

Transport Tracker

Issue #1113, week ending Feb. 21, 2024; Rail labor negot's escalating; WAB Tour

Industry Overview

Hoexter's Thought of the Week

Wabtec Tour next week to focus on new technology

Rail locomotive manufacturer Wabtec is scheduled to host an Analyst tour Tuesday, February 27, at its Texas locomotive plant. The day begins with a discussion with CEO Rafael Santana, CFO John Olin, as well as Wabtec's Chief Technology Officer, EVP Sales & Marketing, EVP Global Ops, and the Presidents of its Transit and Freight segments. We expect the discussions to highlight Wabtec's moves to drive margins through its Integration 2.0 plan (\$75-\$90 million in savings by 2025), detail progress in converting its Freight and Transit backlog, and the benefits of growing its recurring revenue streams. We then are scheduled to tour its locomotive plant and see product demos of Wabtec's service offerings. We look to focus on the company's new technology launches, especially in its aftermarket product suite, which could account for 1.0x-1.5x revenues of a new loco (~\$3 million/unit). Although sales of new power units in North America have pulled back since 2015, aftermarket services such as modernization programs (i.e. WAB's 200 locomotive mod deal with CSX) and digital sales have gained traction, which are margin accretive. Rails can achieve cost benefits with Wabtec's services on their existing equipment through improved fuel efficiency (Fuel Optimizer), operating efficiency (Trip Optimizer), and reliability, generating ongoing savings.

Canadian rail labor negotiations reach impasse

On February 16, Canadian Class I rails Canadian National Railway (CNI) and Canadian Pacific Kansas City (CPKC) filed notices of dispute with the Ministry of Labor, seeking government mediation for negotiations with labor unions. The move officially begins a long process, which can ultimately lead to potential labor strikes or lockouts, if no agreement is reached in the interim. This step does highlight elevated antagonism between Transport carriers and labor. After filing for notice of dispute, the Canada government has 15 days to appoint a rail mediator to facilitate negotiations, who would then assist discussions over the next 60 days. This period could be extended under mutual agreement from both the union and rail carrier. Following the assisted dialogue, a 21-day cooling off period is to commence, after which job actions are permitted after a 72-hour notice. Assuming key issues stay unresolved under mediation, a strike could potentially first occur in 96 days, or May 22, 2024.

Based on our conversations with carriers, the rails and unions remain at odds on certain key issues such as pay increase, quality of life adjustments, and compensation structure adjustments. Canadian rail carriers continue to seek a shift away from a mileage-based pay structure (in Canada) to an hourly-based structure. This could drive more flexible capacity management, as well as allow carriers to benefit from efficiency gains. Given the higher inflation backdrop, and more challenging union discussions, there is rising potential for 2024 wage hikes to accelerate from 2023 settlements, when wages rose 3.0-3.25%, on average (below US rails' 4%-5% average). We target Comp & Benefits to increase 4% y-y on average at CNI and CPKC. CNI noted that wage hike expectations are not factored into the C\$200 million cost headwinds it sees in 2024, which consists of bonus accruals and pension costs. CPKC expects ~3-4% in 2024 wage increases as part of its double-digit EPS growth target.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 31 to 33.

12662297

Timestamp: 21 February 2024 07:29PM EST

21 February 2024

Equity
United States
Transport/Infrastructure

Ken Hoexter
Research Analyst
BofAS
+1 646 855 1498
ken.hoexter@bofa.com

Adam Roszkowski, CFA
Research Analyst
BofAS
+1 646 855 5498
adam.roszkowski@bofa.com

Nathan Ho, CFA
Research Analyst
BofAS
+1 646 855 3599
nathan.m.ho@bofa.com

Key Data This Week:

- **Week 7 Rail Carloads: Up 1.8%**

Y-Y vs Week 6: +0.9% Y-Y

(Third consecutive uptick)

- **Dry Van spot rates ex-fuel = \$1.41/mile vs \$1.46 last week**, flat from \$1.41 on Dec 31, 2023. Spot rates with fuel were \$1.89 vs. \$1.94 last week, and down 1% from \$1.91 on Dec. 31, 2023.

- **DAT Load to Truck Ratio – 1.14 for the week of Feb. 18, down 21% seq.** from 1.44 last week. (Lowest historic level)

- **January's Cass Freight Index: -7.6% Y-Y, -3.5% M-M** vs -7.2% Y-Y in December

- **January Class 8 Final Net Orders 27,125, +45% Y-Y** vs December's 26,306, -14% Y-Y

- **Prelim. January Truck Tonnage: -5.1% Y-Y, -3.5% M-M** vs December's -1.1% Y-Y, +1.5% M-M

Exhibit 1: Airfreight & Surface Transportation

Rails, Trucks, Airfreight, Other Transports Summary Valuation Table

Rating	Company	Price	Mkt	P/E	1-Wk	Price
Rails:		02/21/24	Cap. (\$ bil.)	'24e EPS	Perf	Perf YTD %
B-2-7	Canadian National Railway (CNI)	129.07	82.7	21.7x	0%	3%
B-1-7	Canadian Pacific Kansas City (CP)	85.47	79.7	26.7x	1%	8%
B-1-7	CSX Corp. (CSX)	37.10	72.7	18.6x	0%	7%
RSTR	Norfolk Southern Corp. (NSC)	257.62	58.2	--	2%	9%
B-1-7	Union Pacific Corp. (UNP)	251.32	153.2	22.5x	0%	2%
NR	Grupo México Trans (GMXT*MM)(3)	MXN 38.55	9.9	--	-2%	1%
Rail Avg (ex GMXT for P/E)						
				22.4x	1%	6%
Intermodal / Container Lessors:						
B-1-7	J.B. Hunt Transport Svcs (JBHT)	203.18	21.0	24.9x	-7%	2%
NR	Hub Group (HUBG)	43.67	2.7	19.7x	-2%	-5%
NR	Textainer (TGH)	49.82	2.1	--	0%	1%
Intermodal Average						
				18.2x	-3%	-1%
Less-than-Truckload (LTL) Carriers:						
C-3-7	ArcBest Corp. (ARCB)	138.86	3.3	12.8x	-2%	16%
B-1-7	Old Dominion Freight Line (ODFL)	424.42	46.3	33.6x	-2%	5%
B-1-9	Saia Inc. (SAIA)	547.33	14.5	33.8x	-3%	25%
B-2-7	TFI International (TFII)	144.53	12.2	18.8x	0%	6%
C-1-9	XPO, Inc. (XPO)	119.23	13.8	32.7x	-1%	36%
LTL Average						
				24.7x	-1%	18%
Truckload (TL) Carriers:						
B-1-7	Knight-Swift Transportation (KNX)	57.67	9.3	23.1x	-2%	0%
B-2-7	Schneider National (SNDR)	23.72	4.2	21.6x	-2%	-7%
B-3-7	Werner Enterprises (WERN)	40.46	2.6	19.3x	-2%	-5%
NR	Covenant Logistics (CVLG)	51.85	0.7	12.2x	-3%	13%
NR	Heartland Express (HTLD)	12.46	1.0	244.3x	-3%	-13%
NR	Marten Transport (MRTN)	19.25	1.6	22.4x	-1%	-8%
NR	P.A.M. Transport (PTSI)	18.56	0.4	16.9x	0%	-11%
NR	Universal Logistics Holdings (ULH)	32.41	0.9	--	1%	16%
TL Average						
				51.4x	-1%	-2%
Autonomous trucks						
NR	Aurora Innovation (AUR)	2.78	4.3	--	-16%	-36%
Autonomous trucks Average						
				--	-16%	-36%
Airfreight Companies:						
B-1-7	FedEx Corp. (FDX)	241.41	60.3	13.6x	2%	-5%
B-2-7	UPS (UPS)	148.27	126.4	17.7x	3%	-6%
NR	Deutsche Post (DHL GY) (2)	€ 43.10	57.7	--	2%	-4%
Airfreight Average						
				15.6x	2%	-5%
Freight Forwarders / Logistics:						
B-3-7	C.H. Robinson Worldwide (CHRW)	72.50	8.5	25.9x	-2%	-16%
C-2-9	RXO (RXO)	21.34	2.5	94.8x	-2%	-8%
NR	Landstar System (LSTR)	190.98	6.9	28.8x	-2%	-1%
NR	Expeditors International (EXPD)	117.90	17.1	24.8x	-6%	-7%
B-2-8	Kuehne + Nagel Int'l (KHNGF) (2)	CHF 288.70	38.5	29.8x	1%	0%
B-1-7	DSV Panalpina A/S (DSV DC) (2)	DKK 1,128.5	36.3	2.8x	-1%	-5%
NR	Forward Air Corp. (FWRD)	39.67	1.0	9.2x	-4%	-37%
NR	Ryder System, Inc. (R)	111.03	4.9	9.5x	0%	-4%
NR	Air Transport Services Group (ATSG)	13.83	0.9	8.8x	-4%	-21%
NR	Fortress Transportation (FTAI)	53.37	5.3	20.3x	-1%	15%
B-3-7	World Kinect (WKCC)	23.79	1.4	8.8x	1%	4%
Freight Forwarder Avg.						
				23.9x	-2%	-7%
Rail Equipment:						
C-3-7	The Greenbrier Companies (GBX)	48.56	1.5	12.9x	0%	10%
NR	Freightcar America Inc. (RAIL)	3.05	0.1	60.9x	-2%	13%
NR	GATX Corporation (GATX)	127.31	4.5	17.0x	1%	6%
NR	Koppers Holdings Inc. (KOP)	51.56	1.1	11.0x	1%	1%
NR	Trinity Industries Inc. (TRN)	26.53	2.2	13.7x	0%	0%
B-1-7	Wabtec Corp. (WAB)	136.06	24.1	20.2x	1%	7%
Rail Equipment Avg.(ex-RAIL)						
				14.9x	1%	5%
Transport Average						
			998.4	--	-1%	0%
S&P 500						
		4,976.35		23.0x	0%	4%

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

		Price	Mkt	P/E	1-Wk	Price
Marine Matters		02/21/24	Cap. (\$ bil.)	'24e EPS or Yield	Perf	Perf YTD
Tanker Companies						
C-1-7	Teekay Tankers, Ltd. (TNK)	57.94	2.0	0.0%	0%	16%
NR	Teekay Shipping Corp. (TK)	8.24	0.7	--	0%	15%
NR	Euronav (EURN)	€ 16.44	3.9	9.0%	-1%	3%
NR	DHT Maritime (DHT)	10.83	1.7	14.6%	-4%	10%
NR	Frontline Ltd. (FRO)	23.01	5.1	12.5%	-1%	15%
NR	Tsakos Energy Navigation (TNP)	24.15	0.7	--	-1%	9%
NR	Nordic American Tanker (NAT)	4.16	0.9	10.9%	0%	-1%
NR	Ship Finance Limited (SFL)	12.94	1.6	8.3%	9%	15%
NR	KNOT Offshore Partners (KNOP)	5.57	0.2	--	-1%	-3%
Tanker Average						
				9.2%	0%	9%
Product Tankers						
C-2-7	Scorpio Tankers (STNG)	66.60	3.6	2.9%	1%	10%
NR	Capital Products (CPLP)	18.10	1.0	3.3%	1%	27%
NR	Ardmore Shipping (ASC)	16.16	0.7	6.7%	-1%	15%
Product Tankers Average						
				4.3%	0%	17%
LNG / LPG						
NR	Golar LNG (GLNG)	21.59	2.3	--	2%	-6%
NR	Dynagas LNG Partners (DLNG)	3.06	0.1	13.1%	4%	9%
NR	StealthGas (GASS)	6.54	0.2	--	-5%	1%
LNG / LPG Average						
				13.1%	0%	2%
Container Ship Lessors						
NR	Costamare (CMRE)	11.09	1.3	4.1%	0%	7%
NR	Danaos (DAC)	72.28	1.4	4.4%	0%	-2%
NR	Global Ship Lease (GSL)	20.04	0.7	7.5%	-2%	1%
Container Average						
				5.4%	-1%	2%
Dry Bulk						
NR	Navios Maritime LP. (NMM)	32.77	1.0	3.6x	6%	17%
NR	Safe Bulkers, Inc. (SB)	4.36	0.5	6.5x	5%	11%
NR	Diana Shipping (DSX)	2.91	0.3	6.2x	2%	-2%
NR	Eagle Bulk Shipping (EGLE)	57.99	0.6	10.8x	5%	5%
NR	Golden Ocean Group (GOGL)	11.22	2.3	11.5x	2%	15%
C-1-7	Pacific Basin Shipping (PCFBBF)(1)	HKD 2.25	1.5	5.4x	6%	-12%
U.S. Dry Bulk Average						
				7.3x	5%	7%
Jones Act Carrier/Other						
B-1-9	Kirby Corp. (KEX)	85.70	5.0	17.5x	1%	9%
NR	Matson Inc. (MATX)	114.20	4.0	14.2x	-6%	4%
NR	Tidewater Inc. (TDW)	70.06	3.7	12.9x	3%	-3%
Jones Act Carrier/Other Average						
				14.8x	-1%	4%
Container Shipping / Diversified Companies						
B-2-8	AP Moeller-Maersk (AMKBF) (2)	DKK 10,400	26.2	--	-4%	-14%
B-1-8	COSCO Shipping Holding Co (CICOF)(1)	HK\$8.53	8.0	--	7%	9%
C-3-8	K-Line (KAKKF)(1)	¥7,167.00	11.4	12.7x	10%	18%
B-3-8	Mitsui O.S.K. Lines (MSLOF)(1)	¥5,351.00	12.9	7.7x	7%	18%
B-3-8	NYK Line (NYUKF)(1)	¥4,845.00	16.4	10.1x	5%	11%
NR	Wan Hai Lines (WHILF)	TWD 49.00	4.4	--	4%	-11%
NR	Yang Ming Marine (YMGXF)	TWD 48.35	5.4	--	4%	-6%
C-2-8	Evergreen Marine Corp (EVGQF)(2)	TWD 155.00	10.4	1.4x	4%	8%
NR	Hapag Lyond ADR (HLAG GY) (2)	€ 133.70	25.4	35.3x	2%	-1%
C-3-9	ZIM Integrated Shipping Svcs (ZIM)	12.46	1.5	--	3%	26%
Container & Diversified Average						
				10.2x	5%	6%
Shipping Mkt Cap / Shipping Avg						
				2%	6%	
S&P 500						
		4,976.35		23.0x	0%	4%

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:	UPS (+3%)	DHL GY (+2%)	NSC (+2%)
Worst:	AUR (-16%)	JBHT (-7%)	EXPD (-6%)

Marine Transportation Weekly Movers

Best:	KAKKF (+10%)	SFL (+9%)	CICOF (+7%)
Worst:	MATX (-6%)	GASS (-5%)	DHT (-4%)



Upcoming Calendar of Events

Feb 27	Wabtec's Facility Tour/Field Trip; Fort Worth, Texas
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 14	Aurora Analyst & Investor Day, Pittsburgh
Mar 19-21	BofA Global Industrials Conference (featuring CNI and WAB), London
Mar 26	UPS Investor & Analyst Day, Louisville
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

[Transport Tracker: Issue #1112, week ending Feb. 14, 2024](#)

Primary Author Date Published

Ken Hoexter 14 February 2024

Company News

Old Dominion Freight Line approved a two-for-one stock split of its common stock. The additional shares are to be distributed on March 27, 2024, to shareholders of record on March 13, 2024. Upon completion of the split, the company will have approximately 217.6 million shares outstanding.

Expeditors International of Washington reported 4Q23 EPS of \$1.09, down 21% year-year. Revenues were \$2.3 billion, down 34% year-year. Operating income was \$199 million, down 40% year-year, resulting in an operating margin of 8.8%, an 80 bps deterioration from a year ago. Airfreight tonnage volume decreased 3% and ocean container volume decreased 10%.

FedEx Corp. appointed Jenifer Hollander as VP Investor Relations, effective March 1, 2024.

Ryder System, Inc. opened a logistics operation in Laredo, Texas, a newly built 228,000-square-foot multiclient warehouse and cross dock located just three miles from the World Trade Bridge on the U.S.-Mexico border. It has 102 dock doors and room for 143 trailers. Additionally, it expanded its drayage yard in Nuevo Laredo, Mexico that facilitates the transfer of freight across the border to U.S. drivers.

Shipping

Diana Shipping signed shipbuilding contracts for two 81,200 dwt methanol dual fuel new-building Kamsarmax dry bulk vessels, for a purchase price of \$46 million each. Delivery is expected by the second half of 2027 and the first half of 2028, respectively. The vessels are designed to meet the requirements for energy efficiency levels and associated Greenhouse Gas (GHG) emissions and to comply with the NOx emissions regulations (NOx-Tier III) of the International Maritime Organization (IMO).

Ardmore Shipping Corp reported adju. 4Q23 EPS of \$0.63, down 53% year-year. Revenues were \$99 million, down 25% year-year. Voyage expenses were \$33 million, a decrease of \$6 million from a year ago. Vessel expenses were \$15 million, an increase of \$1 million, driven by a one-time change in technical manager for a portion of its fleet and the timing of certain vessel operating expenses between quarters. The average TCE rate for the company's fleet was \$29,702/day, a decrease from \$38,861/day for 4Q22. In 4Q23, the company completed the installation of modular, carbon capture-ready scrubbers on two additional vessels during their scheduled drydockings.

Matson, Inc. reported 4Q23 EPS of \$1.78, down 15% year-year. Revenues were \$789 million, down 16% year-year. Ocean Transportation revenues were \$639 million, up 1% year-year. Logistics revenues decreased 11% to \$149 million. Total operating income



was \$75 million, down 19% year-year, resulting in an operating margin of 9.5%, a depreciation of 200 bps year-year.

