

Equity Research Report July 29, 2024

CONSUMER: Lodging

Gregory J. Miller

212-303-4198 Gregory.J.Miller@truist.com

C. Patrick Scholes

212-319-3915 Patrick.Scholes@truist.com

Samuel Durno

212-303-4183 Samuel.Durno@truist.com

9 Page Document

Reasons for this report

Review of 2Q24 hotel-level profits for institutional U.S. full- and select-service hotels (data source: HotStats) with read-through to 2Q earnings for both Lodging C-corps and REITS

Hotel P&L Analyzer: Full-service 2Q margins (-90 bps y/y) a tad better than 1Q's -120 bps.

In our analysis of over 1,000 U.S. hotels (data source HotStats): 2Q24 Gross Operating Profit (GOP) margins for our full-service/luxury set were 37.9%, -90 bps y/y and -110 bps vs. same time 2019. These figures compare with 1Q24 of -120 bps y/y / -70 bps vs. same time 2019. Trends were mixed. On the strongest month YTD, May had +5% y/y total revenues but margins down 80 bps. June despite a heavier leisure mix: total revenues just +1.6% but margins only -20 bps. 2Q24 results may not be enough to take down EBITDA guides. We are cautious on 2H24 guidance and the 2025+ impact from union negotiations.

Aggregated Full Service/Luxury Hotel Operating Performance:								
2Q24 vs. Prior Years								
			y/y %		5-yr %			
	<u>2Q24</u>	<u>2Q23</u>	<u>change</u>	<u>2Q19</u>	<u>change</u>			
Occupancy	73.3%	72.2%	1.5%	80.5%	-8.9%			
ADR	\$280	\$277	0.9%	\$239	17.2%			
RevPAR	\$205	\$200	2.5%	\$192	6.8%			
Total RevPAR	\$333	\$322	3.6%	\$310	7.4%			
Room Margin	73.5%	74.2%	-0.9%	74.5%	-1.3%			
F&B Margin	32.2%	31.7%	1.6%	33.1%	-2.7%			
Operating Department Margin	60.9%	61.4%	-0.8%	61.2%	-0.5%			
GOP Margin	37.9%	38.8%	-2.3%	39.0%	-2.8%			
GOP Per Available Room	\$126	\$125	1.4%	\$121	4.4%			
Total Hotel Payroll								
(% of Total Revenue)	35.3%	34.3%	2.9%	33.9%	4.1%			
Total Hotel Payroll	0440	0440	0.00/	0405	44.00/			
(Per Available Room)	\$118	\$110	6.6%	\$105	11.9%			
Total Hotel Payroll	£404	6450	4.00/	6404	00.00/			
(Per Occupied Room)	\$161	\$153	4.9%	\$131	22.8%			

Note: HotStats sample is somewhat skewed to U.S. full-service hotels although individual hotel results vary widely today by hotel location and customer base.

Source: Truist Securities Research; HotStats

For select-service hotels (primarily institutional higher-rated select-service at Upper Midscale/Upscale levels): 2Q24 Gross Operating Profit (GOP) margins were 42.8%, -110 bps y/y and -620 bps vs. same time 2019. These figures compare with 1Q24 of -200 bps y/y / -840 bps vs. same time 2019. Absolute GOP fell 80 bps in 2Q24, far better than 1Q24's 660 bps decline. However, these results continue to support why select-service development is challenged at the high-end of select-service and the subsequent impact to C-corp development strategy as discussed below. We continue to suggest C-corp focus will be in part the introduction of "downscaled" new hotel brands, a topic we have written about since April 2023.

Interestingly, a recent Mews Survey noted that "nearly 80% of travelers would be willing to stay at a hotel with a completely automated front desk or self-service kiosk, with more than 40% of them preferring to check in via a hotel's website, app or digital kiosk." (No Vacancy News). While we personally have some reservations about taking the personal service focus out of a primary part of the guest experience not to mention life-safety considerations, we would view select-service hotels an easier fit for a low-touch point environment and to help sluggish margins.

