

## Transportation - Trucking

## Lower 2Q23 targets given sustained earnings pressure; yet see signs of bottom

Price Objective Change

## Expect 2Q23 earnings to see challenges

We lower our 2Q23 trucking-related EPS targets 12% on average within our coverage of truckload, less-than-truckload (LTL), truck brokerage, and airfreight carriers given sustained demand and pricing softness. We see downside to earnings expectations (we are 3% below 2Q23 Street, on average) as well as carriers 2023 targets. However, the accelerating pace of capacity exits, rising load/truck ratio, and inventory drawdowns support our view of a spot rate inflection in late 2H23. For LTLs, continued volume declines may pressure margins yet shipper freight diversion from Yellow should aid pricing. We also roll forward our target multiples to 2024e as we move past midyear.

## Truck volumes yet to inflect; Broker margins squeezing

We expect Truckload and Intermodal volume declines to accelerate in 2Q23 as demand remains under pressure and utilization comps against a record 2Q22. Pricing declines should accelerate given lower March-May bid season contract renewals, improved fluidity (Port of LA zero vessels in queue vs 49 in 2Q22, thus lower accessorial fees), and falling fuel surcharge levels (diesel averaged \$3.94/gallon in 2Q23 vs \$5.48 in 2Q22, highest quarter ever). Truck ex-fuel spot rates (\$1.32/mile) have come up from May trough levels (\$1.25/mile), aided by capacity exits, yet still below carrier floor costs of \$1.50-\$1.60/mile. We expect a squeeze in truck broker margins in the near-term as capacity costs stabilize while pricing moved lower. See greatest upside potential within JBHT (PO \$205) and KNX (\$63 PO) but recognize market looking for yield inflection first.

## LTL all about the status of YELL; and share gains around it

In LTLs, we expect 2Q23 tonnage to decline 9% and all-in yields (rev/hundredweight) to decline 4%, on average, as pricing gains are offset by normalizing fuel. The sustained softness in demand, coupled with yield pressures, should lead to margin compression. We expect LTLs to achieve less than half the 400 bp historical 1Q to 2Q operating ratio improvement, given the lack of a seasonal lift in freight vs. the Spring. While macro factors remain challenged (PMI is sub-50 for 8 consecutive months), we focus on shipper freight diversions given solvency concerns at Yellow (YELL, not covered), the third largest US LTL carrier (see our [LTL Upgrade](#) report). We expect LTL capacity loss to long-term benefit non-union service leaders (ODFL, SAIA, XPO; POs to \$424, \$405, \$74, respectively) given a greater pricing lift when demand turns.

## Shipper Survey bottoming; Commentary more supportive

During 2Q23, our proprietary BofA Bi-Weekly Truck Shipper Survey Demand Indicator averaged 47 (vs 54 in the 2019 and 2015 Freight Recessions), in-line with 1Q23, as shipper demand builds an extended base near cycle lows (see our recent [Survey](#) report). Views on inventory levels trended to a 9-month low as shippers' moves to destock continues. We see further support to our positive view on a 2H23 turnaround from shipper commentary as they note spot rates (for dry-van and refrigerated freight) have moved off the bottom and see a gradual return of seasonal demand. Thus, entering the peak freight market of August to November, Transports could benefit from a return of seasonality into late '23.

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 11 to 14. Analyst Certification on page 10. Price Objective Basis/Risk on page 6.

12580228

Timestamp: 18 July 2023 05:00AM EDT

18 July 2023

Equity  
United States  
Road Transport/Trucking

**Ken Hoexter**  
Research Analyst  
BofAS  
+1 646 855 1498  
[ken.hoexter@bofa.com](mailto:ken.hoexter@bofa.com)

**Adam Roszkowski, CFA**  
Research Analyst  
BofAS  
+1 646 855 5498  
[adam.roszkowski@bofa.com](mailto:adam.roszkowski@bofa.com)

**Nathan Ho, CFA**  
Research Analyst  
BofAS  
+1 646 855 3599  
[nathan.m.ho@bofa.com](mailto:nathan.m.ho@bofa.com)

## Exhibit 1: Price Objective Changes

We roll forward target multiples to 2024e.

Ticker	Rating	PO	
		New	Prior
<b><u>Truckload Carriers</u></b>			
JBHT	Buy	\$ 205	\$ 205
KNX	Buy	\$ 63	\$ 63
SNDR	Buy	\$ 32	\$ 30
WERN	Buy	\$ 49	\$ 51
<b><u>Freight Forwarding</u></b>			
CHRW	Uperf	\$ 85	\$ 85
RXO	Buy	\$ 25	\$ 25
<b><u>Less-than-Truckload</u></b>			
ARCB	Uperf	\$ 96	\$ 90
ODFL	Buy	\$ 424	\$ 391
SAIA	Buy	\$ 405	\$ 388
TFII	Neutral	\$ 118	\$ 118
XPO	Buy	\$ 74	\$ 65
<b><u>Airfreight</u></b>			
UPS	Neutral	\$ 195	\$ 186

Source: BofA Global Research estimates  
Uperf = Underperform

BofA GLOBAL RESEARCH

# Key Tables and Charts

## Exhibit 2: Price Objective and Earnings Estimate Changes

Lower 2Q23 EPS ests by 12%; Roll forward target multiples to 2024e; see upside potential at LTL's ODFL, SAIA, XPO and Truckload group.

