

Transport Tracker

Issue #1077, week ending June 14, 2023; We see FDX beat; Spot truck rates tick up

Estimate Change

Hoexter's Thought of the Week

Look for FDX beat vs. Street

FedEx (FDX) is set to report F4Q23 results next Tuesday, June 20. We target F4Q23 EPS of \$4.98 (from \$4.89 prior), and above the Street's \$4.87, as we target full-year EPS of \$15.00, above the midpoint of management's F2023 EPS target range (\$14.60-\$15.20). We target total operating margin of 8.0% (from 5.3% in F3Q) as it moves to structurally cut costs to improve margins. FDX targets \$4 bil in cost savings by F25 through its DRIVE initiative (\$1.3 bil in Express, \$1.2 bil in Ground, \$1.5 bil in corporate overhead; see [DRIVE Takeaways](#)), aiming to achieve \$10 bil in operating income over the medium term (vs our F23e of \$5.3 bil). It sees another \$2 bil in savings in its Network 2.0 initiatives (F25-F27). Given the substantial upside to earnings embedded in its cost reduction targets, we expect investors to focus on execution of DRIVE (KPIs on parking planes, consolidating flights, truck linehaul to rail) as well as signs of a freight bottom. We reiterate our Buy on FDX shares and maintain our \$295 PO on 15.5x our F2024e EPS (from 16x) as it moves closer on its cost cut plan.

Express (47% of Revenues), we target \$10.1 bil in revenues and \$552 mil in operating income for an operating margin of 5.5%, down 270 bps year-year, yet up from 1.2% in F3Q23. We target Express volumes to decline 9% y-y in F4Q (vs -10% in F3Q) and revenue/package to decline 6.5% y-y (vs +3% in F3Q) given a lower mix of International Priority volumes and declining fuel surcharges. We expect falling volumes and yields to be offset by 30% flight reductions over Pacific (\$250 mil savings) and closure of excess hangar operations on the West Coast (LAX, \$60 mil savings).

Ground (37% of Revenues), we target \$8.0 bil in revenues and \$885 mil in operating income for an operating margin of 11.0%, up 100 bps year-year and up from 9.7% in F3Q. We expect Salaries to account for 18% of revenues, down 150 bps y-y as it moves to close excess capacity, to consolidate its Ground network. We also expect Purchased Transport to account for 43% of revenues, down 160 bps year-year as it works to in-source more of its third-party miles and shift part of its over-the-road linehaul to rail (which it noted costs 36% less on average).

Freight (11% of Revenues), we target \$2.3 bil in revenues and \$477 mil in operating income, a 20.8% margin, down 100 bps year-year. We target tons/day to decline 26% yy (accelerating from F3Q's 19% decline), partly offset by +13% y-y in rev/hundredweight.

Spot truck rates begin ticking higher

Truckload Dry-van spot rates ex-fuel has jumped to \$1.42/mile from \$1.25 in mid-May, with truckstop.com noting (see [Takeaways note](#)) the market has returned to a normal balance (closing in on historical average operating cost of \$1.50-\$1.60/mile). The improvement in spot rates is due to sequentially higher import volumes (see [Port of Savannah Takeaways](#)) as well as accelerating capacity exits, as less efficient operators face increased solvency challenges given lower rates and inflationary pressures. Mr. Hutto of Truckstop.com noted that there have been 8,800 net carrier exits year-to-date (avg 3 trucks per carrier), up 60% from ~5,500 in April, enhancing the return to market balance (as the for-hire carrier population is still 18% above pre-pandemic levels).

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 33 to 36. Analyst Certification on page 32. Price Objective Basis/Risk on page 32.

12570403

Timestamp: 15 June 2023 01:40AM EDT

15 June 2023

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 23 Rail Carloads: Down - 4.8% Y-Y vs Week 22: 2.8% Y-Y** (18th consecutive downtick).
- **Port of LA/LB has 1 ship in queue, down from 3 last week.**
- **Dry Van spot rates ex-fuel was \$1.42/mile vs \$1.40 last week**, down -14% from \$1.64 on Dec 31, 2022. Spot rates with fuel were \$1.82 vs. \$1.80 last week, and down -20% from \$2.28 on Dec 31, 2022 (Truckstop.com).
- **May Cass Freight Index: -5.6% Y-Y, +1.9% M-M vs April -2.4% Y-Y, -1.0% M-M** (Fourth consecutive downtick)

Exhibit 1: Airfreight & Surface Transportation

Rails, Trucks, Airfreight, Other Transports Summary Valuation Table

Rating	Company	Price 6/14/23	Mkt Cap. (\$ bil.)	P/E '23e EPS	1-Wk Perf	Price Perf YTD %
B-1-7	Canadian National Railway (CNI)	116.61	77.3	19.6x	0%	-2%
B-1-7	Canadian Pacific Kansas City (CP)	77.69	72.3	24.4x	-2%	4%
B-1-7	CSX Corp. (CSX)	33.09	67.3	17.0x	2%	7%
B-1-7	Norfolk Southern Corp. (NSC)	221.40	50.4	16.6x	1%	-10%
B-1-7	Union Pacific Corp. (UNP)	202.74	123.6	18.3x	1%	-2%
NR	Grupo México Trans (GMXT*MM)(3)	MXN 38.55	9.8	--	-3%	2%
Rail Avg (ex GMXT for P/E)						
Intermodal / Container Lessors:						
B-1-7	J.B. Hunt Transport Svcs (JBHT)	174.39	18.1	21.1x	-1%	0%
NR	Hub Group (HUBG)	79.25	2.6	12.4x	2%	0%
NR	Textainer (TGH)	39.53	1.7	8.1x	1%	27%
RSTR	Triton International (TRTN)	82.97	4.6	--	0%	21%
Intermodal Average						
Less-than-Truckload (LTL) Carriers:						
C-3-7	ArcBest Corp. (ARCB)	89.15	2.1	11.9x	2%	27%
B-2-7	Old Dominion Freight Line (ODFL)	320.72	35.2	28.5x	1%	13%
B-2-9	Saia Inc. (SAIA)	313.35	8.3	24.7x	4%	49%
B-2-7	TFI International (TFII)	105.99	9.2	--	-3%	6%
C-2-9	XPO, Inc. (XPO)	51.36	6.0	21.4x	4%	54%
NR	Yellow Corp (YELL)	1.70	0.1	--	4%	-32%
LTL Average						
Truckload (TL) Carriers:						
B-1-7	Knight-Swift Transportation (KNX)	56.00	9.0	16.5x	-3%	7%
B-1-7	Schneider National (SNDR)	27.01	4.8	13.2x	-1%	15%
NR	US Xpress Enterprises (USX)	6.11	0.3	--	0%	238%
B-1-7	Werner Enterprises (WERN)	43.79	2.8	17.2x	-4%	9%
NR	Covenant Logistics (CVLG)	39.50	0.5	9.8x	-4%	14%
NR	Heartland Express (HTLD)	16.32	1.3	20.2x	-1%	6%
NR	Marten Transport (MRTN)	22.24	1.8	18.3x	0%	12%
NR	P.A.M. Transport (PTSI)	27.15	0.6	10.6x	-5%	5%
NR	Universal Logistics Holdings (ULH)	29.97	0.8	--	2%	-10%
TL Average						
Autonomous trucks						
C-3-9	TuSimple (TSP)	2.18	0.5	--	-3%	33%
NR	Embark Trucks (EMBK)	2.80	0.1	--	1%	-15%
NR	Aurora Innovation (AUR)	2.07	2.4	--	11%	71%
Autonomous trucks Average						
Airfreight Companies:						
B-1-7	FedEx Corp. (FDX)	229.67	57.7	12.4x	2%	33%
B-2-7	UPS (UPS)	174.88	150.2	16.4x	2%	1%
B-1-7	Deutsche Post (DPSTF) (2)	€ 43.65	58.7	13.0x	3%	24%
Airfreight Average						
Freight Forwarders / Logistics:						
B-3-7	C.H. Robinson Worldwide (CHRW)	94.61	11.0	22.8x	3%	3%
C-1-9	RXO (RXO)	21.81	2.6	--	-4%	4%
NR	Landstar System (LSTR)	186.33	6.7	22.4x	-1%	14%
NR	Expeditors International (EXPD)	117.64	18.0	21.7x	1%	13%
B-3-8	Kuehne + Nagel Intl (KHNGF) (2)	CHF 260.00	34.0	24.5x	2%	21%
B-1-7	DSV Panalpina A/S (DSV DC) (2)	DKK 1,355.0	43.6	3.4x	0%	24%
NR	Forward Air Corp. (FWRD)	104.05	2.7	18.2x	0%	-1%
NR	Ryder System, Inc. (R)	81.35	3.8	6.9x	-3%	-3%
NR	Air Transport Services Group (ATSG)	18.86	1.3	11.6x	2%	-27%
NR	Fortress Transportation (FTAI)	29.48	2.9	22.4x	6%	72%
B-1-7	World Fuel Services (INT)	24.09	1.5	11.2x	-4%	-12%
Freight Forwarder Avg.						
Rail Equipment:						
C-3-7	The Greenbrier Companies (GBX)	30.74	1.0	12.8x	1%	-8%
NR	Freightcar America Inc. (RAIL)	2.72	0.0	--	-3%	-15%
NR	GATX Corporation (GATX)	125.43	4.4	18.3x	-1%	18%
NR	Koppers Holdings Inc. (KOP)	33.79	0.7	7.7x	1%	20%
NR	Trinity Industries Inc. (TRN)	23.48	1.9	15.5x	0%	-21%
B-2-7	Wabtec Corp. (WAB)	101.66	18.3	18.5x	2%	2%
Rail Equipment Avg.(ex-RAIL)						
Transport Average						
S&P 500						

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

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

BoFA GLOBAL RESEARCH

Exhibit 2: Marine Matters

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

Rating	Company	Price 6/14/23	Mkt Cap. (\$ bil.)	P/E '23e EPS	1-Wk Perf	Price Perf YTD
Marine Matters						
Tanker Companies						
C-2-7	Teekay Tankers, Ltd. (TNK)	38.36	1.3	0.0%	4%	25%
NR	Teekay Shipping Corp. (TK)	6.10	0.6	--	5%	34%
NR	Euronav (EURN)	€ 14.95	3.6	15.4%	3%	-5%
NR	DHT Maritime (DHT)	8.86	1.4	14.1%	13%	0%
NR	Frontline Ltd. (FRO)	15.74	3.5	14.8%	13%	30%
NR	Tsakos Energy Navigation (TNP)	17.74	0.5	--	0%	5%
NR	Nordic American Tanker (NAT)	3.71	0.8	11.9%	1%	21%
NR	Ship Finance Limited (SFL)	9.49	1.3	10.3%	2%	3%
NR	KNOT Offshore Partners (KNOP)	5.27	0.2	--	-7%	-45%
Tanker Average						
Product Tankers						
C-1-7	Scorpio Tankers (STNG)	44.68	2.5	2.1%	-4%	-17%
NR	Capital Products (CPLP)	14.20	0.3	4.6%	2%	4%
NR	Ardmore Shipping (ASC)	12.69	0.5	8.7%	4%	-12%
Product Tankers Average						
LNG / LPG						
C-1-9	Golar LNG (GLNG)(4)	21.66	2.3	0.0%	-3%	-5%
NR	Dynagas LNG Partners (DLNG)	2.55	0.1	--	0%	-3%
NR	Gaslog Partners LP (GLOP)	8.58	0.5	0.5%	0%	29%
NR	StealthGas (GASS)	3.11	0.1	--	-3%	16%
LNG / LPG Average						
Container Ship Lessors						
NR	Costamare (CMRE)	9.31	1.1	4.9%	2%	0%
NR	Danaos (DAC)	65.23	1.3	4.6%	1%	24%
NR	Global Ship Lease (GSL)	18.83	0.7	8.0%	-1%	13%
Container Average						
Dry Bulk						
NR	Navios Maritime L.P. (NMM)	20.71	0.6	3.1x	-1%	-20%
NR	Safe Bulkers, Inc. (SB)	3.36	0.4	4.0x	-4%	15%
NR	Diana Shipping (DSX)	3.75	0.4	6.0x	-8%	-4%
NR	Eagle Bulk Shipping (EGLE)	44.37	0.6	3.4x	4%	-11%
NR	Navios Maritime (NM)	1.69	0.0	--	1%	-3%
NR	Eneti Inc (NETI)	11.60	0.4	--	12%	15%
NR	Golden Ocean Group (GOGL)	7.75	1.6	7.2x	2%	-11%
C-1-7	Pacific Basin Shipping (PCBBF)(1)	HKD 2.39	1.6	3.0x	9%	-9%
U.S. Dry Bulk Average						
Jones Act Carrier/Other						
B-1-9	Kirby Corp. (KEX)	74.91	4.5	21.1x	-2%	16%
NR	Matson Inc. (MATX)	74.59	2.7	16.4x	-2%	19%
NR	Tidewater Inc. (TDW)	43.82	2.2	13.2x	-10%	19%
Jones Act Carrier/Other Average						
Container Shipping / Diversified Companies						
B-2-8	AP Moeller-Maersk (AMKBF) (2)	DKK 12,620	32.1	9.7x	5%	-19%
C-2-8	COSCO Shipping Holding Co (CICOF)(1)	HK\$7.07	7.6	0.0x	-1%	-11%
C-2-8	K-Line (KAKKF)(1)	¥3,202.00	5.8	1.1x	-1%	15%
C-3-8	Mitsui O.S.K. Lines (MSLOF)(1)	¥3,235.00	8.4	1.5x	0%	-2%
C-3-8	NYK Line (NYUKF)(1)	¥3,016.00	11.0	1.5x	-2%	-3%
NR	Wan Hai Lines (WHILF)	TWD 62.20	5.7	--	4%	-22%
NR	Yang Ming Marine (YMGXF)	TWD 64.30	7.3	--	4%	-2%
C-2-8	Evergreen Marine Corp (EVGQF)(2)	TWD 161.50	11.1	10.8x	7%	-1%
NR	Hapag LLOYD ADR (HLA GY) (2)	€ 190.50	36.4	11.3x	4%	7%
C-3-9	ZIM Integrated Shipping Svcs (ZIM)	13.52	1.6	--	-2%	-21%
Container & Diversified Average						
Shipping Mkt Cap / Shipping Avg						
S&P 500						

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

Covered by: (1) Nathan Gee, (2) Muneeba Kayani, (4) Chase Mulvehill
NR: Not Rated.

BoFA GLOBAL RESEARCH

Airfreight and Surface Transportation Weekly Movers

Best: AUR (+11%) FTAI (+6%) YELL (+4%)

Worst: PTSI (-5%) CVLG (-4%) RXO (-4%)

Marine Transportation Weekly Movers

Best: DHT (+13%) FRO (+13%) NETI (+12%)

Worst: TDW (-10%) DSX (-8%) KNOP (-7%)



Upcoming Calendar of Events

May 31-June 15	Hoexter's 20-minute Shipping & Transport Conference Call Series
June 21	BofA hosting XPO in NYC
June 27-28	Canadian Pacific (CP) Analyst Day, Kansas City
July 10-11	Midwest Assoc of Rail Shippers (MARS) Meeting; Lake Geneva
Sep 11-13	Intermodal Expo (IANA), Long Beach, CA
Sep 12-23	Southeast Rail Shippers Assoc (SEARS) Meeting; Savannah
Sep 26-27	Southwest Rail Shippers Assoc (SWARS) Meeting; San Diego
Oct 1-4	Council of Supply Chain Mgmt Professionals (CSCMP) EDGE Conf; FL
Oct 4-6	Northeast Rail Shippers Assoc (NEARS) Meeting; Portland
Oct 10-11	Pacific Northwest Rail Shippers Assoc (PNWARS) Meeting; Seattle

BofA Global Research Reports

Title: Subtitle	Primary Author	Date Published
Railroads: 20-min series: Vena remains on shortlist for UNP CEO	Ken Hoexter	13 June 2023
Hoexter's 20-minute Call Series: Port of LA Marketing Director Chris Chase	Ken Hoexter	12 June 2023
ARCB: Yield declines, accelerate on transactional freight add, Lower PO \$90	Ken Hoexter	09 June 2023
STNG: 20-min series: Rates elevated, but pull back bit	Ken Hoexter	09 June 2023
ARCB: Tentative union deal, a positive step, waiting on details, 2QTD update	Ken Hoexter	08 June 2023
Transport Tracker: Issue #1076, week ending June 7, 2023	Ken Hoexter	08 June 2023

Company News

ArcBest's less-than-truckload (LTL) unit ABF Freight System tentatively agreed with the International Brotherhood of Teamsters (Teamsters) union on a new 5-year contract ahead of its current June 30 contract expiration. The tentative deal will be put to an employee ratification vote in the coming weeks and provides 8,600 union workers with wage increases, benefits, and better working conditions. ARCB would not comment on details during the voting period, as Teamsters will hold two-man meetings with each Local union and then work with the rank and file before a vote is conducted. Separately, ArcBest posted its mid-2Q update with May LTL tons/day up 2% year-year after a 1% increase in April. The improvement is due to higher-than-expected weight per shipment increases. May shipments/day increased 2% year-year, decelerating from +5% in April, to average 3.4% 2Q-to-date. May weight/shipment declined 1% year-year vs -3% April to average -2% 2Q-to-date. Revenue/hundredweight (cwt) was down 12% in May, accelerating down from -10% in April, to average -11% 2Q-to-date given a higher spot mix. May revenue/day was down 10% year-year to average -9.6% 2Q-to-date. In Asset Light, revenue/day was down 25% year-year on average 2Q-to-date as a 3% year-year avg increase in 2QTD shipments was offset by a 30% avg decline in 2QTD rev/shipment.

RXO invested \$2.6 million to expand its 18,000-square-foot brokerage office in Ann Arbor, Michigan, which can support more than 175 employees.

Yellow Corp. reported LTL shipments per day decreased -15.4% in April 2023 and -13.8% in May 2023, compared to 2022, and are down -14.6% QTD. Weight per shipment was down -1.1% in April, down -2.9% in May, and down -2.0% QTD. Tons/day were down -16.4% in April, down -16.3% in May, and down -16.3% QTD. Revenue per Hundredweight was down -1.5% in April, down -3.8% in May, and down -2.7% QTD. Revenue per shipment was down -2.6% in April, down -6.6% in May, and down -4.7% QTD. Separately, Teamsters noted that Yellow informed it that without proposed operational changes to its contract, Yellow will be out of money by August. Sean O'Brien, Teamsters general president noted that the union has given Yellow billions in the form of wage, benefit, and work rule concessions in the past, and noted the carrier received \$700 million from the government in a COVID-relief loan (which it used to catch up on delinquent health and pension benefits and buy new equipment). Mr. O'Brien noted it is not left for the Teamsters to save this company, we have given enough." Yellow has offered to pull forward contract wage increases in exchange for accelerated work rule changes (1000 drivers, or 20% of total road drivers, would be required to work on docks, of which 400 already do). The current contract expires March 31, 2024.



FedEx Corp. and Floship, a global circular supply chain solutions provider for e-commerce brands, partnered to provide enhanced fulfillment and logistics services to e-tailers worldwide. FedEx's e-commerce customers will have access to Floship's network of warehouses and logistics platform's capabilities to streamline their e-commerce fulfillment operations, and Floship's customers will be able to take advantage of FedEx transportation options to optimize its operations. Additionally, FedEx's and Floship's cross-border e-commerce customers in Asia-Pacific, Middle East and Africa, Europe, and North America will gain access to enhanced fulfillment, last-mile delivery, and hassle-free returns.