Dividends Declared

	Amount	Record Date	Payable Date
ASC	\$0.21	02/29/24	03/15/24
CSX	\$0.12	02/29/24	03/15/24

Week 7 Rail Carload Data: Up 1.8% Y-Y

Key Takeaways – Up 1.8% (from +0.9% last week): Total carloads for Week 7 of 2024 were up 1.8% year-year, to 603,055 (BNSF has not reported yet), improving from last week's 0.9% increase (or 611,545 carloads). Carloads were up for the third consecutive week. Growth was above the past 10-week average of +1.0%, while the full 1Q24 Carloads compares against a 0.8% decrease in 1Q23 (BNSF not incl.) Coal was down (-7.3% year-year), deteriorating from last week's 3.9% decrease. This was the sixth downtick in seven weeks. Nat Gas prices were down (-7%) to \$1.58/MMBtu from \$1.69/MMBtu last week. Coal's absolute level of carloads was 54k, below 58k last week, and flat with the 10-week avg of 54k. Chemical volumes were down 1.3% year-year, reversing last week's 2.8% increase. Chemicals declined following four upticks. Grain (+2.3%) was up, moderating from last week's 5.7% increase. Petroleum (+8.3%) was up, improving from last week's 3.8% increase. This was the 18th uptick over the last 19 weeks for Petroleum. Intermodal (+4.1%) was up, improving from last week's 3.0% increase. Intermodal was up for the 11th time over the last 14 weeks, while absolute volumes were 273k, below 279k last week, but above the 260k past 10-week avg. Auto (+9.3%) was up, moderating from last week's 11.3% increase. Auto was up for the third consecutive week.

Overall Carloads: Week 7 carloads were up 1.8% year-year, as increases at NS (+6.9%), CSX (+2.5%), and UP (+2.1%) more than offset a decrease at CPKC (-4.3%), and flat post at CN (+0.0%). Quarter-to-date, carloads are down 2.6% year-year, as decreases at CPKC (-6.6%), CN (-5.1%), UP (-3.2%), and CSX (-0.1%) more than offset an increase at NS (+0.4%). The 1Q24 carload trend of -3.5% (NSC not incl.) is below our -0.7% full quarter target for the Class I rails on average. The avg. carrier is trending below our target (-300 bps), with UNP the best at -130 bps vs. our tgt. (-3.2% vs. our -1.9%), vs CPKC the worst at -470 bps (-6.6% vs. our -1.9%).

Revenue Ton Miles: Week 7 RTMs: CN's RTMs are down 4.4% y-y 1QTD. CPKC's RTM are down 4.3% y-y 1QTD.

Specifics: Intermodal carloads (45.3% of total) were up 4.1% year-year, as increases at NS (+8.9%), CSX (+7.3%), and CN (+4.4%) more than offset decreases at UP (-0.1%) and CPKC (-2.5%). **Coal carloads (9.1% of total)** were down 7.3% year-year, as decreases at CPKC (-18.7%), UP (-16.8%), and CSX (-7.4%) more than offset increases at CN (+1.7%) and NS (+8.9%). **Chemical carloads (9.4% of total)** were down 1.3% year-year, as decreases at NS (-8.5%), CPKC (-5.2%), and CSX (-1.7%) more than offset increases at CN (+1.0%) and UP (+2.5%). **Grain carloads (4.5% of total)** were up 2.3% year-year, as increases at NS (+20.9%), UP (+14.6%), and CPKC (+14.3%) more than offset decreases at CSX (-14.7%) and CN (-21.2%). **Petroleum carloads (4.0% of total)** were up 8.3% year-year, as increases at CSX (+33.7%), UP (+10.6%), CN (+8.3%), and CPKC (+7.5%) more than offset a decrease at NS (-16.6%). **Auto carloads (5.3% of total)** were up 9.3% year-year, as increases at CSX (+24.7%), UP (+16.7%), and NS (+6.4%) more than offset decreases at CN (-3.3%) and CPKC (-6.2%).

Exhibit 3: Carloads Week 7 2024 vs. 2023 and 1QTD volumes

Week 7 Rail Carload Data: Up 1.8% Y-Y

	% of total	2024 Wk 7	2023 Wk 7	% Δ	1Q24 QTD	% Δ
Intermodal	45.3%	273,468	262,685	4.1%	1,825,557	0.2%
Coal	9.1%	54,743	59,033	-7.3%	372,181	-10.6%
Chemicals	9.4%	56,902	57,677	-1.3%	383,989	1.1%
Auto	5.3%	31,841	29,128	9.3%	192,270	-3.7%
Grain	4.5%	27,255	26,652	2.3%	170,943	-11.0%
Forest Prod.	3.6%	21,556	20,973	2.8%	143,648	-1.9%
Petrol. Prod.	4.0%	<u>23,903</u>	<u>22,076</u>	<u>8.3%</u>	<u>163,570</u>	<u>2.8%</u>
Total Carloads		603,055	592,107	1.8%	3,998,389	-2.6%

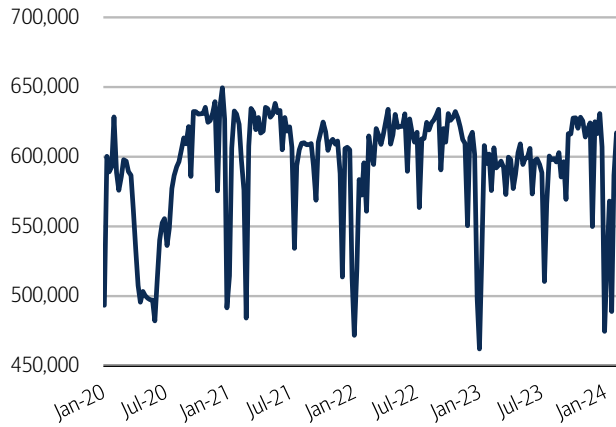
Source: BofA Global Research and AAR.

BofA GLOBAL RESEARCH



Exhibit 4: Total Weekly Carload Volumes

Total volumes were 603,055 for Week 7



Source: BofA Global Research and Association of American Railroads.

BofA GLOBAL RESEARCH

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

Total volume growth was +1.8% y-y for Week 7



Source: BofA Global Research and Association of American Railroads.

BofA GLOBAL RESEARCH

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

Total Carloads Forecast Down 0.7% in 1Q24

	4Q19a	1Q20a	2Q20a	3Q20a	4Q20a	1Q21a	2Q21a	3Q21a	4Q21a	1Q22a	2Q22a	3Q22a	4Q22a	1Q23a	2Q23a	3Q23a	4Q23a	1Q24e
BNSF	-2.5%	-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%	n/a	--
CNI	0.4%	-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%	-1.4%	-1.0%
CPKC						-1.1%	19.6%	-0.5%	-5.7%	-4.0%	0.1%	10.1%	7.5%	5.7%	-2.3%	-4.9%	1.8%	-1.9%
CSX	-5.3%	-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%	1.2%	1.9%
NSC	-5.8%	-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%	2.9%	--
UNP	-8.1%	-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%	3.4%	-1.9%
Total	-4.1%	-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%	1.7%	-0.7%

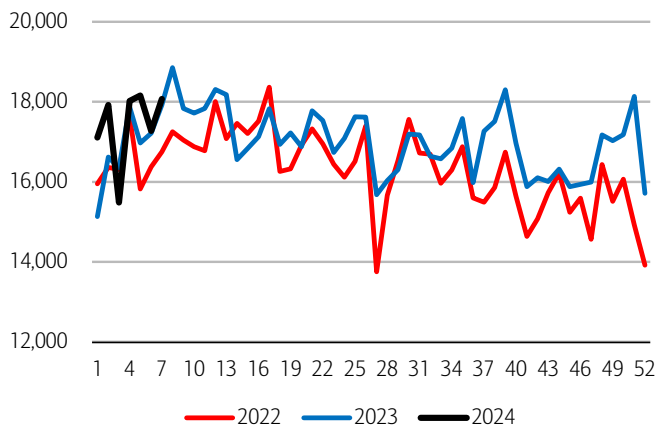
Source: BofA Global Research and Association of American Railroads.

Note: The total for 1Q24 is an average of the estimates; CPKC Reinstated data from 2020; 4Q23 totals does not include BNSF.

BofA GLOBAL RESEARCH

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

Metal Carloads were 18,071 in Week 7, up 0.8% Y-Y

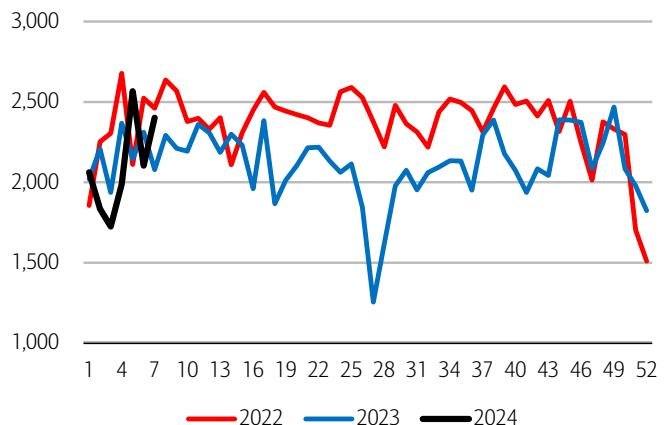


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 8: Forest Product Carloads

Forest Product Carloads were 2,401 in Week 7, up 15.5% Y-Y



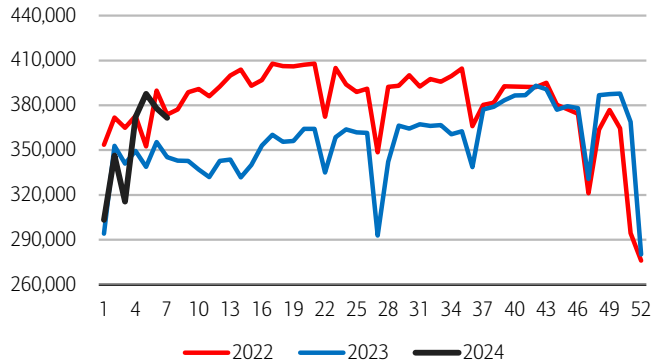
Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Selected Segments Weekly Carloads

Exhibit 9: Intermodal Carloads

Intermodal Carloads were 371,655 in Week 7, up 7.6% Y-Y

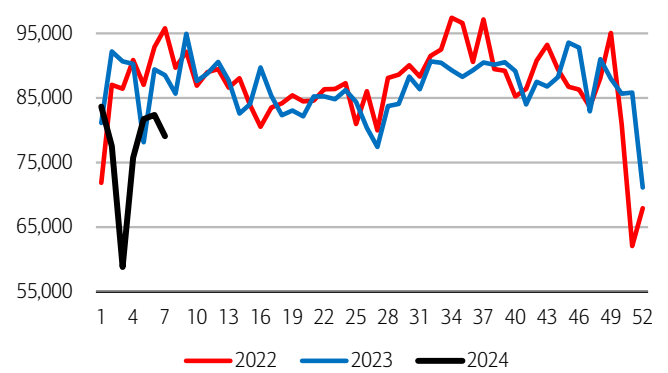


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 10: Coal Carloads

Coal Carloads were 79,099 in Week 7, down 10.6% Y-Y

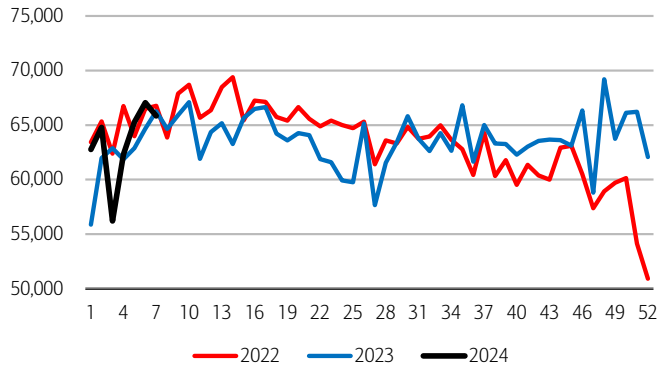


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 11: Chemical Carloads

Chemical Carloads were 65,839 in Week 7, down 0.6% Y-Y

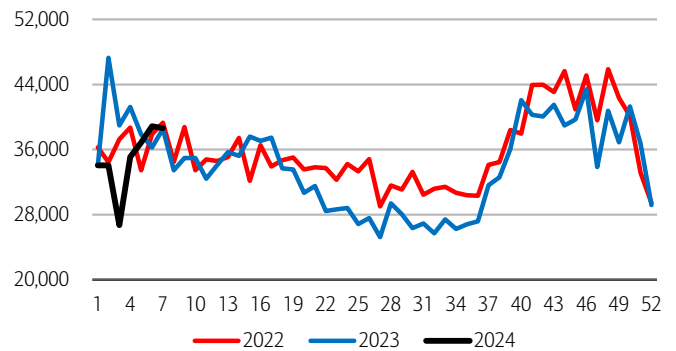


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 12: Grain Carloads

Grain Carloads were 38,615 in Week 7, up 0.3% Y-Y

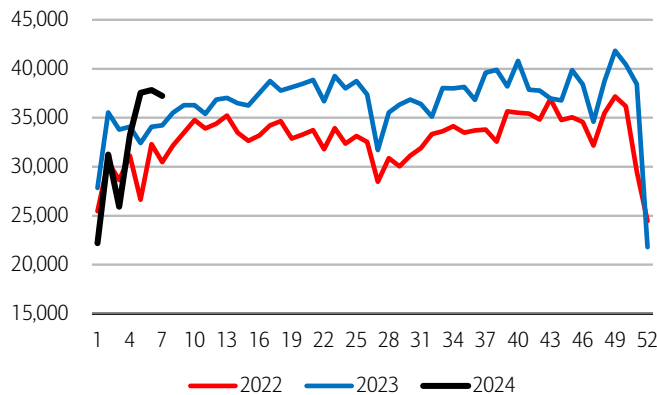


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 13: Auto Carloads

Auto Carloads were 37,228 in Week 7, up 8.8% Y-Y

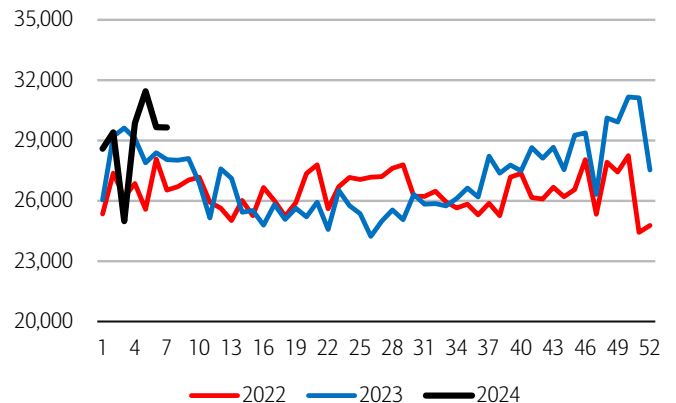


Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Exhibit 14: Petroleum Products Carloads

Petroleum Products Carloads were 29,649 in Week 7, up 5.7% Y-Y



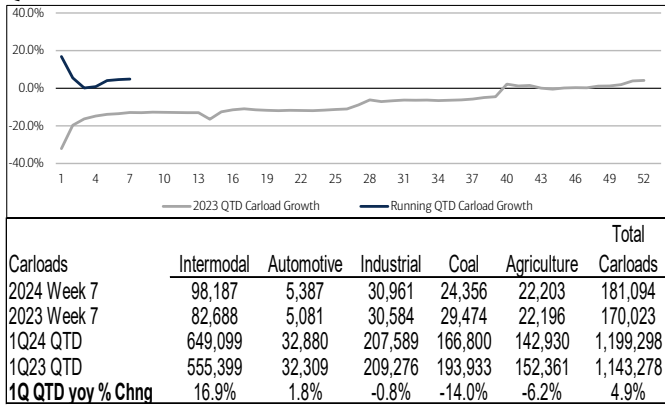
Source: BofA Global Research and Company data.

BofA GLOBAL RESEARCH

Selected Segments Weekly Carloads

Exhibit 15: BNSF Carloads

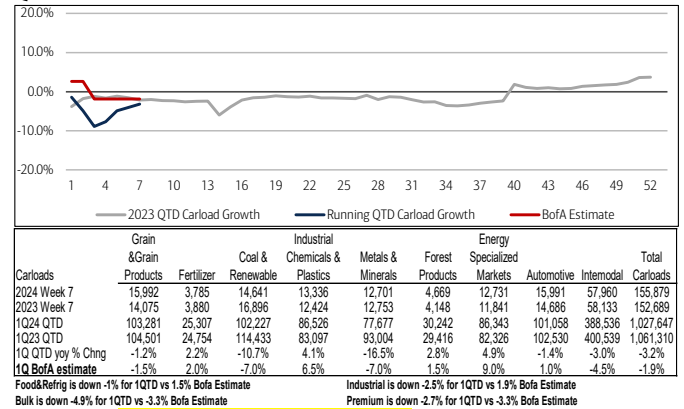
QTD Carloads are +4.9%



Source: BofA Global Research estimates, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Exhibit 16: Union Pacific Carloads

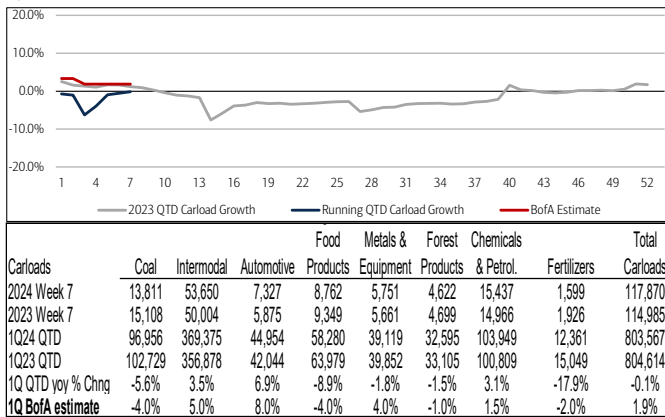
QTD Carloads are -3.2% vs. BofAe -1.9%



Source: BofA Global Research estimates, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Exhibit 17: CSX Carloads

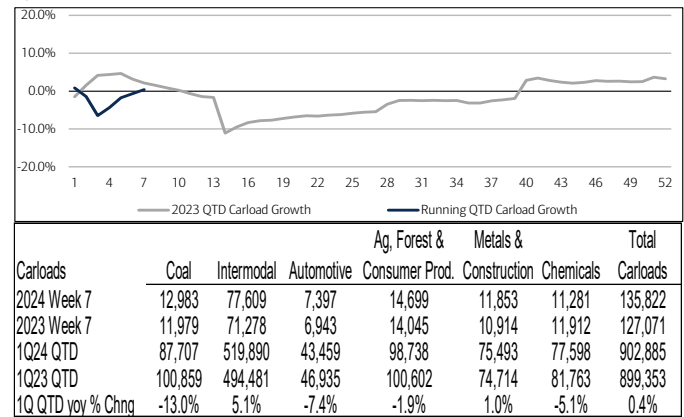
QTD Carloads are -0.1% vs. BofAe +1.9%



Source: BofA Global Research estimates, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Exhibit 18: NSC Carloads

