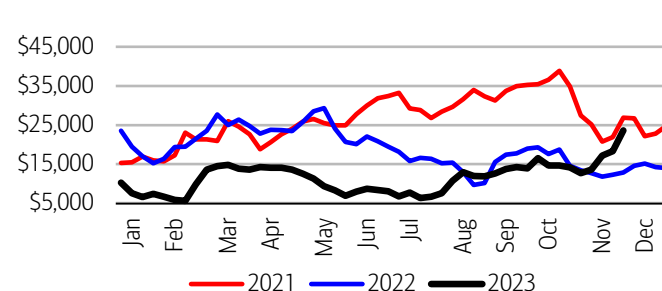


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 82: Panamax Spot Rates

Panamax Spot Rates at \$23,614 as of 12/01/2023

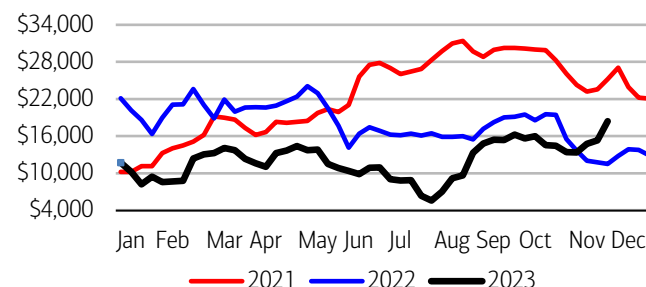


Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 84: Supramax Spot Rates

Supramax Spot Rates at \$18,381 as of 12/01/2023



Source: BoFA Global Research and Clarksons

BoFA GLOBAL RESEARCH

Exhibit 86: Yearly and Quarterly Gas Carrier Rate Data

LNG Carrier Rate is down 4QTD and YTD

Gas Carrier	4QTD Average	2023 YTD Avg.	Orderbook % of Fleet
LNG TFDE	\$157,222	\$96,495	76%
% chg. Y-Y	-52%	-28%	

Source: Clarkson

BoFA GLOBAL RESEARCH

Exhibit 87: Yearly and Quarterly Tanker Rate Data

Tanker Rates are down 4QTD, but mixed YTD

Tanker	4QTD Average	2023 YTD Avg.	Orderbook % of Fleet
VLCC	\$45,518	\$43,327	2%
% chg. Y-Y	-33%	81%	
Suezmax	\$57,480	\$53,202	5%
% chg. Y-Y	-29%	20%	
Aframax	\$64,474	\$55,967	11%
% chg. Y-Y	-29%	0%	

Source: Clarkson

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Exhibit 88: Yearly and Quarterly Dry Bulk Rate Data

Dry Bulk Rates are up 4QTD but mixed YTD

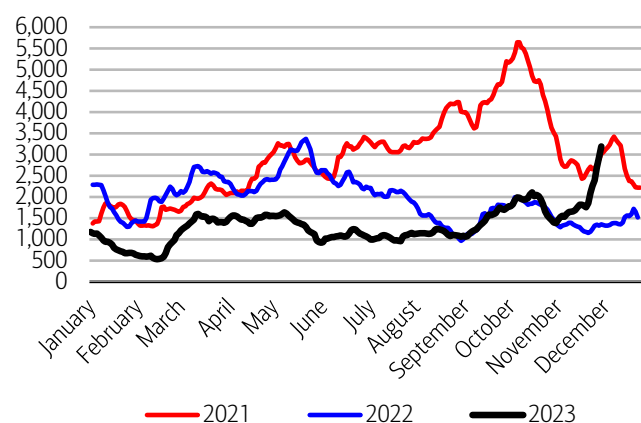
Dry Bulk	4QTD Average	2023 YTD Avg.	Orderbook % of Fleet
Capesize	\$20,609	\$11,007	5%
% chg. Y-Y	74%	-7%	
Panamax	\$16,159	\$11,465	9%
% chg. Y-Y	10%	-39%	
Supramax	\$15,087	\$11,993	8%
% chg. Y-Y	1%	-33%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 89: Baltic Dry Index

Baltic Dry Index is at 3,192 as of 12/01/2023



Source: Bloomberg

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Exhibit 90: Shipping Rates

Shipping Rates are down year-over-year

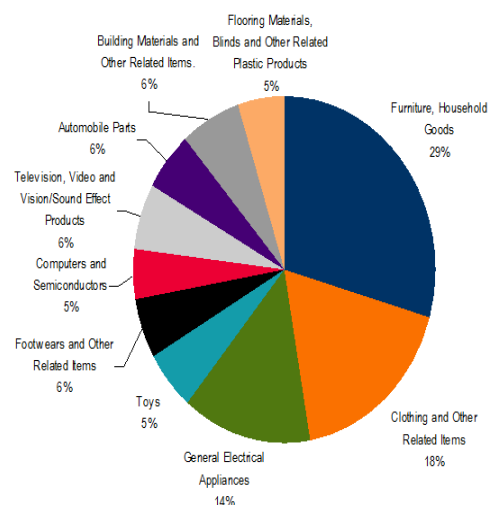
	Current Wk 12/01/23	Prior Wk 11/24/23	YOY Wk 12/02/22	Seq % Change	YOY % Change
Vessel Type					
VLCC	\$52,883	\$50,871	\$54,290	4.0%	-2.6%
Suezmax	\$55,141	\$55,092	\$95,111	0.1%	-42.0%
Aframax	\$52,674	\$58,806	\$124,667	-10.4%	-57.7%
LNG TFDE	\$155,000	\$167,500	\$275,000	-7.5%	-43.6%
Baltic Dry Index	3,192	2,102	1,338	51.9%	138.6%