UPS and the Teamsters union announced that, starting next year, UPS' package delivery trucks will come equipped with air conditioning. Older trucks will be retrofitted to allow air conditioning. Both parties are negotiating a new contract for 330,000 workers, set to expire July 31, with heat protections. Heat shields in cargo section will be included on all new trucks purchased, and retrofitted to existing trucks within 18 months of contract ratification.

Autonomous Trucking

TuSimple Holdings was awarded a fully driverless test license by the Pudong New Area of Shanghai in China, enabling it to conduct SAE Level 4 fully autonomous Driver Out testing in the designated test areas of Yangshan Deep-water Port and Donghai Bridge. Shanghai is set to become the first city in China to pass legislation to allow Level 4 fully driverless testing of autonomous trucks.

Week 23 Rail Carload Data: Down -4.8% Y-Y

Key Takeaways – Down -4.8% (from -2.8% last week): Total carloads for week 23 of 2023 were down -4.8% year-over-year to 597,246 (BNSF has not reported yet), deteriorating from last week's -2.8% decrease (or 573,235 carloads). Carloads have declined for the past 18 consecutive weeks and were below the past 10-week avg. of -4.1%. 2Q23 carloads comp against a -1.1% decrease in 2Q22. Coal (-0.9%) was down, reversing last week's +0.9% increase. Nat Gas prices were up (+3.4%), to \$2.34/MMBtu, from \$2.26/MMBtu last week. The absolute level of coal carloads was 56k, down from last week's 58k, and below the 57k past 10-week avg. Chemical volumes were down -6.9%, deteriorating from last week's -4.4% decrease. Chemical carloads have declined for 14 of the past 15 weeks. Grain (-4.3%) was down, deteriorating from last week's -2.3% decrease. Petroleum (-1.4%) was down, moderating from last week's -4.4% decrease. This was the 10th consecutive downtick for petroleum product carloads. Intermodal (-9.1%) was down, deteriorating from last week's -6.5% decrease. Intermodal was down for 29 of the past 32 weeks, while absolute volumes were 273k, up from 256k last week, and above the 266k past 10 week avg. Auto (+14.8%) was up, improving from last week's +13.1 increase. This was Auto's 63rd consecutive uptick.

Overall Carloads: Week 23 carloads were down -4.8% year-over-year, as all rails declined: CN (-8.1%), UP (-5.3%), CPKC (-4.2%), NS (-4.1%), and CSX (-2.3%). Quarter-to-date, carloads are down -4.1% year-over-year, as all rails are down: CN (-7.9%), NS (-6.3%), CSX (-3.2%) CPKC (-1.6%), and UP (-1.6%). The 2Q23 carload trend of -4.1% is below our -2.1% full quarter target for the Class I rails on average. The average carrier is trending below our target (-200 bps), with CNI the best at +100 bps vs. our target (-7.9% vs. our -8.9%), vs CPKC (CP standalone) the worst at -670 bps (-1.6% vs. our +5.0%).

Revenue Ton Miles: Week 23 RTMs: CN's RTMs are down -10.2% y-y 2QTD. CPKC's RTM are down -14.6% y-y 2QTD.

Specifics: Intermodal carloads (45.8% of total) were down -9.1% year-over-year, as all rails declined: CN (-13.7%), UP (-11.0%), NS (-8.8%), CSX (-7.3%), and CPKC (-2.6%).

Coal carloads (9.4% of total) were down -0.9% year-over-year, as decreases at CPKC (-11.1%), UP (-8.4%), and NS (-4.8%) more than offset increases at CSX (+10.1%) and CN (+15.7%). **Chemical carloads (8.8% of total)** were down -6.9% year-over-year, as all rails declined: CPKC (-20.2%), CSX (-10.9%), NS (-3.9%), CN (-1.5%), and UP (-1.0%).

Grain carloads (3.6% of total) were down -4.3% year-over-year, as decreases at UP (-19.0%), CSX (-16.6%), and CPKC (-1.6%) more than offset increases at CN (+5.6%) and NS (+23.5%). **Petroleum carloads (3.6% of total)** were down -1.4% year-over-year, as decreases at NS (-16.3%) and CN (-5.8%) more than offset increases at UP (+0.4%), CPKC (+4.8%), and CSX (+11.0%). **Auto carloads (5.7% of total)** were up +14.8% year-over-year, as all rails increased: (+18.0%), CSX (+17.0%), NS (+16.8%), CPKC (+10.9%), and CN (+6.0%).

Exhibit 3: Carloads Week 23 2023 vs. 2022; and 2QTD volumes

Week 23 Rail Carload Data: Down -4.8% Y-Y

	% of total	2023 Wk 23	2022 Wk 23	% Δ	2023 QTD	% Δ
Intermodal	45.8%	273,753	301,033	-9.1%	2,677,726	-9.6%
Coal	9.4%	56,226	56,732	-0.9%	565,650	1.2%
Chemicals	8.8%	52,366	56,236	-6.9%	553,277	-2.9%
Auto	5.7%	34,028	29,649	14.8%	324,927	12.7%
Grain	3.6%	21,445	22,409	-4.3%	235,396	4.3%
Forest Prod.	3.5%	20,924	22,744	-8.0%	211,055	-7.3%
Petrol. Prod.	3.6%	<u>21,370</u>	<u>21,666</u>	<u>-1.4%</u>	<u>201,618</u>	<u>-3.5%</u>
Total Carloads		597,246	627,109	-4.8%	5,945,813	-4.1%

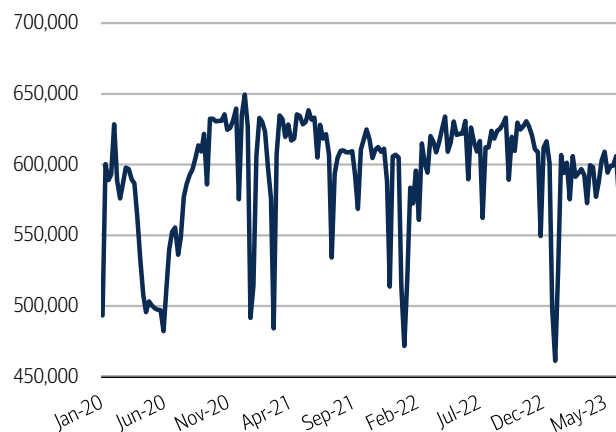
Source: AAR, BofA Global Research

BofA GLOBAL RESEARCH



Exhibit 4: Total Weekly Carload Volumes

Total volumes were 597,246 for Week 23



Source: Association of American Railroads, and BofA Global Research

BofA GLOBAL RESEARCH

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

Total volume growth was -4.8% y-y for Week 23



Source: Association of American Railroads, and BofA Global Research

BofA GLOBAL RESEARCH

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

Total Carloads forecast down -2.1% in 2Q23

	1Q19a	2Q19a	3Q19a	4Q19a	1Q20a	2Q20a	3Q20a	4Q20a	1Q21a	2Q21a	3Q21a	4Q21a	1Q22a	2Q22a	3Q22a	4Q22a	1Q23e	2Q23e
BNSF	-5.4%	-3.6%	-2.5%	-6.2%	-5.2%	-17.9%	-8.3%	2.6%	4.8%	24.5%	4.4%	-3.1%	-3.3%	-5.6%	-5.0%	-9.2%	-10.3%	--
CNI	0.7%	2.1%	0.4%	-7.3%	-5.9%	-15.9%	-5.9%	7.1%	7.2%	13.5%	-0.9%	-10.0%	-5.9%	0.3%	2.9%	2.5%	0.5%	-8.9%
CPKC	-2.1%	5.6%	1.4%	-1.1%	8.7%	-12.0%	-7.4%	3.7%	0.1%	14.7%	0.9%	-9.9%	-9.5%	-1.5%	9.8%	8.9%	8.7%	5.0%
CSX	-0.1%	-3.9%	-5.3%	-6.6%	-1.1%	-20.5%	-3.0%	3.9%	1.0%	26.6%	2.7%	-1.8%	-2.0%	0.2%	1.5%	-1.8%	-0.8%	-1.3%
NSC	0.1%	-3.8%	-5.8%	-9.2%	-11.4%	-25.6%	-7.0%	-1.2%	2.9%	25.5%	-0.3%	-3.6%	-4.5%	-3.3%	-2.1%	-1.3%	-0.1%	-4.9%
UNP	-1.8%	-4.0%	-8.1%	-11.1%	-7.0%	-19.6%	-4.0%	2.9%	-0.7%	21.9%	0.0%	-3.9%	4.1%	-1.4%	3.2%	0.8%	-1.4%	-0.6%
Total	-1.8%	-2.3%	-3.8%	-7.3%	-4.9%	-19.5%	-5.9%	2.6%	2.5%	22.5%	1.1%	-4.4%	-2.3%	-2.0%	0.8%	-1.4%	-2.2%	-2.1%

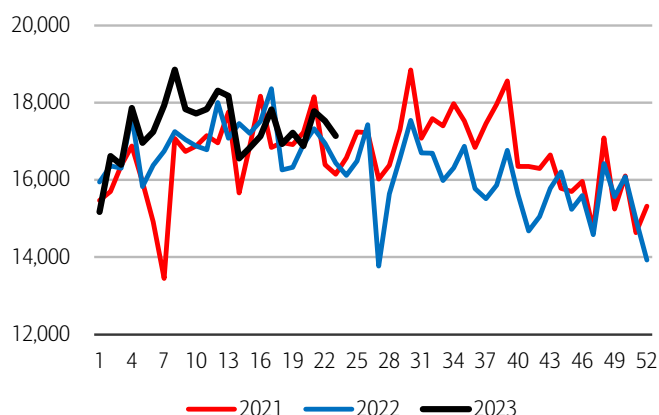
Source: Association of American Railroads

Note: The total for 2Q23 is an average of the estimates; CPKC's actuals and estimates correspond to CP carloads.

BofA GLOBAL RESEARCH

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

Metal Carloads were 17,141 in Week 23, up 4.3% Y-Y

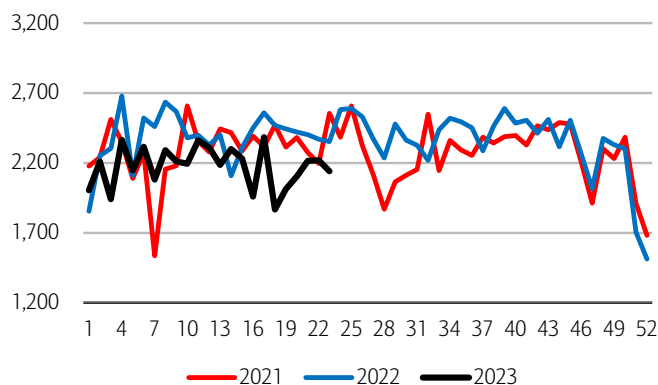


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 8: Forest Product Carloads

Forest Product Carloads were 2,141 in Week 23, down -9% Y-Y



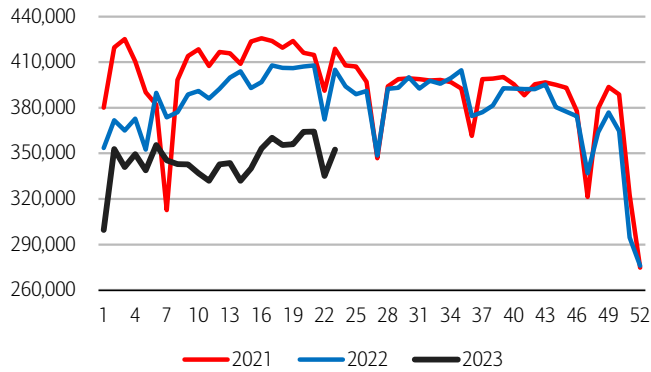
Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Selected Segments Weekly Carloads

Exhibit 9: Intermodal Carloads

Intermodal Carloads were 352,401 in Week 23, down -13% Y-Y

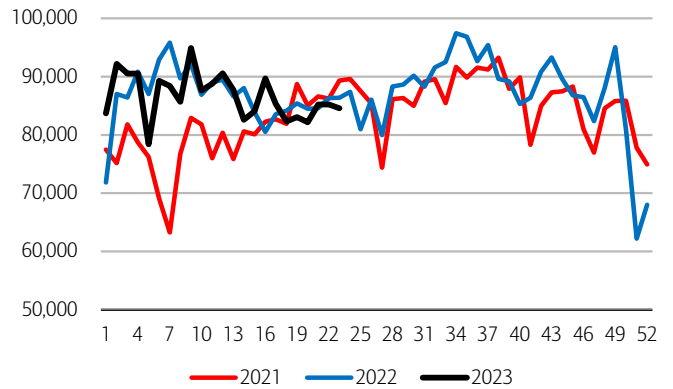


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 10: Coal Carloads

Coal Carloads were 84,576 in Week 23, down -2.1% Y-Y

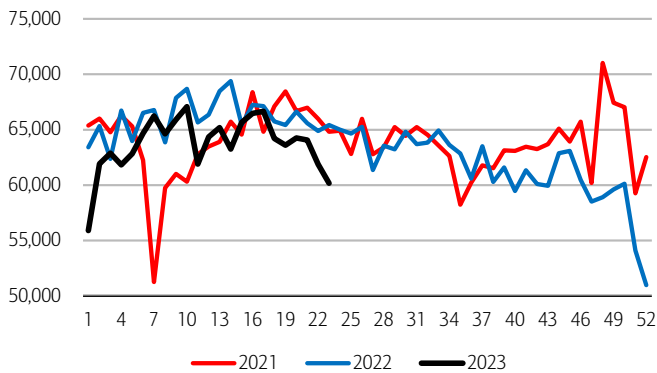


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 11: Chemical Carloads

Chemical Carloads were 60,178 in Week 23, down -8% Y-Y

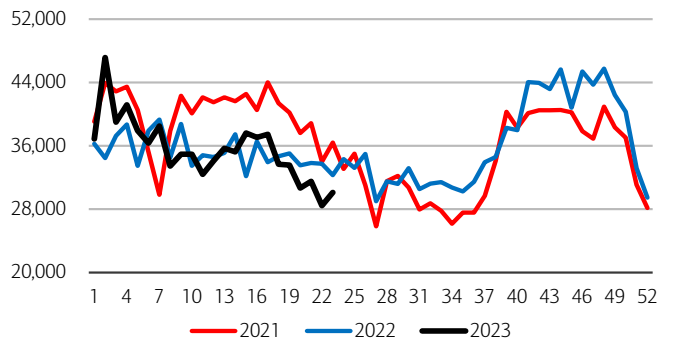


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 12: Grain Carloads

Grain Carloads were 30,089 in Week 23, down -6.8% Y-Y

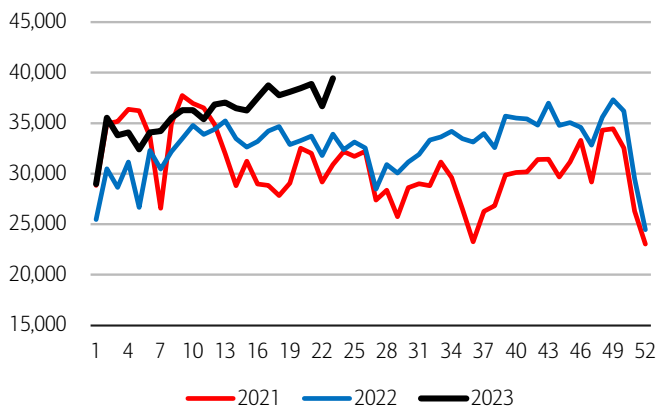


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 13: Auto Carloads

Auto Carloads were 39,431 in Week 23, up 16.2% Y-Y

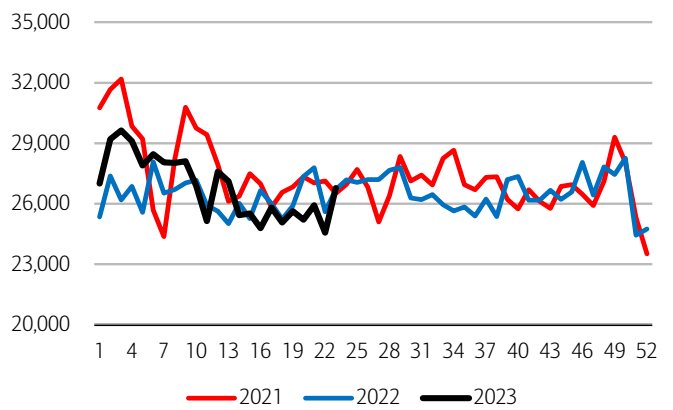


Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 14: Petroleum Products Carloads

Petroleum Products Carloads were 26,786 in Week 23, up 0.3% Y-Y



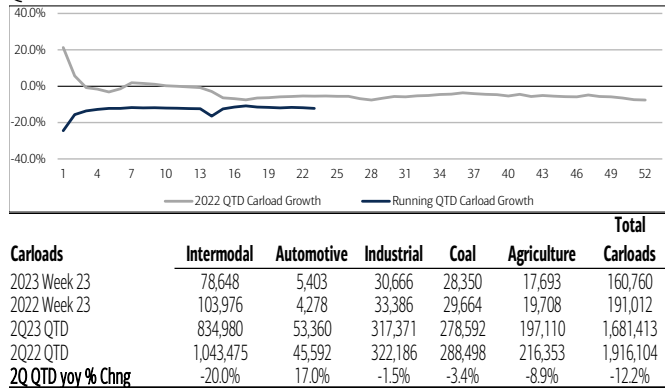
Source: Company data, and BofA Global Research