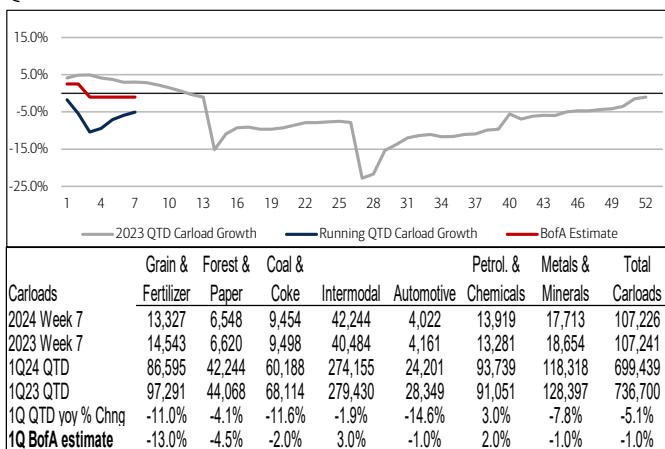
QTD Carloads are +0.4%



Source: BofA Global Research, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Exhibit 19: CNI Carloads

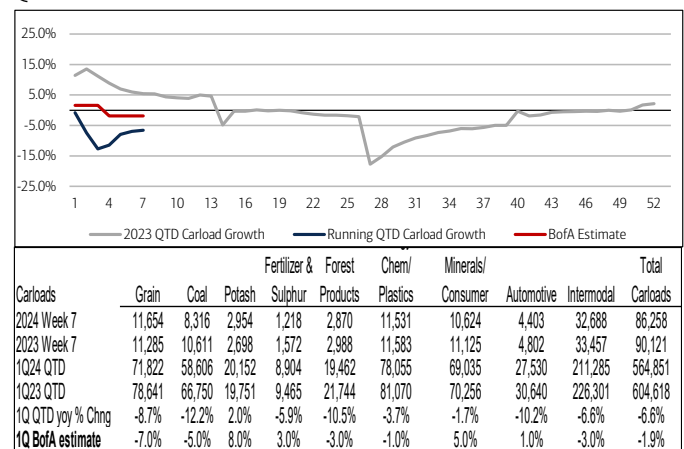
QTD Carloads are -5.1% vs. BofAe -1.0%



Source: BofA Global Research estimates, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Exhibit 20: CPKC Carloads

QTD Carloads are -6.6% vs. BofAe -1.9%



Source: BofA Global Research estimates, Association of American Railroads, and Company reports
BofA GLOBAL RESEARCH

Diesel Fuel Prices: Flat sequentially

Diesel fuel prices were flat (+0%) with last week, at \$4.11 for week 7 of 2024. Prices remain above \$4.00 for the second consecutive week after nine weeks below. The 1Q24 average for on-highway diesel is \$3.92/gallon, down 11% y-y from \$4.41 in 1Q23, and down 8% sequentially from 4Q23's \$4.26.

WTI crude oil futures closed at \$78.18, up 0.4% from last week's \$77.87. WTI was up for the sixth time over the past 7 weeks. The 1Q24 average is \$74.63, down 2% from 1Q23's \$76.12 average, and down 5% from 4Q23's \$78.44. We target \$77 and \$80 for 1Q24 and 2024.

Brent crude oil futures closed at \$82.34, down 0.5% from last week's \$82.77. The 1Q24 average is \$79.83, down 3% from 1Q23 average of \$82.16, and down 4% from 4Q23's average of \$82.80.

The Brent to WTI gap is \$4.16, down 15% from last week's \$4.90. The current spread is down 31% from the 1Q23 avg. of \$6.04.

Natural Gas futures closed at \$1.58 on February 20th, down 7% from \$1.69 last Tuesday. Nat Gas trends below \$2.00 for the second week and it closed at the lowest level since Week 12 of 2020 (\$1.60). Additionally, it was the sixth consecutive downtick. The 1Q24 average is \$2.31, down 18% from the 1Q23 average of \$2.83.

Exhibit 21: Fuel surcharges

Weekly and Monthly surcharges table

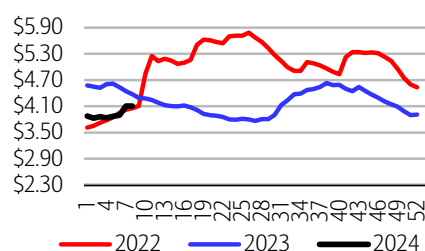
	Week 6 2/7/24	Week 7 2/14/24	Week 8 2/21/24
ARCB - LTL	31.5%	33.8%	33.8%
XPO - LTL	32.8%	32.8%	35.3%
ARCB - TL	63.0%	67.6%	67.6%
XPO - TL	65.6%	65.6%	70.5%
FDX - Express	17.00%	17.25%	17.50%
UPS - Express	20.25%	20.50%	21.00%
FDX - Ground	15.25%	15.25%	16.00%
UPS - Ground	15.50%	15.50%	16.00%
	Dec-23	Jan-24	Feb-24
UP (standard)	\$0.49	\$0.44	\$0.38
y-y % change	-22%	-31%	-28%
UP (coal)	\$0.49	\$0.44	\$0.38
y-y % change	-22%	-31%	-28%
CSX	\$0.63	\$0.57	\$0.50
y-y % change	-22%	-30%	-26%
CPKC	\$0.60	\$0.53	\$0.46
y-y % change	-22%	-32%	-29%

Source: BofA Global Research and company reports.

BofA GLOBAL RESEARCH

Exhibit 22: National Diesel Fuel Prices

Diesel fuel prices: \$4.11 for week 7 of 2024

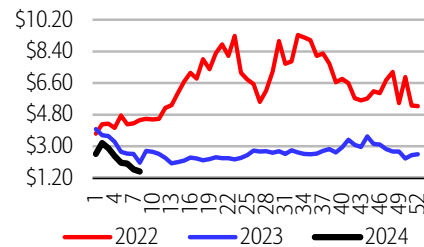


Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 23: US Nat Gas Price Per MMBtu.

Futures closed at \$1.58 on February 21st

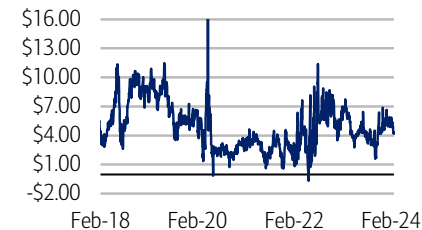


Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

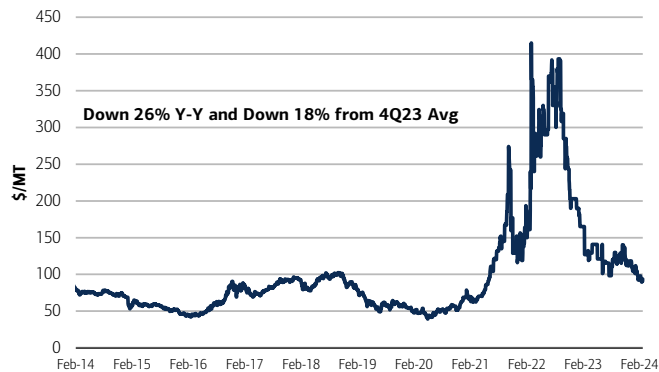
Exhibit 24: Brent to WTI Spread

The Brent to WTI gap is \$4.16



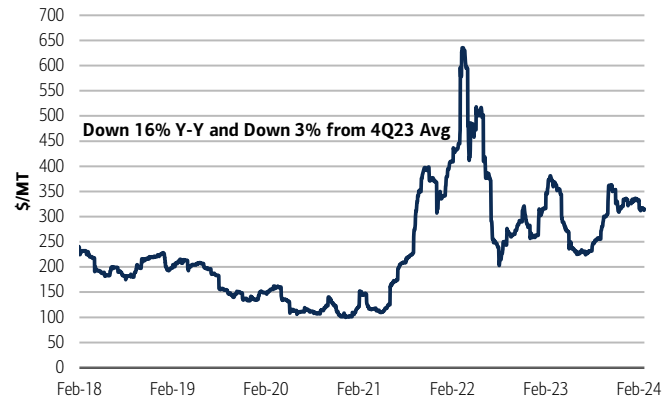
Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 25: Thermal Coal, Europe Coal 6000kcal CIF ARA ForwardPrice = \$93.70 on February 21st

Source: BofA Global Research and Bloomberg.

BofA GLOBAL RESEARCH

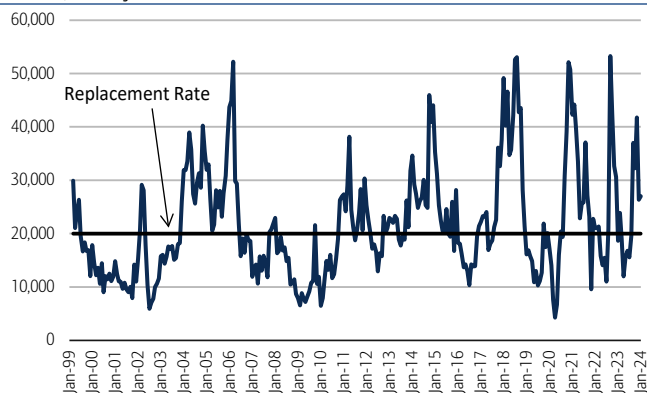
Exhibit 26: Australian Premium Coking Coal FuturesPrice = \$315.00 on February 21st

Source: BofA Global Research and Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 27: Class 8 Truck net orders

Prelim. January Class 8 Net Orders at 27,000 vs 26,352 in December



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

BofA GLOBAL RESEARCH

Prelim. January Class 8 Net Orders at 27,000 (from 26,352 in December)**Exhibit 28: Class 8 Truck net orders**

January's Final Class 8 Net Orders at 27,125 (Preliminary was 27,000)

CLASS 8 NET ORDERS

	2019	2020	2021	2022	2023	2024
JAN	16,105	17,204	42,307	21,041	18,624	27,125
FEB	16,854	14,040	44,190	21,006	23,790	
MAR	15,783	7,632	40,049	21,301	19,010	
APR	14,859	4,251	33,353	15,820	12,016	
MAY	10,886	6,690	23,072	14,081	15,623	
JUN	12,979	16,010	25,824	15,444	16,773	
JUL	10,298	20,359	25,876	11,025	15,573	
AUG	11,119	19,389	37,096	20,892	19,513	
SEP	12,692	30,768	27,323	53,271	36,974	
OCT	21,864	39,089	23,391	42,359	32,287	
NOV	17,483	52,104	9,902	32,630	41,732	
DEC	20,073	50,760	20,651	30,623	26,352	
Year Total	180,995	278,296	353,034	299,493	278,336	27,125

Source: American Commercial Transportation Research (ACT)

BofA GLOBAL RESEARCH

January Class 8 Final Net Orders 27,125

Final Class 8 Net Orders were 27,125 in January, just above the 27,000 preliminary level (published two-weeks prior). On a year-over-year basis, orders were up 45% reversing December's 14% decrease. This was the second uptick in the last three months. On a sequential basis, net Orders were up 3%, reversing December's 37% decrease. Class 8 orders were above the 20,000 theoretical replacement level for the fifth consecutive month. Additionally, Orders were 17% above the past-12 month rolling average of 23,191 (January 2023 - December 2023).

Exhibit 29: Class 8 Truck production

Class 8 Truck Production at 26,926 in January

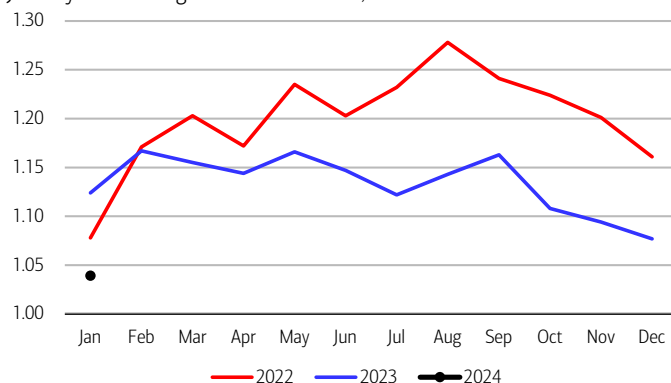


Source: BofA Global Research estimates and American Commercial Transportation Research (ACT)
BofA GLOBAL RESEARCH

Class 8 Truck Production at 26,926 Up 3% Sequentially

Exhibit 30: Cass Freight Shipments Index

January's Cass Freight Index: -7.6% Y-Y, -3.5% M-M



Source: Cass Information Systems, Inc.

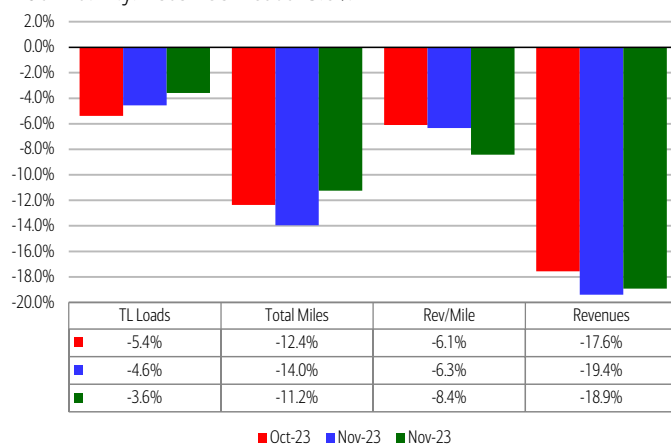
BofA GLOBAL RESEARCH

Cass Freight Index: -7.6% Y-Y, -3.5% M-M

The Cass Freight Shipment index declined 7.6% year-over-year in January, in line with December's 7.2% decrease. This was the 12th consecutive downtick. On a sequential basis, the index was down 3.5%, deteriorating from the 1.6% decline last month. Cass believes that the continuous downturn will soon end as destocking is playing out and goods consumption is rising. The expenditures index was down 24.3% year-over-year, deteriorating from last month's 23.7% decline. This was the 11th consecutive double-digit decline for this index. Overall, the index for both shipments and expenditures declined 20.7% from January 2022.

Exhibit 31: Truck Activity

Truck Activity: December Loads -3.6% Y-Y



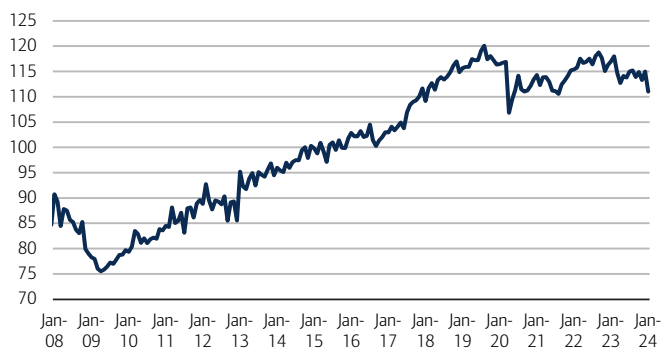
Source: American Trucking Association

BofA GLOBAL RESEARCH

December Total Truck Loads: -3.6% Y-Y

Exhibit 32: Historical ATA Truck Tonnage Index

Preliminary January Truck Tonnage: -5.1% Y-Y, -3.5% M-M



Source: American Trucking Association

BofA GLOBAL RESEARCH

Prelim. January Truck Tonnage: -5.1% Y-Y, -3.5% M-M

The American Trucking Association's (ATA) seasonally adjusted Truck Tonnage index declined 5.1% year-over-year in January to 111.0, deteriorating from December's 1.1% decrease. This was the 11th consecutive downtick for the index. Tonnage was down 3.5% sequentially, reversing December's 1.5% increase. ATA's Chief Economist Bob Costello mentioned that bad winter weather during the month likely hurt volumes, as well as drops in number of drivers of tonnage, including retail sales, housing starts and manufacturing output.

Exhibit 33: Historical ATA Truck Tonnage Index

December Truck Tonnage: -1.0% Y-Y, +1.6% M-M

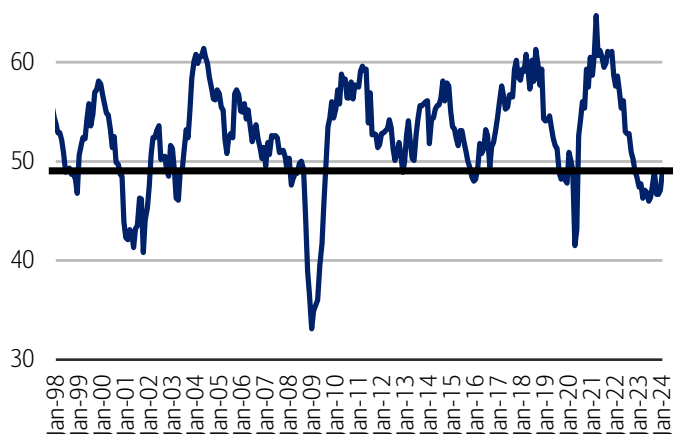
	2017	2018	2019	2020	2021	2022	2023
JAN	103.2	109.5	116.1	117.0	114.2	115.5	117.0
FEB	104.2	111.9	116.1	116.9	112.5	116.1	118.0
MAR	103.5	112.7	116.7	117.9	114.5	118.8	114.7
APR	104.3	111.9	117.6	107.3	113.7	116.5	112.7
MAY	105.0	113.3	117.4	109.7	112.9	117.1	114.1
JUN	103.7	113.8	117.1	111.1	111.3	117.5	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	114.9
NOV	109.9	116.8	116.9	111.8	113.8	114.8	113.3
DEC	111.6	114.7	116.1	113.1	114.9	116.2	115.1
Avg.	106.5	113.5	117.3	112.6	112.9	116.8	114.8

Source: American Trucking Association

BofA GLOBAL RESEARCH

December Truck Tonnage: -1.0% Y-Y, +1.6% M-M**Exhibit 34: ISM Manufacturing Index**

January ISM Manufacturing Index 49.1, +2.0 pts.



Source: BofA Global Research and Bloomberg.

BofA GLOBAL RESEARCH

ISM Manufacturing Index 49.1, +2.0 pts.