Source: Bloomberg and Clarkson

BofA GLOBAL RESEARCH

Exhibit 91: Container Breakdown by Commodity

Furniture, Household & Goods represents almost 30%

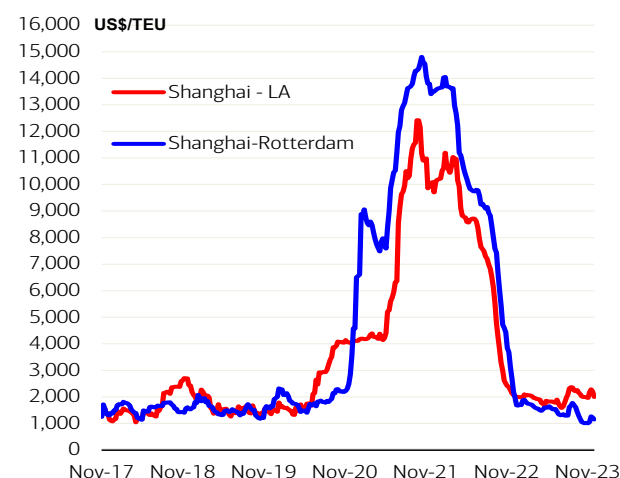


Source: OOCL, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 92: Container Rates – Shanghai Containerized Freight Index (SCFI)

Shanghai – LA and Shanghai – Rotterdam are down year-year



Source: Chinese Shipping, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 93: Railroads Comp Sheet

Data as of 12/06/2023

		QRQ	Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward			EBITDA (\$ bil)			Forward	EV/EBITDA					
			Price	Out.					BofA	BofA	BofA	Cons.	P/E											
Company	Ticker			(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e				
Canadian National	CNI	B-2-7	\$117.81	648	\$76.4	\$13.4	\$89.8	\$5.75	\$5.31	\$5.93	\$5.94	20.5x	22.2x	19.9x	\$6.61	\$6.15	\$6.61	13.6x	14.6x	13.6x				
Canadian Pacific	CP	B-1-7	\$73.97	932	\$68.9	\$17.6	\$86.5	\$2.89	\$2.82	\$3.15	\$3.28	25.6x	26.2x	23.5x	\$4.92	\$5.02	\$5.46	17.6x	17.2x	15.9x				
CSX Corporation	CSX	B-1-7	\$33.52	1,976	\$66.2	\$17.0	\$83.3	\$1.91	\$1.84	\$2.05	\$1.98	17.5x	18.2x	16.4x	\$7.42	\$7.12	\$7.51	11.2x	11.7x	11.1x				
Norfolk Southern	NSC	B-1-7	\$228.08	226	\$51.6	\$15.1	\$66.7	\$13.60	\$11.85	\$13.05	\$12.92	16.8x	19.2x	17.5x	\$6.12	\$5.33	\$5.88	10.9x	12.5x	11.3x				
Union Pacific	UNP	B-1-7	\$232.97	610	\$142.0	\$32.1	\$174.1	\$11.23	\$10.10	\$11.20	\$11.32	20.7x	23.1x	20.8x	\$12.26	\$11.31	\$12.27	14.2x	15.4x	14.2x				
												20.2x	21.8x	19.6x				13.5x	14.3x	13.2x				
2023Q4EPS								Revenue		2023Q3	Net	ROIC			Total Return (w/reinvested dividends)					Dividend				
		est.	Δ to	EPS Growth			YoY	Growth		Op.	Debt/													
Company		BofA	Cons.	Street	1yr	3yr	5yr	3Q2023	1yr	5yr	Ratio	EBITDA	1yr			1 week	YTD	1yr	3yr	5yr	Annual	Yield		
Canadian National		\$1.39	\$1.46	-5%	4%	11%	6%	18%	4%	2%	62%	2.2x	9.6%			3%	1%	-4%	5%	10%	\$3.16	2.0%		
Canadian Pacific		\$0.84	\$0.82	2%	-1%	8%	1%	65%	17%	15%	61%	3.8x	12.1%			4%	0%	-6%	4%	15%	\$0.76	0.8%		
CSX Corporation		\$0.45	\$0.44	2%	3%	88%	6%	19%	1%	4%	64%	2.4x	9.3%			6%	10%	9%	4%	9%	\$0.44	1.3%		
Norfolk Southern		\$2.93	\$2.85	3%	-33%	15%	2%	14%	0%	1%	69%	3.3x	7.6%			6%	-5%	-4%	0%	9%	\$5.40	2.4%		
Union Pacific		\$2.52	\$2.54	-1%	-7%	11%	4%	14%	-1%	1%	63%	3.0x	10.5%			5%	15%	13%	6%	11%	\$5.20	2.2%		
												64%	2.9x	10%			5%	4%	2%	4%	11%			

Source: BofA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BofA Global Research)

BofA GLOBAL RESEARCH

Exhibit 94: Intermodal/Container Lessors Comp Sheet

Data as of 12/06/2023

			Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward			P/E			EBITDA (\$ bil)			Forward			EV/EBITDA		
		QRQ		Out.				BofA	BofA	BofA	Cons															
Company	Ticker		Price	(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e			
J.B. Hunt																										
Transp.	JBHT	B-1-7	\$188.08	103	\$19.4	\$1.4	\$20.8	\$9.79	\$7.05	\$8.75	\$8.27	19.2x	26.7x	21.5x	\$2.06	\$1.77	\$2.05	10.1x	11.7x	10.1x						
Textainer Group	TGH	n/a	\$49.16	41	\$2.0	\$4.9	\$6.9	n/a	n/a	n/a	\$4.87	8.0x	10.8x	10.1x	\$0.75	\$0.65	\$0.65	9.2x	10.6x	10.6x						
Hub Group Inc	HUBG	n/a	\$80.62	31	\$2.6	\$0.2	\$2.7	n/a	n/a	n/a	\$5.45	7.6x	15.1x	14.8x	\$0.62	\$0.39	\$0.39	4.4x	7.0x	7.0x						
												11.6x	17.5x	15.5x				7.9x	9.8x	9.3x						
		2023Q4EPS							Revenue		2023Q3		Net		ROIC			Total Return (w/reinvested dividends)					Dividend			
		est.		Δ to	EPS Growth			YoY		Growth		Op.	Debt/													
Company		BofA	Cons.	Street	1yr	3yr	5yr	3Q2023	1yr	5yr	Ratio	EBITDA	1yr			1 week					YTD	1yr	3yr	5yr	Annual	Yield
J.B. Hunt																										
Transp.		\$1.70	\$1.78	-5%	-22%	26%	13%	22%	-10%	9%	92%	0.8x	12%		3%	9%	7%	12%	14%					\$1.68	0.9%	
Textainer Group		n/a	\$1.05		-1%	118%	176%	7%	-2%	8%	54%	7.1x	6%		0%	64%	73%	41%	38%					\$1.20	2.4%	
Hub Group Inc		n/a	\$1.04		-36%	70%	6%	26%	-15%	3%	96%	0.3x	18%		8%	1%	2%	13%	14%					--	--	
											81%	2.7x	12%		4%	25%	27%	22%	22%							