BofA GLOBAL RESEARCH

Selected Segments Weekly Carloads

Exhibit 15: BNSF Carloads

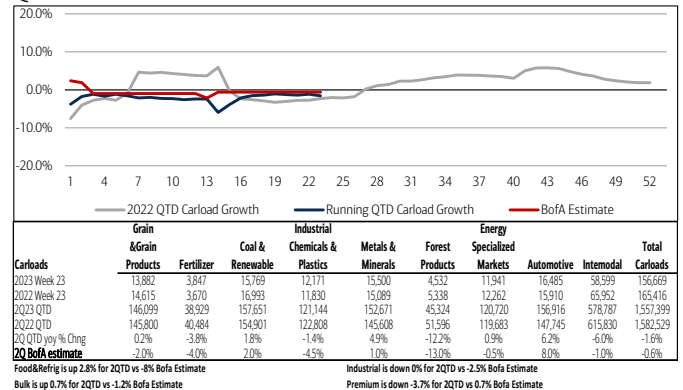
QTD Carloads are -12.2%



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

Exhibit 16: Union Pacific Carloads

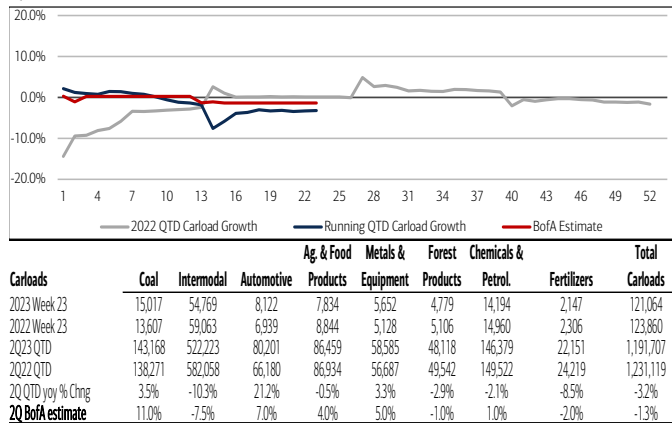
QTD Carloads are -1.6% vs. BofAe -0.6%



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

Exhibit 17: CSX Carloads

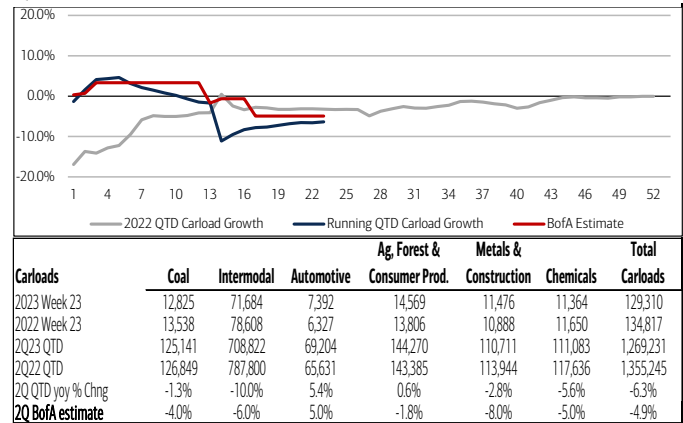
QTD Carloads are -3.2% vs. BofAe -1.3%



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

Exhibit 18: NSC Carloads

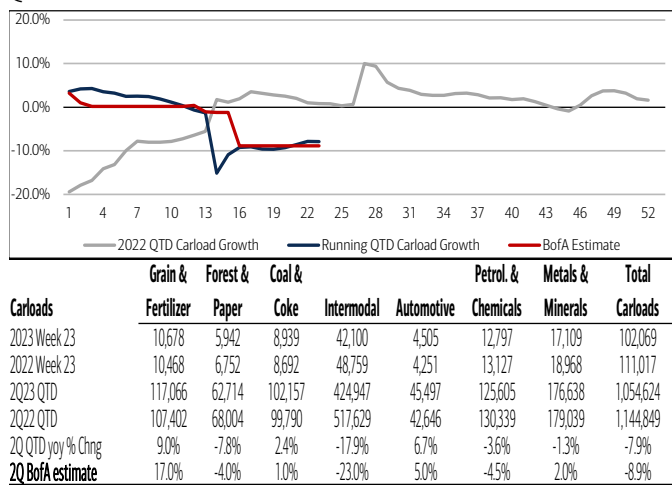
QTD Carloads are -6.3% vs. BofAe -4.9%



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

Exhibit 19: CNI Carloads

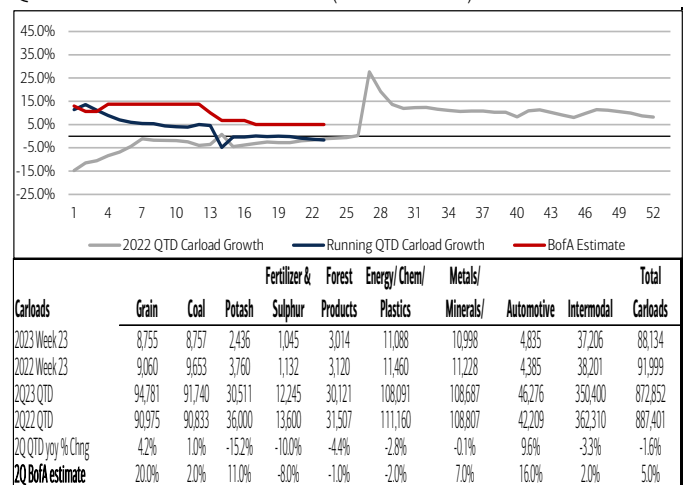
QTD Carloads are -7.9% vs. BofAe -8.9%



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

Exhibit 20: CPKC Carloads

QTD Carloads are -1.6% vs. BofAe (CP standalone) +5.0%



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

Diesel Fuel Prices: -0.1% sequentially

Diesel fuel prices were down slightly -0.1% sequentially, to \$3.79 for week 23 of 2023, compounding last week's -1.5% decrease. This was the 19th downtick over the last 20 weeks, as prices continue at the lowest level since Week 4 of 2022. The 2Q23 average for on-highway diesel is \$3.96/gallon, down 28% y-y from \$5.48 in 2Q22, and down 10% sequentially from 1Q23's \$4.41.

WTI crude oil futures closed at \$69.42, down -3.2% from last week's \$71.74. WTI is below \$70 for the second time over the past three weeks. The 2Q23 average is \$74.51, down 31% from 2Q22's \$108.60 average, and down 2% seq. from 1Q23's \$76.12. We target \$78 and \$78 for 2Q23 and 2023.

Brent crude oil futures closed at \$74.29, down -2.6% from last week's \$76.29. The 2Q23 average is \$78.60, down 30% from the 2Q22 average of \$111.97, and down 4% sequentially from 1Q23's average of \$82.16.

The Brent to WTI gap is \$4.87, up from last week's \$4.55. The current spread is up +45% from the 2Q22 avg. of \$3.36.

Natural Gas futures closed at \$2.34 on June 13, up +3.4% from last Tuesday. Nat Gas is below \$3.00 for the 20th consecutive week. The 2Q23 average is \$2.28, down -70% from the 2Q22 average of \$7.47.

Exhibit 21: Fuel surcharges

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

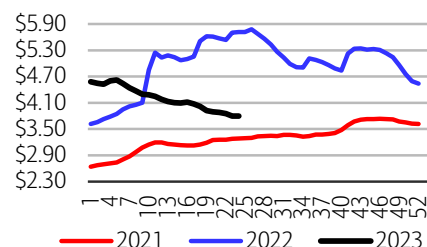
	Week 21 5/24/23	Week 22 5/31/23	Week 23 6/7/23
ARCB - LTL	31.4%	31.3%	30.5%
XPO - LTL	32.8%	32.8%	32.8%
YELL - LTL	31.7%	31.4%	30.8%
ARCB - TL	62.8%	62.6%	61.0%
XPO - TL	65.5%	65.5%	65.5%
YELL - TL	63.4%	62.8%	61.6%
FDX - Express	14.00%	14.00%	13.75%
UPS - Express	16.00%	16.00%	16.00%
FDX - Ground	14.25%	14.25%	14.25%
UPS - Ground	14.25%	14.25%	14.25%
	Apr-23	May-23	Jun-23
UP (standard)	\$0.47	\$0.43	\$0.40
y-y % change	21%	10%	-34%
UP (coal)	\$0.47	\$0.43	\$0.40
y-y % change	21%	10%	-34%
CSX	\$0.61	\$0.56	\$0.53
y-y % change	20%	-28%	-33%
KCS	\$0.57	\$0.52	\$0.49
y-y % change	19%	-31%	-35%

Source: BofA Global Research, company reports

BofA GLOBAL RESEARCH

Exhibit 22: National Diesel Fuel Prices

Diesel fuel prices: \$3.79 for week 23 of 2023

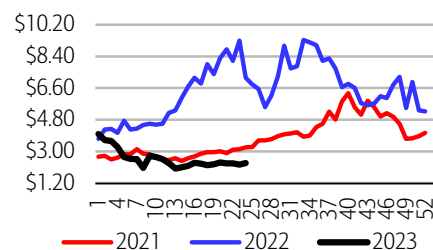


Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 23: US Nat Gas Price Per MMBtu.

Futures closed at \$2.34 on June 13th

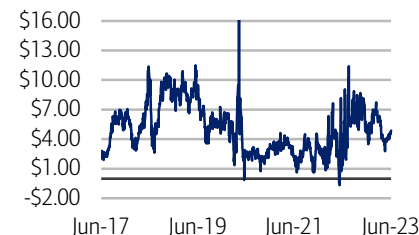


Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

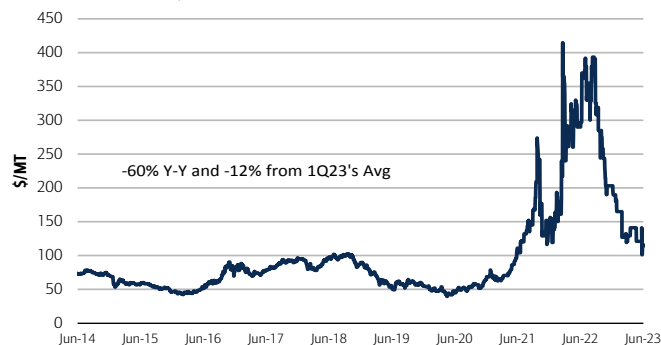
Exhibit 24: Brent to WTI Spread

The Brent to WTI gap is \$4.87



Source: BofA Global Research, DOE, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 25: Thermal Coal, Europe Coal 6000kcal CIF ARA ForwardPrice = \$116.00 on June 14th

Source: Bloomberg

BofA GLOBAL RESEARCH

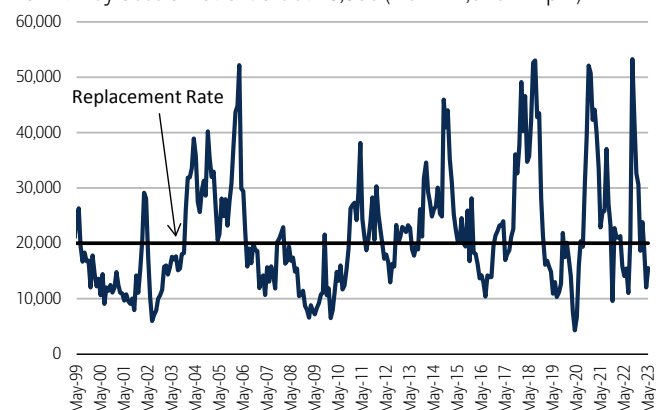
Exhibit 26: Australian Premium Coking Coal FuturesPrice = \$228.50 on June 14th

Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 27: Class 8 Truck net orders

Prelim. May Class 8 Net Orders at 15,500 (from 12,016 in April)



Source: American Commercial Transportation Research Co.

BofA GLOBAL RESEARCH

**Prelim. May Class 8 Net Orders at 15,500
(from 12,016 in April)****Exhibit 28: Class 8 Truck net orders**

Final Class 8 Net Orders at 12,016 in April (Preliminary was 11,600)

CLASS 8 NET ORDERS

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
JAN	49,136	16,105	17,204	42,307	21,041	18,624
FEB	40,271	16,854	14,040	44,190	21,006	23,790
MAR	46,593	15,783	7,632	40,049	21,301	19,010
APR	34,735	14,859	4,251	33,353	15,820	12,016
MAY	35,721	10,886	6,690	23,072	14,081	
JUN	42,213	12,979	16,010	25,824	15,444	
JUL	52,618	10,298	20,359	25,876	11,025	
AUG	53,040	11,119	19,389	37,096	20,892	
SEP	42,781	12,692	30,768	27,323	53,271	
OCT	43,526	21,864	39,089	23,391	42,359	
NOV	28,114	17,483	52,104	9,902	32,630	
DEC	21,381	20,073	50,760	20,651	30,623	
Year Total	490,129	180,995	278,296	353,034	299,493	73,517

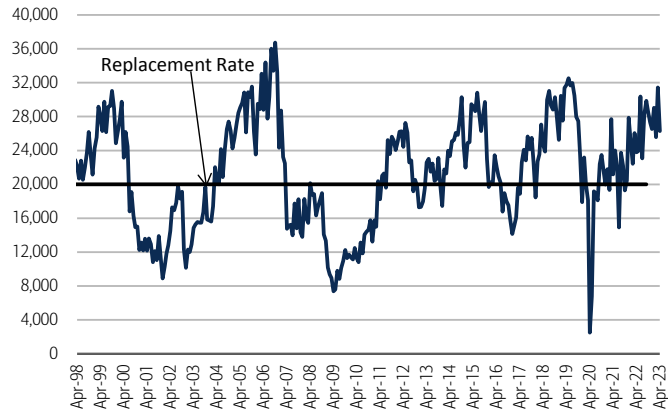
Source: American Commercial Transportation Research Co.

BofA GLOBAL RESEARCH

April Class 8 Final Net Orders 12,016

Exhibit 29: Class 8 Truck production

Class 8 Truck Production at 26,302 in April

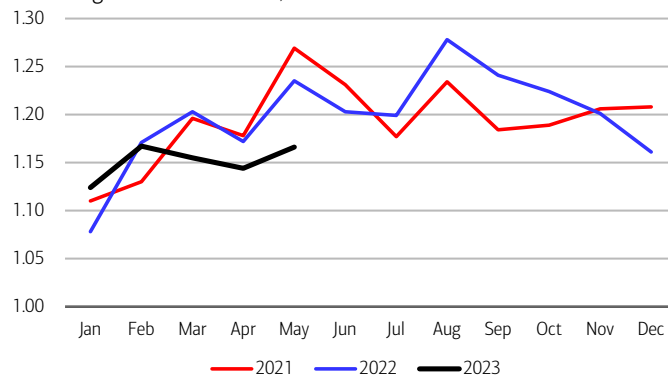


Source: American Commercial Transportation Research Co.

BofA GLOBAL RESEARCH

Class 8 Truck Production at 26,302, Down -16% Sequentially**Exhibit 30: Cass Freight Shipments Index**

Cass Freight Index: -5.6% Y-Y, +1.9% M-M



Source: Cass Information Systems, Inc.

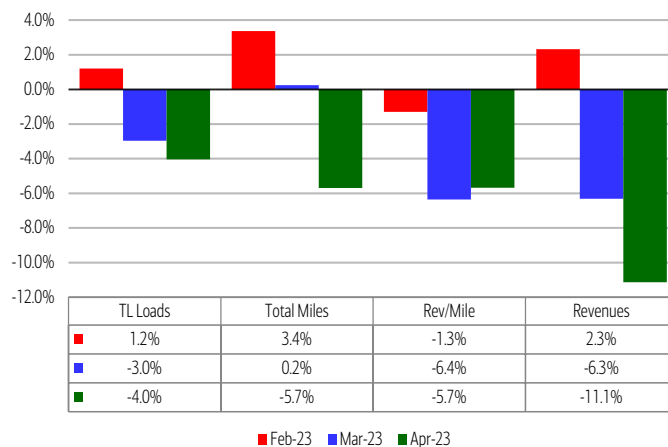
BofA GLOBAL RESEARCH

Cass Freight Index: -5.6% Y-Y, +1.9% M-M

The Cass Freight Shipment index declined -5.6% year-over-year in May, deteriorating from April's -2.4% decrease. This was the sixth downtick over the last seven months. The index was up +1.9% sequentially, reversing April's -1.0% decrease. The expenditures index which measures the total dollars spent on freight transportation, including both contract and spot market rates, was down -15.7% year-over-year, deteriorating from April's -14.0%. This was the third consecutive double-digit decline. The overall index for both shipments and expenditures decreased -13.4% from May 2022. Cass remarked that declining real retail sales trends, and ongoing destocking, remain the primary headwinds to freight volumes but the dynamic is shifting as real incomes improve and the worst of the destock is being left behind.

Exhibit 31: Truck Activity

Truck Activity April. Loads -4.0% Y-Y



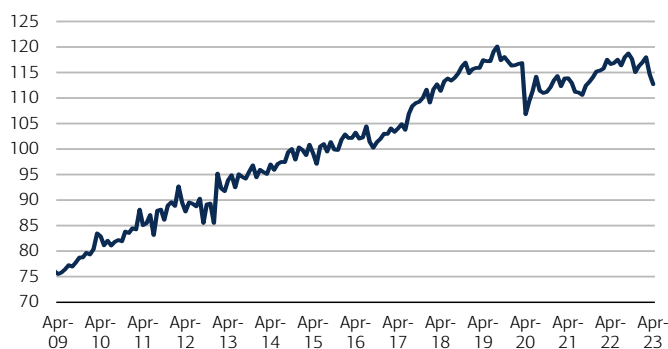
Source: American Trucking Association

BofA GLOBAL RESEARCH

Truck Activity: April Loads -4.0% Y-Y

Exhibit 32: Historical ATA Truck Tonnage Index

Preliminary April Truck Tonnage: -3.4% Y-Y, -1.7% M-M



Source: American Trucking Association

BofA GLOBAL RESEARCH

Prelim. April Truck Tonnage: -3.4% Y-Y, -1.7% M-M**Exhibit 33: Historical ATA Truck Tonnage Index**

March Truck Tonnage: -2.4% Y-Y, -2.8% M-M

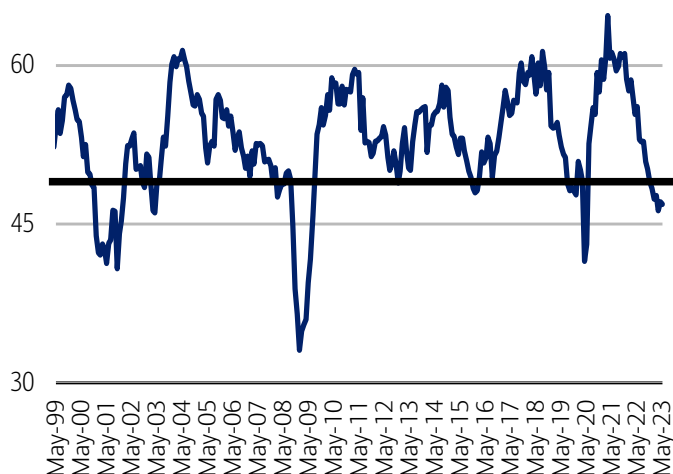
	2017	2018	2019	2020	2021	2022	2023
JAN	103.2	109.5	116.1	117.0	114.2	115.5	117.0
FEB	104.2	111.9	116.1	116.9	112.5	116.1	118.0
MAR	103.5	112.7	116.7	117.9	114.5	118.8	114.7
APR	104.3	111.9	117.6	107.3	113.7	116.5	
MAY	105.0	113.3	117.4	109.7	112.9	117.1	
JUN	103.7	113.8	117.1	111.1	111.3	117.5	
JUL	106.9	113.0	118.3	113.1	110.6	115.8	
AUG	108.2	113.7	119.7	110.9	110.8	118.2	
SEP	108.8	114.7	117.3	111.0	112.7	119.1	
OCT	109.2	116.0	117.9	111.1	113.1	117.6	
NOV	109.9	116.8	116.9	111.8	113.8	114.8	
DEC	111.6	114.7	116.1	113.1	114.9	116.2	
Avg.	106.5	113.5	117.3	112.6	112.9	116.8	116.6

Source: American Trucking Association

BofA GLOBAL RESEARCH

March Truck Tonnage: -2.4% Y-Y, -2.8% M-M**Exhibit 34: ISM Manufacturing Index**

May ISM Manufacturing Index 46.9, -0.2 pts



Source: Bloomberg

BofA GLOBAL RESEARCH

ISM Manufacturing Index 46.9, -0.2 pts

Exhibit 35: BofA Truckload Diffusion IndicatorDemand Indicator to 42.6 from 44.3 (bi-weekly Issue #284 on June 1st)

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

BofA TRUCK SHIPPER SURVEY**Survey Says: Demand (42.6)**

This week, our proprietary bi-weekly **BofA Truckload Demand Indicator** for shippers' 0- to 3-month freight demand outlook **decreased to 42.6 from 44.3 last survey**, down 4% sequentially, hitting its 5th lowest level on record. The Demand Indicator remains sub-50 for the 16th time in the past 18 issues and sub-60 for the 30th consecutive survey. It remains well below the 54.2 average level of the '12, '15, '19 Freight Recession periods and is down 27% y-y. The downtick suggests weak truck freight demand outlook on pressured macro environment. Rail carloads fell 4% y-y this week, the 16th consecutive downtick. However, dry van spot rates ex-fuel climbed to \$1.39/mile on avg this week (per Truckstop.com), down 15% YTD, but up from May's \$1.25/mile (toward \$1.50-\$1.60 cost/mi of operation). Shippers' short-term Negative outlooks were 38%, from 40% last survey; Positive outlooks were 17%, down from 25% last survey; and Neutral outlooks were 45%, up from 35% last issue. For the week of June 1st, we surveyed 47 shippers across the U.S. to get current views on freight demand, supply, pricing, and inventories.