Aggregated Select Service & Extended Stay Hotel Operating Performance:								
2Q24 vs. Prior Years								
			<u>y/y %</u>		5-yr %			
	<u>2Q24</u>	<u>2Q23</u>	<u>change</u>	<u>2Q19</u>	<u>change</u>			
Occupancy	78.1%	77.0%	1.4%	82.5%	-5.3%			
ADR	\$173	\$172	0.2%	\$163	6.3%			
RevPAR	\$135	\$133	1.6%	\$134	0.6%			
Total RevPAR	\$147	\$145	1.4%	\$145	1.1%			
Room Margin	74.3%	74.8%	-0.7%	76.6%	-3.0%			
F&B Margin	8.3%	13.9%	-40.3%	17.6%	-52.8%			
Operating Department Margin	72.0%	72.5%	-0.7%	74.4%	-3.2%			
GOP Margin	42.8%	43.9%	-2.5%	49.0%	-12.7%			
GOP Per Available Room	\$63	\$63	-0.8%	\$71	-11.7%			
Total Hotel Payroll								
(% of Total Revenue)	25.1%	24.4%	2.9%	22.4%	12.1%			
Total Hotel Payroll (Per Available Room) Total Hotel Payroll	\$37	\$35	4.7%	\$32	13.4%			
(Per Occupied Room)	\$47	\$46	3.3%	\$39	19.8%			

Note: HotStats sample is somewhat skewed to more institutional/higher ADR hotels although individual hotel results vary widely today by hotel location and customer base.

Source: Truist Securities Research: HotStats

FY 2024 REIT and C-corp guidances and consensus estimate considerations:

Are there going to be REIT guidance changes during earnings due to fundamental operating performance? It is a tricky call for us to say if EBITDA guides are going to be materially revised as 2Q GOP data was not especially soft -- and our GOP data does not incorporate fixed costs such as property taxes that continue to be fought for lowered assessments. Real estate tax credits (such as the big credit Pebblebrook (PEB, Hold) received in May) and eventual lower property tax assessments for some profit-strained REIT-owned urban hotels may provide eventual tailwinds for Hotel EBITDA margins if/when tax reductions occur. As far as property insurance, we currently assume flattish to up single-digit y/y costs for the 2024-2025 period given the encouraging conversations at June NAREIT (an improvement from the ~ +10% y/y increases we expected several months ago). As a reminder, some REIT insurance renewals begin around June (the start of hurricane season) and some REIT renewals are in November (around the end of hurricane season).

• While we lack conviction at this time that 2024 REIT guidances will come down at 2Q earnings particularly given a quasireiteration by some companies during NAREIT, we are also not terribly bullish on profit trend prospects for the remainder of the year -- or put differently we view the downside risks are currently greater than the upside risks.

Lodging REIT Consensus Hotel EBITDA Margins (bps y/y change)

	4Q23A	1Q24A	2Q24E	3Q24E	4Q24E	FY 2024E
DiamondRock (DRH)	-478	-177	-85	-9	98	-47
Host (HST)	78	141	-31	-386	-192	-118
Park (PK)	not provided	by Conser	nsusMetrix			
Pebblebrook (PEB)	257	134	166	9	-14	74
RLJ (RLJ)	-40	-190	-253	-96	-59	-152
Sunstone (SHO)	-332	-216	-232	15	137	-85

Source: Truist Securities Research, Consensus Metrix

Notes: Data is as of 07/22/24. We note that non-comp hotels (e.g. Naples) are included in above.

- 2Q24 results may not be weak enough to result in lowered FY24 EBITDA guides but we remain cautious on expectations for the back half of the year, especially if 2H RevPAR growth is closer to +1-3% than +3-5%. Said differently, if guides are revised, we may view 2H expectations as a primary driver. Given the long established strategy for hotels to push group mix higher in 2024 despite the negative hit to RevPAR growth, we see Absolute EBITDA less impaired than margin trends or RevPAR growth itself (perhaps the high-ends of some RevPAR guides are at greater risk). As for profit guidance, many investors understandably care about margin trends even above absolute EBITDA movement. Continued relative softness for leisure and gaping holes for business travel/groups for weeks surrounding holidays add concerns for us on how strong 2H24 will be for both profit margins and absolute EBITDA growth or if we see a continuation of similar trends from 1H24.
 - Is PEB's recent earnings guidance revisions a read-through to other names? We would say perhaps to an extent although PEB is much more leisure-oriented than some peer companies and the REITS' leisure assets are quite geographically diversified by company. Similarly, PEB has more impact from citywide pace in San Francisco than peers. What will be an interesting comparison this earnings season is if other REITS with a wider array of hard-brand assets and the C-corps as managers can quickly enact operating cost savings in an increasingly choppy macro. Our gut feeling is PEB has a bit of an advantage in this respect especially

compared to the luxury hard branded hotels where brand standards and labor staffing are less flexible (at times intentionally so to justify high ADRs). Conversely, hard branded hotels should also have more occupancy support due to their affiliations and loyalty programs; we would be surprised to hear some of the other REITS speaking as much as PEB did with regards to raising exposures in lower ADR (and/or net RevPAR) wholesale and consortia.