Source: BofA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BofA Global Research)

BofA GLOBAL RESEARCH

Exhibit 95: Less-than-Truckload (LTL) Comp Sheet

Data as of 12/06/2023

				Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward			P/E			EBITDA (\$ bil)			Forward			EV/EBITDA		
		QRQ		Price	Out.				BofA	BofA	BofA	Cons.															
Company	Ticker				(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e
Arcbest Corp	ARCB	C-3-7		\$107.88	24	\$2.6	\$0.0	\$2.5	\$13.63	\$7.65	\$10.40	\$10.51	7.9x	14.1x	10.4x	\$0.58	\$0.36	\$0.45	4.4x	7.1x	5.6x						
Old Dominion	ODFL	B-1-7		\$372.89	109	\$40.7	(\$0.1)	\$40.6	\$12.18	\$11.17	\$13.15	\$13.48	30.6x	33.4x	28.4x	\$2.10	\$1.96	\$2.24	19.3x	20.7x	18.1x						
Saia Inc	SAIA	B-1-9		\$390.06	27	\$10.4	(\$0.1)	\$10.3	\$13.40	\$13.11	\$16.10	\$16.15	29.1x	29.8x	24.2x	\$0.63	\$0.64	\$0.76	16.3x	16.0x	13.5x						
TFI Int'l	TFII	B-2-7		\$114.90	85	\$9.8	\$1.8	\$11.6	\$8.02	\$6.40	\$8.25	\$7.87	14.3x	18.0x	13.9x	\$1.13	\$0.91	\$1.05	10.3x	12.8x	11.1x						
XPO, Inc.	XPO	C-1-9		\$81.46	116	\$9.4	\$2.9	\$12.3	\$3.53	\$2.74	\$3.25	\$3.70	23.1x	29.7x	25.1x	\$0.66	\$0.64	\$0.77	18.6x	19.3x	16.0x						
													21.0x	25.0x	20.4x				13.8x	15.2x	12.9x						
		2023Q4EPS							2023Q3		ROIC		Total Return (w/reinvested dividends)					Dividend									
Company		est.	Δ to		EPS Growth			YoY	Revenue Growth	Op. Ratio	Net Debt/ EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield								
Arcbest Corp		\$2.23	\$2.33	-4%	-42%	108%	24%	34%	-11%	8%	93%	0.3x	7.2%	-8%	55%	40%	34%	24%	\$0.48	0.4%							
Old Dominion		\$2.86	\$2.89	-1%	-4%	35%	19%	19%	-5%	8%	71%	-0.1x	18.7%	-3%	32%	30%	22%	34%	\$1.60	0.4%							
Saia Inc		\$3.18	\$3.23	-2%	-7%	48%	31%	22%	1%	13%	83%	-0.2x	11.9%	2%	86%	70%	29%	48%	--	--							
TFI Int'l		\$1.76	\$1.75	1%	-20%	62%	26%	22%	-17%	22%	90%	1.6x	10.9%	-2%	16%	15%	32%	--	\$1.40	1.2%							
XPO, Inc.		\$0.59	\$0.65	-9%	-22%	86%	n/a	7%	0%	-9%	91%	3.8x	--	-5%	145%	126%	25%	27%	--	--							
												86%	1.1x	12.2%	-3%	67%	56%	28%	33%								

Source: BofA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BofA Research)

BofA GLOBAL RESEARCH



Exhibit 96: Airfreight Comp Sheet

Data as of 12/06/2023

			Share	Share	Mkt Cap	Net Debt	EV	EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA					
Company	Ticker	QRQ	Price	Out.						Bofa	Bofa	Bofa	Cons.	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	
Fedex Corp	FDX	B-1-7	\$267.21	251	\$67.2	\$13.4	\$80.6			\$14.96	\$18.80	\$23.25	\$18.25	17.9x	14.2x	11.5x	\$9.55	\$12.47	\$12.47	8.4x	7.4x	6.5x	
United Parcel-B	UPS	B-2-7	\$155.29	723	\$132.3	\$16.8	\$149.1			\$12.95	\$9.00	\$9.85	\$9.56	12.0x	17.3x	15.8x	\$16.97	\$14.29	\$14.29	8.8x	11.2x	10.4x	
														14.9x	15.7x	13.6x				8.6x	9.3x	8.5x	
2023Q4EPS est.			Δ to Street	EPS Growth			YoY 3Q2023			Revenue Growth		2023Q3 Op. Ratio	Net Debt/ EBITDA	ROIC		Total Return (w/reinvested dividends)					Dividend		
Company	Bofa	Cons.		1yr	3yr	5yr	3Q2023	1yr	5yr					1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
Fedex Corp	\$4.72	\$4.17	13%	-18%	94%	10%	-4%	-6%	5%	92%	3.3x	5%	5%	5%	57%	58%	-2%	6%		\$5.04	1.9%		
UPS	\$2.69	\$2.50	8%	-23%	257%	0%	3%	-8%	4%	92%	1.3x	15%	2%	-7%	-8%	1%	11%			\$6.48	4.2%		
														92%	2.3x	10%	4%	25%	25%	-1%	9%		

Source: BoFA Global Research estimates, Company reports, Bloomberg.

Note: FedEx fiscal calendar ends May 31. Fiscal year 2024 goes from June 1, 2023 - to - May 31, 2024. Quarter estimates correspond to 2024 and year metrics correspond to 2023, 2024, and 2025.