Exhibit 35: BofA Truckload Diffusion IndicatorDemand Indicator at 50.5 from 52.8 (bi-weekly Issue #302 on Feb 8th)

Source: BofA Global Research estimates

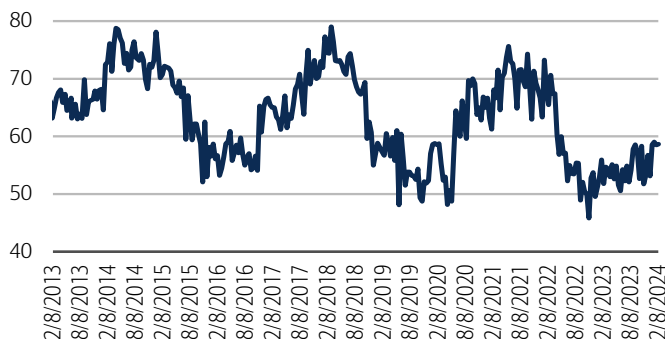
BofA GLOBAL RESEARCH

**BofA TRUCK SHIPPER SURVEY
Survey Says: Demand (50.5)**

This week, our proprietary bi-weekly **BofA Truckload Demand Indicator** for shippers' 0- to 3-month freight demand outlook **decreased to 50.5 from 52.8 last survey**. The Demand Indicator has now been at- or above-50 for 4 consecutive issues and 7x over the past 12. This positive stretch follows a period at- or below-50 for 21 of the prior 25 issues (since February 2023). The Indicator remains below the 54.2 average during the '12, '15, '19 Freight Recession periods, highlighting the muted backdrop, yet improving from its 2023 trough (42.6). The Demand Indicator was up 12% year-year, its 11th yr-yr uptick in the past 12 issues. Rail carloads increased 4% year-year this week, the 1st uptick after 3 weeks of declines from Jan. weather impacts. Dry van spot rates ex-fuel were \$1.46/mile, down a touch from \$1.48/mile last week, in line with normal seasonal pullbacks around Lunar New Year, yet remaining above the \$1.21-\$1.26 band it was at in Aug-Oct 2023. Of the respondents, 27% had a positive short-term demand outlook, up from 25% last survey; neutral outlooks were 47%, down from 55% last survey, and negative outlooks were 27%, up from 20% last survey. In the week of February 8th, we surveyed 49 shippers for views on truckload demand, supply, pricing, and inventory.

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

L-T Demand Indicator at 58.7, up 0.3% sequentially



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 37: Shippers' view of inventory levels

Inventory Indicator at 56.1, up 3% from last issue.



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

**Capacity view lowest in 11 surveys;
Inventory ticks up**

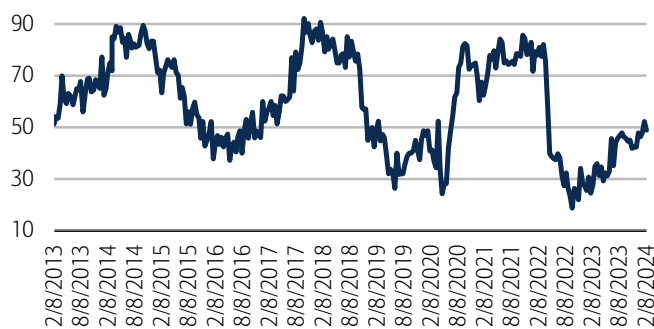
The Rate Indicator, or shippers' view on truck rates, decreased to 49.0 from 52.3 last issue, down 6% sequentially after surpassing 50 last survey for the first time in 92 weeks. **The Inventory Indicator** increased to 56.1 from 54.5 last issue, as shippers hold higher inventories into Lunar New Year. **The Truck Capacity Indicator**, which gauges shippers' views of available truck capacity, decreased to 59.2 from 61.4 last survey, its lowest in 11 surveys as capacity continues to tighten.

Rates face seasonal soft patch

With respect to rates, 22% of shippers expect rates to fall, up from 11% last issue, 57% expect pricing to be flat, down from 73% last issue, and 20% expect rates to rise, up from 16% last issue. On capacity, 31% expect capacity to rise, vs 27% last issue, 57% expect capacity to stay flat, from 68% last issue, 12% expect capacity to be lower, vs 5% last issue. **SHIPPER COMMENTS:** A Consumer Shipper noted spot market rates are increasing week-over-week, while contracted rates remain flat. An Industrial Shipper is seeing pockets of tightness from weather events and year end rail congestion. It is still receiving lots of cold calls from carriers looking for business. An Industrial Shipper sees rates moving up slightly as the market recovers from the lows. (See survey for additional commentary).

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

Rate Indicator at 49.0, -6% sequentially



Source: BofA Global Research estimates.

BofA GLOBAL RESEARCH

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

Diffusion indicator month-by-month levels

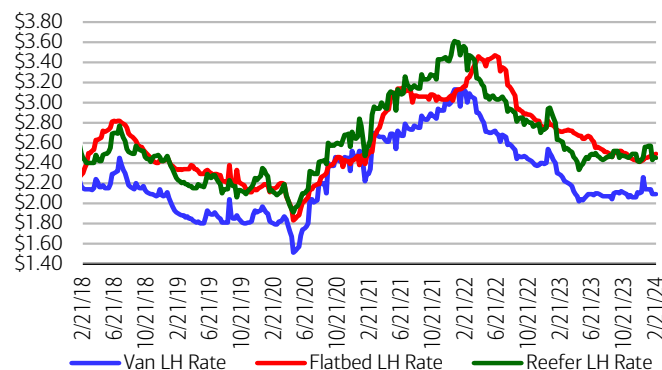
	2020		2021		2022		2023		2024	
Jan	1/2	52.3	1/14	63.8	1/13	75.0	1/12	47.5	1/11	51.6
Feb	1/16	54.1	1/28	63.8	1/27	70.0	1/26	51.3	1/25	52.8
	1/30	54.6	2/11	67.5	2/10	69.5	2/9	45.1	2/8	50.5
Mar	2/13	53.1	2/25	68.8	2/24	71.9	2/23	47.6	2/22	
	2/27	51.3	3/11	72.9	3/10	70.3	3/9	46.9	3/8	
Apr	3/12	46.1	3/25	68.8	3/24	69.2	3/23	48.3	3/22	
	3/26	43.5	4/8	73.0	4/7	64.1	4/6	49.5	4/5	
May	4/9	37.2	4/22	75.7	4/21	58.0	4/20	44.4	4/19	
	4/23	33.3	5/6	77.6	5/5	57.5	5/4	49.5	5/3	
Jun	5/7	37.8	5/20	78.3	5/19	55.0	5/18	44.3	5/17	
	5/21	46.2	6/3	78.3	6/2	58.5	6/1	42.6	5/31	
Jul	6/4	54.6	6/17	78.1	6/16	54.0	6/15	47.9	6/14	
	6/18	56.4	7/1	75.7	6/30	55.5	6/29	49.4	6/28	
Aug	7/2	59.3	7/15	70.9	7/14	50.9	7/13	47.1	7/12	
	7/16	62.5	7/29	74.3	7/28	53.9	7/27	50.0	7/26	
Sep	7/30	59.1	8/12	73.0	8/11	50.0	8/10	55.2	8/9	
	8/13	63.5	8/26	73.0	8/25	54.5	8/24	51.0	8/23	
Oct	8/27	71.1	9/9	73.6	9/8	51.6	9/7	52.4	9/6	
	9/10	75.8	9/23	75.0	9/22	50.0	9/21	50.0	9/20	
Nov	9/24	78.1	10/7	69.4	10/6	47.6	10/5	48.9	10/4	
	10/8	73.3	10/21	68.3	10/20	45.6	10/19	52.5	10/18	
Dec	10/22	70.0	11/4	76.6	11/3	42.4	11/2	47.7	11/1	
	11/5	72.5	11/18	67.7	11/17	50.4	11/16	44.4	11/15	
	11/19	69.9	12/2	69.7	12/1	47.8	11/30	49.0	11/29	
	12/3	63.8	12/16	68.6	12/15	47.2	12/14	49.0	12/13	
	12/17	66.3	12/30	66.7	12/29	49.4	12/28	52.4	12/27	
	12/31	67.7								

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 42: Month-to-Date Run Rate

Van Rate = \$2.09 Flatbed Rate = \$2.49 & Reefer Rate = \$2.45

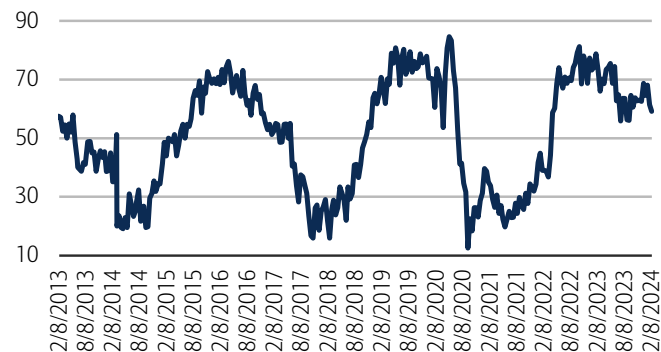


Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

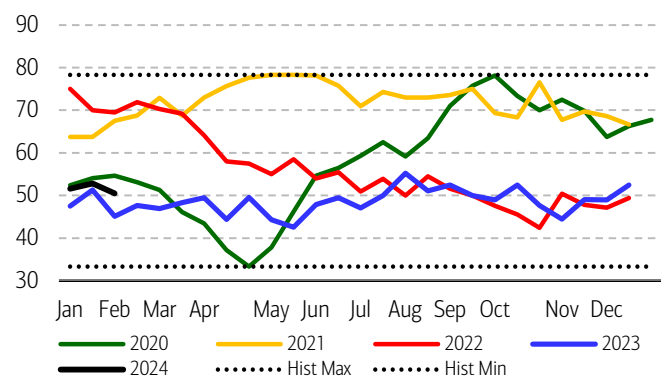
Exhibit 39: Shippers' view of Capacity over the next 3 months

Capacity Indicator at 59.2, down 4% sequentially



Source: BofA Global Research estimates.

BofA GLOBAL RESEARCH

Exhibit 41: Demand (Diffusion) Indicator for 0-3-month demand outlook on stack basis (2020-2024)Demand Indicator to 50.5 (bi-weekly Issue #302 on February 8th)

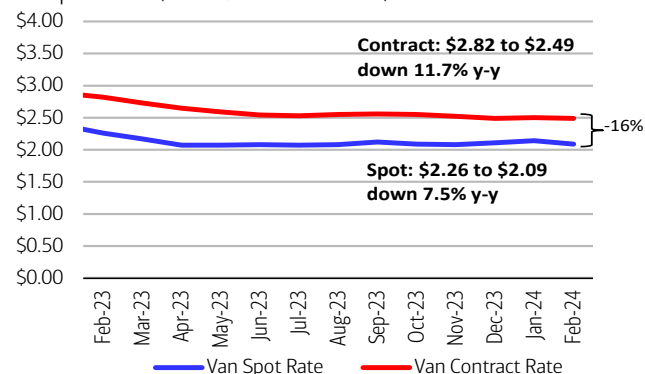
Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

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 43: Monthly Van Spot Rate vs. Contract Rate

Van Spot Rate = \$2.09 & Contract Rate = \$2.49



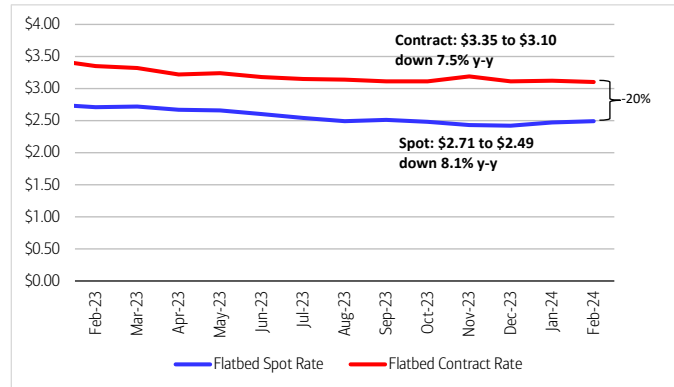
Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH



Exhibit 44: Monthly Flatbed Spot Rate vs. Contract Rate

Flatbed Spot Rate = \$2.49 & Contract Rate = \$3.10

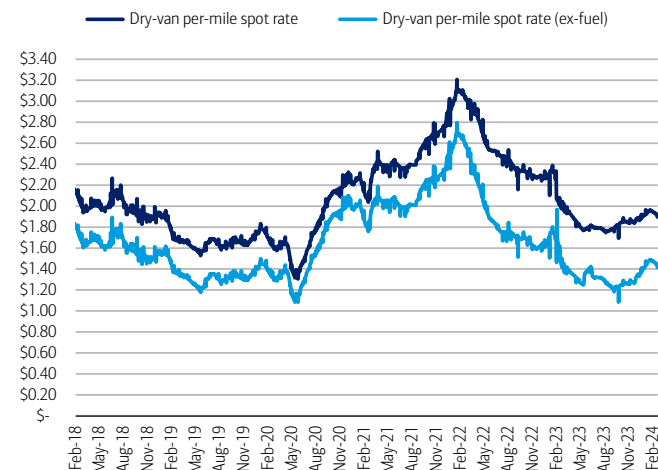


Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

Exhibit 46: Truckstop.com Spot Rates

Dry-Van Spot = \$1.89 Dry-Van (ex-fuel) = \$1.41

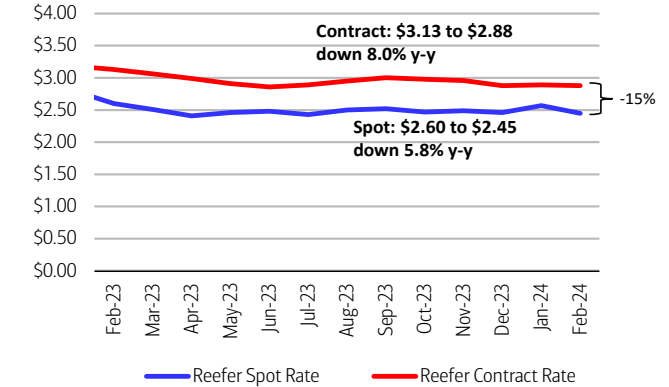


Source: Truckstop.com, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 45: Monthly Reefer Spot Rate vs. Contract Rate

Reefer Spot Rate = \$2.45 & Contract Rate = \$2.88



Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

TruckStop Spot Rates: Dry-Van Spot = \$1.89, Dry-Van (ex-fuel) = \$1.41

Truckstop.com's Dry van spot rates ex-fuel were \$1.41/mi for the week ending February 21, from \$1.46/mi the prior week (February 14) and are flat YTD (from \$1.41/mi on Dec 31).

Truckstop.com's Dry van spot rates (fuel included) were \$1.89/mi for the week ending February 21, from \$1.93/mi the prior week (February 14) and are down 1% YTD (from \$1.91/mi on Dec 31).

Fuel represented \$0.48/mi, up from last week's \$0.47/mi and down from \$0.50 on Dec 31.

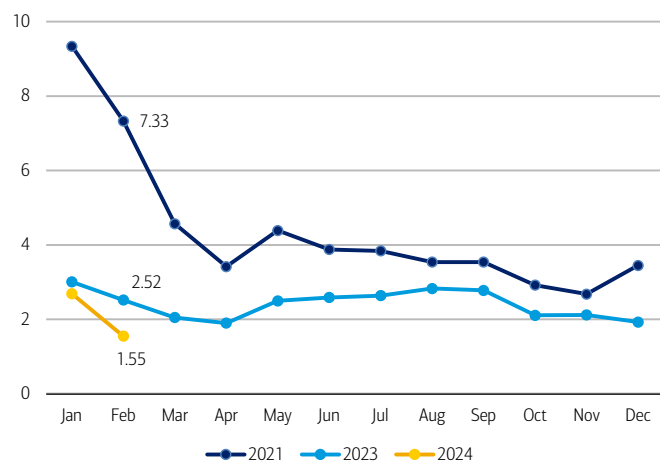
DAT Spot Dry-Van Load/Truck Ratio = 1.14

Weekly Update: DAT's (Dial-a-Truck) dry-van spot load-to-truck ratio was 1.14 for the week ended February 18th, down from 1.44 (-21%) the prior week (February 11), and up from 2.48 (-54%) a year prior. The Ratio posted two consecutive historic lows.

Monthly Update: DAT's (Dial-a-Truck) dry-van spot load-to-truck ratio is at 1.55 for the month of February, down from 2.69 in January, and down from 2.52 (-38%) a year prior. In January, the Ratio was down year-year for the 24th consecutive month.

Exhibit 47: Van Load to Truck Ratio

February Load-to-Truck Ratio at 1.55, down 42% M-M



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

BofA GLOBAL RESEARCH



Exhibit 48: Top 10 US Ports Loaded Volumes

Top 10 Ports in December: +11% Y-Y, LA/LB +15% Y-Y

Top 10 U.S. Ports	2023 TEU's	2023 YTD Chg.	Nov-23 Y-Y %	Dec-23 Y-Y %	Nov-23 TEU's	Dec-23 TEU's
Los Angeles (18%)	5,733,326	-7%	25%	8%	496,374	486,236
Long Beach (16%)	5,086,796	-12%	21%	22%	464,137	437,017
Total LA/LB (35% of total US)	10,820,122	-9%	23%	15%	960,511	923,253
New York (17%)	5,275,292	-14%	-5%	6%	436,302	430,690
Savannah (13%)	3,738,450	-11%	-3%	-1%	318,679	321,579
Houston (11%)	3,175,543	0%	-10%	11%	254,027	270,618
Norfolk (9%)	2,627,523	-6%	6%	-1%	230,047	213,388
Seaport Alliance (6%)	1,667,451	-8%	2%	19%	138,832	156,423
Charleston (7%)	1,923,450	-6%	1%	-3%	157,512	162,100
Oakland (5%)	1,575,077	-10%	1%	15%	132,648	142,148
Maryland (1%)	793,060	2%	0%	5%	61,962	67,655
Total Top 10 (91.5% of US)	31,595,968	-6.7%	5.4%	11%	0	2,687,854
Vancouver	2,355,940	-7%	4%	42%	213,457	215,153
Prince Rupert	494,713	-26%	-10%	-20%	41,679	44,340

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

BofA GLOBAL RESEARCH

Top 10 Ports in December: +11% Y-Y, LA/LB +15% Y-Y**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 11.0 on 02/21/24 (vs 9.4 on 02/14/24). On day-of basis: 11 vs 8 (includes 11 vs 8 vessels at dock), or 0 vs 0 in queue alone.