Ticker	Rating	Price Obj		Target Multiple		2023 EPS				2023 EPS			2024 EPS			
		New	Prior	New	Prior	New	Street	Prior	%Change	New	Prior	%Change	New	Prior	%Change	
Truckload Carriers																
JBHT	Buy	\$ 205	\$ 205	21.5x	21.5x	\$ 1.89	\$ 1.92	\$ 1.94	-3%	\$ 8.10	\$ 8.24	-2%	\$ 9.55	\$ 9.65	-1%	
KNX	Buy	\$ 63	\$ 63	17.5x	17.5x	\$ 0.52	\$ 0.59	\$ 0.77	-32%	\$ 2.50	\$ 3.40	-26%	\$ 3.60	\$ 4.30	-16%	
SNDR	Buy	\$ 32	\$ 30	14.0x	14.5x	\$ 0.44	\$ 0.44	\$ 0.47	-6%	\$ 2.00	\$ 2.05	-2%	\$ 2.25	\$ 2.30	-2%	
WERN	Buy	\$ 49	\$ 51	17.5x	20.0x	\$ 0.54	\$ 0.60	\$ 0.58	-7%	\$ 2.50	\$ 2.55	-2%	\$ 2.85	\$ 2.90	-2%	
Freight Forwarding																
CHRW	Uperf	\$ 85	\$ 85	18.0x	20.5x	\$ 0.91	\$ 0.92	\$ 1.01	-10%	\$ 4.00	\$ 4.15	-4%	\$ 4.70	\$ 4.85	-3%	
RXO	Buy	\$ 25	\$ 25	15.5x	16.5x	\$ 0.06	\$ 0.08	\$ 0.17	-65%	\$ 0.45	\$ 0.85	-47%	\$ 0.90	\$ 1.10	-18%	
Less-than-Truckload																
ARCB	Uperf	\$ 96	\$ 90	10.5x	12.0x	\$ 2.10	\$ 2.06	\$ 2.10	0%	\$ 6.90	\$ 6.90	0%	\$ 9.10	\$ 9.10	0%	
ODFL	Buy	\$ 424	\$ 391	33.5x	36.0x	\$ 2.65	\$ 2.64	\$ 2.73	-3%	\$ 10.85	\$ 11.25	-4%	\$ 12.65	\$ 12.85	-2%	
SAIA	Buy	\$ 405	\$ 388	28.5x	30.5x	\$ 3.24	\$ 3.27	\$ 3.28	-1%	\$ 12.35	\$ 12.70	-3%	\$ 14.20	\$ 14.55	-2%	
TFII	Neutral	\$ 118	\$ 118	14.5x	16.5x	\$ 1.85	\$ 1.72	\$ 1.88	-2%	\$ 7.05	\$ 7.15	-1%	\$ 8.20	\$ 8.30	-1%	
XPO	Buy	\$ 74	\$ 65	24.0x	27.0x	\$ 0.64	\$ 0.61	\$ 0.71	-10%	\$ 2.40	\$ 2.40	0%	\$ 3.10	\$ 3.10	0%	
Airfreight																
UPS	Neutral	\$ 195	\$ 186	16.0x	17.5x	\$ 2.48	\$ 2.50	\$ 2.48	0%	\$ 10.65	\$ 10.65	0%	\$ 12.20	\$ 12.20	0%	
Average									-12%				-8%			-4%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

## Exhibit 3: BofA Truck Shipper Survey Demand Indicator

Demand (47.1) remains sub-50 for 19 of the past 21 surveys (vs 54 average Freight Recession levels).

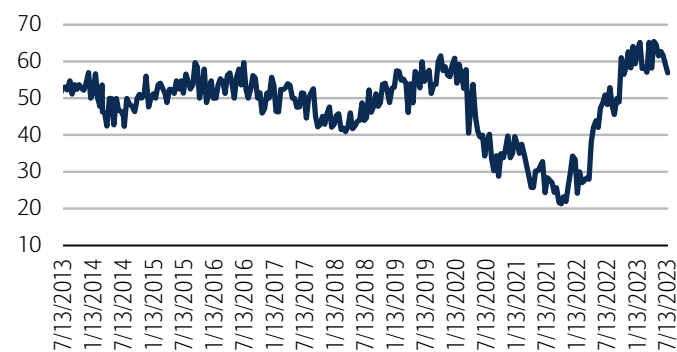


Source: BofA Global Research

BofA GLOBAL RESEARCH

## Exhibit 4: BofA Truck Shipper Survey Inventory Indicator

Inventory views reaching 9-month lows after April's record-high.