BoFA GLOBAL RESEARCH

Exhibit 97: Truckload Carriers Comp Sheet

Data as of 12/06/2023

								EPS				Forward P/E		EBITDA (\$ bil)			Forward EV/EBITDA				
QRQ		Share	Shares Out.	Mkt Cap	Net Debt	EV	BoFA	BoFA	BoFA	Cons.	Forward	P/E	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e
Company	Ticker	Price	(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)															
Knight Transportation	KNX	B-1-7	\$56.47	161	\$9.1	\$2.7	\$11.8	\$5.10	\$2.15	\$3.50	\$2.98	11.1x	26.3x	16.1x	\$1.77	\$1.20	\$1.59	6.7x	9.8x	7.4x	
Schneider National	SNDR	B-2-7	\$23.67	93	\$4.2	\$0.2	\$4.4	\$2.63	\$1.41	\$1.60	\$1.51	9.0x	16.8x	14.8x	\$0.97	\$0.70	\$0.79	4.6x	6.3x	5.6x	
Werner Enterprises	WERN	B-3-7	\$40.44	63	\$2.6	\$0.6	\$3.2	\$3.71	\$2.02	\$2.40	\$2.46	10.9x	20.0x	16.9x	\$0.61	\$0.49	\$0.53	5.3x	6.6x	6.1x	
Covenant Transport	CVLG	n/a	\$42.22	11	\$0.5	\$0.2	\$0.8	n/a	n/a	n/a	\$4.35	7.2x	10.2x	9.7x	\$0.15	\$0.12	\$0.12	5.2x	6.4x	6.4x	
Heartland Express	HTLD	n/a	\$13.62	79	\$1.1	\$0.3	\$1.4	n/a	n/a	n/a	\$0.36	9.6x	200.3x	37.8x	\$0.25	\$0.22	\$0.22	5.6x	6.4x	6.4x	
Marten Transport	MRTN	n/a	\$19.31	81	\$1.6	(\$0.1)	\$1.5	n/a	n/a	n/a	\$1.06	14.5x	21.0x	18.3x	\$0.25	\$0.21	\$0.21	6.0x	7.1x	7.1x	
Pam Transport	PTSI	n/a	\$19.25	22	\$0.4	\$0.1	\$0.5	n/a	n/a	n/a	\$1.70	4.4x	13.2x	11.3x	\$0.20	\$0.11	\$0.11	2.6x	4.5x	4.5x	
Universal Logistics	ULH	n/a	\$25.37	26	\$0.7	\$0.5	\$1.1	n/a	n/a	n/a	n/a	3.9x	--	--	\$0.32	--	--	3.5x	--	--	
												8.8x	44.0x	17.8x				4.9x	6.7x	6.2x	
2023Q4EPS								2023Q3		ROIC		Total Return (w/reinvested dividends)					Dividend				
Company	BoFA	Cons.	Δ to Street	EPS Growth			YoY 3Q2023	Revenue Growth		Op. Ratio	Net Debt/EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
Knight Transportation	\$0.52	\$0.48	9%	-54%	42%	7%	24%	-7%	10%	95%	2.3x	6.1%	6%	9%	2%	12%	14%	\$0.56	1.0%		
Schneider National	\$0.21	\$0.22	-6%	-33%	49%	29%	18%	-14%	2%	96%	0.2x	7.0%	3%	2%	-5%	5%	6%	\$0.36	1.5%		
Werner Enterprises	\$0.48	\$0.47	3%	-28%	19%	-4%	20%	4%	6%	95%	1.3x	9.6%	2%	1%	-6%	2%	8%	\$0.56	1.4%		
Covenant Transport	n/a	\$1.04		-35%	--	--	16%	-7%	5%	95%	0.0x	15.6%	-1%	23%	12%	35%	16%	\$0.44	1.0%		
Heartland Express	n/a	(\$0.06)		-84%	27%	--	59%	69%	18%	103%	1.3x	12.0%	2%	-11%	-16%	-9%	-6%	\$0.08	0.6%		
Marten Transport	n/a	\$0.21		-26%	22%	2%	30%	-2%	8%	94%	-0.3x	13.5%	3%	-2%	-6%	5%	13%	\$0.24	1.2%		
Pam Transport	n/a	\$0.20		-58%	162%	37%	34%	-6%	11%	96%	0.7x	15.6%	1%	-26%	-29%	19%	12%	--	--		
Universal Logistics	n/a	n/a		-32%	73%	--	15%	-15%	3%	91%	1.6x	18.6%	2%	-23%	-29%	7%	5%	\$0.42	1.7%		
												95%	0.9x	12%	3%	-3%	-9%	10%	9%		

Source: BoFA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BoFA Global Research).