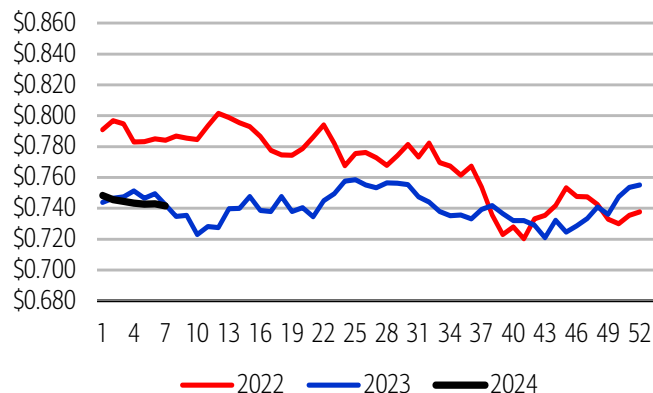


Source: BofA Global Research and Port of LA/Long Beach

BofA GLOBAL RESEARCH

Port of LA/Long Beach – Ships in queue – 0 on 02/21/24 (from 0 a week prior)**Canadian Dollar and Mexican Peso FX Rates****Exhibit 50: Price of 1 Canadian Dollar in US\$**

1 CAD = 0.742 US\$

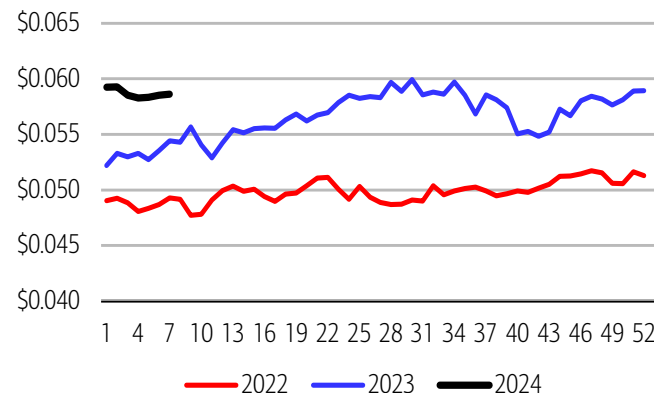


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 51: Price of 1 Mexican Peso in US\$

1 MXN = 0.059 US\$



Source: Bloomberg

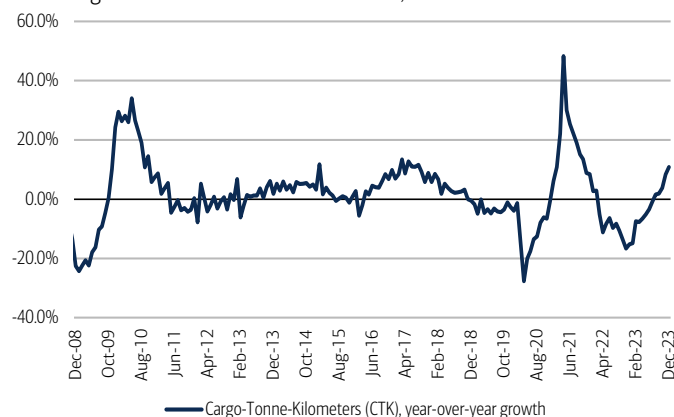
BofA GLOBAL RESEARCH





Exhibit 52: IATA Volume year-over-year growth

IATA Freight Vols: +10.8% Y-Y in December, North America +2.0%



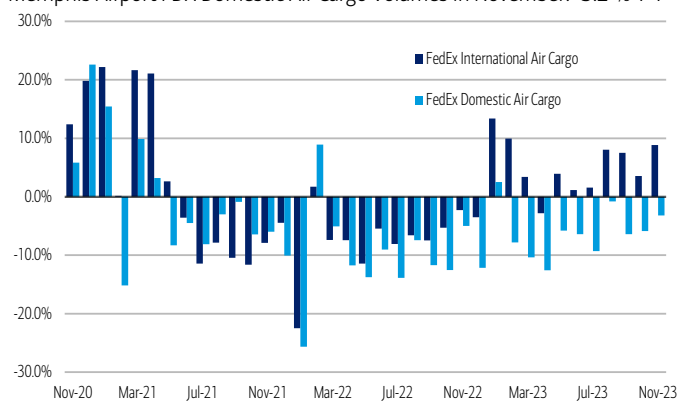
Source: International Air Transport Association

BofA GLOBAL RESEARCH

**IATA Freight Vols: +10.8% Y-Y in
December, North America +2.0%**

Exhibit 53: FedEx Air Cargo Volumes at Memphis International Airport

Memphis Airport FDX Domestic Air Cargo Volumes in November: -3.2% Y-Y



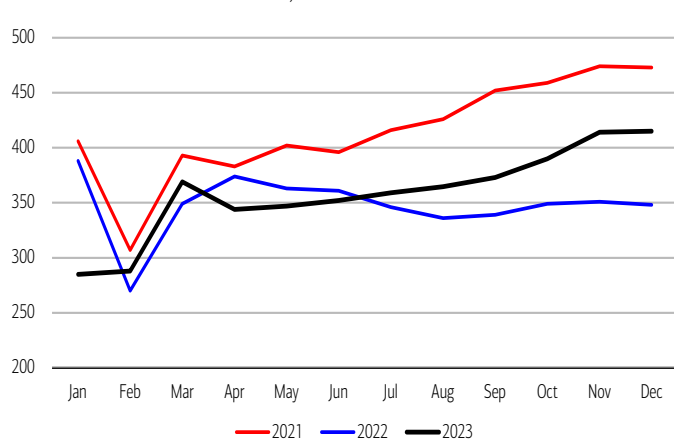
Source: BofA Global Research and Memphis International Airport Statistics

BofA GLOBAL RESEARCH

**Memphis Airport FDX Air Cargo Volumes in
November: -3.2% Y-Y**

Exhibit 54: Hong Kong Airport cargo (000 tons)

HKIA in December: +19.3% Y-Y, +0.2% M-M



Source: Hong Kong International Airport

BofA GLOBAL RESEARCH

**Hong Kong Airport (HKIA): +19.3% Y-Y,
+0.2% M-M**

Rail Performance Measures

Overall Takeaway: The 3 main service level metrics for Class I Rails deteriorated on a sequential basis for the second consecutive week, as Velocity, Dwell Time, and Cars-On-Line were down. At the same time, all 3 metrics posted upticks on a year-over-year basis for the third consecutive week, as Velocity, Cars-On-Line and Dwell Time improved. CPKC (+1.0%) led the group in velocity this week, reversing last week's 2.0% decline. NSC (-3.2%) trailed the group for the second week, deteriorating from last week's 2.3% decrease. BNSF has not reported yet.

Velocity (avg. speed of rail network, faster is better): Deteriorated sequentially (-1.0%) and Improved year-over-year (+1.1%).

Cars-on-Line (fewer cars-on-line is better): Deteriorated sequentially (+0.1%) and improved year-over-year (-0.8%).

Terminal Dwell (lower is better): Deteriorated sequentially (+2.5%) and Improved year-over-year (-3.4%).

Exhibit 55: Rail Performance Metrics

Service levels deteriorated sequentially but improved year-over-year

Rail Performance Measures

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

	2024	2024	2023			% Seq Chg	% y-y Chg
(miles per hour)	Week 7	Week 6	Week 7	% Seq Chg	% y-y Chg		
CNI	19.0	19.4	20.0	-2.1%	-5.0%		
CPKC	19.4	19.2	17.3	1.0%	12.1%		
CSX	18.2	18.2	18.5	0.0%	-1.6%		
NSC	20.9	21.6	20.3	-3.2%	3.0%		
UNP	23.8	23.9	24.1	-0.4%	-1.2%		
BNSF (1)	25.4	25.4	26.0	0.0%	-2.3%	Slower -1.0%	Faster +1.1%
Average	20.3	20.5	20.0	-1.0%	1.1%		

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

	2024	2023	2023				
(no. of cars)	Week 7	Week 6	Week 7	% Seq Chg	% y-y Chg		
CNI	85,140	83,711	86,127	1.7%	-1.1%		
CPKC	89,272	89,394	92,941	-0.1%	-3.9%		
CSX	125,671	125,443	127,336	0.2%	-1.3%		
NSC	169,267	169,399	170,168	-0.1%	-0.5%		
UNP	311,549	312,315	310,632	-0.2%	0.3%		
BNSF (1)	260,471	260,471	252,313	0.0%	3.2%	Worse +0.1%	Better -0.8%
Average	156,180	156,052	157,441	0.1%	-0.8%		

Terminal Dwell Time (lower is better)

	2023	2023	2023				
(time in hours)	Week 7	Week 6	Week 7	% Seq Chg	% y-y Chg		
CNI	7.0	6.8	7.2	2.9%	-2.8%		
CPKC	9.2	9.2	10.4	0.0%	-11.5%		
CSX	9.9	9.6	8.9	3.1%	11.2%		
NSC	24.3	23.0	25.8	5.7%	-5.8%		
UNP	23.3	23.3	24.0	0.0%	-2.9%		
BNSF (1)	26.9	26.9	27.4	0.0%	-1.8%	Worse +2.5%	Better -3.4%
Average	14.7	14.4	15.3	2.5%	-3.4%		

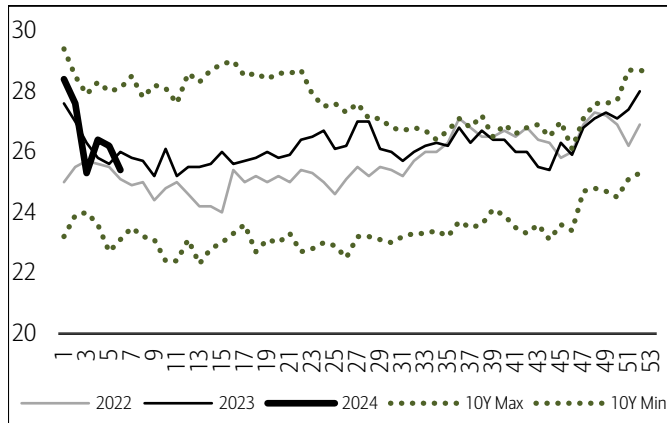
(1): Due the BNSF reporting schedule the reported data is delayed by one week and not included on the averages.

Source: BofA Global Research, company reports

Weekly Rail Velocity Monitor

Exhibit 56: BNSF Velocity

BNSF velocity was 25.4 mph for week 6

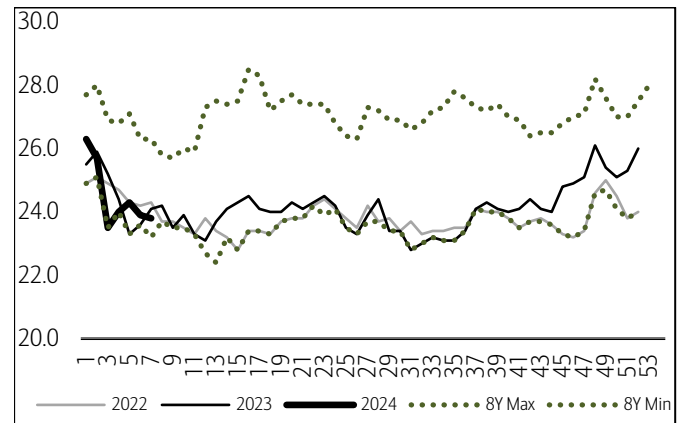


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 57: Union Pacific Velocity

UNP velocity was 23.8 mph for week 7



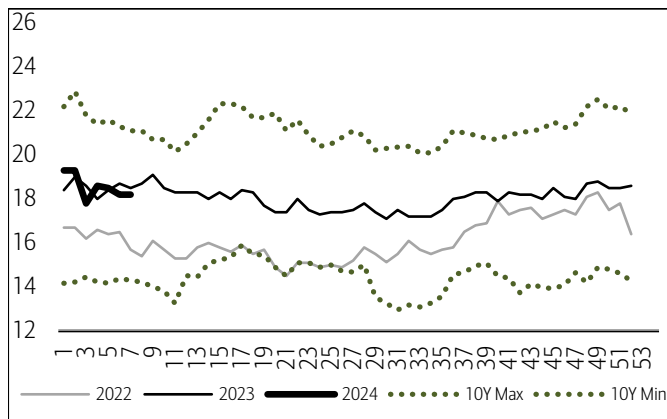
Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 58: CSX Velocity

CSX velocity was 18.2 mph for week 7

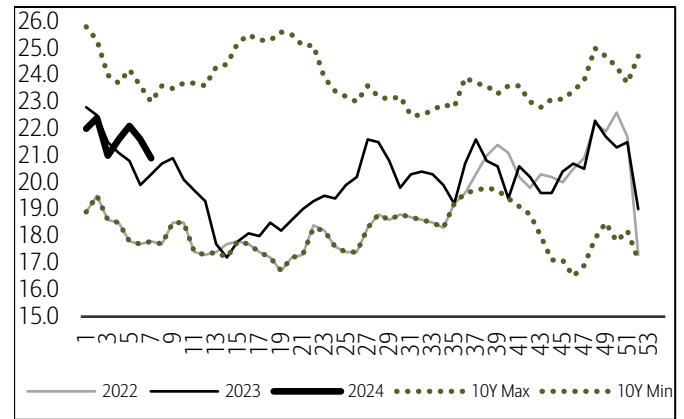


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 59: Norfolk Southern Velocity

NSC velocity was 20.9 mph for week 7

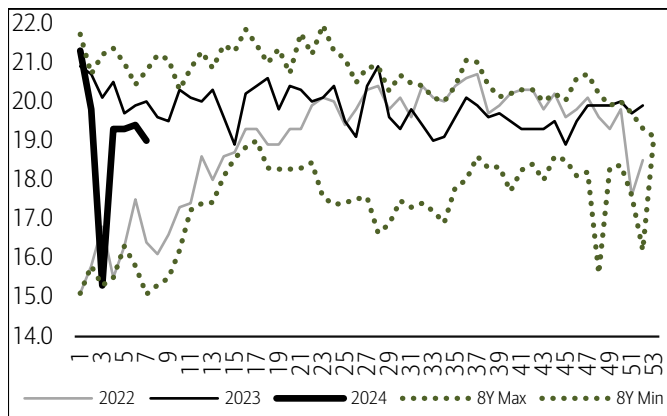


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 60: Canadian National Velocity

CNI velocity was 19.0 mph for week 7



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 19.4 mph for week 7



Source: Company reports, and Association of American Railroads.

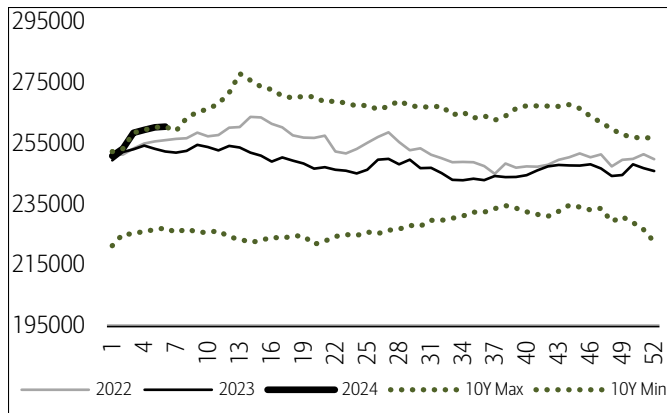
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Cars On-Line Monitor

Exhibit 62: BNSF Cars-On-Line

BNSF cars on line were 260,471 for week 6

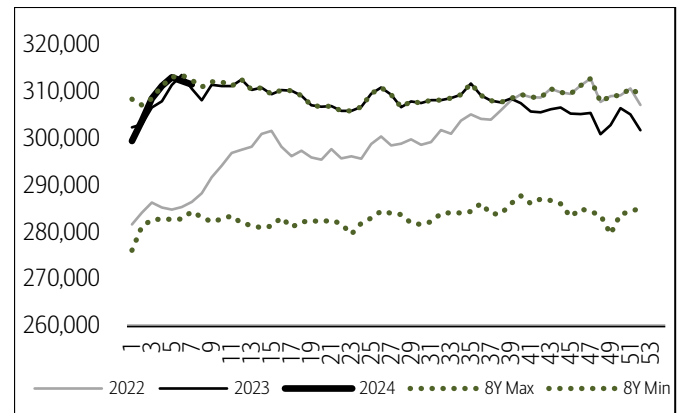


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 63: Union Pacific Cars-On-Line

UNP cars on line were 311,549 for week 7



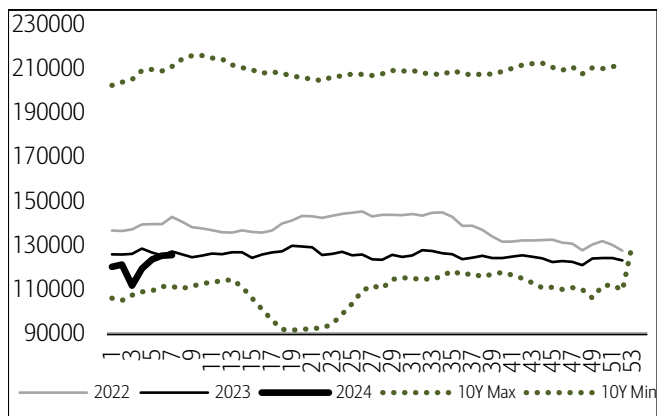
Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 64: CSX Cars-On-Line

CSX cars on line were 125,671 for week 7



Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 65: Norfolk Southern Cars-On-Line

NSC cars on line were 169,267 for week 7

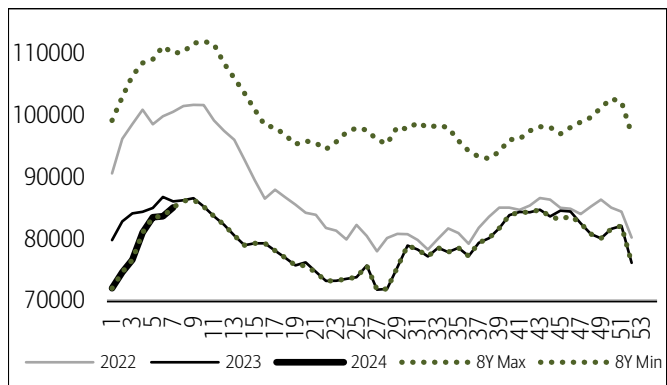


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 66: Canadian National Cars-On-Line

CNI cars on line were 85,140 for week 7



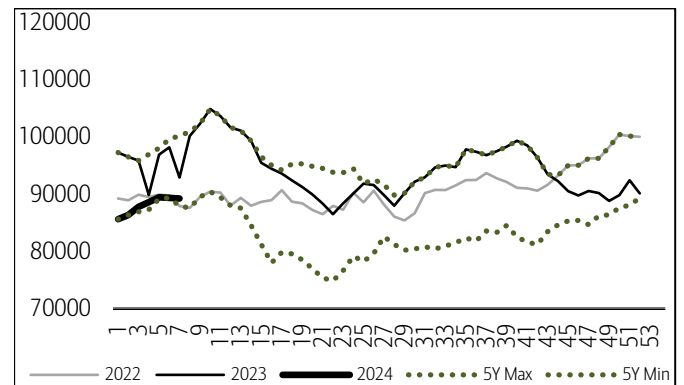
Source: Company reports, and Association of American Railroads.