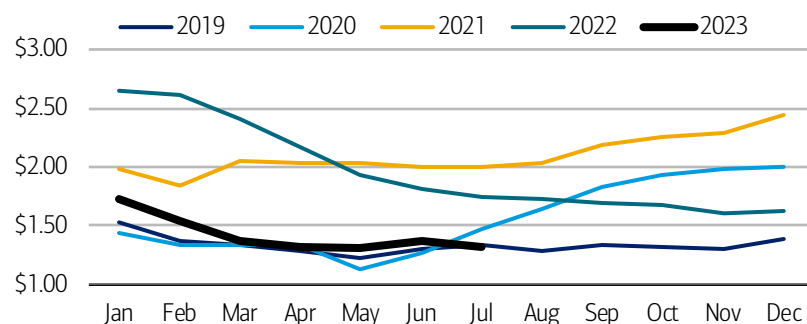


Source: BofA Global Research

BofA GLOBAL RESEARCH

## Exhibit 5: Spot Dry-Van Trucking Rates Ex-Fuel

Truck spot rates have averaged near \$1.32/mile, below floor cost levels of \$1.50-\$1.60/mile.



Source: BofA Global Research and Truckstop.com

BofA GLOBAL RESEARCH

# Truckload Carriers

## J.B. Hunt (JBHT): Intermodal rate pressure persists

**Lower 2Q23 2%:** In our [July 12 Transport Tracker Thought of the Week](#) report: J.B. Hunt – Lower 2Q Below Consensus note, we decreased our 2Q23, 2023, and 2024 EPS estimates 2%, 2%, and 1%, to \$1.89 (vs Street's \$1.92), \$8.10, and \$9.55, from \$1.94, \$8.24, and \$9.65, respectively. We lowered our intermodal yield targets on continued pressure on rates, fuel, and accessorial revenues. We target intermodal revenue/load to decline 8.0% year-over-year (previously at -7.5%). We target an 89.5% Intermodal operating ratio (previously at 89.0%) for 2Q23. Nevertheless, we see potential upside to 2H transcontinental load volume (we target a 6% sequential increase) due to the 13-day strike at Port of Prince Rupert and Vancouver (July 1-July 13).

**PO at \$205:** We reiterate Buy on JBHT's shares and \$205 PO (we had previously increased it from \$194), on 21.5x our 2024e EPS estimate. Our target remains above the midpoint of its historic 16x-23x range given the expected trough in earnings in 2023.

## Knight-Swift (KNX): Lackluster demand; rates stayed soft

**Lowered 2Q23 32%:** In our July 5 [Knight-Swift Preview](#), we decreased our 2Q23, 2023, and 2024 EPS estimates 32%, 27%, and 16%, to \$0.52 (vs Street's \$0.59), \$2.50, and \$3.60, from \$0.77, \$3.40, and \$4.30, respectively. Our reductions were led by lackluster trucking demand which we expect is weighing on its margins. Our 2023 EPS target of \$2.50 is now well below its prior \$4/share floor, yet still above its 2019 trough of \$2.17. The company targets 1,100-1,200 bps in year-year 2Q23 operating ratio deterioration (we target 1,100 bps) given higher volume and pricing pressures, yet flat costs.

**PO at \$63:** We reiterate Buy on KNX's shares and \$63 PO, which is based on 17.5x our 2024e EPS. Although we expect near-term pressures given the challenging macroeconomic environment, we consider KNX as an industry leader in the truckload carrier space. We also expect its recent acquisition of peer carrier USX (which expanded its tractor fleet 40%) to aid in its growth trajectory and be accretive into 2024.

## Schneider National (SNDR): Lower 2Q est by 7%

**Lower 2Q23 EPS 7%:** We lower our 2Q23, 2023, and 2024 EPS estimates 7%, 3%, and 2%, respectively, to \$0.44 (vs Street's \$0.44), \$2.00, and \$2.25, from \$0.47, \$2.05, and \$2.30, respectively. Our 2023e EPS estimate moves to the bottom of SNDR's 2.00-\$2.20 target EPS range, as we see persistent rate and margin pressures across its Network (For-Hire) Truckload, Intermodal, and Logistics segments. We increase our 2Q23 consolidated operating ratio target (ex-fuel surcharge) to 91.5% from 90.8%.

**Raise PO to \$32:** We reiterate Buy on SNDR's shares and raise our PO to \$32 (from \$30), on 14.0x our 2024e EPS estimate (from 14.5x 2023e). We roll forward as we pass mid-year 2023 and its trough post. Our target remains near the midpoint of its 11x-19x trading range.

## Werner (WERN): One-Way Truckload, Logistics pressured

**Lower 2Q23 EPS 6%:** We lower our 2Q23, 2023, and 2024 EPS estimates 7%, 2%, and 2%, respectively, to \$0.54 (vs Street's \$0.60 target), \$2.50, and \$2.85, from \$0.58, \$2.55, and \$2.90, respectively. We decrease our 2Q23e One-Way Truckload revenue per mile (excluding fuel surcharge) estimate to -7% year-year from -6%, on persistent spot and contractual pricing pressure. In Logistics (27% of revenue), we increase our 2Q23 operating ratio target to 97.3% (from 96.5%) given continued truckload brokerage gross margin pressure.

**Lower PO to \$49:** We reiterate Buy on WERN's shares and lower PO to \$49 (from \$51), on 17.5x our 2024e EPS estimate (from 20.0x 2023e). We roll forward as we pass mid-year 2023. Our target is just above the midpoint of its 13x-20x range as 2023 looks to be a cycle trough.