Capacity indicator up; Rates view (& rates) climb from trough

The Truck Capacity Indicator, which measures shippers' views of available truckload capacity, increased to 74.5 from 68.8 last survey, as shippers see more available truck capacity. **The Rate Indicator**, or shippers' views on truck rates, increased to 33.0 from 31.3, up 6% sequentially, in-line with spot rate moves as rate expectations rose after the end of March-May bid season (when annual contracts renew).

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

L-T Demand Indicator at 50.5, down 1.1 pts sequentially



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 37: Shippers' view of inventory levels

Inventory Indicator at 62.8, up from 61.5 last issue



Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Inventory indicator ticks up

The Inventory Indicator ticked up to 62.8 from 61.5 last survey, up 2% sequentially, as shippers see slightly higher inventory levels. With respect to rates, 36% expect rates to fall, from 48% last issue, 62% expect flat pricing, from 42% last issue, and 2% expect rates to rise, down from 10% last issue. On capacity, 51% expect capacity to rise from 42% last issue, 47% expect capacity to remain flat, down from 54% last issue, and 2% expect capacity to be lower, down from 4% last issue. **SHIPPER COMMENTS:** An Industrial Shipper believes all indications point to a tepid freight market for the rest of the year unless an unknown world or geopolitical event were to occur. A Manufacturing Shipper still sees downward pricing pressures in the truckload spot market and noted some Less-than-Truckload carriers working to build profitability. (See survey for additional commentary).

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

Rate Indicator at 33.0, +1.7 pts sequentially

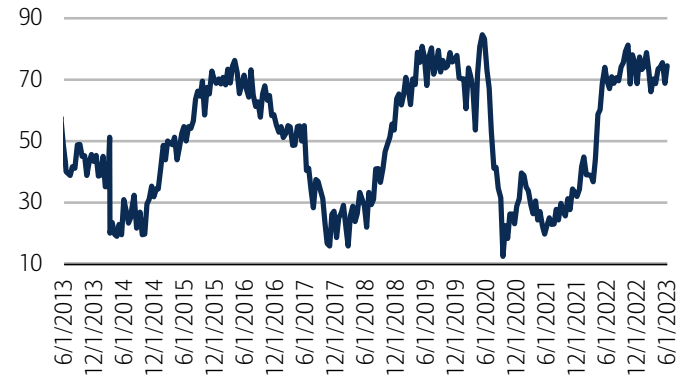


Source: BofA Global Research estimates.

BofA GLOBAL RESEARCH

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

Capacity Indicator increased to 74.5, above its historic 50 avg



Source: BofA Global Research estimates.

BofA GLOBAL RESEARCH

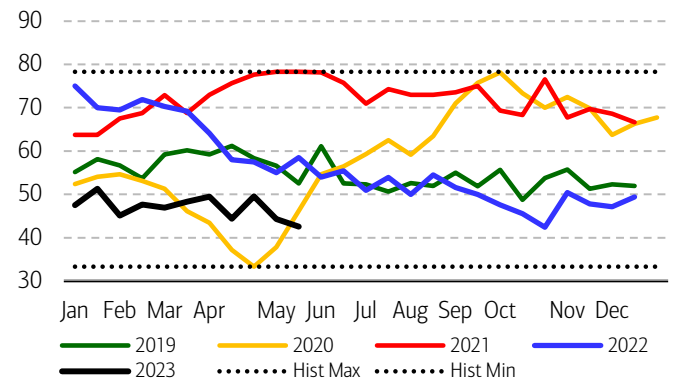
Exhibit 40: BofA Truckload 0-3 month Demand (Diffusion) Indicator

Diffusion indicator month-by-month levels

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

Source: BofA Global Research estimates.

BofA GLOBAL RESEARCH

Exhibit 41: Demand (Diffusion) Indicator for 0-3 month demand outlook on stack basis (2019-2023)Demand Indicator to 42.6 (bi-weekly Issue #284 on June 1st)

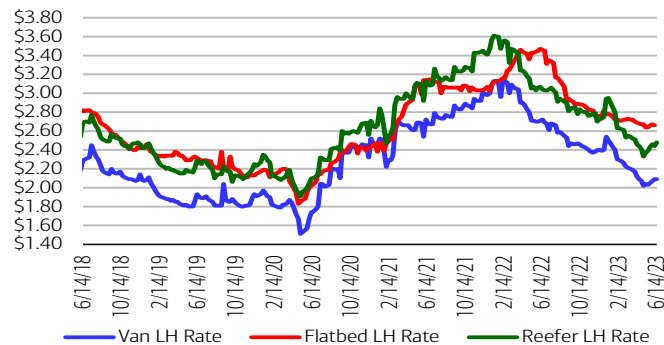
Source: BofA Global Research estimates.

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 42: Month-to-Date Run Rate

Van Rate = \$2.09 Flatbed Rate = \$2.66 & Reefer Rate = \$2.48

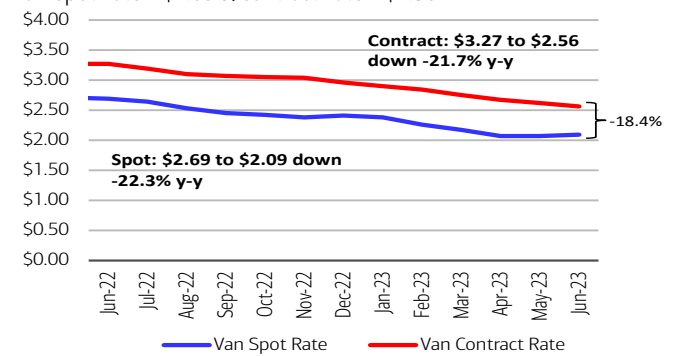


Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

Exhibit 43: Monthly Van Spot Rate vs. Contract Rate

Van Spot Rate = \$2.09 & Contract Rate = \$2.56



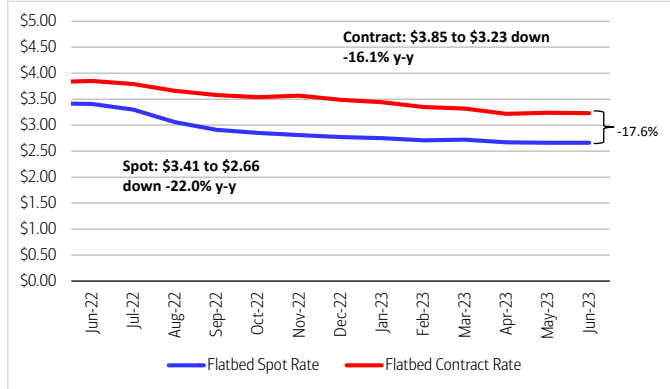
Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH



Exhibit 44: Monthly Flatbed Spot Rate vs. Contract Rate

Flatbed Spot Rate = \$2.66 & Contract Rate = \$3.23

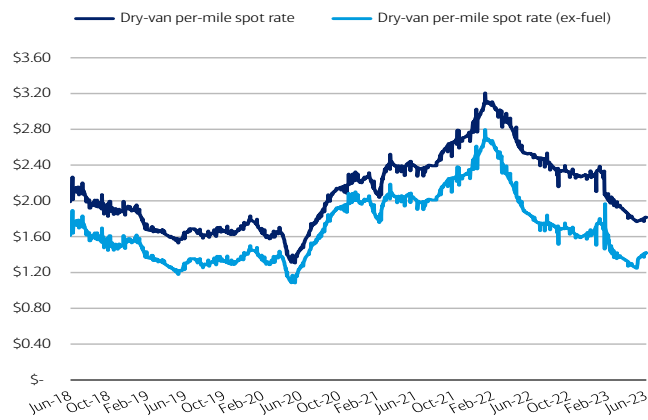


Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

Exhibit 46: Truckstop.com Spot Rates

Dry-Van Spot = \$1.82, Dry-Van (ex-fuel) = \$1.42

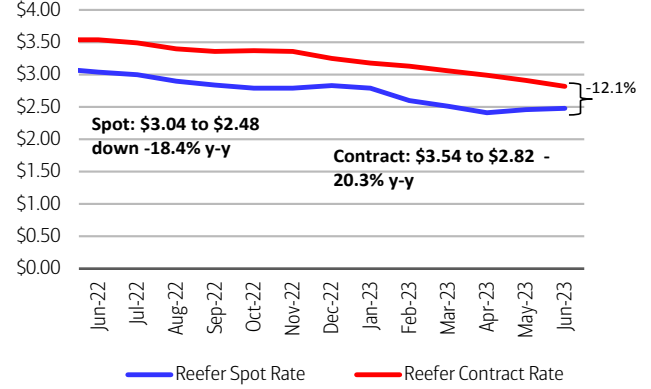


Source: Truckstop.com, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 45: Monthly Reefer Spot Rate vs. Contract Rate

Reefer Spot Rate = \$2.48 & Contract Rate = \$2.82



Source: DAT (Dial-A-Truck)

BofA GLOBAL RESEARCH

TruckStop Spot Rates: Dry-Van Spot = \$1.82, Dry-Van (ex-fuel) = \$1.42

Truckstop.com's Dry van spot rates ex-fuel were \$1.42/mi for the week ending June 14, up from \$1.40/mi the prior week (June 7) and are down -14% YTD (from \$1.64/mi on Dec 31).

Truckstop.com's Dry van spot rates (fuel included) were \$1.82/mi for the week ending June 14, up from \$1.80/mi the prior week (June 7) and are down -20% YTD (from \$2.28/mi on Dec 31).

Fuel represented \$0.40/mi, flat with last week's \$0.40/mi and down from \$0.64 on Dec 31.

Exhibit 47: STB employment data

April STB employment: 121,391, up +5.5% Y-Y

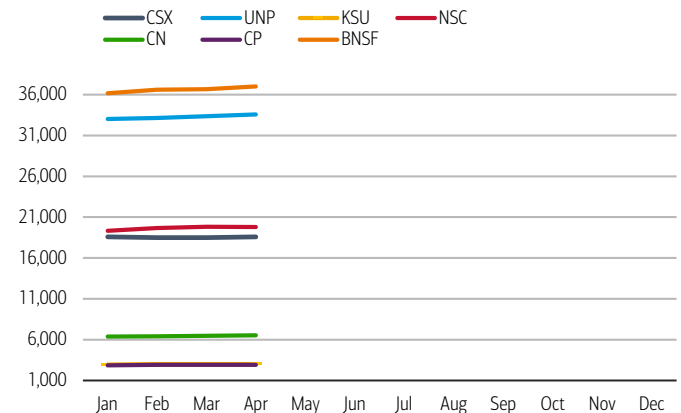


Source: BofA Global Research, Company Reports

BofA GLOBAL RESEARCH

Exhibit 48: STB monthly total employment by company

STB monthly total employment by company



Source: BofA Global Research, Company Reports

BofA GLOBAL RESEARCH

Exhibit 49: Top 10 US ports loaded volumes

Top 10 Ports in April: -16.5% Y-Y, LA/LB -20% Y-Y

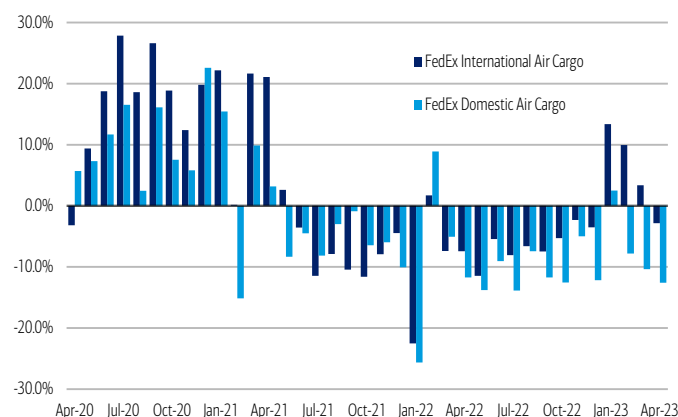
Top 10 U.S. Ports	2023 TEU's	2023 YTD Chg %	Mar-23 Y-O-Y %	Apr-23 Y-O-Y %	Apr-23 TEU's
Los Angeles (17% of total US)	1,656,703	-25%	-31%	-22%	431,890
Long Beach (16%)	1,583,673	-24%	-24%	-17%	436,107
Total LA/LB (35% of total)	3,240,376	-25%	-28%	-20%	867,997
New York (17%)	1,658,513	-20%	-28%	-19%	431,191
Savannah (12%)	1,218,422	-10%	-10%	-16%	313,956
Houston (11%)	1,026,260	3%	-3%	-10%	251,038
Norfolk (9%)	852,450	26%	-16%	-13%	210,435
Seaport Alliance (5%)	510,007	-21%	-28%	-9%	132,460
Charleston (7%)	638,620	-14%	-25%	-17%	163,086
Oakland (5%)	497,009	-18%	-23%	-11%	133,333
Maryland (1%)	190,687	4%	-6%	n/a	-
Total Top Ten (91.5% of N.A total)	9,832,344	-16.9%	-22.1%	-16.5%	2,503,496
Vancouver	767,497	-9%	-21%	-11%	215,668
Prince Rupert	165,278	-29%	-24%	-42%	37,997

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 April: -16.5% Y-Y, LA/LB -20% Y-Y**Exhibit 50: FedEx Air Cargo Volumes at Memphis International Airport**

Memphis Airport FedEx Domestic Air Cargo Volumes in April: -12.6% Y-Y



Source: BofA Global Research and Memphis International Airport Statistics

BofA GLOBAL RESEARCH

Memphis Airport FedEx Air Cargo Volumes in April: -12.6% Y-Y

Exhibit 51: 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 13.8 on 6/14/23 (vs 12.2 on 6/07/23). On day-of-basis: 15 vs. 17 (includes 14 vs 14 vessels at dock), or 1 vs 3 in queue alone.

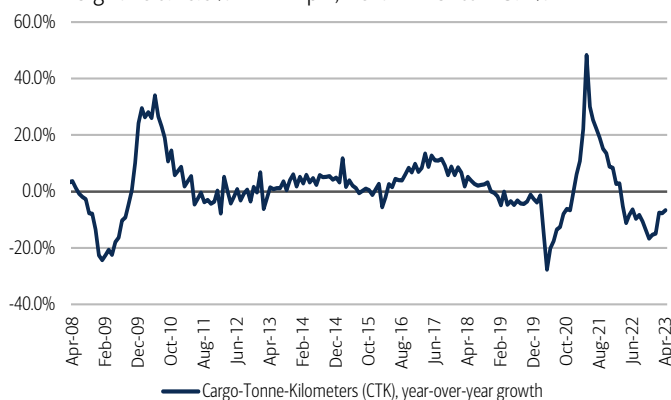


Source: BofA Global Research and Port of LA/Long Beach

BofA GLOBAL RESEARCH

Port of LA/Long Beach – Ships in queue – 1 on 6/14/23 (from 3 a week prior)**Exhibit 52: IATA Volume year-over-year growth**

IATA Freight Vols: -6.6% Y-Y in April, North America -13.1%

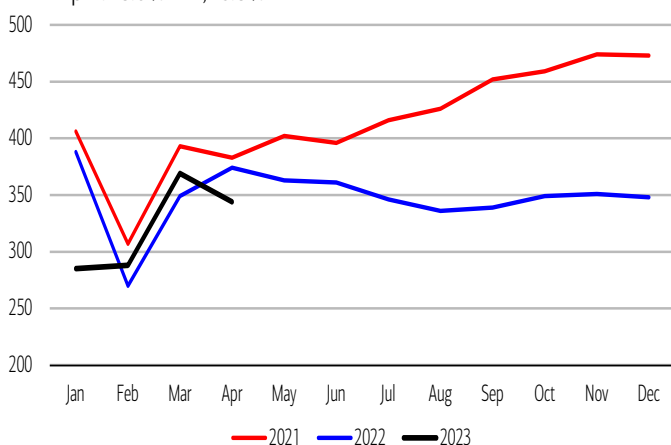


Source: International Air Transport Association

BofA GLOBAL RESEARCH

IATA Freight Vols: -6.6% Y-Y in April, North America (-13.1%)**Exhibit 53: Hong Kong Airport cargo (000 tons)**

HKIA April: -8.0% Y-Y, -6.8% M-M



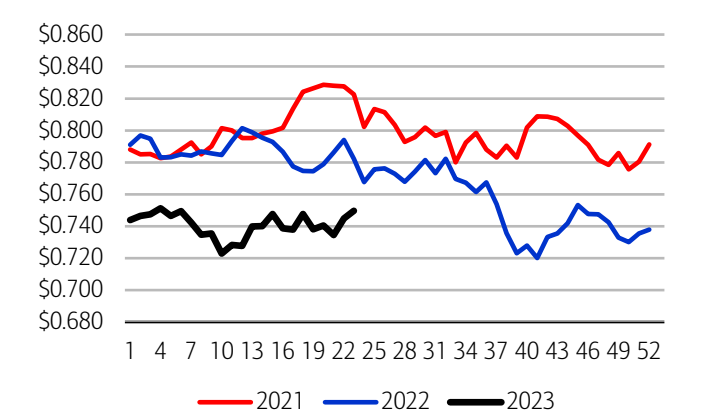
Source: Hong Kong International Airport

BofA GLOBAL RESEARCH

Hong Kong Airport: -8.0% Y-Y, -6.8% M-M

Canadian Dollar and Mexican Peso FX Rates

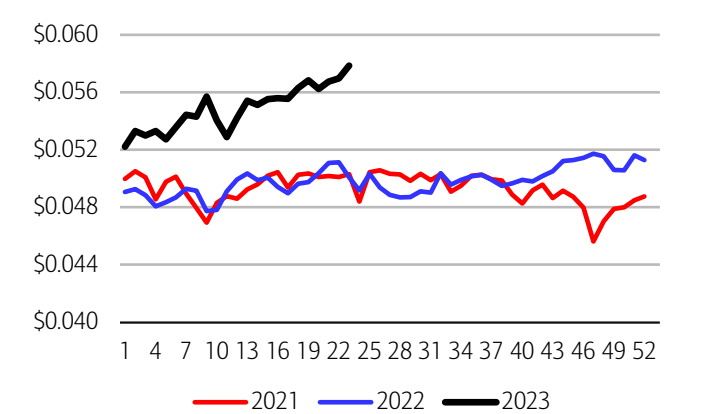
Exhibit 54: Price of 1 Canadian Dollar in US\$
1 CAD = 0.750 US\$



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 55: Price of 1 Mexican Peso in US\$
1 MXN = 0.058 US\$



Source: Bloomberg

BofA GLOBAL RESEARCH



Rail Performance Measures

Overall Takeaway: Service levels all improved year-over-year for the second week, as Velocity, Cars-On-Line, and Dwell Time improved. On a sequential basis, service levels were mixed, as Velocity and Cars-On-Line deteriorated, while Dwell Time improved. NSC (+1.0%) led the sequential improvement in velocity this week, moderating from last week's +1.6% increase. CSX (-2.8%) trailed the group this week, reversing last week's +3.4% increase. BNSF has not reported yet.

Velocity (avg. speed of rail network, faster is better): Deteriorated sequentially (-0.5%) and improved year-over-year (+4.2%).