- We would be critical for any REITS that call out surprising weakness for group around holiday weeks as a justification for lowering guidance -- this trend of group softness for the weeks before or after holiday weeks has been occurring since PEB identified this emerging issue after Thanksgiving in 2022.
- As a proxy for FY 2024 guidance considerations, the June YTD full-service results are as follows:
 - Total revenues: +2.9% y/y
 - Gross Operating Profit margins: -110 bps (only HST and RLJ Hotel EBITDA consensus margins are lower than -110 bps)
 - Gross Operating Profit Per Available Room: +0.1%
 - o Hotel Payroll Per Occupied Room: +4.7%

C-corp guidances: in this note we focus on incentive management fees (IMFs) in isolation due to the IMF relationship to hotelevel profits, mostly a consideration for Marriott (MAR, Hold, Scholes), Hyatt (H, Buy, Scholes), and Hilton (HLT, Hold, Scholes) in that order. While we view IMFs highly difficult to forecast, the sequential RevPAR growth from 1Q to 2Q could suggest IMF consensus may be too aggressive. We do not have strong conviction, however. Our logic: most regional results of materiality had lower RevPAR growth sequentially from 1Q but y/y IMF consensus is higher. A bigger question: what were the C-corps anticipating for China results for 2Q24/FY24 as of 1Q24 earnings and/or were initial overall EBITDA guidances conservative enough?

Region	2Q24 RevPAR y/y	1Q24 RevPAR y/y
Europe (Local Currency)	+6-8%	+7.5-9.5%
APAC (Local Currency)	+0-3%	+7-9%
China (Local Currency)	-6% to -3%	+2-4%
Caribbean (in USD)	+7-8%	+16-18%
US Luxury/Upper Upscale (Classes)	+2.7%	+2.6%

Source: Truist Securities Research, STR

Lodging C-corp Consensus Incentive Management Fees (y/y change)

	4Q23A	1Q24A	2Q24E	3Q24E	4Q24E	FY 2024E
Hilton (HLT)	20%	8%	10%	10%	5%	8%
Marriott (MAR)	17%	4%	5%	15%	6%	7%

Source: Truist Securities Research, FactSet, Company filings Notes: Data is as of 07/22/24.

- While IMF outperformance has contributed to company beats in some quarters, we struggle with IMF outperformance in 2Q24.
- There may be portfolio-specific considerations to suggest the IMF consensus is correct; however, we particularly question if China 2Q RevPAR results (important given the general lack of hurdles for C-corps to receive IMFs in APAC) were simply weaker than expectations. We caution that we do not receive chain scale data for China and national STR results may skew to domestic, lower-rated hotels in Tier 2-4 cities outside the scope of MAR/HLT/H. We also note that Beijing and Shanghai appear to be holding better on the top-line than leisure-focused Sanya and that regional leisure cities popular with the Chinese may be taking share from the domestic market. To illustrate, below are YTD June RevPAR y/y growth in local currency (per STR):
 - o China: -1.6%
 - o Beijing: +3.8% / Shanghai +3.9% / Hong Kong: +12.2% greater C-corp exposure
 - Sanya: -14.8% weak domestic leisure
- o Bali: +22.5% / Macau +35.8% (Macau is in Renminbi) / Seoul +16.3% / Taiwan +2.9% / Tokyo +30.8% strong regional markets

Transactions and development/pipeline impact:

- C-corps: We would view continued weak U.S. hotel-level profit results especially in select-service as a continued challenge for new build hotel development, especially for the more fee lucrative (higher absolute ADR) Upscale brands. As a result, we expect continued intense focus on conversions and conversion brands, disciplined new build prototypes that are cost friendly particularly in Midscale and the upper-tier of Economy, and international focus. To continue to grow the U.S. pipeline in higher-rated hotels, we anticipate more Lodging C-corp M&A activity such as brand acquisitions, marketing or strategic partnerships, and in some cases going after struggling companies that may present weaker business models but are simply too cheap to pass up given the benefit to net unit growth (NUG) and some investor focus on NUG growth over fee contribution. That said, accretive small acquisitions despite mixed ten-year growth prospects are still accretive. We are keeping an eye on the small cap public companies that have gone public since the pandemic to disastrous stock price results as well as private companies with mediocre growth prospects/financial results/liquidity/investors seeking exits and/or battled by any owned asset exposures.
- REITS: While we anticipate a pickup in transactions activity including acquisitions announced before/around earnings, we still view
 U.S. hotel transactions activity lagging broker and other industry expectations of a robust 2H24 as has been discussed for months

(notably, brokers benefit financially from said transactions) (CoStar). In an environment where some hotels are not distressed enough for deals to accelerate (excluding a market like San Francisco) and continued uncertainty in near- and longer-term performance, we can appreciate why bid-ask spreads may remain wide at times.