## Freight Forwarding

### C.H. Robinson (CHRW): Brokerage gross profit squeezed

**Lower 2Q23 10%:** We lower our 2Q23, 2023, and 2024 EPS estimates 10%, 4%, and 3%, to \$0.91 (vs Street's \$0.92), \$4.00, and \$4.70, from \$1.01, \$4.15, and \$4.85, respectively. We lower our 2Q23 truckload adjusted gross profit by 7%, as truck brokers are impacted by sustained low rates (truck contracts renew at lower rates), pressuring net margins (we target Transport Net Revenue margin to fall to 15%, from 4Q's peak of 15.5%). We also expect increased volume pressure as peer operators take share, which may further exacerbate its margin deterioration.

**Hold PO at \$85:** We remain Underperform on CHRW's shares and hold our \$85 PO, based on 18.0x our 2024e EPS estimate (from 20.5x 2023e EPS). We roll forward our target multiple as we pass mid-year 2023. Our target is just above the bottom of its 10-year 17x-22x range, on sustained margin pressure and a shifting management team (with a potential new strategic direction into 2024).

### RXO (RXO): Lower contract rates a drag on margins

**Previously reduced 2Q23 by 65%:** In our standalone July 5 [RXO Preview](#) report we decreased our 2Q23, 2023, and 2024 EPS estimates 65%, 47%, and 19%, to \$0.06 (vs Street's \$0.08), \$0.45, and \$0.90, from \$0.17, \$0.85, and \$1.10, respectively. We anticipate gross margins to compress given stabilizing spot trucking rates (cost of capacity) and declining contract renewals (77% of RXO mix). Given the elevated operating leverage in RXO's asset-light model (its 1Q23 operating margin is 2%), the earnings impact is significant. However, despite near-term headwinds, we continue to expect it to post volume growth as it wins share from peers and asset carriers.

**PO \$25:** We reiterate our Buy and \$25 PO on RXO shares, based on 15.5x our 2024 EBITDA estimate as we move past trough truck demand levels. We remain positive on RXO's ability to gain share and outpace industry growth given its tech leadership and operating focus.

## Less-than-Truckload Carriers

### ArcBest (ARCB): Teamster wage hikes to hit in 2H

**New Teamster contract takes hold:** We maintain our 2Q23, 2023, and 2024 EPS estimates at \$2.10, \$6.90, and \$9.10, respectively. [On July 5](#) (see our labor agreement note), we lowered 2023, 2024, and 2025 EPS estimates 8%, 9% and 3%, respectively, following the details on its 5-year contract with the International Brotherhood of Teamsters. Beginning July 1, more than 8,000 Teamster employees in ARCB's less-than-truckload (LTL) unit ABF Freight System (~82% of its base) will receive annual hourly wage increases of 13% in year one (+\$3.50/hr), and +2.4% on average (\$0.75/hr) in each subsequent year through 2027, from 1Q23's base of \$26.79. This represents a \$58 million impact in year 1, or \$1.76/sh in EPS, about \$0.60/sh larger than our year 1 step up estimate. Beginning August 1, hourly health, welfare & pension benefits will increase \$0.83, \$0.63, \$0.80, \$0.99, and \$1.21/year on a \$21.00 1Q23 base (or +3.9% CAGR).

**Raise PO to \$96:** We reiterate Underperform on ARCB's shares and raise our PO to \$96 (from \$90) on 10.5x our 2024e EPS (from 13x 2023e). Our target is below the midpoint of its 10x-17x historical range given its negative leverage with lower volumes yet recognize rising risk on our rating given a potential Yellow bankruptcy and possible freight spillover to ARCB and peer union carrier TFI International.

### Old Dominion Freight Line (ODFL): Still focused on pricing

**See softness on volumes; story remains continued share gains:** In our standalone June 15 [ODFL 20 min call / 20 update](#) report, we decreased our 2Q23, 2023, and 2024 EPS estimates 3%, 4%, and 2%, to \$2.65 (vs Street's \$2.64), \$10.85, and \$12.65, from \$2.73, \$11.25, and \$12.85, respectively. We increased our 2Q23 operating ratio target

given increased volume pressures. Our targets now imply a 90 bps 1Q-2Q operating ratio improvement, below its historical average of 400 bps (company noted it would be flattish mid-quarter). We also expect declining fuel prices to lead to greater all-in yield challenges.

**PO to \$424:** We reiterate our Buy on ODFL's shares and raise our PO to \$424 (from \$391) on 33.5x 2024e EPS (from 36x 2023e EPS) as we roll forward our target multiple and move down in our target as earnings begin to ramp. We anticipate positive pricing and volume tailwinds for industry service leader ODFL from shipper freight diversions given rising solvency risk at the 3<sup>rd</sup> largest US LTL carrier YELL. Given its strong pricing discipline and low claims ratio, we expect ODFL to gain profitable share given its 30%+ excess freight capacity.