Cars-on-Line (fewer cars-on-line is better): Deteriorated sequentially (+0.2%) and improved year-over-year (-2.3%).

Terminal Dwell (lower is better): Improved sequentially (-3.6%) and improved year-over-year (-4.2%).

Exhibit 56: Rail Performance Metrics

Service levels were mixed sequentially but improved year-over-year

Rail Performance Measures

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

	2023	2023	2022			% Seq Chg	% y-y Chg
(miles per hour)	Week 23	Week 22	Week 23	% Seq Chg	% y-y Chg		
CNI	20.1	20.0	20.1	0.5%	0.0%		
CPKC	18.5	19.0	18.3	-2.6%	1.1%		
CSX	17.5	18.0	15.1	-2.8%	15.9%		
NSC	19.5	19.3	18.2	1.0%	7.1%		
UNP	24.5	24.3	24.4	0.8%	0.4%		
BNSF (1)	25.9	26.4	25.0	-1.9%	3.6%	Slower -0.5%	Faster 4.2%
Average	20.0	20.1	19.2	-0.5%	4.2%		

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

	2023	2023	2022				
(no. of cars)	Week 23	Week 22	Week 23	% Seq Chg	% y-y Chg		
CNI	73,286	73,267	81,394	0.0%	-10.0%		
CPKC	88,441	86,527	87,321	2.2%	1.3%		
CSX	126,206	125,729	143,428	0.4%	-12.0%		
NSC	171,026	172,122	174,216	-0.6%	-1.8%		
UNP	305,937	305,916	296,216	0.0%	3.3%		
BNSF (1)	247,160	246,328	257,505	0.3%	-4.0%	Worse 0.2%	Better -2.3%
Average	152,979	152,712	156,515	0.2%	-2.3%		

Terminal Dwell Time (lower is better)

	2023	2023	2022				
(time in hours)	Week 23	Week 22	Week 23	% Seq Chg	% y-y Chg		
CNI	6.7	6.8	7.1	-1.5%	-5.6%		
CPKC	11.4	11.5	9.8	-0.9%	16.3%		
CSX	9.1	9.4	12.1	-3.2%	-24.8%		
NSC	24.9	26.9	26.3	-7.4%	-5.3%		
UNP	22.8	23.1	22.9	-1.3%	-0.4%		
BNSF (1)	25.9	25.5	27.4	1.6%	-5.5%	Better -3.6%	Better -4.2%
Average	15	16	15.6	-3.6%	-4.2%		

(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

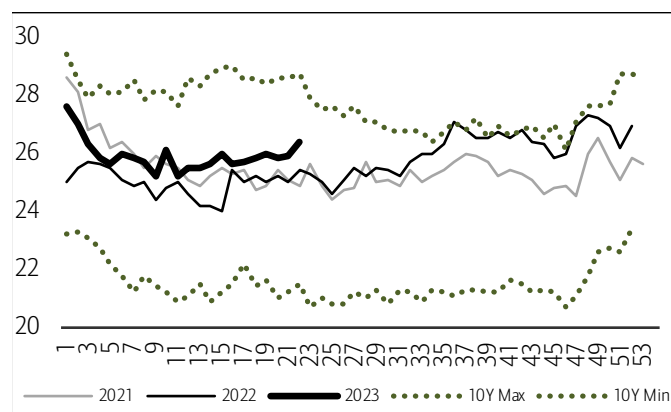
BofA GLOBAL RESEARCH



Weekly Rail Velocity Monitor

Exhibit 57: BNSF Velocity

BNSF velocity was 25.9 mph for week 22

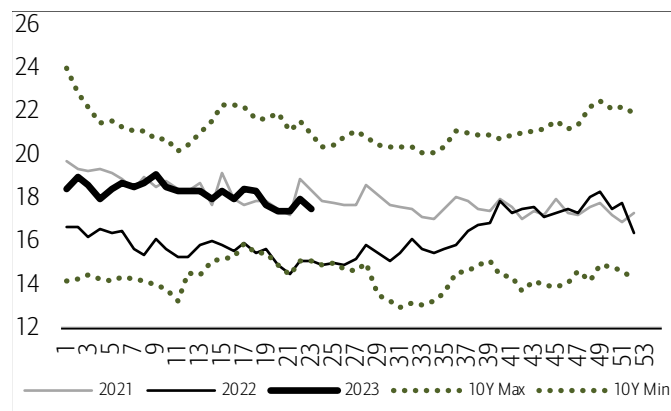


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 59: CSX Velocity

CSX velocity was 17.5 mph for week 23

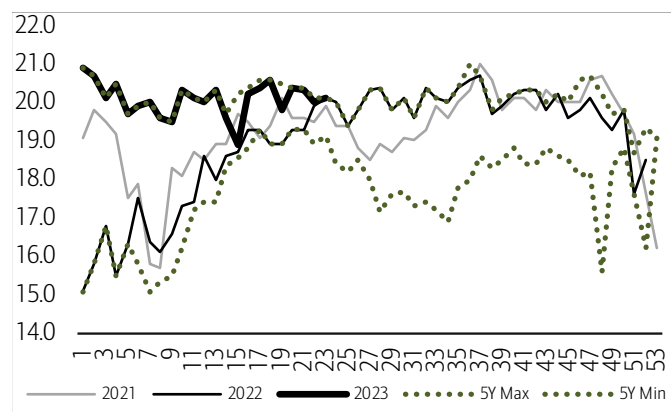


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 61: Canadian National Velocity

CNI velocity was 20.1 mph for week 23



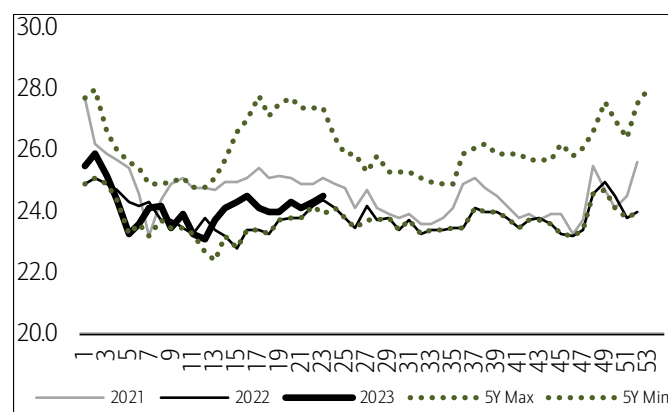
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 58: Union Pacific Velocity

UNP velocity was 24.5 mph for week 23



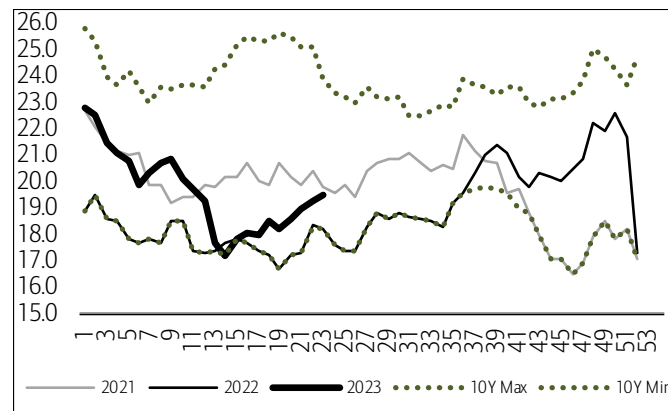
Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 60: Norfolk Southern Velocity

NSC velocity was 19.5 mph for week 23

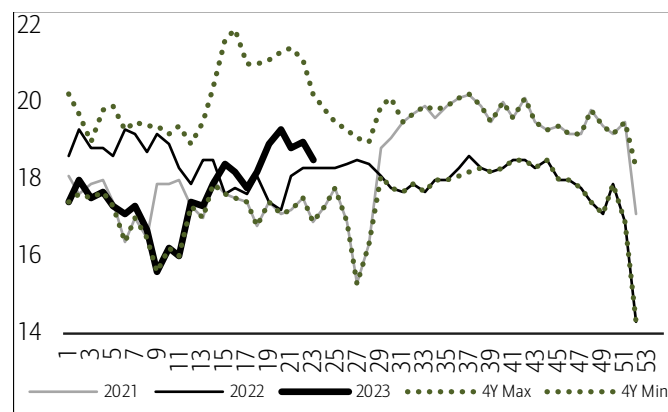


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 62: Canadian Pacific Kansas City Velocity

CPKC velocity was 18.5 mph for week 23



Source: Company reports, and Association of American Railroads.

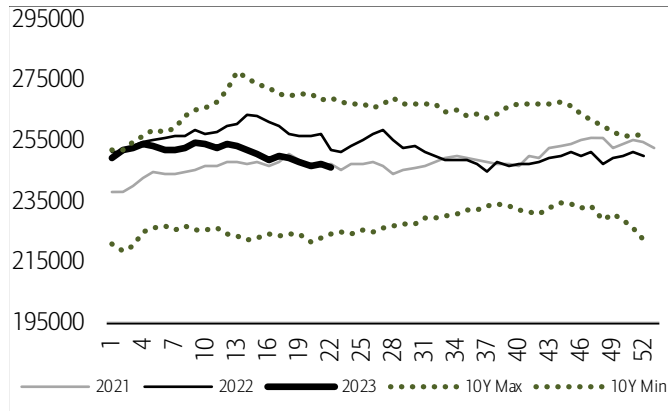
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Cars On-Line Monitor

Exhibit 63: BNSF Cars-On-Line

BNSF cars on line were 247,160 for week 22

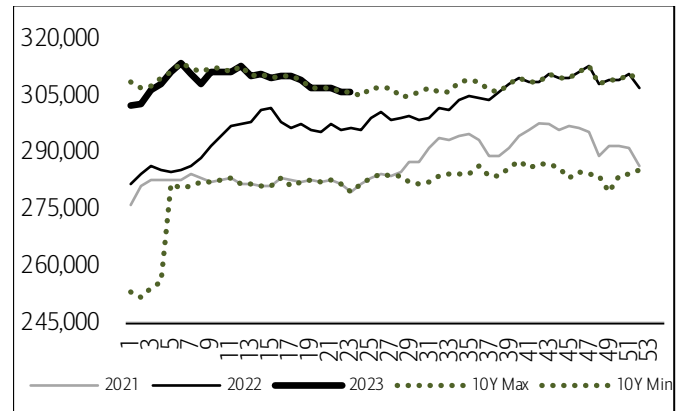


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 64: Union Pacific Cars-On-Line

UNP cars on line were 305,937 for week 23



Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 65: CSX Cars-On-Line

CSX cars on line were 126,206 for week 23

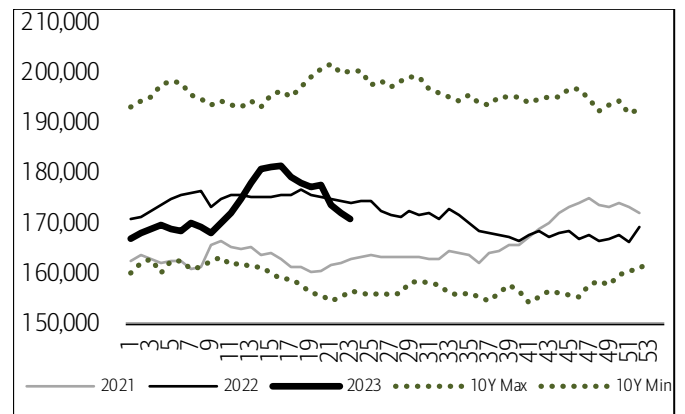


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 66: Norfolk Southern Cars-On-Line

NSC cars on line were 171,026 for week 23

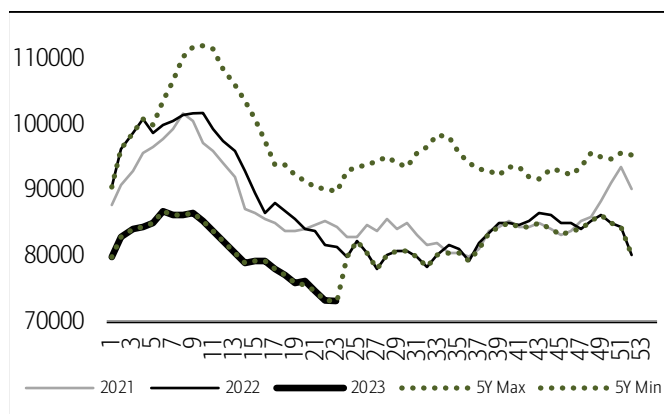


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 67: Canadian National Cars-On-Line

CNI cars on line were 73,286 for week 23



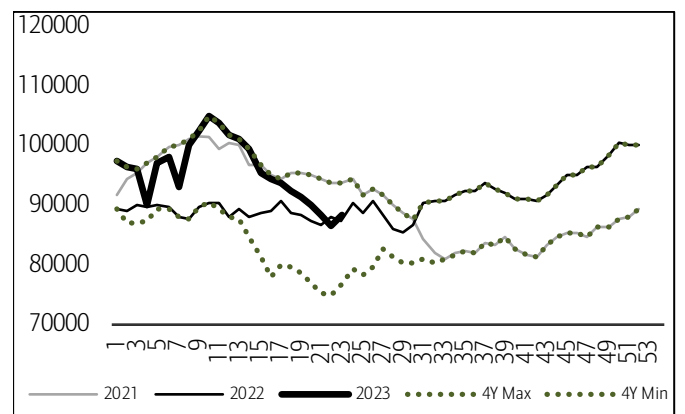
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 68: Canadian Pacific Kansas City Cars-On-Line

CPKC cars on line were 88,441 for week 23



Source: Company reports, and Association of American Railroads.

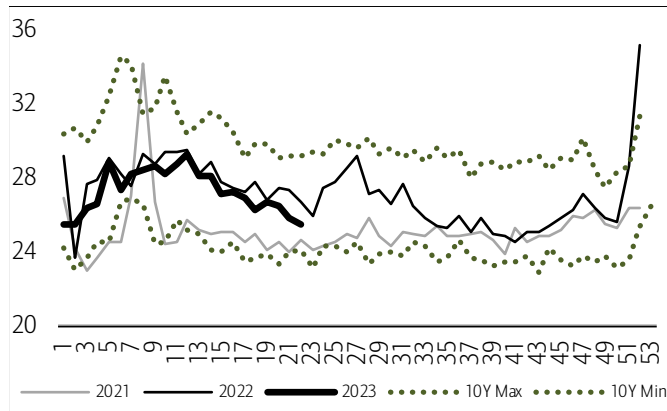
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Weekly Dwell Time Monitor

Exhibit 69: BNSF Dwell Time

BNSF dwell time was 25.9 hrs for week 22

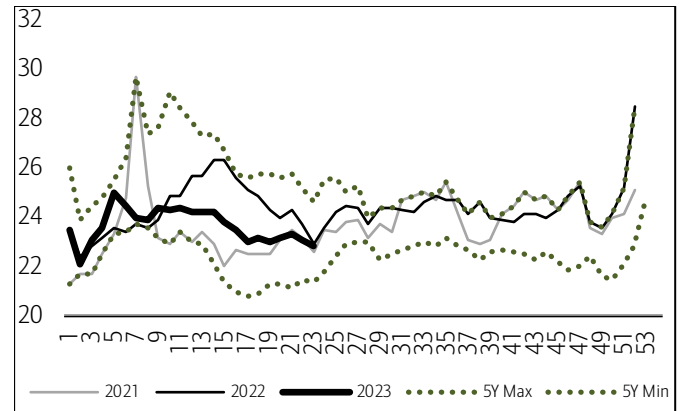


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 70: Union Pacific Dwell Time

UNP dwell time was 22.8 hrs for week 23



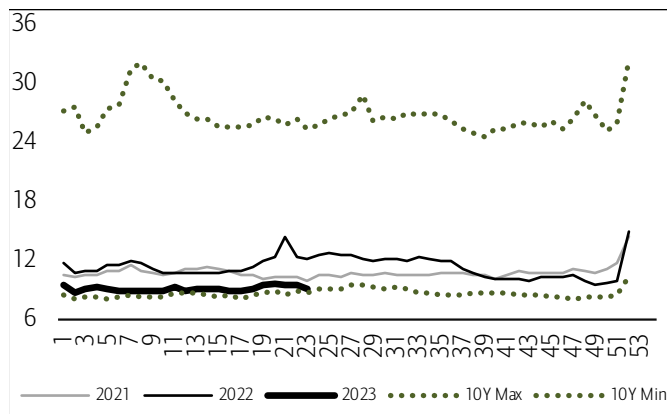
Source: Company reports, and Association of American Railroads.

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

BofA GLOBAL RESEARCH

Exhibit 71: CSX Dwell Time

CSX dwell time was 9.1 hrs for week 23

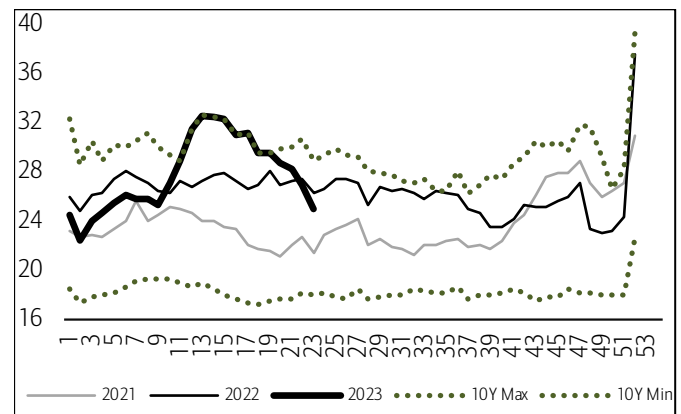


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 72: Norfolk Southern Dwell Time

NSC dwell time was 24.9 hrs for week 23

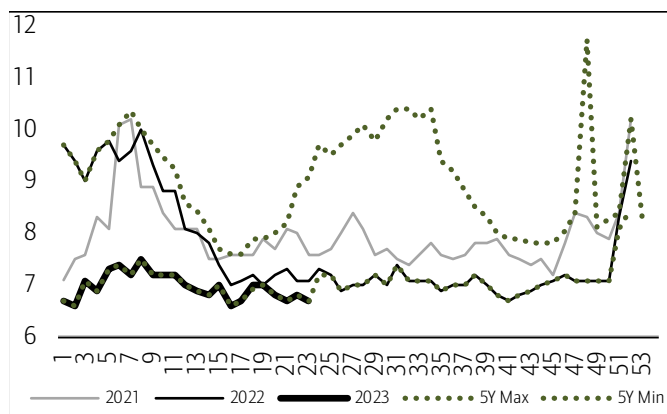


Source: Company reports, and Association of American Railroads.

BofA GLOBAL RESEARCH

Exhibit 73: Canadian National Dwell Time

CNI dwell time was 6.7 hrs for week 23



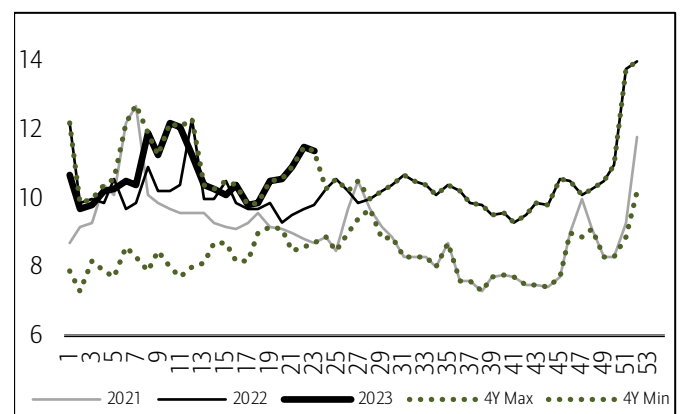
Source: Company reports, and Association of American Railroads.