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 89,272 for week 7



Source: Company reports, and Association of American Railroads.

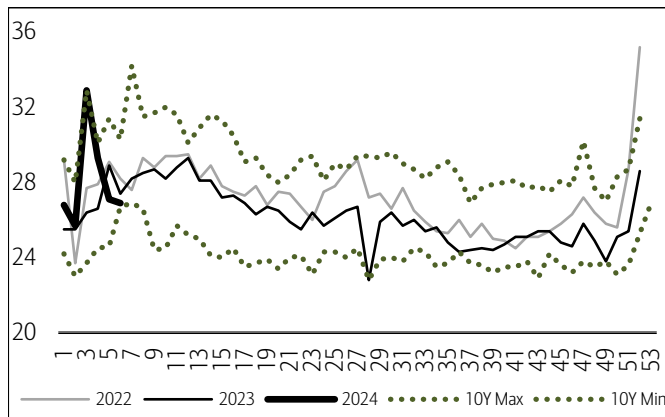
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Dwell Time Monitor

Exhibit 68: BNSF Dwell Time

BNSF dwell time was 26.9 hrs for week 6

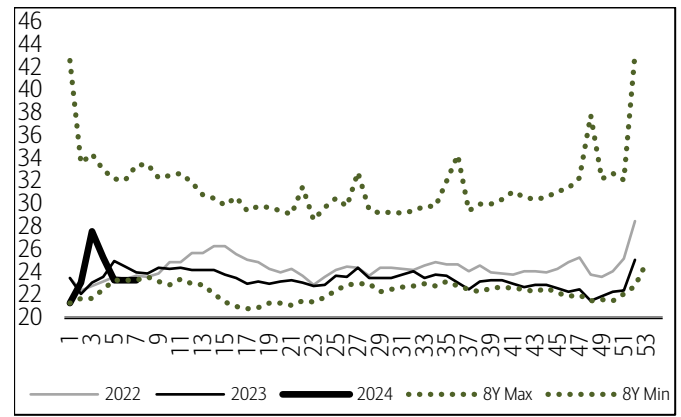


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 69: Union Pacific Dwell Time

UNP dwell time was 23.3 hrs for week 7



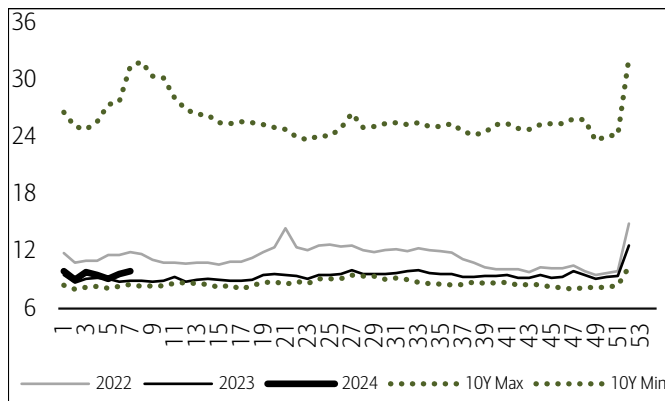
Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 70: CSX Dwell Time

CSX dwell time was 9.9 hrs for week 7

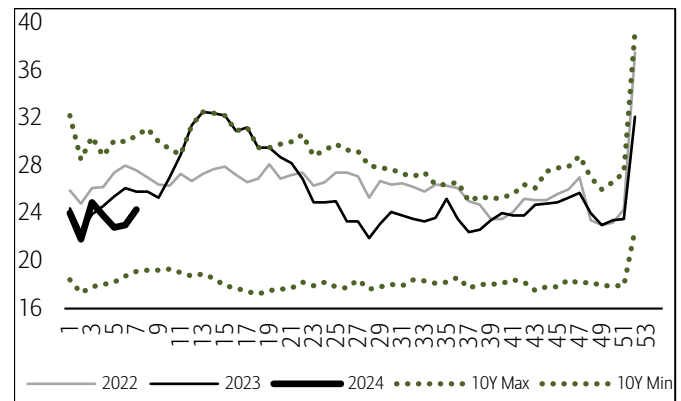


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 71: Norfolk Southern Dwell Time

NSC dwell time was 24.3 hrs for week 7

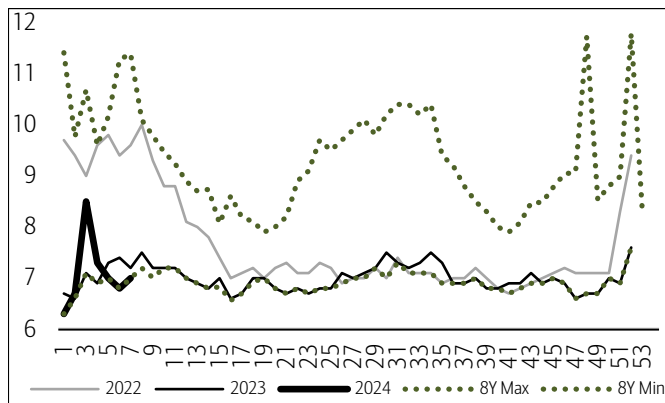


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 72: Canadian National Dwell Time

CNI dwell time was 7.0 hrs for week 7



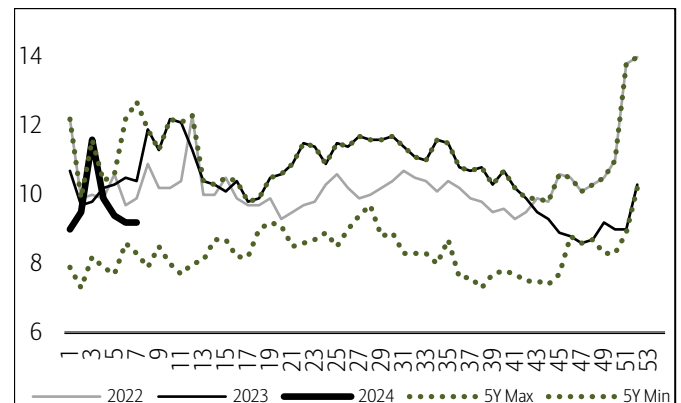
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 73: Canadian Pacific Kansas City Dwell Time

CPKC dwell time was 9.2 hrs for week 7



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 5.2% on avg y-y in Dec. (among peers that disclose)

	ODFL	YELL	ARCB	SAIA	XPO
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%	-0.5%
Dec-23	-2.5%		-8.3%	6.8%	3.6%
Jan-24	-5.1%		-18.0%	3.3%	-1.1%

No data provided (BofA quarterly average)

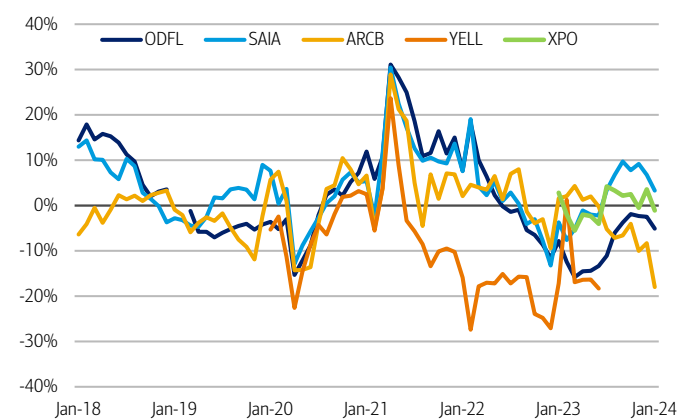
Source: BofA Global Research estimates and company reports

Note: ODFL's January Tons are preliminary

BofA GLOBAL RESEARCH

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

LTL Tons/Day is down 5.2% on avg y-y in Dec. (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 1.4% on avg y-y in Dec. (among peers that disclose)

	ODFL	YELL	ARCB	SAIA	XPO	FDX
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%	-6.0%
Oct-23	-8.5%		3.7%	18.0%	6.2%	-5.0%
Nov-23	-1.2%		-5.0%	18.9%	3.7%	-4.0%
Dec-23	1.0%		-1.9%	16.5%	6.6%	
Jan-24			-9.0%	11.8%	1.4%	

No data provided (BofA quarterly average)

Source: BofA Global Research estimates and company reports

BofA GLOBAL RESEARCH

Exhibit 77: STB employment data

December STB employment: 122,343, up 2.5% Y-Y



Source: STB

BofA GLOBAL RESEARCH

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

Data as of December 2023

	2023 4Q Avg #	4Q Avg. chg. %	BofAe	Diff	4Q Vols
UNP	33,020	0.2%	1.5%	-1.3%	3.4%
CSX	19,216	6.0%	3.3%	2.7%	1.2%
NSC	20,759	7.1%	--	--	7.0%
CN	6,561	3.2%	4.6%	-1.4%	-1.4%
CP	2,912	1.1%	1.0%	0.1%	1.7%
KSU	2,927	-0.6%	-	-	-
BNSF	36,968	2.2%	-	-	-
Total	122,364	3.0%	-	-	-

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

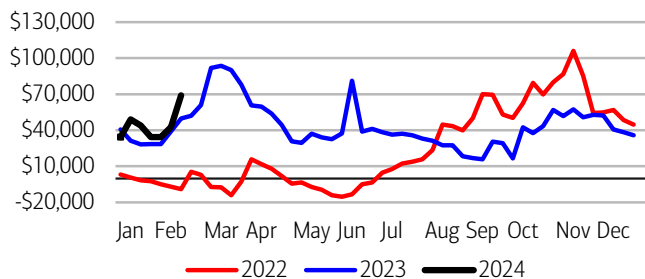
Source: STB, BofA Global Research estimates

BofA GLOBAL RESEARCH

Weekly Shipping Rates

Exhibit 79: VLCC Spot Rates

VLCC Spot Rates at \$69,077 as of 02/16/2024

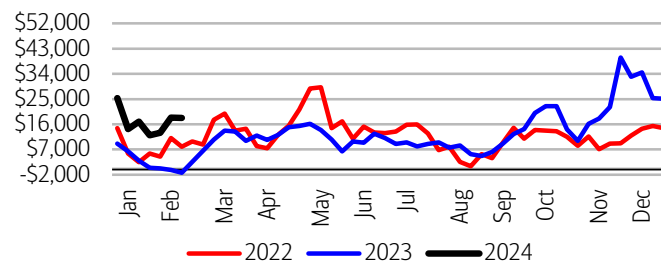


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 80: Capesize spot Rates

Capesize Spot rates at \$18,220 as of 02/16/2024

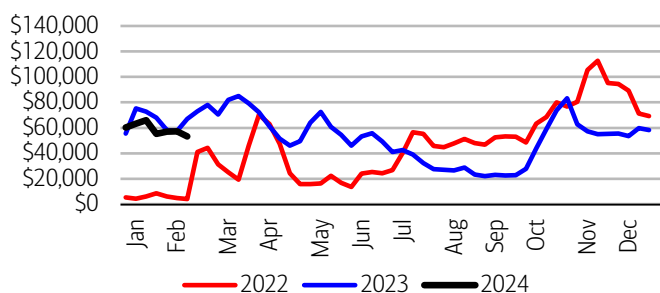


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 81: Suezmax Spot Rates

Suezmax Spot Rates at \$53,222 as of 02/16/2024

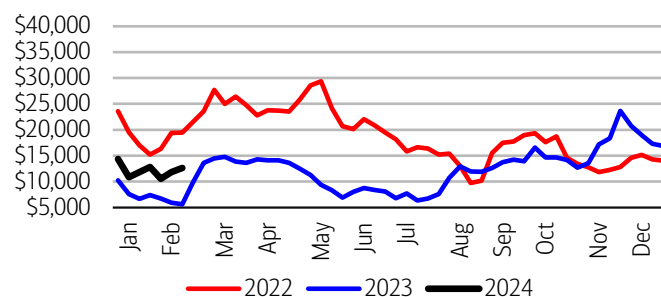


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 82: Panamax Spot Rates

Panamax Spot Rates at \$12,664 as of 02/16/2024

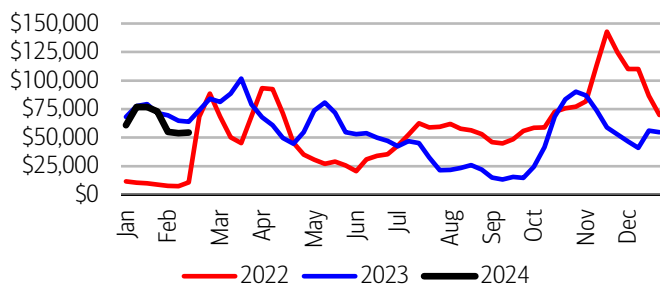


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 83: Aframax Spot Rates

Aframax Spot Rates \$54,475 as of 02/16/2024

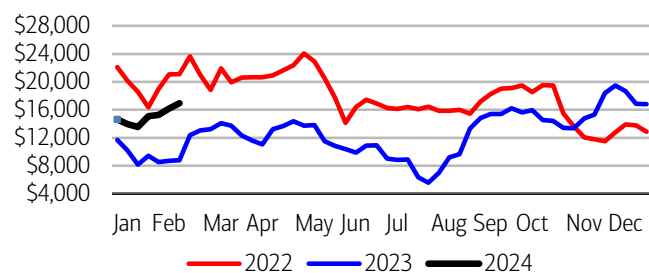


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 84: Supramax Spot Rates

Supramax Spot Rates at \$16,966 as of 02/16/2024

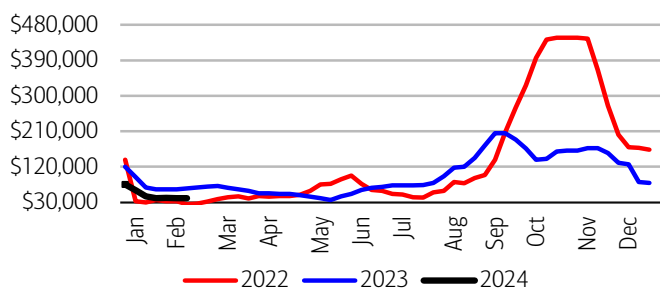


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 85: LNG TFDE Spot Rates

LNG TFDE Spot Rates at \$40,000 as of 02/16/2024



Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 86: Yearly and Quarterly Gas Carrier Rate Data

LNG Carrier Rate is down 1QTD and YTD

Gas Carrier	1QTD Average	2024 YTD Avg.	Orderbook % of Fleet
LNG TFDE	\$48,714	\$48,714	76%
% chg. Y-Y	-32%	-50%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 87: Yearly and Quarterly Tanker Rate Data

Tanker Rates are down 1QTD, but mixed YTD

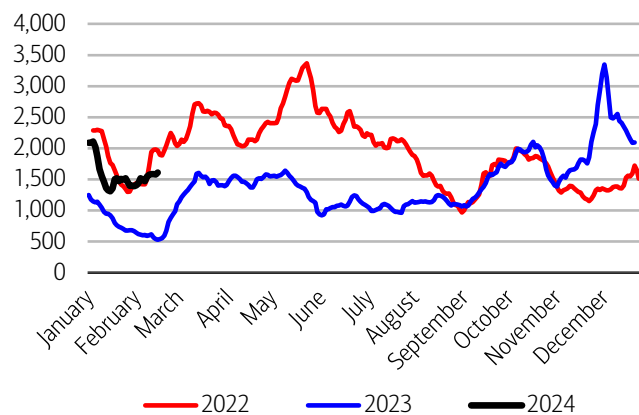
Tanker	1QTD Average	2024 YTD Avg.	Orderbook % of Fleet
VLCC	\$43,918	\$43,918	2%
% chg. Y-Y	-20%	2%	
Suezmax	\$58,921	\$58,921	5%
% chg. Y-Y	-17%	10%	
Aframax	\$64,377	\$64,377	11%
% chg. Y-Y	-17%	16%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 89: Baltic Dry Index

Baltic Dry Index is at 1,610 as of 02/16/2024

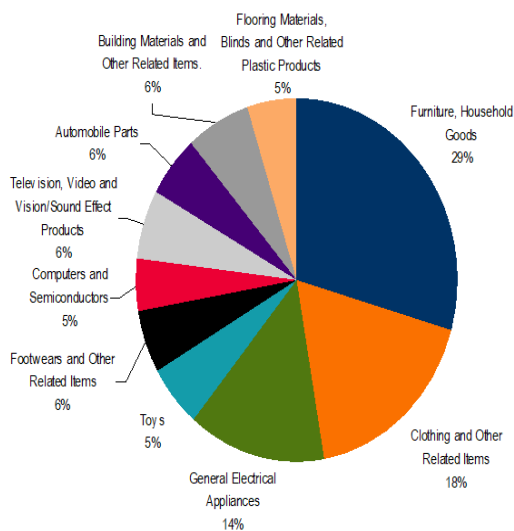


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 91: Container Breakdown by Commodity

Furniture, Household & Goods represents almost 30%



Source: OOCL, BofA Global Research estimates

Exhibit 88: Yearly and Quarterly Dry Bulk Rate Data

Dry Bulk Rates are up 1QTD, while mixed YTD

Dry Bulk	1QTD Average	2024 YTD Avg.	Orderbook % of Fleet
Capesize	\$16,892	\$16,892	5%
% chg. Y-Y	194%	36%	
Panamax	\$12,108	\$12,108	9%
% chg. Y-Y	21%	1%	
Supramax	\$15,089	\$15,089	8%
% chg. Y-Y	36%	21%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 90: Shipping Rates