### **Saia (SAIA): Share gains alleviate sub-seasonal margin**

**Lower 2Q23e 1%:** We lower our 2Q23, 2023, and 2024 EPS estimates 1%, 3%, and 2%, to \$3.24 (vs Street's \$3.27), \$12.35, and \$14.20, from \$3.28, \$12.70, and \$14.55, respectively. We target a 2Q23 operating ratio of 83.7% (from 83.5%), implying 130 bps of sequential improvement vs. its historic five-year 1Q-2Q average of 300 bps, as declining fuel prices, thus, lower all-in yields, more than offset lower fuel costs.

**Raise PO to \$405:** We reiterate Buy on SAIA and raise our PO to \$405 (from \$388), on 28.5x our 2024e EPS estimate (from 30.5x 2023e). We roll forward as we pass mid-year 2023 and as SAIA continues to demonstrate solid growth. Our target remains above the top end of its 14x-23x one-standard deviation 10-year trading range given its leading service and ability to win share, which should more than offset a decelerating freight environment and rising yield pressures.

### **TFI Int'l (TFII): Tough US LTL backdrop w/ YELL on horizon**

**Lower 2Q23 2%:** We lower our 2Q23, 2023, and 2024, EPS estimates 2%, 1%, and 1%, to \$1.85 (vs Street's \$1.72), \$7.05, and \$8.20, from \$1.88, \$7.15, and \$8.30, respectively. We target a 2Q23 US Less-than-truckload (LTL) operating ratio of 90.5% (from 90%), as US LTL demand remains challenged by macro pressure, and sequential trends underperform normal seasonality. At our [30th Annual BofA Transportation Conference](#) (see note) in May, CFO David Saperstein, noted its April contract renewals were tracking in the mid-single-digits, yet it was getting less volume at that rate. Our 2023e EPS estimate is at the low end of TFII's \$7.00-\$7.25 target range. TForce Freight's tentative agreement with the Teamsters union appears to have substantially lower wage rate increases vs. ArcBest's, according to industry news, given its higher starting base pay levels. This could position it well for additional freight gains as Yellow works through its solvency issues.

**Hold \$118 PO:** We reiterate our Neutral rating on TFII's shares and our US\$118 PO (C\$160 PO), on 14.5x our 2024e EPS (from 16.5x 2023e EPS). We roll forward as we pass mid-year 2023. Our target moves to the midpoint of its 11x-17x historical range. While we are positive on its ability to actualize savings through exiting UPS' legacy services, renewing equipment, and reducing headcount, its self-help could be offset by a slower macro view.

### **XPO (XPO): Service improvement is key focus**

**Prime opportunity as service quality improves:** In our June 22 [XPO NDR Takeaways note](#) (see report) after its mid-quarter update, we decreased our 2Q23 and 2023 EPS estimates 9% and 6%, to \$0.64 (vs Street's \$0.61) and \$2.40, from \$0.71 and \$2.55, respectively. We expect near-term volume pressures to impact its 2Q23 margins as the company expects to achieve less than half its sequential 400 bps 1Q-2Q operating ratio improvement (we target 170 bps of improvement). We target 2Q23 tons/day to decline 2.6% year-year (vs -1.8% in 1Q) and revenue per hundredweight to increase 1.0% year-year (vs +1.4% in 1Q).



**PO to \$74:** We reiterate our Buy on XPO's shares and raise our PO to \$74 (from \$65 PO) on 24x our 2024e EPS (from 27x our 2023e EPS) as we roll forward our target multiple and see its operational overhaul lead to tangible service improvements. Given the addition of David Bates as COO and its focus on growing local accounts, we expect accelerating share gain as it improves its operations, optimizes its cost structure, and insources third-party line haul miles by 50% (to 12% from 24% of total miles) by 2027.

## Airfreight

### UPS (UPS): Teamster negotiates at crossroads; Reports Aug 8

**Hold 2Q23 EPS:** We maintain our 2Q23, 2023, and 2024 EPS estimates at \$2.48 (vs Street's \$2.50), \$10.65, and \$12.20, respectively. Results will likely take a back seat to the July 31 contract deadline for a new Teamsters agreement (and as such, management has pushed off its report until August 8, after the contract deadline). We have included approximately 6% salary & wage cost increases in 2023 and 2024. As detailed in our [July 5 note](#) (see UPS/Teamsters note), we believe this process will be loud and noisy as we close in on the finish. While there are still 2 weeks until the current contract expires, FedEx and USPS noted package diversion has begun.

**PO to \$195:** We reiterate our Neutral on UPS' shares and raise our PO to \$195 (from 186) on 16.0x our 2024e EPS estimate (from 17.5x 2023e EPS), as benefits from its moves to optimize its network are balanced by higher costs (including its upcoming contract), Amazon volume headwinds, and international margin pressures. We roll forward our target multiple as we pass mid-year 2023.

### Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ARCB	ARCB US	ArcBest	US\$ 95.96	C-3-7
CHRW	CHRW US	C.H. Robinson	US\$ 94.85	B-3-7
JBHT	JBHT US	J.B. Hunt Trans	US\$ 183.38	B-1-7
KNX	KNX US	Knight-Swift	US\$ 54	B-1-7
ODFL	ODFL US	Old Dominion	US\$ 383.28	B-1-7
RXO	RXO US	RXO, Inc.	US\$ 20.27	C-1-9
SAIA	SAIA US	Saia Inc.	US\$ 370.72	B-1-9
SNDR	SNDR US	Schneider National	US\$ 27.77	B-1-7
TFII	TFII US	TFI International	US\$ 110.2	B-2-7
YTFII	TFII CN	TFI International	C\$ 145.41	B-2-7
UPS	UPS US	United Parcel	US\$ 182.74	B-2-7
WERN	WERN US	Werner Enterprises	US\$ 42.57	B-1-7
XPO	XPO US	XPO, Inc.	US\$ 62.21	C-1-9

Source: BofA Global Research

## Price objective basis & risk

### ArcBest Corporation (ARCB)

Our \$96 price objective is based on a 10.5x multiple on our 2024 EPS estimate. ArcBest shares have averaged 14x over the past 5 years and traded in a 7x-18x one-standard

deviation range over the past 20 years on forward earnings (10x-17x more recently). We believe a multiple below its historical average is appropriate given a slower macro environment, negative operating leverage from lower volumes, its move to add more transactional (lower profitable) freight, which can pressure earnings in this slower environment. Alternatively, benefits are moving past trough earnings, potential improvement at ARCB from its integration plan and focus on its asset-light segments, as well as structural gains at asset-based margins over time as it benefits from the industry's focus on improved pricing.

Downside risks to our price objective and estimates are a sustained economic downturn, a decline in fuel costs (LTLs make a profit on surcharges), a return to pricing competition among its peers, a significant recovery of its largest competitor, YRC Worldwide, and rising labor costs.

Upside risks to our price objective and estimates are more resilient yield growth, a faster-than-expected recovery in LTL volumes, and accelerated reduction in costs.

### **C.H. Robinson (CHRW)**

Our \$85 price objective is based on a 18x target multiple of our 2024 EPS estimate, near the bottom of its 10-year 17x-22x historical range, as we expect results to fall to trough levels post-COVID ramps, with forwarding results pulling back to nearly 2020 levels, truckload margins dropping to cyclical trough levels as spot pricing has rolled over in 2022 and contract rates should decline in 2023 (thus negatively impacting margins). We believe CHRW will see the peak impact of the decelerating freight environment in 2023 and it is launching an executive management overhaul. We believe the company should benefit from continued progress in its brokerage automation (Navisphere & Freightquote), which should enable further productivity improvement.

Upside risks to our price objective are faster-than-expected advancement in its technology and digital integration as well as larger-than-expected cost reductions. Downside risks to our price objective are the continued inability to pass along rate increases faster than capacity cost increases (or decreases for both), which would negatively impact margins. Also, a prolonged economic downturn, increased fuel headwinds, increased pricing pressure within the third party logistics industry, changes in the company's customer base due to consolidation, and changes in relationships with its truck, ocean, and air carriers could also impact returns, as well as its ability (or inability) to blend recent acquisitions.

### **J.B. Hunt Transport Services (JBHT)**

Our \$205 price objective is based on a 21.5x target multiple of our 2024e EPS. Our target multiple is near the top of its 16x-23x one standard deviation trading band as earnings are expected to trough in late '23 yet gradually recover in '24. We expect pricing pressure to be somewhat countered with improved operational performance as supply chains improve fluidity. We forecast solid double-digit EPS gains over time, robust Intermodal performance, and potential for improved box turns as rail service improves. It also plans to grow its container fleet to 150k over 3-5 years as it scales growth on BNSF's network, post competitors shift to UNP.

Risks to our PO are a slowing economic environment, an inability for the company to raise rates to offset rising costs (driver pay, insurance, depreciation, and fuel), a severe accident impacting costs or the company's image, or significant impacts (strikes, network outages) to BNSF or Norfolk Southern's rail network or J.B. Hunt's relationship with either of those carriers impacting intermodal operations. Additional risks are regulatory changes impacting the flow of freight from the highway to rail, or rapidly falling fuel prices that could encourage freight to stay on the highway, its occasional arbitration with BNSF over rail rates, a sustained loose capacity truckload market that may overhang Intermodal pricing, and inability to obtain labor.



**Knight-Swift Transportation Holdings Inc (KNX)**

Our \$63 price objective is based on a 17.5x target multiple on our 2024 EPS estimate. Our target multiple is above the bottom of its one-standard-deviation 22-year historical trading range of 14x-25x on year ahead estimates, as it nears trough earnings (led by pressure on economic growth and truck spot rate declines). We view downside as somewhat limited given its diversified model and strong operational performance, and a truckload market that is beginning to work out excess capacity (though recognize the pendulum can overswing on rate declines and cost pressures). Nevertheless, given its diversification moves (LTL, Intermodal, Brokerage/Logistics, and Trucking/Dedicated) it looks to prove earnings will be more sustainable than in prior cycles.

Risks to our price objective are volatility at its truckload segment (particularly its historical SWFT segment, which is more exposed to large retail and project pricing), slower earnings growth from its LTL acquisitions of AAA Cooper and MME, weaker-than-expected economic conditions, an inability for the company to have trucking rates offset rising costs (driver pay, insurance, depreciation, and fuel), a severe accident impacting the company's image and finances, over-expanding (or acquiring assets) without maintaining its focus on cost controls, and a lack of growth opportunities, and the failure to complete its acquisition of US Xpress, which may affect its growth outlook.