BoFA GLOBAL RESEARCH

Exhibit 98: Freight Forwarding Comp Sheet

Data as of 12/06/2023

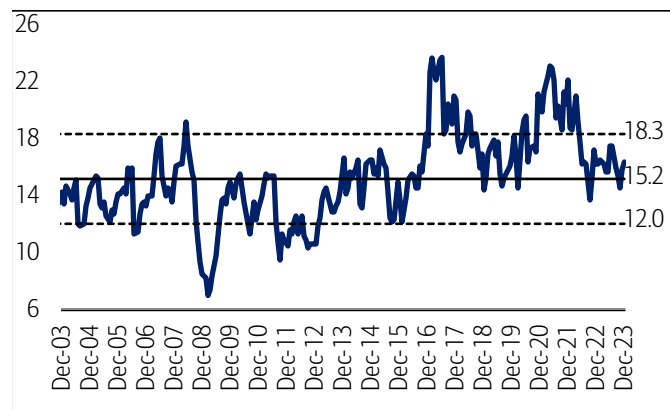
			Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA			
Company	Ticker	QRQ	Price	Out. (mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e				
CH Robinson	CHRW	B-3-7	\$85.51	117	\$10.0	\$1.4	\$11.4	\$6.29	\$7.50	\$3.55	\$3.97	11.4x	24.1x	21.1x	\$1.38	\$0.7	\$0.76	8.2x	16.5x	14.9x	
RXO Inc	RXO	C-1-9	\$20.98	117	\$2.5	\$0.4	\$2.8	\$1.43	\$1.59	\$0.29	\$0.48	13.2x	72.3x	38.1x	\$0.31	\$0.1	\$0.17	9.1x	20.8x	16.2x	
World Kinect	WKC	B-3-7	\$20.62	60	\$1.2	\$0.5	\$1.8	\$1.36	\$2.04	\$1.85	\$2.34	10.1x	11.1x	10.1x	\$0.38	\$0.4	\$0.40	4.6x	4.7x	4.5x	
Landstar System	LSTR	n/a	\$178.99	36	\$6.4	(\$0.4)	\$6.1	n/a	n/a	\$11.76	\$7.91	15.2x	24.3x	22.6x	\$0.63	\$0.4	\$0.41	9.6x	15.0x	15.0x	
Expeditors Intl	EXPD	n/a	\$120.62	145	\$17.5	(\$1.1)	\$16.4	n/a	n/a	\$8.83	\$4.88	13.7x	23.5x	24.7x	\$1.98	\$1.0	\$1.03	8.3x	16.0x	16.0x	
Forward Air Corp	FWRD	n/a	\$63.93	26	\$1.6	\$0.3	\$1.9	n/a	n/a	\$14.24	\$4.48	4.5x	--	--	\$0.32	\$0.2	\$0.22	5.9x	8.8x	8.8x	
												11.3x	31.1x	23.3x				7.6x	13.6x	12.5x	
2023Q4EPS								2023Q3				ROIC		Total Return (w/reinvested dividends)					Dividend		
Company		est.	Δ to Street	EPS Growth			YoY 3Q2023	Revenue Growth		Op. Ratio	Net Debt/EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
CH Robinson		\$0.83	\$0.84	-1%	-56%	26%	0%	7%	-29%	3%	97%	2.2x	23%	6%	-4%	-8%	0%	1%	\$2.44	2.9%	
RXO Inc		\$0.04	\$0.04	11%	--	--	--	2%	--	--	99%	--	--	1%	22%	--	--	--	--	--	
World Kinect		\$0.43	\$0.51	-16%	12%	-4%	24%	88%	-10%	18%	99%	1.4x	7%	-2%	-23%	-20%	-11%	-2%	\$0.56	2.7%	
Landstar System		n/a	\$1.64		-32%	35%	6%	14%	-25%	5%	94%	-0.8x	38%	5%	12%	7%	12%	14%	\$1.32	0.7%	
Expeditors Intl		n/a	\$1.20		-45%	41%	15%	3%	-45%	10%	90%	-1.0x	35%	1%	17%	11%	11%	11%	\$1.38	1.1%	
Forward Air Corp		n/a	\$0.99		-32%	124%	13%	19%	-12%	6%	96%	0.9x	20%	1%	-38%	-40%	-4%	2%	\$0.96	1.5%	
												96%	0.5x	25%	2%	-2%	-10%	2%	5%		

Source: BoFA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BoFA Research)

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Exhibit 99: CSX forward P/E

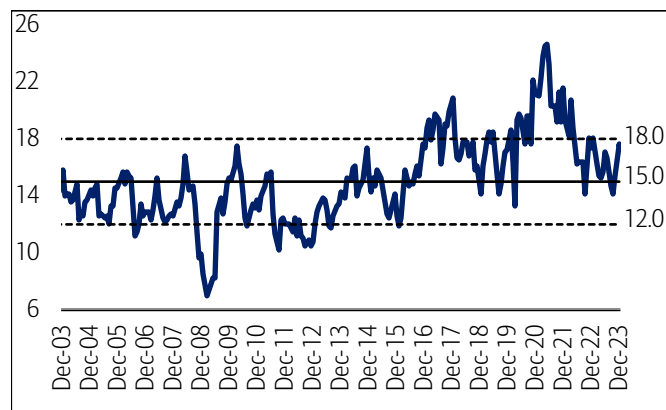
CSX Forward P/E is 16.4x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 100: NSC forward P/E

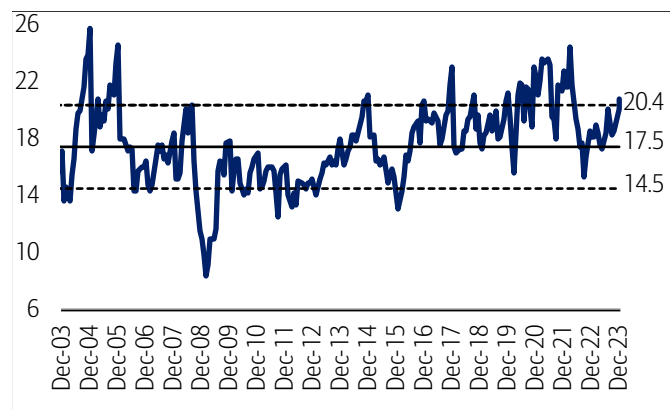
NSC Forward P/E is 17.5x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 101: UNP forward P/E

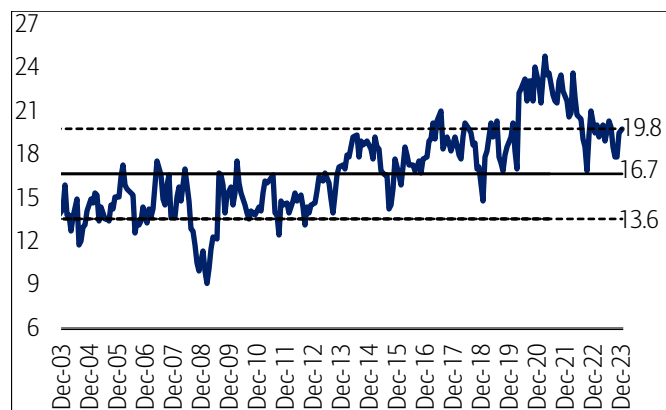
UNP Forward P/E is 20.8x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 102: CNI forward P/E