Shipping Rates are mixed year-over-year

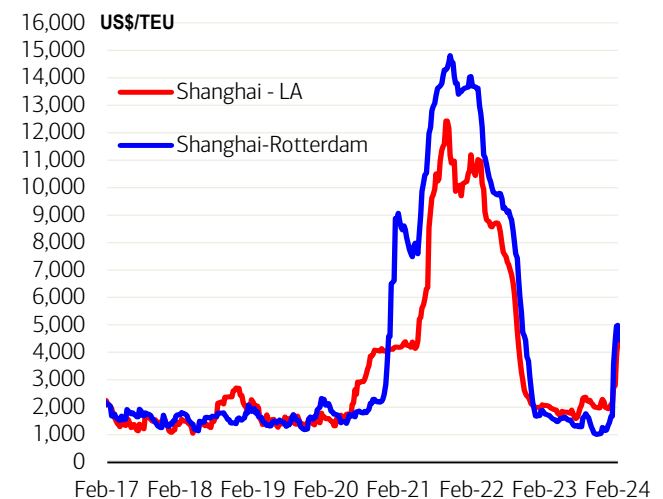
	Current Wk 02/16/24	Prior Wk 02/09/24	YOY Wk 02/17/23	Seq % Change	YOY % Change
Vessel Type					
VLCC	\$69,077	\$42,546	\$49,746	62.4%	38.9%
Suezmax	\$53,222	\$57,292	\$67,019	-7.1%	-20.6%
Aframax	\$54,475	\$53,782	\$63,893	1.3%	-14.7%
LNG TFDE	\$40,000	\$40,000	\$65,000	0.0%	-38.5%
Baltic Dry Index	1,610	1,545	538	4.2%	199.3%

Source: Bloomberg and Clarkson

BofA GLOBAL RESEARCH

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

Shanghai – LA and Shanghai – Rotterdam are up significantly year-over-year



Source: Chinese Shipping, and BofA Global Research

Exhibit 93: Railroads Comp Sheet

Data as of 02/21/2024

								EPS														
		Share	Shares	Mkt Cap	Net Debt	EV		BofA	BofA	BofA	Cons.	Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA				
	QRQ		Out.																			
Company	Ticker	Price	(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)		2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e		
Canadian National	CNI	B-2-7	\$129.07	641	\$82.7	\$13.4	\$96.1	\$5.75	\$5.43	\$5.94	\$5.94	22.4x	23.8x	21.7x	\$6.61	\$6.27	\$6.76	14.5x	15.3x	14.2x		
Canadian Pacific	CP	B-1-7	\$85.47	932	\$79.7	\$16.9	\$96.6	\$2.89	\$2.86	\$3.20	\$3.23	29.6x	29.9x	26.7x	\$4.92	\$5.03	\$5.50	19.6x	19.2x	17.6x		
CSX Corporation	CSX	B-1-7	\$37.10	1,959	\$72.7	\$17.1	\$89.8	\$1.91	\$1.84	\$2.00	\$1.98	19.4x	20.2x	18.6x	\$7.42	\$7.13	\$7.43	12.1x	12.6x	12.1x		
Norfolk Southern	NSC	RSTR	\$257.62	226	\$58.2	\$15.6	\$73.8	--	--	--	--	--	--	--	--	--	--	--	--	--		
Union Pacific	UNP	B-1-7	\$251.32	610	\$153.2	\$31.5	\$184.8	\$11.23	\$10.29	\$11.15	\$11.18	22.4x	24.4x	22.5x	\$12.26	\$11.47	\$12.23	15.1x	16.1x	15.1x		
														23.4x	24.6x	22.4x				14.7x	15.5x	14.7x
2024Q1EPS								Revenue		2023Q4	Net				Total Return (w/reinvested dividends)					Dividend		
		est.	Δ to	EPS Growth			YoY	Growth	Op.	Debt/	ROIC											
Company		BofA	Cons.	Street	1yr	3yr	5yr	1Q2024	1yr	5yr	Ratio	EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
Canadian National		\$1.20	\$1.27	-6%	-3%	20%	19%	-2%	-2%	4%	59%	2.2x		10.4%	0%	3%	13%	8%	10%	\$3.38	1.9%	
Canadian Pacific		\$0.69	\$0.70	-1%	-5%	6%	15%	-5%	4%	17%	58%	3.5x		5.6%	1%	8%	12%	6%	17%	\$0.76	0.7%	
CSX Corporation		\$0.46	\$0.45	2%	-1%	110%	44%	-1%	-1%	4%	64%	2.5x		10.8%	0%	7%	23%	8%	10%	\$0.48	1.3%	
Norfolk Southern		--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	
Union Pacific		\$2.45	\$2.51	-3%	-7%	11%	6%	-3%	-3%	2%	61%	2.9x		11.4%	0%	2%	33%	9%	10%	\$5.20	2.1%	
														9.3%	1%	6%	20%	6%	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 02/21/2024

								EPS															
		Share	Shares	Mkt Cap	Net Debt	EV		BofA	BofA	BofA	Cons	Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA					
QRQ		Price	Out.																				
Company	Ticker		(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)		2022a	2032e	2042e	2042e	2022a	2032e	2042e	2022a	2032e	2042e	2022a	2032e	2042e			
J.B. Hunt																							
Transp.	JBHT	B-1-7	\$203.18	103	\$21.0	\$1.5	\$22.5	\$9.79	\$7.20	\$8.15	\$7.80	20.8x	28.2x	24.9x	\$2.06	\$1.78	\$1.99	10.9x	12.6x	11.3x			
Textainer Group	TGH	n/a	\$49.82	41	\$2.1	\$4.7	\$6.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a			
Hub Group Inc	HUBG	n/a	\$43.67	62	\$2.7	\$0.4	\$3.1	n/a	\$2.68	n/a	\$2.22	8.3x	16.3x	19.7x	\$0.62	\$0.40	\$0.40	5.0x	7.8x	7.8x			
												12.4x	18.5x	18.2x				8.3x	10.3x	9.8x			
2024Q1EPS								Revenue		2023Q4		Net		ROIC		Total Return (w/reinvested dividends)					Dividend		
		est.	Δ to	EPS Growth			YoY	Growth	Op.		Debt/								Annual		Yield		
Company		BofA	Cons.	Street	1yr	3yr	5yr	1Q2024	1yr	5yr	Ratio	EBITDA	1yr				1 week	YTD	1yr	3yr	5yr		
J.B. Hunt																							
Transp.		\$1.59	\$1.61	-1%	-23%	18%	19%	-13%	-13%	8%	92%	0.9x		12.9%	-7%	2%	11%	12%	14%		\$1.72	0.8%	
Textainer Group		n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Hub Group Inc		n/a	\$0.41		-49%	63%	30%	-21%	-21%	1%	97%	1.0x		7.4%	-2%	-5%	-7%	15%	14%		--	--	
												83%	3.0x		8.4%	-3%	-1%	22%	19%	20%			

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 02/21/2024

		QRQ	Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA					
Company	Ticker	Price		Out. (mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2021e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e			
Arcbest Corp	ARCB	C-3-7	\$138.86	24	\$3.3	\$0.0	\$3.3	\$13.63	\$7.88	\$10.85	\$10.21	10.2x	17.6x	12.8x	\$0.58	\$0.37	\$0.47	5.6x	8.8x	6.9x			
Old Dominion	ODFL	B-1-7	\$424.42	109	\$46.3	(\$0.4)	\$46.0	\$12.18	\$11.26	\$12.65	\$12.94	34.8x	37.7x	33.6x	\$2.10	\$1.97	\$2.17	21.9x	23.4x	21.2x			
Saia Inc	SAIA	B-1-9	\$547.33	27	\$14.5	(\$0.2)	\$14.4	\$13.40	\$13.27	\$16.20	\$16.20	40.8x	41.2x	33.8x	\$0.63	\$0.64	\$0.78	22.9x	22.5x	18.3x			
TFI Int'l	TFII	B-2-7	\$144.53	84	\$12.2	\$1.9	\$14.1	\$1.74	\$1.71	\$2.20	\$7.49	83.0x	84.5x	65.7x	\$1.14	\$0.91	\$1.09	12.4x	15.4x	12.9x			
XPO, Inc.	XPO	C-1-9	\$119.23	116	\$13.8	\$3.7	\$17.5	\$3.53	\$2.93	\$3.65	\$3.47	33.8x	40.7x	32.7x	\$0.66	\$0.66	\$0.87	26.5x	26.5x	20.2x			
												40.5x	44.4x	35.7x				17.9x	19.3x	15.9x			
		2024Q1EPS est.		EPS Growth		YoY		Revenue Growth		2023Q4 Op. Ratio		Net Debt/EBITDA		ROIC		Total Return (w/reinvested dividends)			Dividend				
Company		BofA	Cons.	Δ to Street	1yr	3yr	5yr	1Q2024	1yr	5yr	1yr	5yr	1yr	5yr	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield	
Arcbest Corp		\$1.91	\$1.58	21%	-42%	70%	n/a	-17%	-15%	9%	93%	0.3x		10.5%		-2%	16%	42%	36%	31%	\$0.48	0.3%	
Old Dominion		\$2.74	\$2.72	1%	-8%	29%	20%	-6%	-6%	8%	72%	-0.2x		28.7%		-2%	5%	24%	26%	34%	\$2.08	0.5%	
Saia Inc		\$3.39	\$3.40	0%	-1%	40%	35%	3%	3%	13%	85%	-0.2x		18.3%		-3%	25%	101%	37%	51%	--	--	
TFI Int'l		\$1.57	\$1.47	7%	-17%	47%	130%	-15%	-15%	20%	90%	1.7x		12.8%		0%	6%	18%	27%	--	\$1.60	1.1%	
XPO, Inc.		\$0.71	\$0.67	7%	-7%	89%	n/a	0%	0%	-10%	92%	4.3x		9.6%		-1%	36%	240%	42%	45%	--	--	
												86%	1.2x		16.0%		-1%	18%	85%	34%	40%		

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 02/21/2024

			Share	Share	Mkt Cap	Net Debt	EV	EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA				
		QRQ		Out.																		
Company	Ticker		Price	(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2022a	2023e	2024e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e		
Fedex Corp	FDX	B-1-7	\$241.41	250	\$60.3	\$13.8	\$74.1	\$14.96	\$17.70	\$20.85	\$17.62	16.1x	13.6x	11.6x	\$9.55	\$11.60	\$11.60	7.8x	7.1x	6.4x		
United Parcel-B	UPS	B-2-7	\$148.27	727	\$126.4	\$19.1	\$145.5	\$12.95	\$8.78	\$8.40	\$8.28	11.4x	16.9x	17.7x	\$16.97	\$12.88	\$12.88	8.6x	11.2x	11.3x		
												13.8x	15.3x	14.6x				8.2x	9.1x	8.8x		
			2024Q1EPS est.			EPS Growth		YoY		Revenue Growth		2023Q4 Op. Ratio	Net Debt/EBITDA	ROIC	Total Return (w/reinvested dividends)					Dividend		
Company			BofA	Cons.	Street	1yr	3yr	5yr	1Q2024	1yr	5yr			1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield	
Fedex Corp			\$3.13	\$3.57	-12%	-7%	94%	11%	-4%	-7%	5%	94%	3.3x	5.6%	2%	-5%	20%	0%	8%	\$5.04	2.1%	
UPS			\$1.61	\$1.58	2%	-33%	267%	n/a	-9%	-9%	5%	89%	1.5x	14.4%	4%	-5%	-13%	1%	9%	\$6.52	4.4%	
												91%	2.4x	10.0%	3%	-5%	3%	0%	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 3Q24, and year metrics correspond to fiscal years 2023, 2024, and 2025.

BofA GLOBAL RESEARCH

Exhibit 97: Truckload Carriers Comp Sheet

Data as of 02/21/2024

		QRQ	Share	Shares Out.	Mkt Cap	Net Debt	EV	EPS				Forward P/E		EBITDA (\$ bil)			Forward EV/EBITDA				
Company	Ticker		Price	(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	BofA	BofA	BofA	Cons.	2022a	2023e	2024e	2022a	2023e	2024e	2022a	2023e	2024e	
Knight Transportation	KNX	B-1-7	\$57.67	161	\$9.3	\$2.8	\$12.1	\$5.10	\$1.72	\$2.50	\$2.49	11.3x	33.5x	23.1x	\$1.77	\$1.10	\$1.39	6.9x	11.0x	8.7x	
Schneider National	SNDR	B-2-7	\$23.72	93	\$4.2	\$0.3	\$4.4	\$2.63	\$1.36	\$1.10	\$1.14	9.0x	17.4x	21.6x	\$0.97	\$0.68	\$0.67	4.6x	6.5x	6.6x	
Werner Enterprises	WERN	B-3-7	\$40.46	63	\$2.6	\$0.6	\$3.2	\$3.71	\$1.93	\$2.10	\$1.98	10.9x	21.0x	19.3x	\$0.61	\$0.48	\$0.50	5.2x	6.6x	6.3x	
Covenant Transport	CVLG	n/a	\$51.85	11	\$0.7	\$0.2	\$0.9	n/a	n/a	n/a	\$4.27	8.8x	12.5x	12.2x	\$0.15	\$0.12	\$0.12	6.0x	7.5x	7.5x	
Heartland Express	HTLD	n/a	\$12.46	79	\$1.0	\$0.3	\$1.3	n/a	n/a	n/a	\$0.05	8.8x	319.5x	244.3x	\$0.25	\$0.23	\$0.23	5.0x	5.6x	5.6x	
Marten Transport	MRTN	n/a	\$19.25	81	\$1.6	(\$0.1)	\$1.5	n/a	n/a	n/a	\$0.86	14.5x	21.5x	22.4x	\$0.25	\$0.21	\$0.21	6.0x	7.2x	7.2x	
Pam Transport	PTSI	n/a	\$18.56	22	\$0.4	\$0.1	\$0.5	n/a	n/a	n/a	\$1.10	4.3x	12.7x	16.9x	\$0.20	\$0.11	\$0.11	2.7x	4.7x	4.7x	
Universal Logistics	ULH	n/a	\$32.41	26	\$0.9	\$0.4	\$1.2	n/a	n/a	n/a	n/a	5.0x	--	--	\$0.32	--	--	3.8x	--	--	
												9.1x	62.6x	51.4x				5.0x	7.0x	6.7x	
2024Q1EPS								2023Q4		ROIC		Total Return (w/reinvested dividends)					Dividend				
Company		est.	Δ to Street	EPS Growth			YoY 1Q2024		Op. Ratio	Net Debt/EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield			
Knight Transportation		\$0.39	\$0.38	2%	-66%	7%	--	-4%	8%	98%	2.2x	3.4%	-2%	0%	0%	10%	12%	\$0.64	1.1%		
Schneider National		\$0.19	\$0.16	19%	-50%	19%	-3%	-17%	2%	98%	0.3x	6.8%	-2%	-7%	-14%	2%	3%	\$0.38	1.6%		
Werner Enterprises		\$0.26	\$0.31	-16%	-52%	0%	-6%	0%	5%	95%	1.2x	5.3%	-2%	-5%	-12%	-1%	7%	\$0.56	1.4%		
Covenant Transport		n/a	\$0.78		-44%	--	--	-9%	1%	95%	0.0x	15.6%	-3%	13%	54%	43%	17%	\$0.44	0.8%		
Heartland Express		n/a	(\$0.09)		-84%	-2%	-16%	25%	24%	96%	1.2x	2.2%	-3%	-13%	-25%	-11%	-9%	\$0.08	0.6%		
Marten Transport		n/a	\$0.16		-40%	6%	0%	-10%	7%	94%	-0.3x	8.4%	-1%	-8%	-12%	8%	11%	\$0.24	1.2%		
Pam Transport		n/a	\$0.10		-74%	92%	37%	-14%	8%	100%	1.2x	3.1%	0%	-11%	-34%	8%	8%	--	--		
Universal Logistics		n/a	n/a		-45%	47%	33%	-18%	1%	91%	1.3x	11.2%	1%	16%	7%	12%	9%	\$0.42	1.3%		
												96%	0.9x	7.0%	-1%	-2%	-4%	9%	7%		

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 02/21/2024

		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				
CH Robinson	CHRW	B-3-7	\$72.50	117	\$8.5	\$1.4	\$9.9	\$6.29	\$7.50	\$3.22	\$3.24	9.7x	22.5x	25.9x	\$1.38	\$0.7	\$0.59				
RXO Inc	RXO	C-2-9	\$21.34	117	\$2.5	\$0.4	\$2.9	\$1.43	\$1.59	\$0.30	\$0.23	13.4x	71.1x	213.4x	\$0.31	\$0.1	\$0.11				
World Kinect	WKC	B-3-7	\$23.79	60	\$1.4	\$0.4	\$1.8	\$1.36	\$2.04	\$1.85	\$2.19	11.7x	12.9x	11.3x	\$0.38	\$0.4	\$0.40				
Landstar System	LSTR	n/a	\$190.98	36	\$6.9	(\$0.4)	\$6.5	n/a	n/a	\$11.76	\$6.64	16.2x	25.9x	28.8x	\$0.63	\$0.4	\$0.40				
Expeditors Intl	EXPD	n/a	\$117.90	145	\$17.1	(\$1.0)	\$16.2	n/a	n/a	\$8.83	\$4.76	13.3x	22.9x	24.8x	\$1.98	\$1.0	\$1.03				
Forward Air Corp	FWRD	n/a	\$39.67	26	\$1.0	\$0.3	\$1.3	n/a	n/a	\$14.24	\$4.29	2.8x	--	--	\$0.32	\$0.2	\$0.22				
												11.2x	31.1x	60.8x				7.3x	13.1x	14.1x	
2024Q1EPS																					
Company	est.		Δ to Street	EPS Growth			Revenue Growth			2023Q4		ROIC	Total Return (w/reinvested dividends)					Dividend			
	BofA	Cons.		1yr	3yr	5yr	1Q2024	1yr	5yr	Op. Ratio	Net Debt/EBITDA		1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield	
CH Robinson	\$0.55	\$0.65	-16%	-61%	8%	-11%	-29%	-29%	3%	98%	2.5x	12.8%	-2%	-16%	-25%	-5%	-2%	\$2.44	3.4%		
RXO Inc	(\$0.04)	(\$0.03)	60%	--	--	--	-18%	--	--	98%	--	5.4%	-2%	-8%	--	--	--	--	--		
World Kinect	\$0.35	\$0.45	-22%	12%	-4%	24%	88%	-10%	18%	99%	1.4x	6.0%	1%	4%	-18%	-11%	0%	\$0.56	2.4%		
Landstar System	n/a	\$1.30		-38%	27%	7%	-29%	-29%	5%	94%	-1.0x	23.2%	-2%	0%	8%	8%	14%	\$1.32	0.7%		
Expeditors Intl	n/a	\$1.09		-39%	21%	16%	-46%	-46%	10%	91%	-1.0x	21.1%	-6%	-7%	13%	9%	11%	\$1.38	1.2%		
Forward Air Corp	n/a	\$0.85		-32%	124%	13%	19%	-12%	6%	96%	0.9x	19.7%	-4%	-37%	-61%	-22%	-9%	\$0.96	2.4%		
												96%	0.6x	14.7%	-3%	-11%	-17%	-4%	2%		