**Old Dominion Freight Line (ODFL)**

Our \$424 price objective is based on a 33.5x target multiple on our 2024 EPS estimate. Our target is above the company's 20-year historical one-standard deviation range of 13x-27x forward earnings, adjusted for outlier periods, but within its 3-year range of 28x-34x. We move above its long term range as the deceleration in freight demand is more than offset by sustainable share gains, above inflation cost pricing, and a robust free cash flow yield. It continues to post superior operating performance relative to peers and the favorable dynamics of the LTL industry.

Downside risks to our PO are weak freight demand and slow or negative industrial production growth. Additionally, increasing LTL competition could limit Old Dominion's ability to grow volume and increase market share, while also negatively impacting freight rates and pressuring profit margins. A return to industry pricing competition, last experienced en masse in the 2008 Great Recession, could weigh on investor views on the health of the industry, and thus OD's leading multiple. The less-than-truckload industry is competitive, with a large number of national and regional companies vying for business. A potential turnaround at Yellow could lead to increased freight capacity and negative pricing pressures.

**RXO, Inc. (RXO)**

Our \$25 price objective is based on a 15.5x 2024E EV/EBITDA multiple. Its target EV/EBITDA multiple remains above peer C.H. Robinson due to its accelerating share gains and ability to grow volumes above that of its peers given its advanced technology.

Downside risks to our price objective are weaker than expected economic conditions resulting in more spot and less contract revenues, which could compress gross profit margins, it relies on third-party carriers to deliver customers freight (exposing it to service parameters it does not control, higher carrier prices which could decrease op income), fuel price volatility could impact results, unusual weather could impact operations (freight volumes), carriers status as independent contractors or labor disputes among its carrier base, risk to IT systems being compromised by cyberattacks, court decisions on insurance accident exposure from a 3rd party performance, ability to retain qualified employees, and cost initiatives may not prove fruitful (its target to eliminate some overhead costs).

**Saia Inc. (SAIA)**



Our \$405 price objective is based on a 28.5x target multiple on our 2024 EPS estimate. Our target moves above the top of its 14x-23x one-standard deviation 10-year trading range on what appears to be trough EPS levels. Our target multiple is above the top end (but below our prior targets, which has reached up to 31x) given its leading service and ability to win share more than offsetting a decelerating freight environment and rising yield pressures.

Downside risks to our PO are weak freight demand and slow or negative industrial production growth. Our price objective is also threatened by increasing competition, which could limit Saia's ability to grow volume and increase market share, while also negatively impacting freight rates and pressuring profit margins. The less-than-truckload industry is competitive, with a large number of national and regional companies vying for business. A potential turnaround at Yellow could lead to increased freight capacity and negative pricing pressures.

Upside risks are strength in the US economy, which could drive higher volume and pricing gains, as well as an improvement in margins, as the less-than-truckload (LTL) industry has high fixed costs, and consequently benefits from operating leverage.

### **Schneider National (SNDR)**

Our \$32 PO is based on a 14x target multiple on our 2024 EPS estimate. Our target multiple is the mid-point of its 10x-19x historical range. It is at a discount to average of best-in-class peer targets, which include a blend of peer historical averages (50% of SNDR's revs are Truck, which peers trade low double digits, currently, 20% is Intermodal and its peer trade at 20x, 20% is Logistics which peers trade at upper-teens multiples, and 10% is other, or low double-digits), yielding a mid-teen fair value multiple target. SNDR's diverse base is countered by increasing concerns of decelerating economic and freight flows.

Risks to our price objective are a cyclical downturn impacting freight flows, higher-than-expected costs from weather, driver pay, accident claims, fuel costs, and equipment prices. Given Schneider operates in a fragmented market, it may not have pricing power to adjust as costs rise in an improving market to offset an increased cost base. Additionally, the company is a 'controlled company' given A shares have 10:1 votes and are completely controlled by the Schneider family and trusts.

### **TFI International (TFII / YTFII)**

Our US\$118 price objective (C\$160) is based on 14.5x our 2024 US\$ EPS estimate, within its 10-year one-standard deviation trading range of 11x-17x, as the company is transforming its North American LTL operations (post the acquisition of UPS Freight for \$800 million), countered with a decelerating economic backdrop. Our target multiple is in the middle of where LTL peers (10x-30x) and US Parcel peers (10x-16x) are trending toward.

Downside risks to our price objective are weaker-than-expected economic conditions resulting in a turnover in demand, an inability for the company to raise trucking rates to offset rising costs (driver pay, insurance, depreciation, and fuel), intensifying competition in brokerage and logistics and acquisition selection and integration risk.

Upside risks to our price objective are better-than-expected pricing, more accelerated M&A moves to drive inorganic growth, or higher-than-expected share repurchases.

### **UPS (UPS)**

Our \$195 price objective is based on a 16x multiple on our 2024 EPS estimate, above the bottom of its 20-year one-standard deviation 15x-23x historical range, as it focuses on margin improvement ('laser focus'), to counter consumer volumes coming under increasing pressure, and as volumes are expected to remain negative in the near term.