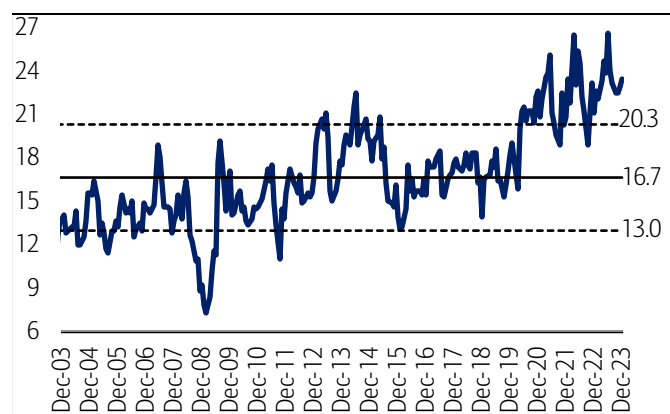
CNI Forward P/E is 19.9x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 103: CP forward P/E

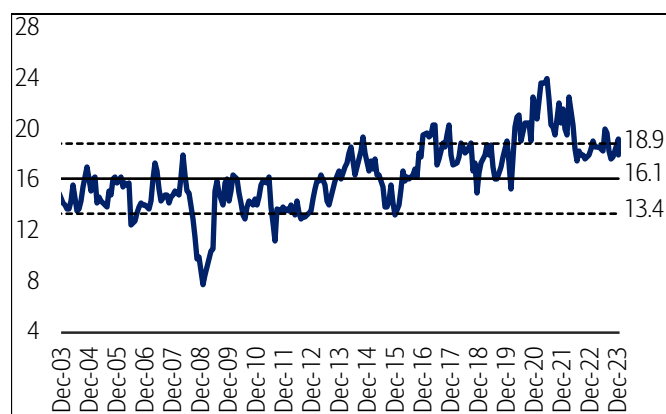
CP Forward P/E is 23.5x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 104: Rails Average forward P/E

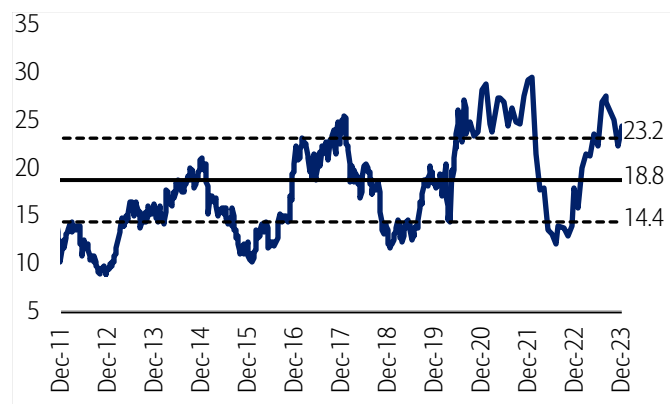
Rails Average Forward P/E is 18.0x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 105: SAIA forward P/E

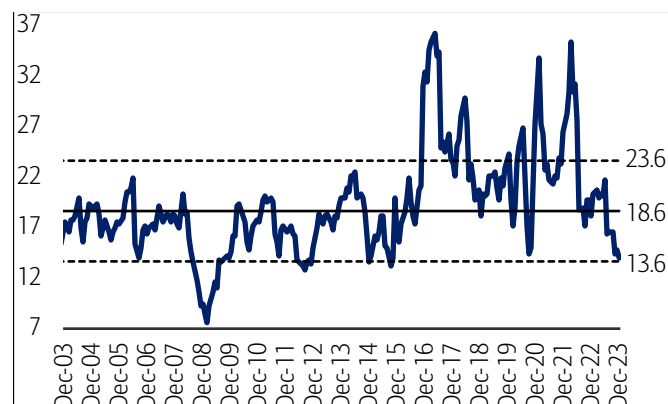
SAIA Forward P/E is 24.2x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 106: KEX forward P/E

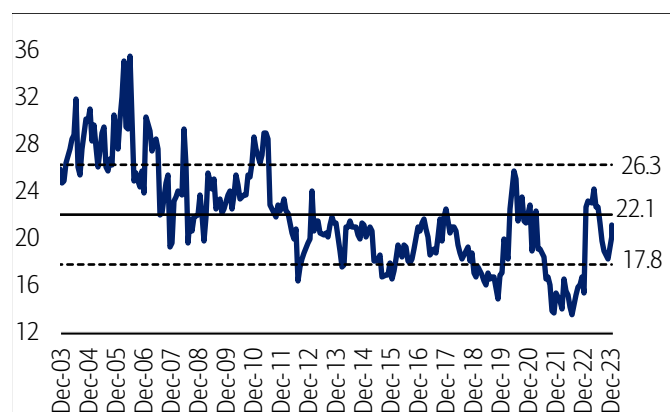
KEX Forward P/E is 14.1x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 107: CHRW forward P/E

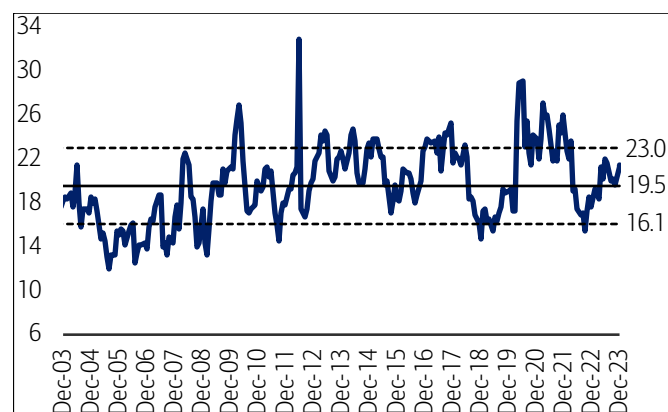
CHRW Forward P/E is 21.1x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 108: JBHT forward P/E