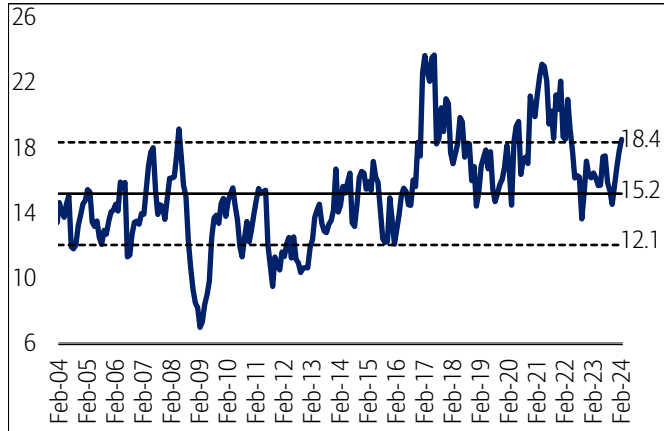
Source: BofA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BofA Research)

BofA GLOBAL RESEARCH



Exhibit 99: CSX forward P/E

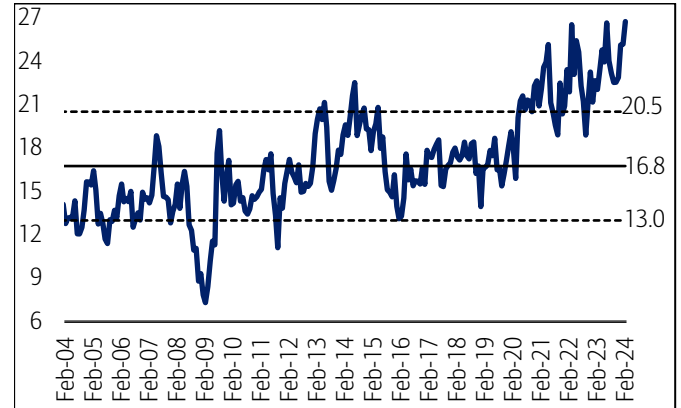
CSX Forward P/E is 18.6x



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

Exhibit 100: CP forward P/E

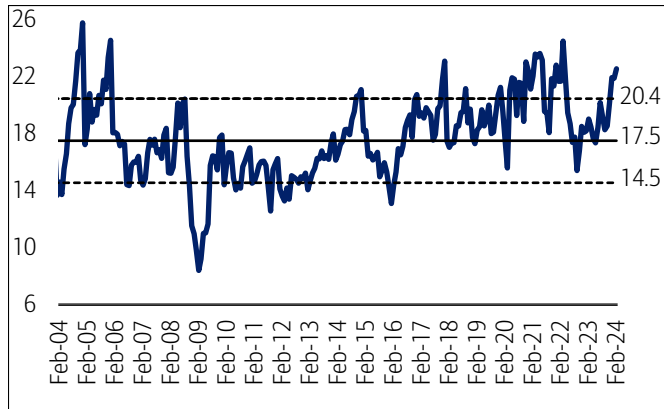
CP Forward P/E is 26.7x



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

Exhibit 101: UNP forward P/E

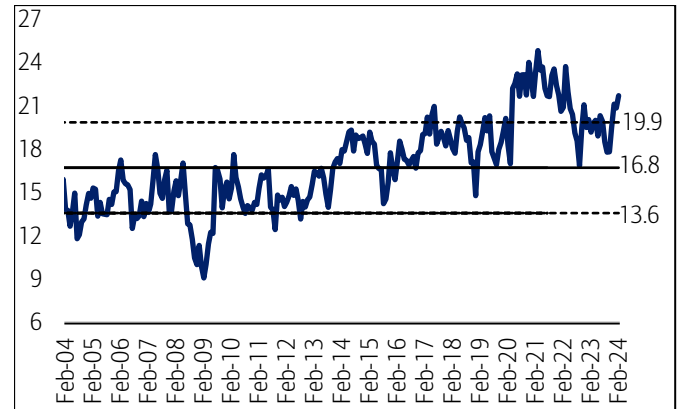
UNP Forward P/E is 22.5x



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

Exhibit 102: CNI forward P/E

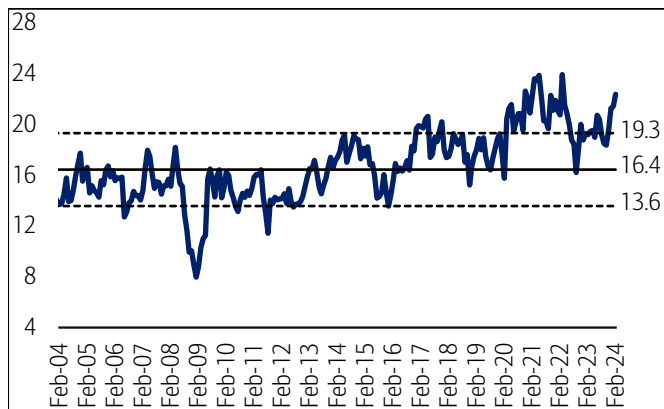
CNI Forward P/E is 21.7x



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

Exhibit 103: Rails Average forward P/E

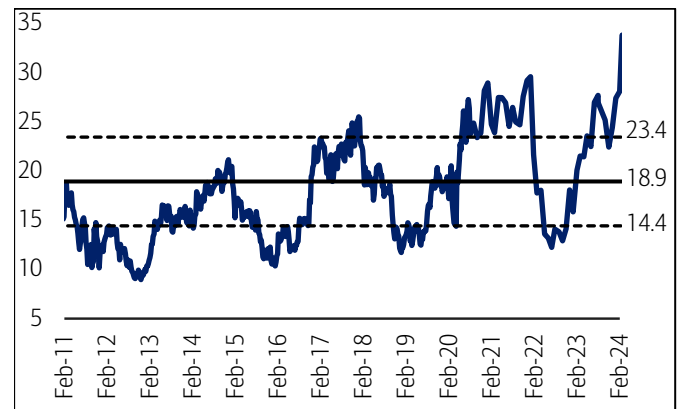
Rails Average Forward P/E is 22.4x



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

Exhibit 104: SAIA forward P/E

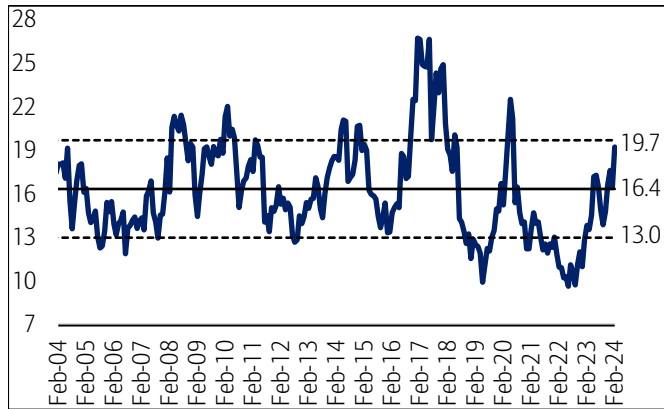
SAIA Forward P/E is 33.8x



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

Exhibit 105: WERN forward P/E

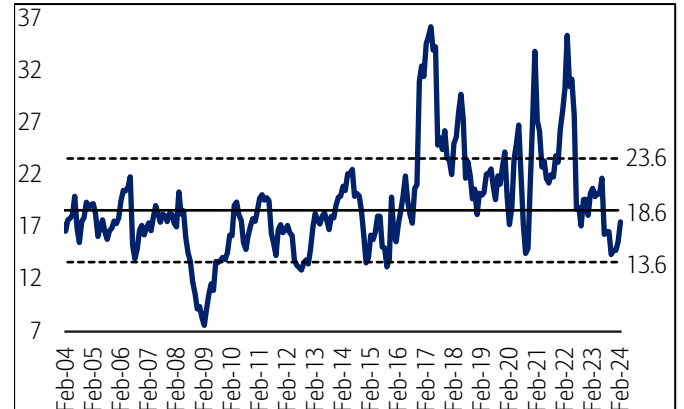
WERN Forward P/E is 19.3x



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

Exhibit 106: KEX forward P/E

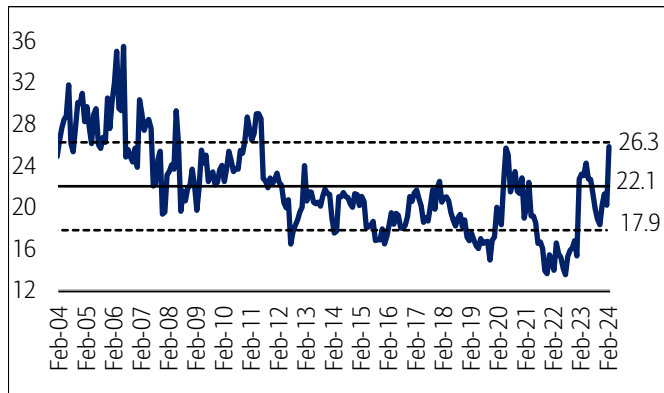
KEX Forward P/E is 17.5x



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

Exhibit 107: CHRW forward P/E

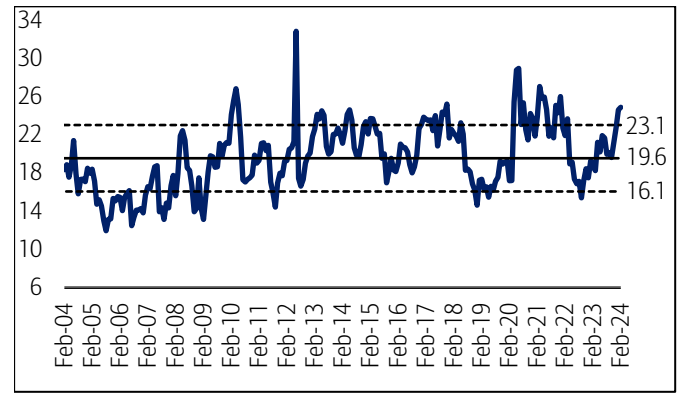
CHRW Forward P/E is 25.9x



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

Exhibit 108: JBHT forward P/E

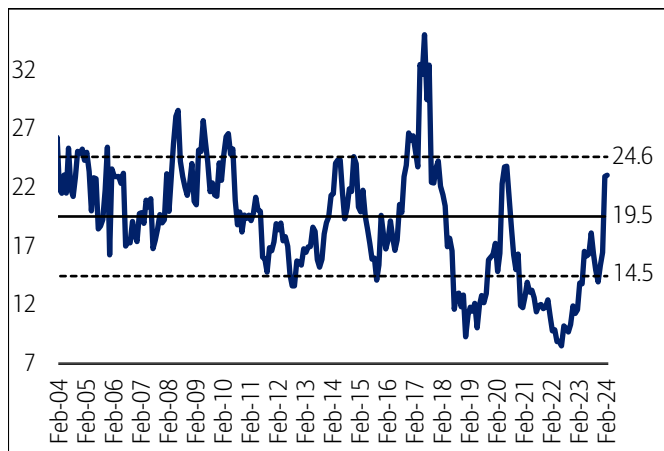
JBHT Forward P/E is 24.9x



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

Exhibit 109: KNX forward P/E

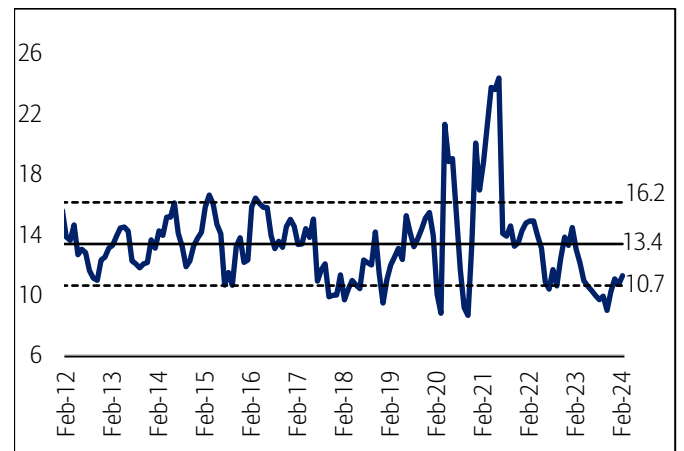
KNX Forward P/E is 23.1x



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

Exhibit 110: WKC forward P/E

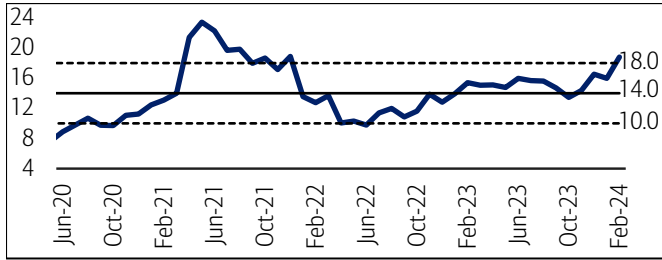
WKC Forward P/E is 11.3x



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

Exhibit 111: TFI forward P/E

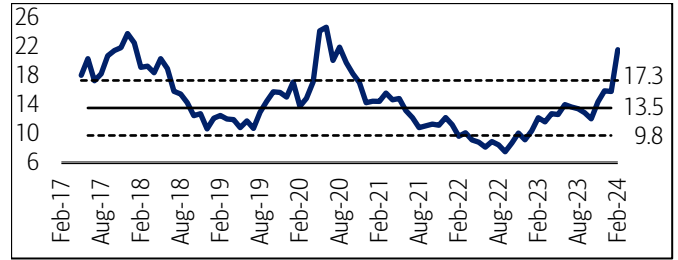
TFI Forward P/E is 18.8x



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

Exhibit 112: SNDR forward P/E

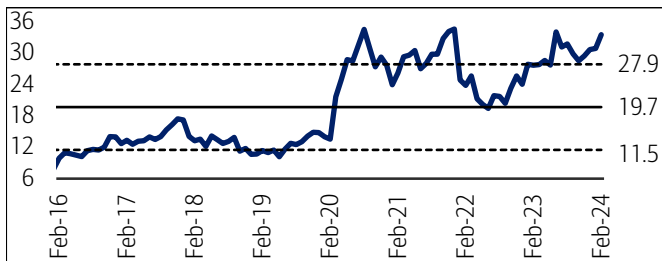
SNDR Forward P/E is 21.6x



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

Exhibit 113: ODFL forward P/E

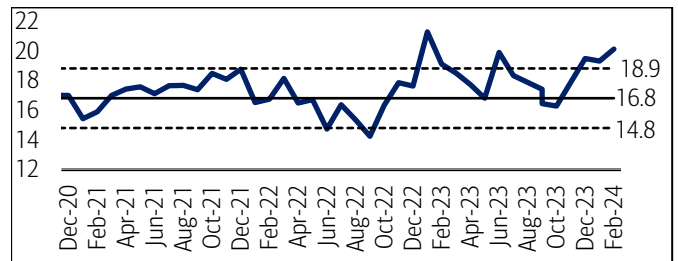
ODFL Forward P/E is 33.6x



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

Exhibit 114: WAB forward P/E

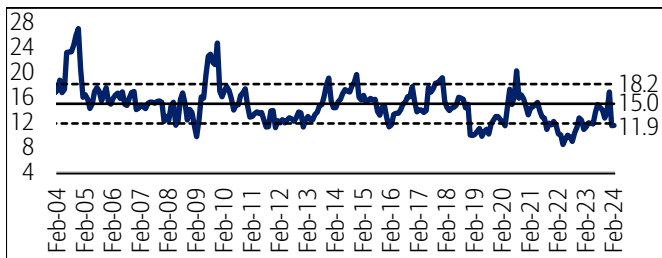
WAB Forward P/E is 20.2x



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

Exhibit 115: FDX forward P/E

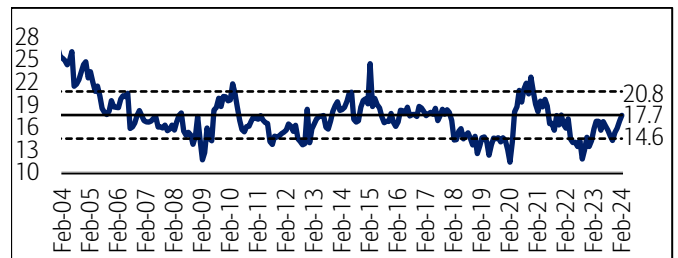
FDX Forward P/E is 11.6x



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

Exhibit 116: UPS forward P/E

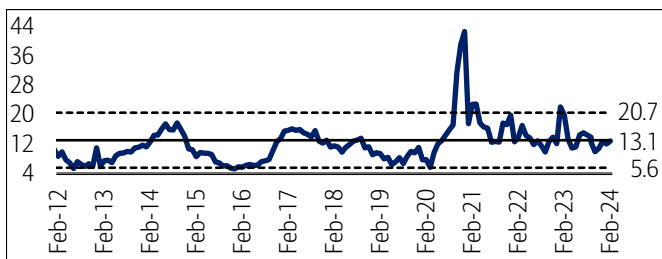
UPS Forward P/E is 17.7x



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

Exhibit 117: GBX forward P/E

GBX Forward P/E is 12.9x



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

Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} 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.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. **Coverage Cluster** is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore)



(Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBL. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA

Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.