CNI restated performance metrics, historical data available from 2017

BofA GLOBAL RESEARCH

Exhibit 74: Canadian Pacific Kansas City Dwell Time

CPKC dwell time was 11.4 hrs for week 23



Source: Company reports, and Association of American Railroads.

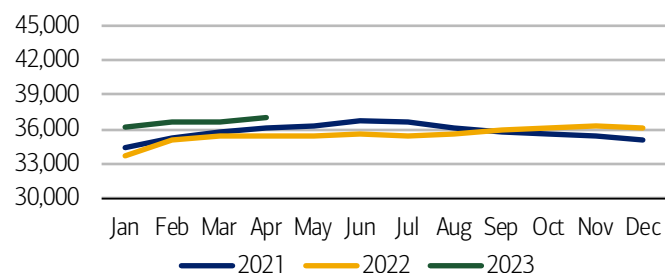
CPKC restated performance metrics, historical data available from 2020

BofA GLOBAL RESEARCH

Monthly Railroad employment data

Exhibit 75: BNSF US labor data

BNSF employment was +4.4% Y-Y in Apr 2023

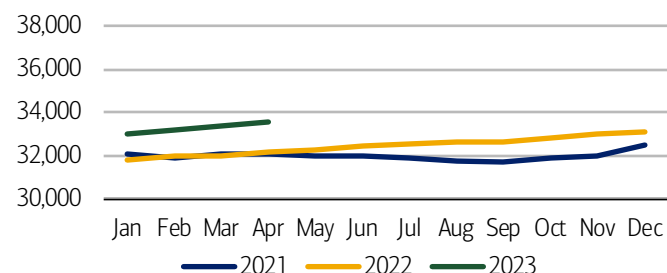


Source: STB

BofA GLOBAL RESEARCH

Exhibit 76: UNP US labor data

UNP employment was +4.4% Y-Y in Apr 2023

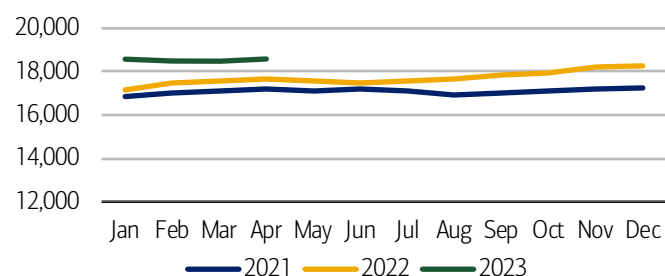


Source: STB

BofA GLOBAL RESEARCH

Exhibit 77: CSX US labor data

CSX employment was +5.2% Y-Y in Apr 2023

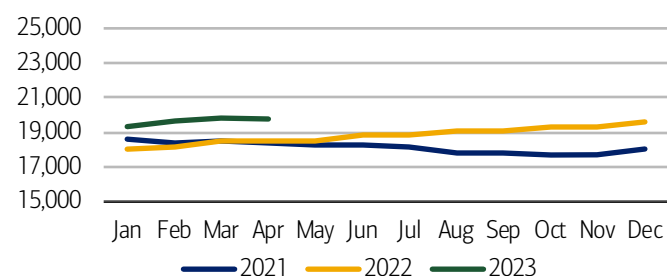


Source: STB

BofA GLOBAL RESEARCH

Exhibit 78: NSC US labor data

NSC employment was +7.0% Y-Y in Apr 2023

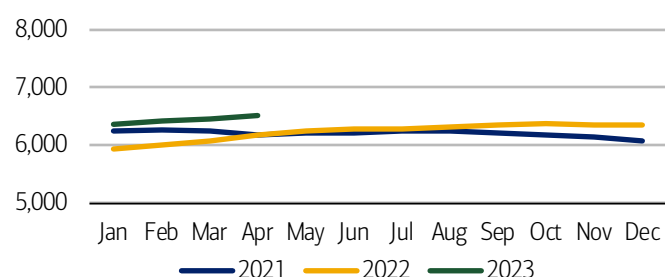


Source: STB

BofA GLOBAL RESEARCH

Exhibit 79: CN US labor data

CN employment was +5.7% Y-Y in Apr 2023

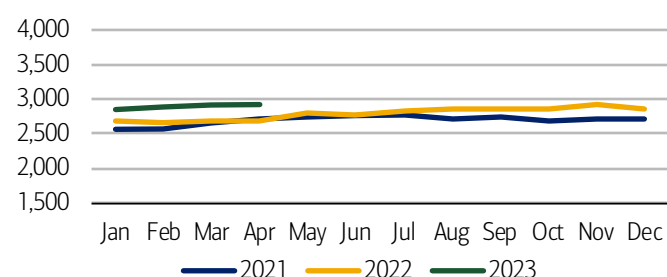


Source: STB

BofA GLOBAL RESEARCH

Exhibit 80: CP US labor data

CP employment was +8.9% Y-Y in Apr 2023

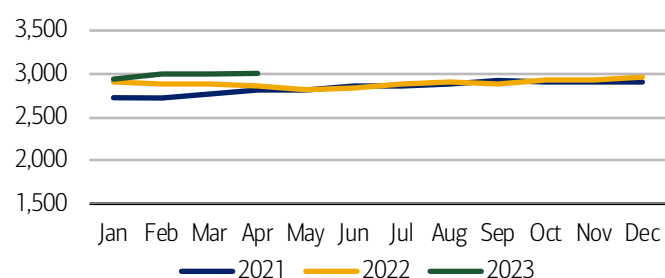


Source: STB

BofA GLOBAL RESEARCH

Exhibit 81: KSU US labor data

KSU employment was +4.8% Y-Y in Apr 2023



Source: STB

BofA GLOBAL RESEARCH

Exhibit 82: STB quarter to date data vs BofAe labor estimates

Data as of April 2023

	2023	2Q #	2Q %	BofAe	Diff	2Q Vols e
UNP		33,559	3.9%	3.0%	0.9%	-0.6%
CSX		18,574	5.7%	6.6%	-0.9%	-1.3%
NSC		19,794	6.3%	5.0%	1.3%	-4.9%
CN		6,518	4.5%	6.9%	-2.4%	-8.9%
CP		2,923	6.3%	4.1%	2.2%	5.0%
KSU		3,005	5.8%	-	-	-

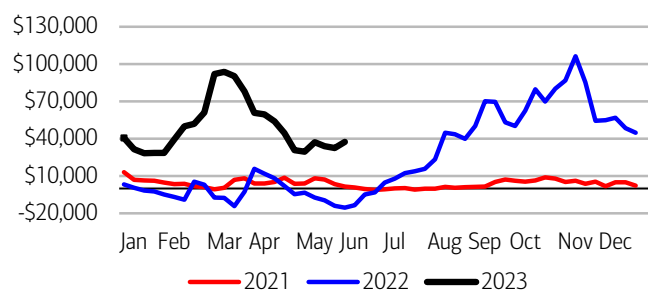
Source: STB, BofA Global Research estimates

BofA GLOBAL RESEARCH

Weekly Shipping Rates

Exhibit 83: VLCC Spot Rates

VLCC Spot Rates at \$37,234 as of 6/09/2023

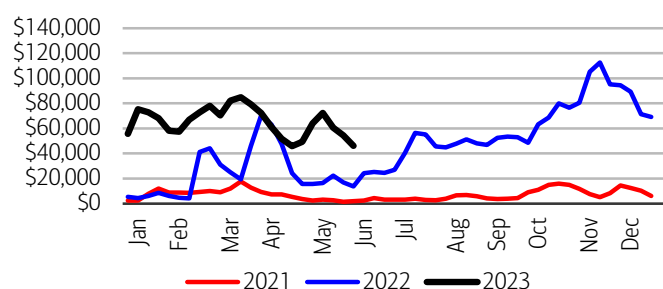


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 85: Suezmax Spot Rates

Suezmax Spot Rates at \$46,034 as of 6/09/2023

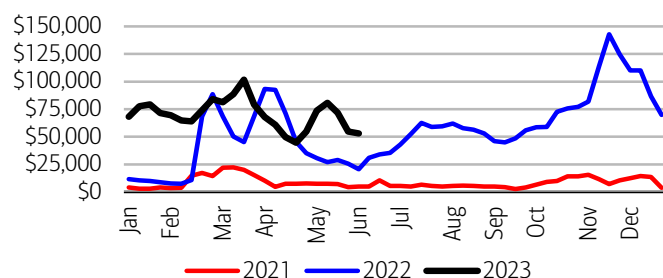


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 87: Aframax Spot Rates

Aframax Spot Rates at \$53,000 as of 6/09/2023

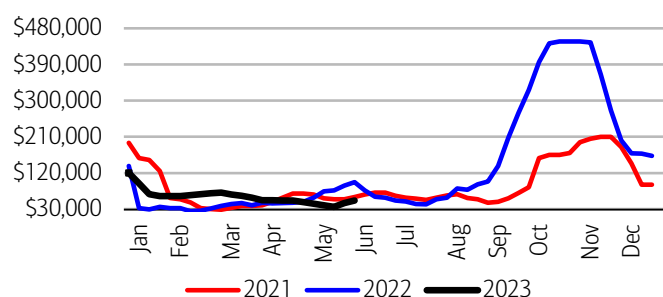


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 89: LNG TFDE Spot Rates

LNG TFDE Spot Rates at \$51,250 as of 6/09/2023

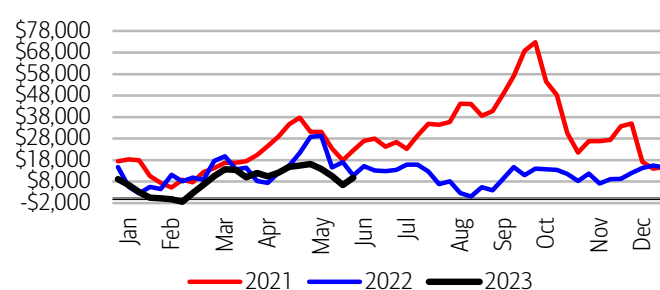


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 84: Capesize spot Rates

Capesize Spot rates at \$9,821 as of 6/09/2023

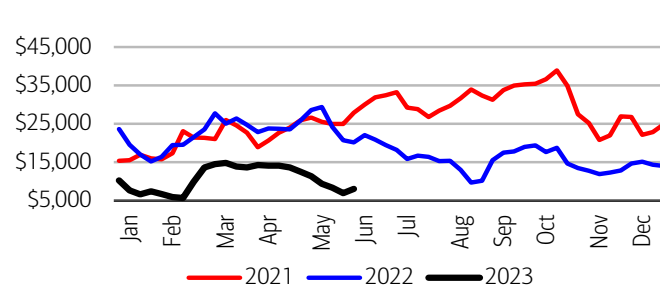


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 86: Panamax Spot Rates

Panamax Spot Rates at \$8,003 as of 6/09/2023

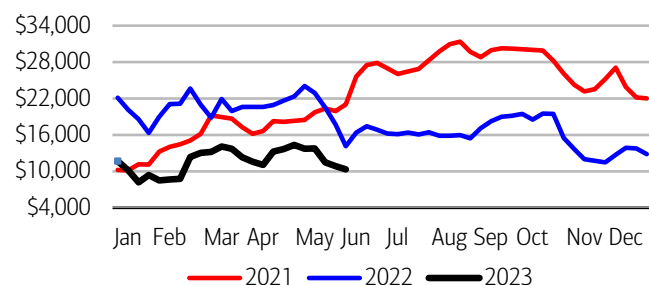


Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 88: Supramax Spot Rates

Supramax Spot Rates at \$10,358 as of 6/09/2023



Source: BofA Global Research and Clarksons

BofA GLOBAL RESEARCH

Exhibit 90: Yearly and Quarterly Gas Carrier Rate Data

LNG Carrier Rate is down 2QTD & down YTD

Gas Carrier	2QTD Average	2023 YTD Avg.	Orderbook % of Fleet
LNG TFDE	\$47,100	\$60,924	76%
% chg. Y-Y	-26%	-54%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 91: Yearly and Quarterly Tanker Rate Data

Tanker Rates are up 2QTD & YTD

Tanker	2QTD Average	2023 YTD Avg.	Orderbook % of Fleet
VLCC	\$41,928	\$49,190	2%
% chg. Y-Y	1485%	106%	
Suezmax	\$57,795	\$65,208	5%
% chg. Y-Y	98%	47%	
Aframax	\$61,156	\$70,236	11%
% chg. Y-Y	39%	25%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 92: Yearly and Quarterly Dry Bulk Rate Data

Dry Bulk Rates are down 2QTD & YTD

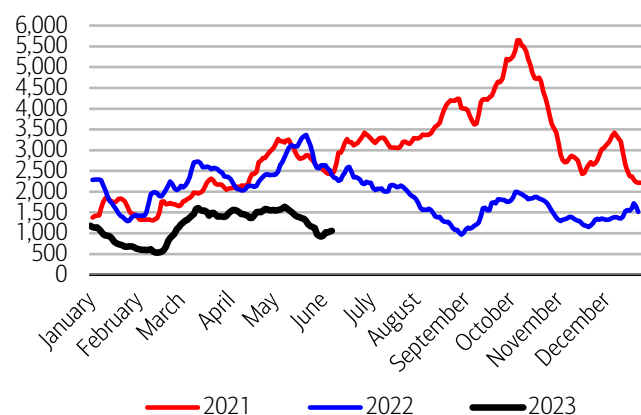
Dry Bulk	2QTD Average	2023 YTD Avg.	Orderbook % of Fleet
Capesize	\$12,167	\$8,532	5%
% chg. Y-Y	-23%	-28%	
Panamax	\$11,245	\$10,551	9%
% chg. Y-Y	-52%	-44%	
Supramax	\$12,425	\$11,676	8%
% chg. Y-Y	-37%	-35%	

Source: Clarkson

BofA GLOBAL RESEARCH

Exhibit 93: Baltic Dry Index

Baltic Dry Index is at \$1,055 as of 6/09/2023



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 94: Shipping Rates

Shipping Rates are mixed year over year

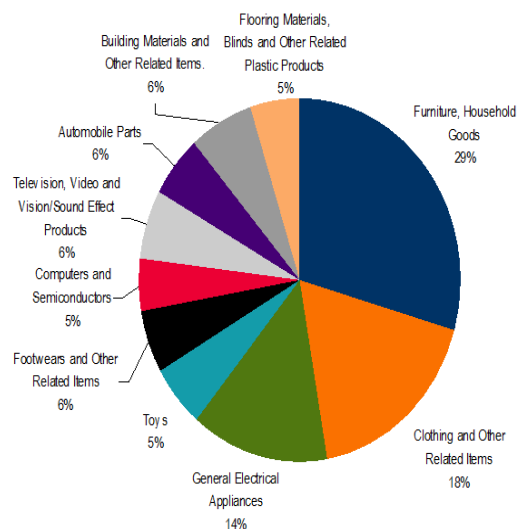
	Current Wk 06/09/23	Prior Wk 06/02/23	YOY Wk 06/10/22	Seq % Change	YOY % Change
Vessel Type					
VLCC	\$37,234	\$32,424	-\$15,466	14.8%	340.7%
Suezmax	\$46,034	\$54,429	\$13,675	-15.4%	236.6%
Aframax	\$53,000	\$54,843	\$20,623	-3.4%	157.0%
LNG TFDE	\$51,250	\$45,000	\$76,750	13.9%	-33.2%
Baltic Dry Index	1,055	919	2,342	14.8%	-55.0%

Source: Bloomberg and Clarkson

BofA GLOBAL RESEARCH

Exhibit 95: Container Breakdown by Commodity

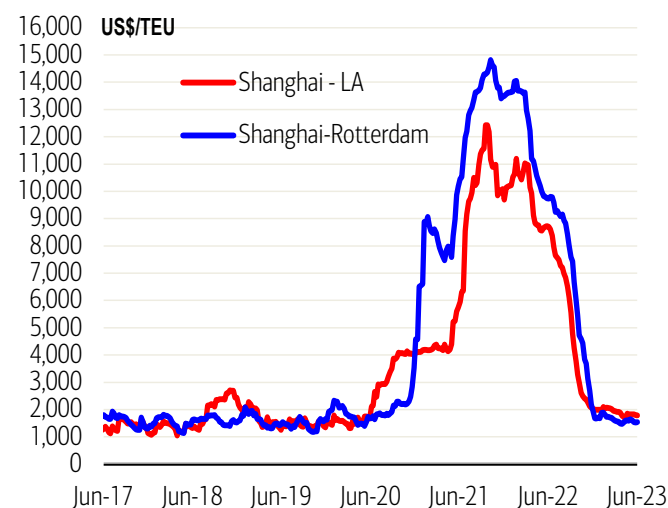
Furniture, Household & Goods represents almost 30%



Source: OOCL, BofA Global Research estimates

Exhibit 96: Container Rates – Shanghai Containerized Freight Index (SCFI)

Shanghai – Rotterdam stabilized at mid-year mark



Source: Chinese Shipping, and BofA Global Research

Exhibit 97: Railroads Comp Sheet

Data as of 6/14/2023

								EPS															
		Investor Opinion	Share	Shares Out.	Mkt Cap	Net Debt	EV	BofA	BofA	BofA	Cons.	Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA					
Company	Ticker	Price		(mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2021a	2022a	2023e	2023e	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e			
Canadian National	CNI	B-1-7	\$116.61	663	\$77.3	\$11.2	\$88.5	\$4.71	\$5.75	\$5.95	\$5.91	24.8x	20.3x	19.6x	\$5.73	\$6.61	\$6.74	15.5x	13.4x	13.1x			
Canadian Pacific	CP	B-1-7	\$77.69	931	\$72.3	\$14.7	\$87.0	\$2.97	\$2.89	\$3.18	\$3.19	26.2x	26.9x	24.4x	\$3.33	\$3.26	\$3.63	26.1x	26.7x	24.0x			
CSX Corporation	CSX	B-1-7	\$33.09	2033	\$67.3	\$16.0	\$83.2	\$1.56	\$1.91	\$1.95	\$1.93	21.2x	17.3x	17.0x	\$6.67	\$7.42	\$7.41	12.5x	11.2x	11.2x			
Norfolk Southern	NSC	B-1-7	\$221.40	228	\$50.4	\$14.7	\$65.1	\$12.11	\$13.60	\$13.30	\$13.19	18.3x	16.3x	16.6x	\$5.63	\$6.12	\$5.87	11.6x	10.6x	11.1x			
Union Pacific	UNP	B-1-7	\$202.74	610	\$123.6	\$32.3	\$155.9	\$9.95	\$11.23	\$11.10	\$11.25	20.4x	18.1x	18.3x	\$11.55	\$12.26	\$12.15	13.5x	12.7x	12.8x			
											22.2x			19.8x	19.2x				15.8x	14.9x	14.5x		
2023Q2EPS								Revenue				2022Q4		Net		ROIC							
		est.	Δ to	EPS Growth			YoY		Growth		Op.	Debt/ EBITDA	Total Return (w/reinvested dividends)					Dividend					
Company		BofA	Cons.	Street	1yr	3yr	5yr	2Q2023	1yr	5yr	Ratio	EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield			
Canadian National		\$1.42	\$1.47	-3%	32%	11%	14%	18%	21%	6%	58%	1.8x	9.6%	0%	-1%	10%	12%	9%	\$3.14	2.0%			
Canadian Pacific		\$0.82	\$0.78	5%	-15%	8%	17%	65%	56%	17%	58%	3.2x	12.1%	-2%	4%	14%	16%	16%	\$0.76	0.7%			
CSX Corporation		\$0.52	\$0.49	5%	23%	88%	14%	19%	15%	6%	61%	2.2x	9.3%	2%	8%	14%	14%	10%	\$0.44	1.3%			
Norfolk Southern		\$3.17	\$3.22	-2%	5%	15%	10%	14%	14%	3%	62%	2.5x	7.6%	1%	-9%	2%	10%	10%	\$5.40	2.4%			
Union Pacific		\$2.74	\$2.78	-1%	9%	11%	10%	14%	11%	2%	61%	2.8x	10.5%	1%	-1%	0%	9%	9%	\$5.20	2.6%			
								60%		2.5x		10%		0%		0%		8%		12%		11%	