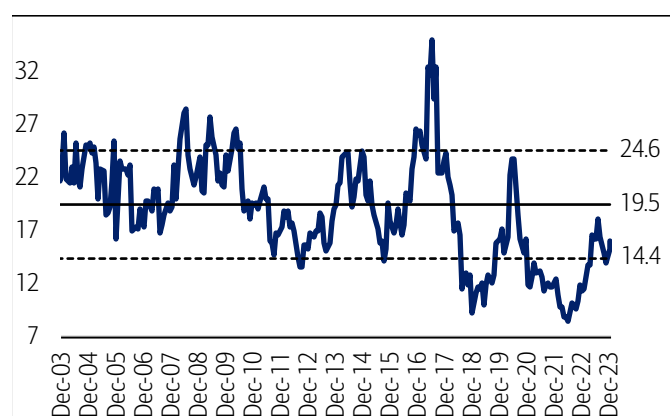
JBHT Forward P/E is 21.5x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 109: KNX forward P/E

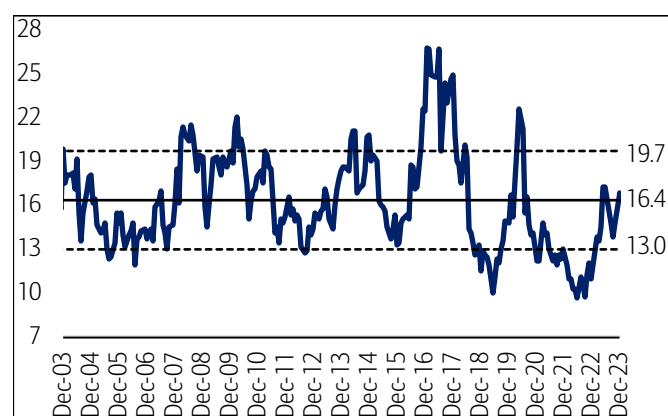
KNX Forward P/E is 16.1x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 110: WERN forward P/E

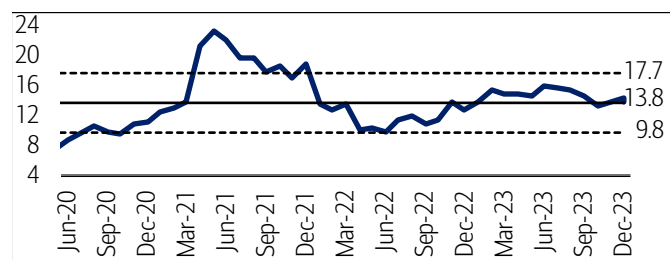
WERN Forward P/E is 16.9x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 111: TFII forward P/E

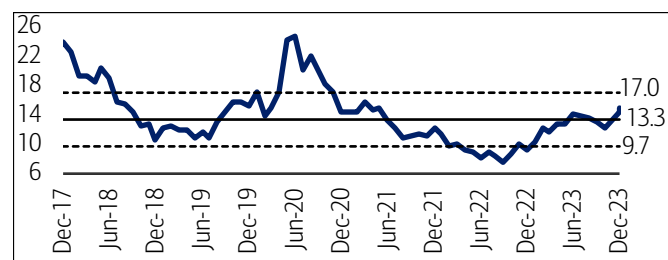
TFII Forward P/E is 13.9x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 112: SNDR forward P/E

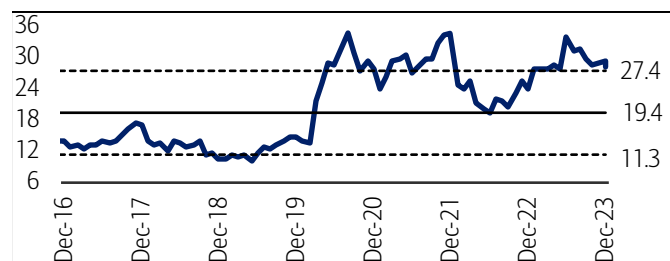
SNDR Forward P/E is 14.8x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 113: ODFL forward P/E

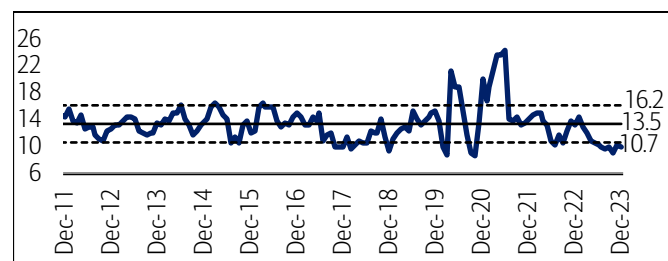
ODFL Forward P/E is 28.4x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 114: WKC forward P/E

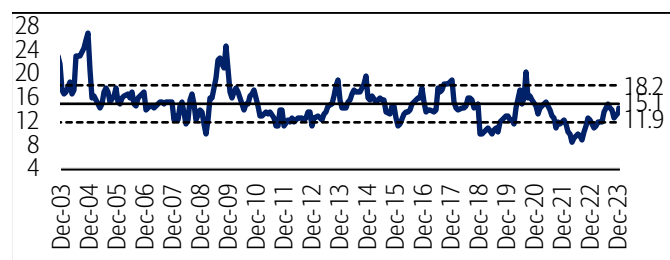
WKC Forward P/E is 10.1x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 115: FDX forward P/E

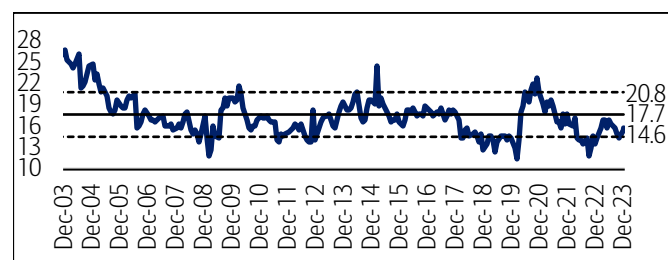
FDX Forward P/E is 14.2x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
BofA GLOBAL RESEARCH

Exhibit 116: UPS forward P/E

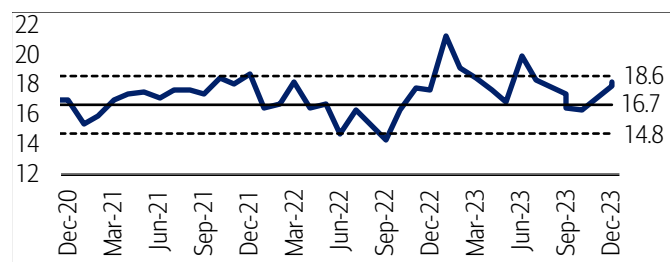
UPS Forward P/E is 15.8x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 117: WAB forward P/E