UPS continues to see pricing potential as the industry institutes improved surcharges and sees a shift in focus on margins with its Better and Bolder focus (from Better, Not Bigger).

Downside risks to our PO are a weaker-than-expected domestic or global economic performance, and external impacts to global trade (such as protectionism, trade wars, or tariffs), weather impacts, higher-than-expected fuel prices, increased ground delivery and price competition, disruptions with its employee-union relationships, and external disruptions to its cargo facilities or aircraft. Continued pressure on margins from growth of e-commerce vol given its lower delivery density. Additionally, sustained impacts from COVID-19 shutdowns in China could pressure results. Upside risks to our PO are stronger-than-expected pricing growth, a faster-than-expected rebound in freight volumes, and margin improvements from accelerated cost reductions.

### **Werner Enterprises (WERN)**

Our \$49 price objective is based on an 17.5x target multiple on our 2024 EPS estimate. Our target multiple is at the upper end of its 13x-20x historical trading range, as 2023 appears to be WERN's earnings trough as demand bottoms and pricing finds a floor. Werner continues to focus on operational improvements, led by CEO Derek Leathers, which it targets to drive margin improvement.

Downside risks to our price objective are an economic (or freight) downturn, trade of fleet growth for reduced incremental margins, a sustained rise in fuel prices which could increase costs, inability of the company to raise rates, a severe accident, rapidly rising costs (driver pay, insurance, claims, etc.), and larger-than-expected impact from regulatory changes (hours of service, CSA safety rules, electronic on board recorder enforcement, drug and alcohol clearinghouse limitations on drivers, which continue to cull the driver population).

### **XPO, Inc. (XPO)**

Our \$74 price objective is based on a 24.0x P/E multiple on its 2024e EPS, at the upper end of peer range at 8x-24x. The company is focused on core improvement at its LTL segment, which is working to raise service levels, grow share, improve cost structure, lower operating ratio by 600 bps between 2021-2027, increase inhouse linehaul ops, and improve pricing. We expect XPO to decrease its discount to leading LTL operators (at 25x and above) as it improves its service with the help of its new COO David Bates and ex-ODFL CFO Wes Frye, who joined XPO's Board.

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

## **Analyst Certification**

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

## US - Transportation Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	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
	Old Dominion Freight Line	ODFL	ODFL US	Ken Hoexter
	RXO, Inc.	RXO	RXO US	Ken Hoexter
	Saia Inc.	SAIA	SAIA 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
	XPO, Inc.	XPO	XPO US	Ken Hoexter
<b>NEUTRAL</b>				
	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
<b>UNDERPERFORM</b>				
	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
	World Kinect	WKC	WKC US	Ken Hoexter
<b>RSTR</b>				
	Triton International, Ltd	TRTN	TRTN US	Ken Hoexter

## Disclosures

## Important Disclosures

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	72	52.94%	Buy	42	58.33%
Hold	29	21.32%	Hold	13	44.83%
Sell	35	25.74%	Sell	17	48.57%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1877	53.28%	Buy	1040	55.41%
Hold	815	23.13%	Hold	464	56.93%
Sell	831	23.59%	Sell	385	46.33%

<sup>R1</sup> 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 <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> 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: ArcBest, C.H. Robinson, J.B. Hunt Trans, Knight-Swift, Old Dominion, RXO, Inc., Saia Inc., Schneider National, TFI International, United Parcel, Werner Enterprises, XPO, Inc.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: RXO, Inc, United Parcel, XPO, Inc.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: C.H. Robinson, J.B. Hunt Trans, Knight-Swift, RXO, Inc, Saia Inc, Schneider National, United Parcel, XPO, Inc.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: ArcBest Corp., C.H. Robinson, J.B. Hunt Trans, Knight-Swift, Old Dominion Freight, RXO, Inc, Saia Inc, Schneider National, TFI International, United Parcel, Werner Enterprises, XPO, Inc.

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: ArcBest Corp., C.H. Robinson, J.B. Hunt Trans, Knight-Swift, Old Dominion Freight, RXO, Inc, Saia Inc, Schneider National, TFI International, United Parcel, Werner Enterprises, XPO, Inc.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: J.B. Hunt Trans, Knight-Swift, RXO, Inc, Schneider National, United Parcel, XPO, Inc.

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: C.H. Robinson, J.B. Hunt Trans, Knight-Swift, RXO, Inc, Saia Inc, Schneider National, United Parcel, XPO, Inc.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: TFI International, United Parcel.

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: ArcBest, C.H. Robinson, J.B. Hunt Trans, Knight-Swift, Old Dominion, RXO, Inc., Saia Inc., Schneider National, TFI International, United Parcel, Werner Enterprises, XPO, Inc.

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: C.H. Robinson, J.B. Hunt Trans, Knight-Swift, Old Dominion Freight, RXO, Inc, Schneider National, TFI International, United Parcel, XPO, Inc.

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.bofamli.com/BofASEdisclaimer](http://www.bofamli.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 BofA 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 BofA 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 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.