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

BofA GLOBAL RESEARCH

Exhibit 98: Intermodal/Container Lessors Comp Sheet

Data as of 6/14/2023

								EPS							EBITDA (\$ bil)			Forward EV/EBITDA				
		Investor	Share	Shares	Mkt Cap	Net Debt	EV	BofA	BofA	BofA	Cons	Forward	P/E				Forward					
Company	Ticker	Opinion	Price	Out.	(\$ bil.)	(\$ bil.)	(\$ bil.)	2021a	2022a	2023e	2023e	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e		
J.B. Hunt																						
Transp.	JBHT	B-1-7	\$174.39	104	\$18.1	\$1.2	\$19.3	\$7.14	\$9.79	\$8.25	\$8.40	24.4x	17.8x	21.1x	\$1.60	\$2.06	\$1.91	12.0x	9.4x	10.1x		
Triton Int'l Ltd	TRTN	RSTR	\$82.97	--	\$4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Textainer Group	TGH	n/a	\$39.53	42	\$1.7	\$5.1	\$6.7	n/a	\$6.13	n/a	\$4.88	7.2x	6.4x	8.1x	\$0.69	\$0.75	\$0.67	9.8x	9.0x	10.1x		
Hub Group Inc	HUBG	n/a	\$79.25	33	\$2.6	\$0.2	\$2.8	n/a	\$10.55	n/a	\$6.39	19.8x	7.5x	12.4x	\$0.32	\$0.62	\$0.45	8.9x	4.5x	6.2x		
												17.2x	10.6x	13.9x				10.2x	7.6x	8.8x		
2023Q2EPS								Revenue		2022Q4		Net		ROIC		Total Return (w/reinvested dividends)					Dividend	
Company		BofA	Cons.	Street	1yr	3yr	5yr	2Q2023	1yr	5yr	Op. Ratio	EBITDA		1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield	
J.B. Hunt																						
Transp.		\$1.94	\$2.02	-4%	12%	26%	16%	22%	12%	11%	91%	0.6x	12%		-1%	0%	9%	16%	7%	\$1.68	1.0%	
Triton Int'l Ltd		--	--	--	--	--	--	--	--	--	--	--	--		0%	23%	55%	46%	25%	--	--	
Textainer Group		n/a	\$1.21		22%	118%	--	7%	0%	9%	50%	6.8x	6%		1%	30%	37%	69%	20%	\$1.20	3.0%	
Hub Group Inc		n/a	\$1.42		43%	70%	81%	26%	13%	8%	93%	0.3x	18%		2%	0%	8%	20%	9%	--	--	
											78%	2.6x	12%		1%	13%	27%	38%	15%			

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

BofA GLOBAL RESEARCH

Exhibit 99: Less-than-Truckload (LTL) Comp Sheet

Data as of 6/14/2023

			Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward			P/E	EBITDA (\$ bil)			Forward EV/EBITDA			
Company	Ticker	Investor Opinion	Price	Out. (mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	BofA	BofA	BofA	Cons.	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e		
Arcbest Corp	ARCB	C-3-7	\$89.15	24	\$2.1	\$0.1	\$2.3	\$8.11	\$13.63	\$7.50	\$7.90	11.0x	6.5x	11.9x	\$0.41	\$0.58	\$0.36	5.6x	3.9x	6.2x		
Old Dominion	ODFL	B-2-7	\$320.72	110	\$35.2	(\$0.1)	\$35.0	\$8.89	\$12.18	\$11.25	\$10.87	36.1x	26.3x	28.5x	\$1.65	\$2.10	\$1.96	21.2x	16.7x	17.8x		
Saia Inc	SAIA	B-2-9	\$313.35	27	\$8.3	\$0.0	\$8.3	\$9.48	\$13.40	\$12.70	\$12.18	33.1x	23.4x	24.7x	\$0.48	\$0.63	\$0.62	17.4x	13.2x	13.3x		
TFI Int'l	TFII	B-2-7	\$105.99	87	\$9.2	\$1.5	\$10.7	\$5.23	\$8.02	\$7.15	\$7.03	20.3x	13.2x	14.8x	\$0.70	\$1.13	\$0.90	15.2x	9.4x	11.9x		
XPO, Inc.	XPO	C-2-9	\$51.36	116	\$6.0	\$3.0	\$8.9	\$1.94	\$3.53	\$2.40	\$2.44	26.5x	14.5x	21.4x	\$0.90	\$0.66	\$0.58	9.9x	13.5x	15.3x		
Yellow Corp	YELL	n/a	\$1.70	52	\$0.1	\$1.5	\$1.6	-\$1.39	\$0.75	-\$2.79	(\$2.79)	--	2.3x	--	\$0.26	\$0.35	\$0.19	5.9x	4.4x	8.2x		
												25.4x	14.4x	20.3x				12.5x	10.2x	12.1x		
2023Q2EPS est.								2022Q4 Op. Ratio		Net Debt/EBITDA		ROIC		Total Return (w/reinvested dividends)					Dividend			
Company	BofA	Cons.	Street	1yr	3yr	5yr	YoY 2Q2023	1yr	5yr	Ratio	EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield			
Arcbest Corp	\$2.06	\$2.06	0%	8%	108%	262%	34%	15%	12%	93%	0.2x	7.2%	2%	28%	20%	57%	14%	\$0.48	0.5%			
Old Dominion	\$2.73	\$2.70	1%	24%	35%	26%	19%	10%	10%	71%	-0.1x	18.7%	1%	13%	35%	27%	25%	\$1.60	0.5%			
Saia Inc	\$3.28	\$3.24	1%	22%	48%	34%	22%	13%	12%	86%	0.0x	11.9%	4%	49%	72%	44%	30%	--	--			
TFI Int'l	\$1.88	\$1.84	2%	26%	62%	36%	22%	3%	24%	90%	1.0x	10.9%	-3%	6%	42%	50%	--	\$1.40	1.3%			
XPO, Inc.	\$0.64	\$0.64	-1%	38%	86%	99%	7%	5%	-9%	91%	2.7x	--	4%	54%	81%	26%	6%	--	--			
Yellow Corp	n/a	(\$0.61)	0%	n/a	n/a	n/a	2%	-1%	-1%	101%	3.6x	12.2%	4%	-32%	-50%	-3%	-31%	--	--			
												89%	1.2x	12.2%	2%	20%	33%	34%	9%			

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

BofA GLOBAL RESEARCH



Exhibit 100: Airfreight Comp Sheet

Data as of 6/14/2023

			Share					EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA			
Company	Ticker	Investor Opinion	Price	Share Out. (mil.)	Mkt Cap (\$ bil.)	Net Debt (\$ bil.)	EV (\$ bil.)	BoFA	BoFA	BoFA	Cons.	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e	
Fedex Corp	FDX	B-1-7	\$229.67	251	\$57.7	\$15.6	\$73.3	\$18.19	\$14.90	\$18.45	\$14.87	12.6x	15.4x	12.4x	\$9.98	\$10.84	\$9.42	7.4x	6.8x	7.8x	
United Parcel-B	UPS	B-2-7	\$174.88	725	\$150.2	\$14.1	\$164.3	\$12.13	\$12.95	\$10.65	\$10.74	14.4x	13.5x	16.4x	\$16.10	\$16.97	\$15.51	10.2x	9.7x	10.6x	
												13.5x	14.5x	14.4x				8.8x	8.2x	9.2x	
2023Q2EPS est.			Δ to Street	EPS Growth			YoY 2Q2023	Revenue Growth		2022Q4 Op. Ratio	Net Debt/ EBITDA	ROIC			Total Return (w/reinvested dividends)					Dividend	
Company	BoFA	Cons.		1yr	3yr	5yr		1yr	5yr			1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
Fedex Corp	\$4.89	\$4.87	0%	-10%	138%	11%	11%	1%	6%	95%	3.5x	5%	3%	34%	3%	22%	-1%	\$5.04	2.2%		
UPS	\$2.48	\$2.53	-2%	-3%	257%	58%	3%	0%	7%	86%	1.0x	15%	2%	2%	4%	23%	12%	\$6.48	3.7%		
												90%	2.2x	10%	2%	18%	3%	23%	5%		

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

BoFA GLOBAL RESEARCH

Exhibit 101: Truckload Carriers Comp Sheet

Data as of 6/14/2023

				EPS																			
		Investor	Share	Shares	Mkt Cap	Net Debt	EV					BoFA	BoFA	BoFA	Cons.	Forward P/E		EBITDA (\$ bil)			Forward EV/EBITDA		
Company	Ticker	Opinion	Price	Out. (mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	2021a	2022a	2023e	2023e	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e
Knight Transportation	KNX	B-1-7	\$56.00	161	\$9.0	\$1.7	\$10.7	\$4.72	\$5.10	\$3.40	\$3.31	11.9x	11.0x	16.5x	\$1.55	\$1.77	\$1.43	6.9x	6.0x	7.5x			
Schneider National	SNDR	B-1-7	\$27.01	95	\$4.8	(\$0.2)	\$4.6	\$2.29	\$2.63	\$2.05	\$2.05	11.8x	10.3x	13.2x	\$0.83	\$0.97	\$0.85	5.6x	4.8x	5.5x			
US Xpress Enterprises	USX	n/a	\$6.11	41	\$0.3	\$0.5	\$0.8	\$0.16	-\$0.63	-\$0.50	-\$1.55	38.2x	--	--	\$0.10	\$0.06	\$0.09	7.6x	13.1x	9.2x			
Werner Enterprises	WERN	B-1-7	\$43.79	63	\$2.8	\$0.6	\$3.4	\$3.46	\$3.71	\$2.55	\$2.76	12.7x	11.8x	17.2x	\$0.58	\$0.61	\$0.53	5.8x	5.5x	6.3x			
Covenant Transport	CVLG	n/a	\$39.50	11	\$0.5	\$0.1	\$0.6	n/a	n/a	n/a	\$4.05	11.0x	6.7x	9.8x	\$0.12	\$0.15	\$0.11	5.1x	4.2x	5.6x			
Heartland Express	HTLD	n/a	\$16.32	79	\$1.3	\$0.3	\$1.6	n/a	n/a	n/a	\$0.81	16.4x	11.6x	20.2x	\$0.21	\$0.25	\$0.30	7.7x	6.4x	5.4x			
Marten Transport	MRTN	n/a	\$22.24	81	\$1.8	(\$0.1)	\$1.7	n/a	n/a	n/a	\$1.22	22.4x	16.7x	18.3x	\$0.22	\$0.25	\$0.25	7.9x	6.8x	6.9x			
Pam Transport	PTSI	n/a	\$27.15	22	\$0.6	\$0.1	\$0.7	n/a	n/a	n/a	\$2.55	8.8x	6.2x	10.6x	\$0.15	\$0.20	\$0.15	4.7x	3.7x	4.7x			
Universal Logistics	ULH	n/a	\$29.97	26	\$0.8	\$0.4	\$1.2	n/a	n/a	n/a	n/a	11.4x	4.6x	--	\$0.19	\$0.32	--	6.4x	3.7x	--			
															16.0x	9.9x	15.1x				6.4x	6.0x	6.4x
2023Q2EPS								Revenue				2022Q4		ROIC		Total Return (w/reinvested dividends)					Dividend		
Company		BoFA	Cons.	Δ to Street	EPS Growth		YoY 2Q2023	Growth		Op. Ratio	Net Debt/EBITDA	1yr	1 week			YTD	1yr	3yr	5yr	Annual	Yield		
Knight Transportation		\$0.77	\$0.77	1%	-17%	42%	25%	24%	10%	7%	87%	1.1x	6.1%	-3%	7%	25%	14%	7%	\$0.56	1.0%			
Schneider National		\$0.47	\$0.46	2%	15%	49%	19%	18%	7%	6%	91%	-0.2x	7.0%	0%	16%	21%	11%	2%	\$0.36	1.3%			
US Xpress Enterprises		(\$0.18)	--	0%	--	--	--	11%	6%	3%	101%	5.8x	3.8%	0%	238%	120%	4%	-18%	--	--			
Werner Enterprises		\$0.58	\$0.64	-9%	-11%	19%	19%	20%	16%	8%	90%	1.0x	9.6%	-4%	9%	15%	4%	6%	\$0.56	1.3%			
Covenant Transport		n/a	\$0.99	14%	--	--	--	16%	7%	10%	93%	0.0x	15.6%	-4%	15%	75%	48%	4%	\$0.44	1.1%			
Heartland Express		n/a	\$0.19	-1%	27%	3%	59%	89%	24%	93%	0.9x	12.0%	-1%	7%	19%	-5%	-2%	\$0.08	0.5%				
Marten Transport		n/a	\$0.30	20%	22%	20%	30%	23%	10%	90%	-0.4x	13.5%	0%	13%	30%	15%	11%	\$0.24	1.1%				
Pam Transport		n/a	\$0.65	-7%	162%	--	34%	22%	14%	96%	0.7x	15.6%	-5%	5%	-2%	53%	21%	--	--	--			
Universal Logistics		n/a	n/a	62%	73%	34%	15%	4%	6%	91%	1.2x	18.6%	2%	-10%	9%	27%	5%	\$0.42	1.4%				
												92%	1.1x	11%	-2%	33%	35%	19%	4%				

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

BoFA GLOBAL RESEARCH

Exhibit 102: Freight Forwarding Comp Sheet

Data as of 6/14/2023

			Share	Shares	Mkt Cap	Net Debt	EV	EPS				Forward P/E			EBITDA (\$ bil)			Forward EV/EBITDA			
Company	Ticker	Investor Opinion	Price	Out. (mil.)	(\$ bil.)	(\$ bil.)	(\$ bil.)	BoFA	BoFA	BoFA	Cons.	2021a	2022a	2023e	2021a	2022a	2023e	2021a	2022a	2023e	
CH Robinson	CHRW	B-3-7	\$94.61	116	\$11.0	\$1.8	\$12.8	\$6.29	\$7.50	\$4.15	\$4.11	15.0x	12.6x	22.8x	\$1.17	\$1.4	\$0.81	10.9x	9.3x	15.8x	
RXO Inc	RXO	C-1-9	\$21.81	117	\$2.6	\$0.4	\$2.9	\$1.48	\$1.56	\$0.85	\$0.62	14.7x	14.0x	25.7x	\$0.26	\$0.3	\$0.44	11.2x	9.7x	6.6x	
World Fuel Svcs	INT	B-1-7	\$24.09	62	\$1.5	\$0.5	\$2.0	\$1.36	\$2.04	\$2.15	\$2.17	17.7x	11.8x	11.2x	\$0.24	\$0.4	\$0.42	8.5x	5.3x	4.9x	
Landstar System	LSTR	n/a	\$186.33	36	\$6.7	(\$0.2)	\$6.5	n/a	n/a	\$11.76	\$8.31	18.8x	15.8x	22.4x	\$0.55	\$0.6	\$0.45	11.7x	10.3x	14.3x	
Expeditors Intl	EXPD	n/a	\$117.64	153	\$18.0	(\$1.8)	\$16.1	n/a	n/a	\$8.83	\$5.43	15.3x	13.3x	21.7x	\$1.82	\$2.0	\$1.14	8.9x	8.2x	14.2x	
Forward Air Corp	FWRD	n/a	\$104.05	26	\$2.7	\$0.3	\$3.0	n/a	n/a	\$14.24	\$5.71	24.9x	7.3x	--	\$0.20	\$0.3	\$0.27	15.4x	9.3x	11.1x	
												17.7x	12.5x	20.8x				11.1x	8.7x	11.1x	
2023Q2EPS										2022Q4		ROIC		Total Return (w/reinvested dividends)					Dividend		
Company		est.	Δ to Street	EPS Growth			YoY 2Q2023	Revenue Growth		Op. Ratio	Net Debt/EBITDA	1yr	1 week	YTD	1yr	3yr	5yr	Annual	Yield		
CH Robinson		\$1.01	\$0.98	3%	-9%	26%	19%	7%	-10%	7%	96%	1.5x	23%	3%	5%	-9%	9%	3%	\$2.44	2.6%	
RXO Inc		\$0.17	\$0.11	50%	--	--	--	2%	--	--	100%	--	--	-4%	27%	--	--	--	--	--	
World Fuel Svcs		\$0.44	\$0.50	-11%	35%	-4%	2%	88%	57%	14%	99%	1.3x	7%	-4%	-11%	3%	0%	3%	\$0.56	2.3%	
Landstar System		n/a	\$1.89	-7%	35%	21%	14%	-4%	11%	93%	-0.4x	38%	-1%	16%	31%	23%	12%	\$1.20	0.6%		
Expeditors Intl		n/a	\$1.39	-12%	41%	24%	3%	-17%	15%	89%	-1.1x	35%	1%	14%	21%	18%	10%	\$1.38	1.2%		
Forward Air Corp		n/a	\$1.30	33%	124%	53%	19%	9%	8%	88%	0.7x	20%	0%	0%	16%	31%	12%	\$0.96	0.9%		
												94%	0.4x	25%	-1%	8%	12%	16%	8%		

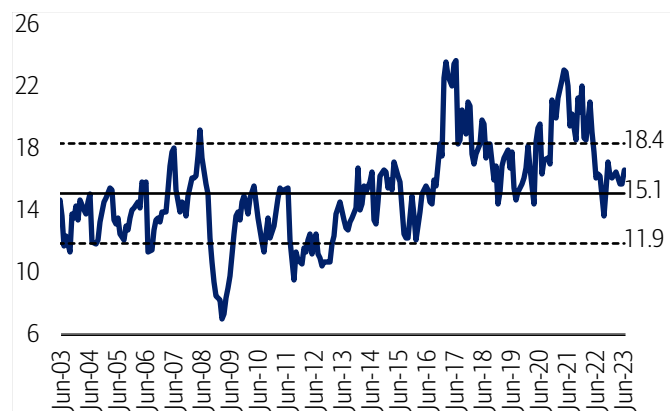
Source: BoFA Global Research estimates, Company reports, Bloomberg (for stocks not covered by BoFA Research)