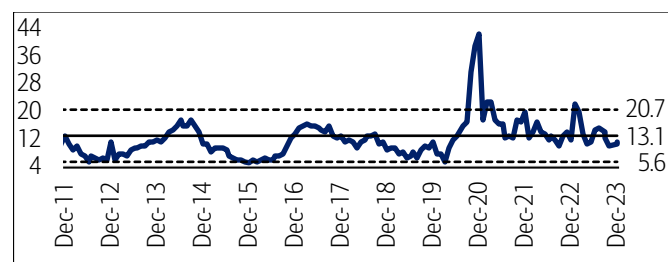
WAB Forward P/E is 18.2x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Exhibit 118: GBX forward P/E

GBX Forward P/E is 11.1x



Source: BofA Global Research estimates, company reports, Bloomberg, Reuters, First Call, Factset.
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Price objective basis & risk

XPO, Inc. (XPO, C-1-9, \$81.46)

Our \$100 price objective is based on a 31x P/E multiple on its 2024e EPS, above the upper end of peer range at 8x-24x, as we look for it to close the premium gap to best-in-class peers as it executes on its Network 2.0 growth plan and its purchase of Yellow real estate.

Downside risks to our price objective are a downturn in the global economy, which could reduce volume and pressure margins, while also potentially having a disproportionate impact on XPO's earnings given its leveraged capital structure. Long term inability to secure a sale of its Europe operation may also be a downside risk to our price objective. Its inability to improve cargo claims, insource linehaul, obtain tractors/trailers at pace it desires, and failure to improve pricing on its improved service levels would be a downside risk to targets/valuation. A potential turnaround at Yellow could lead to increased freight capacity and negative pricing pressures.

Analyst Certification

I, Ken Hoexter, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

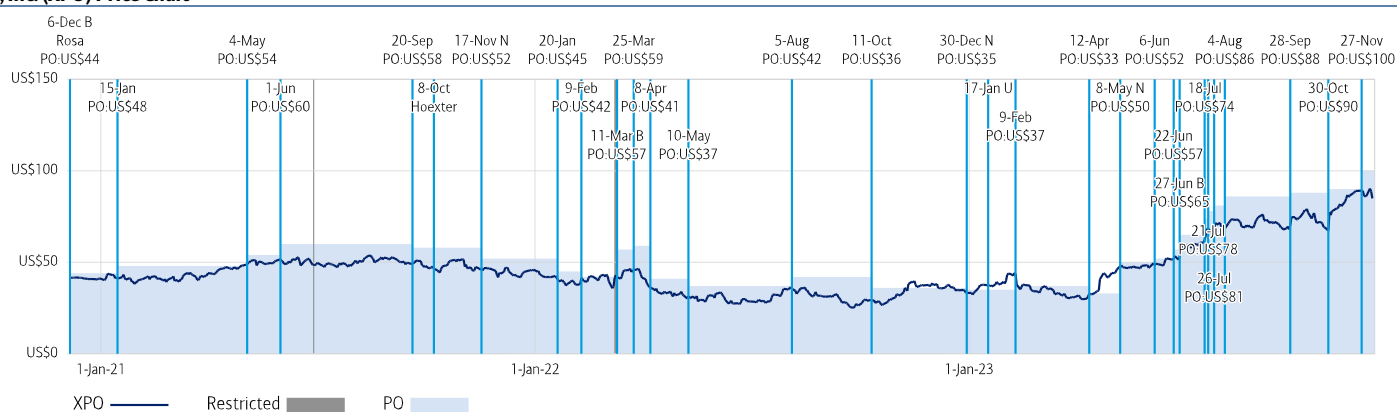
US - Transportation Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Canadian Pacific Kansas City Ltd	CP	CP US	Ken Hoexter
	CSX Corporation	CSX	CSX US	Ken Hoexter
	FedEx Corp.	FDX	FDX US	Ken Hoexter
	J.B. Hunt Transport Services	JBHT	JBHT US	Ken Hoexter
	Kirby Corp	KEX	KEX US	Ken Hoexter
	Knight-Swift Transportation Holdings Inc	KNX	KNX US	Ken Hoexter
	Norfolk Southern	NSC	NSC US	Ken Hoexter
	Old Dominion Freight Line	ODFL	ODFL US	Ken Hoexter
	RXO, Inc.	RXO	RXO US	Ken Hoexter
	Saia Inc.	SAIA	SAIA US	Ken Hoexter
	Union Pacific	UNP	UNP US	Ken Hoexter
	XPO, Inc.	XPO	XPO US	Ken Hoexter
NEUTRAL				
	Canadian National	CNI	CNI US	Ken Hoexter
	Schneider National	SNDR	SNDR US	Ken Hoexter
	Scorpio Tankers Inc.	STNG	STNG US	Ken Hoexter
	Teekay Tankers Limited	TNK	TNK US	Ken Hoexter
	TFI International	TFII	TFII US	Ken Hoexter
	TFI International	YTFII	TFII CN	Ken Hoexter
	UPS	UPS	UPS US	Ken Hoexter
	Wabtec Corp.	WAB	WAB US	Ken Hoexter
UNDERPERFORM				
	ArcBest Corporation	ARCB	ARCB US	Ken Hoexter
	C.H. Robinson	CHRW	CHRW US	Ken Hoexter
	The Greenbrier Companies	GBX	GBX US	Ken Hoexter
	Werner Enterprises	WERN	WERN US	Ken Hoexter
	World Kinect	WKC	WKC US	Ken Hoexter

Disclosures

Important Disclosures

XPO, Inc. (XPO) Price Chart



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Equity Investment Rating Distribution: Transport/Infrastructure Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	71	53.38%	Buy	43	60.56%
Hold	29	21.80%	Hold	13	44.83%
Sell	33	24.81%	Sell	17	51.52%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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