BoFA GLOBAL RESEARCH



Exhibit 103: CSX forward P/E

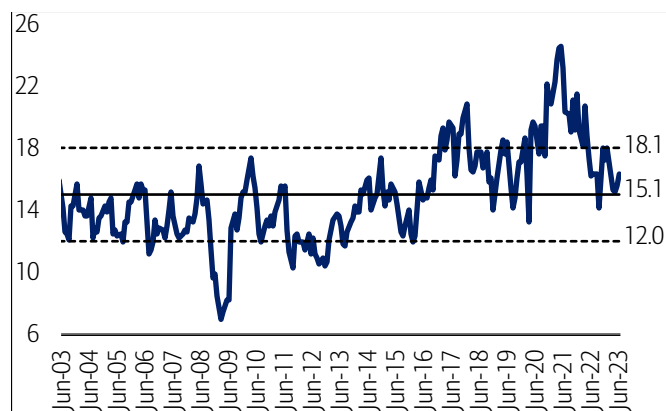
CSX Forward P/E is 17.0x



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

Exhibit 104: NSC forward P/E

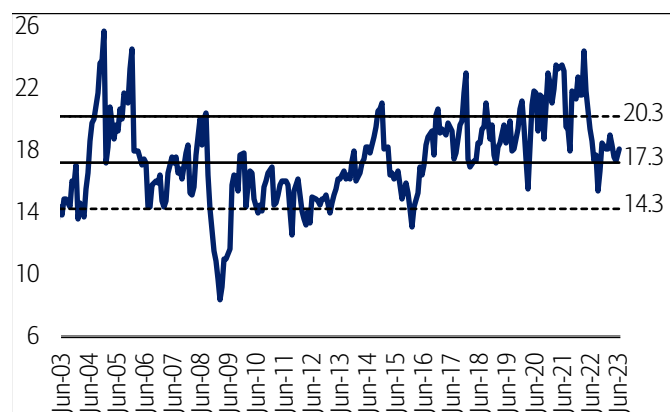
NSC Forward P/E is 16.6x



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

Exhibit 105: UNP forward P/E

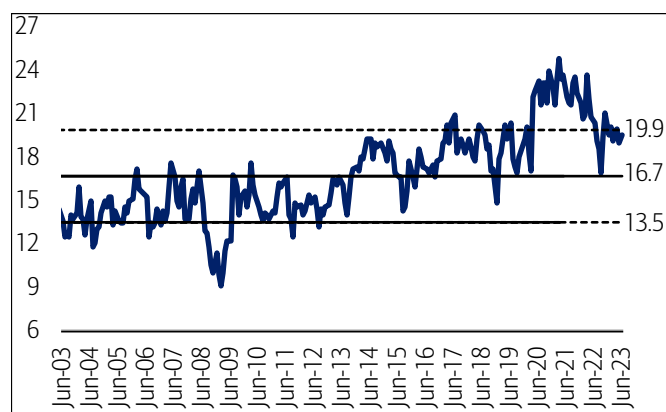
UNP Forward P/E is 18.3x



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

Exhibit 106: CNI forward P/E

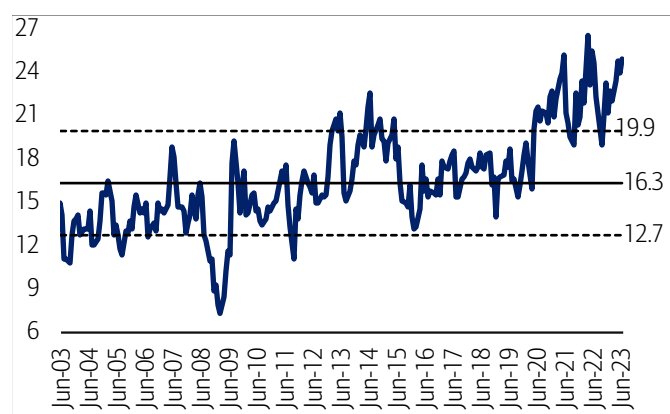
CNI Forward P/E is 19.6x



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

Exhibit 107: CP forward P/E

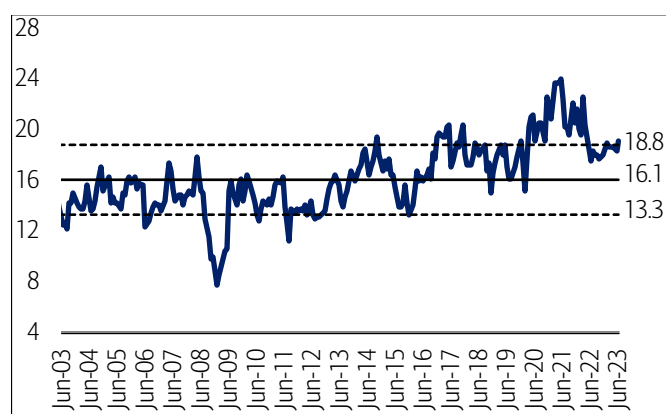
CP Forward P/E is 24.4x



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

Exhibit 108: Rails Average forward P/E

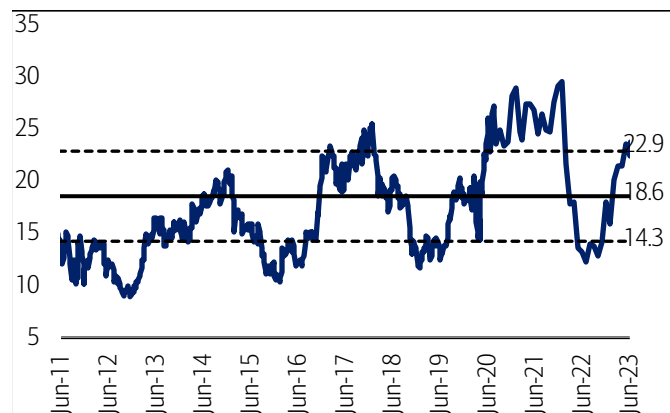
Rails Average Forward P/E is 19.2x



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

Exhibit 109: SAIA forward P/E

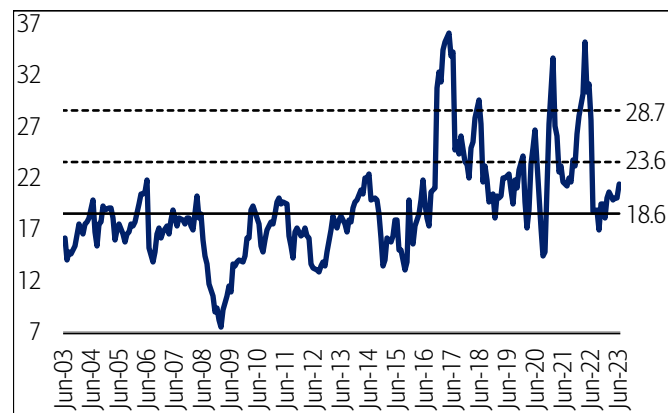
SAIA Forward P/E is 24.7x



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

Exhibit 110: KEX forward P/E

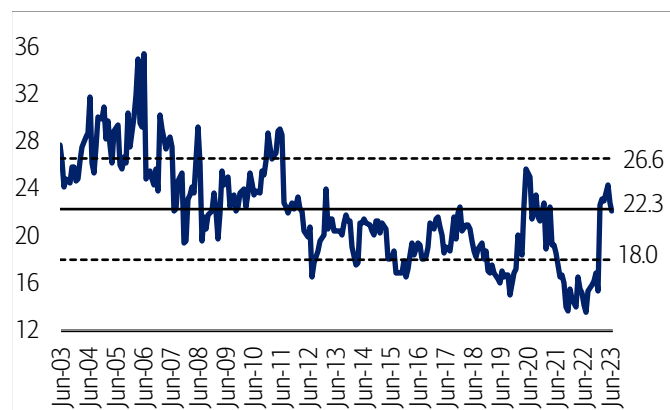
KEX Forward P/E is 21.1x



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

Exhibit 111: CHRW forward P/E

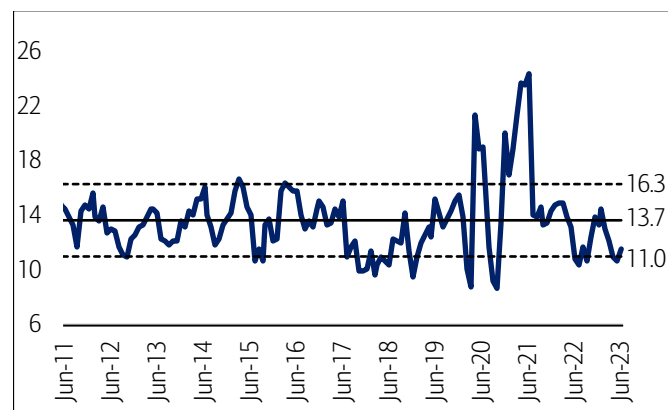
CHRW Forward P/E is 22.8x



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

Exhibit 112: INT forward P/E

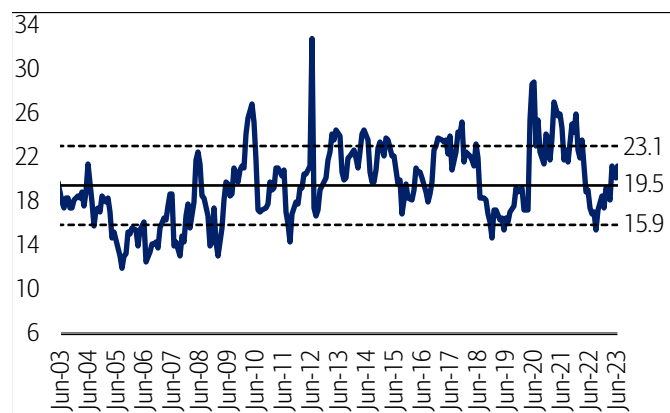
INT Forward P/E is 11.2x



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

Exhibit 113: JBHT forward P/E

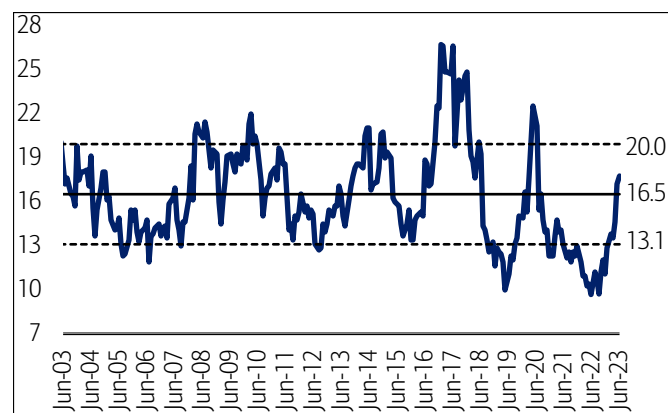
JBHT Forward P/E is 21.1x



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

Exhibit 114: WERN forward P/E

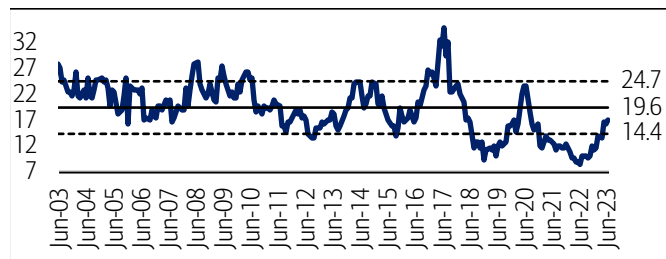
WERN Forward P/E is 17.2x



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

Exhibit 115: KNX forward P/E

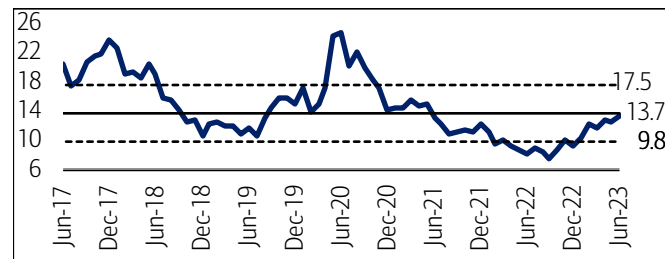
KNX Forward P/E is 16.5x



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

Exhibit 116: SNDR forward P/E

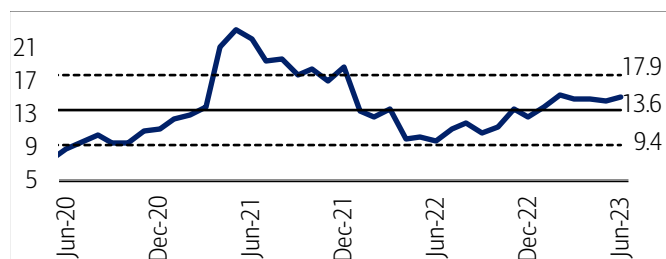
SNDR Forward P/E is 13.2x



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

Exhibit 117: TFI forward P/E

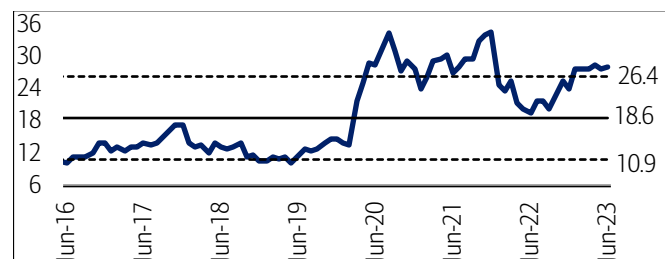
TFI Forward P/E is 14.8x



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

Exhibit 118: ODFL forward P/E

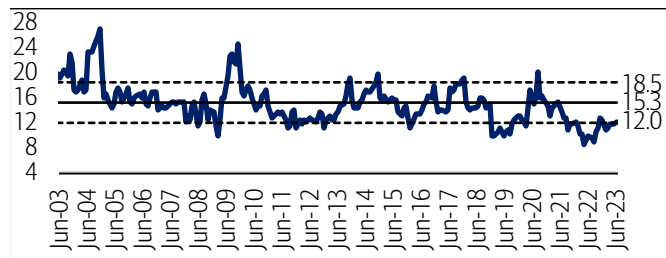
ODFL Forward P/E is 28.5x



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

Exhibit 119: FDX forward P/E

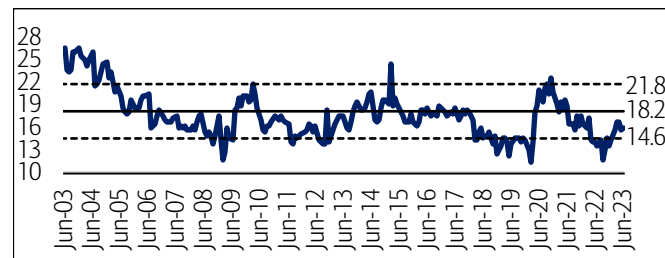
FDX Forward P/E is 12.4x



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

Exhibit 120: UPS forward P/E

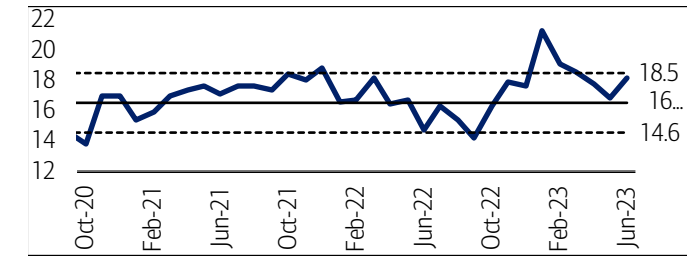
UPS Forward P/E is 16.4x



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

Exhibit 121: WAB forward P/E

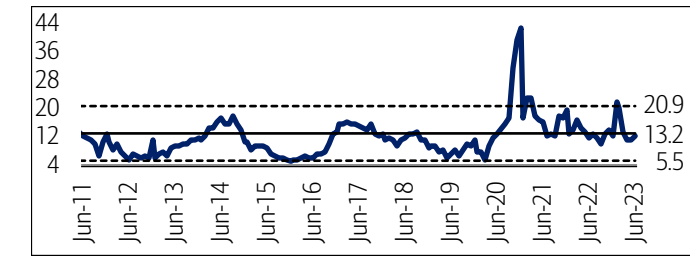
WAB Forward P/E is 18.5x



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

Exhibit 122: GBX forward P/E

GBX Forward P/E is 12.8x



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

Exhibit 123: Stocks mentioned

Rating and price summary

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
FDX	FDX US	FedEx Corp.	US\$ 229.67	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH



Price objective basis & risk

FedEx Corp. (FDX)

Our \$295 price objective is based on a 15.5x multiple on our F24 EPS estimate. Our target multiple is above the mid-point of its 20-year historical 12.5x-18.5x range as F23 appears to be trough as the company engages on a robust cost cutting program. We believe its cost cutting program is more credible given its tangible moves to reduce headcount and shed excess capacity.

Risks to our objective are slower-than-expected growth in the U.S. and global economy, increasing barriers to global trade (protectionism), a quick rise in fuel prices, increased volume and price competition, a return of union pressure on the company's Ground and Express employees, and renewed unionization moves at its Freight segment. Risks also are Congressional approval moving FedEx Express from the RLA to the NLRB and additional steps to classify Ground contractor drivers as employees. This pressure is occurring at the State level as well, given some legislative moves to declare all trucking and parcel contractors as employees. Additionally, domestic Express network restructuring could result in a service disruption, which could impact estimates. Also continued pressure on margins from growth of e-commerce volumes given its lower delivery density, or an unexpected deceleration in ecommerce growth. A rapidly deteriorating econ backdrop given rising inflation and interest rates.

Analyst Certification

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

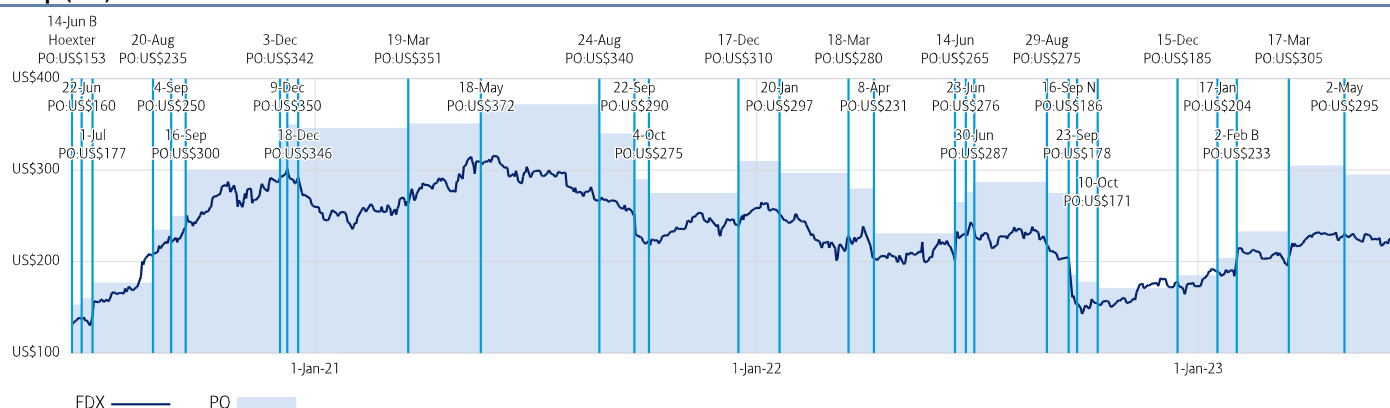
US - Transportation Coverage Cluster

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

Disclosures

Important Disclosures

FedEx Corp. (FDX) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Transport/Infrastructure Group (as of 31 Mar 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	68	51.52%	Buy	38	55.88%
Hold	28	21.21%	Hold	15	53.57%
Sell	36	27.27%	Sell	18	50.00%

Equity Investment Rating Distribution: Global Group (as of 31 Mar 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1869	53.01%	Buy	1030	55.11%
Hold	827	23.45%	Hold	476	57.56%
Sell	830	23.54%	Sell	389	46.87%

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

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 ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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

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.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: FedEx Corp.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: FedEx Corp.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: FedEx Corp.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: FedEx Corp.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: FedEx Corp.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: FedEx Corp.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: FedEx Corp.

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 Investment Industry Regulatory Organization of Canada; 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; BofA 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; BofA 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 CBI. 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.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at [BofA ESGMeter methodology](#). ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2023 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.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current. 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.