Organized labor:

We remain cautious about the 2025+ financial impact from current negotiations in several U.S. cities. While we appreciate that workers with pre-pandemic contracts have seen cost of living increases that may be ahead of negotiated compensation set pre-pandemic, our data combined with stock performance and property transaction pricing all support the challenged position for hotel-level profitability especially for full-service hotels in still recovering urban Top 25 markets. We would view efforts by the unions to strike at hotels (strike authorization votes may transpire in August in Boston, San Francisco, Honolulu, and Providence per a Reuters article) as potentially very hazardous at a time when group demand is very important for the U.S. lodging industry given relative softness/weakness in transient leisure and still recovering transient business and international inbound travel. This negative setup is particularly problematic in San Francisco where meeting planners do not need yet another reason to avoid events at the Moscone Center or local hotels and instead choose a non-union market.

- We view organized labor can be a better industry partner to support U.S. tourism (including international inbound demand) which ultimately leads to more hotel employment and better hotel-level profits. If the unions are engaged with local/federal government agencies and travel bureaus in the background, we would welcome knowing that these efforts are transpiring
- As much as organized labor would like to see more employees at their hotels, occupancy levels do not necessarily justify
 staffing to pre-pandemic levels. We do not support messaging that incorrectly states how hotels are "very profitable" today -- if that
 was the case, there would be more new construction of full-service hotels and likely better pricing on hotel transactions.

Other labor takeaways:

National nominal wage growth is slowing (2Q24 $y/y \sim +3.94\%$ versus 1Q24 $y/y \sim +4.25\%$ and improved from the north of +5% y/y growth in 2022 and +4.5-5.0% for most of 2023)) (WSJ). We see similar high-level setups in our data sets although we may have a better sense of granular impact later this year.

We question if hotels have been able to push group contracts hard enough on both room block ADRs and food and beverage (F&B) spend relative to hotel operating cost pressures -- particularly given some meeting planners may be pushing back. Below results are YTD June 2024 y/y for our full-service/luxury comp set:

- · Segmentation:
 - Group ADR: +7.4%, led by association/convention at +14.6% and Government at +12.5%. Comparatively corporate group ADR was +3.6%. Some association/convention groups use a lot of hotel banquet space; some spend more of their time at convention centers. We view corporate group as more in-house.
- · Revenues:
 - Banquet food revenues per occupied room (POR): +5.8% (F&B outlets +0-1% by comparison)
 - o Banquet beverage revenues POR: +1.1% (F&B outlets -3% by comparison)
 - o Audiovisual revenues POR: +1.1%
 - Total F&B revenues POR: +3.3%
- Expenses:
 - F&B department labor costs: up 90 bps
 - o Banquet hourly labor salaries and wages as a percentage of F&B revenue: flat
- Profits:
 - F&B department profit: down 20 bps
 - F&B flowthrough/flex: 390 bps (definition: ratio that measures the proportion of the dollar change in gross operating profit relative to dollar changes in total revenue)

Full-service results by month

- April results may surprise some of our readers as GOP margins fell 150 bps despite 4.4% total revenue growth. We view the
 Easter Shift impact potentially greater to some of the luxury hotels in our data set and we do not suggest overreading weakness in
 margins. May data being a cleaner month of comparison offers more interesting insights for us.
- May results for full-service were discouraging for margin growth for the best RevPAR month of the year: 5% Total RevPAR which includes F&B and other revenues was quite insufficient for flat margins. Is May a negative read-through for the strong group months in 2H24? We are not completely sure; if so we would be concerned about profit trends for the anticipated strong group months this fall. We also wonder if part of the issue in May is from urban hotels that have lagged in pushing room rates post-pandemic due in part to keeping corporate negotiated room rates flat during the heart of the pandemic while inflation was rising fast and the consequential challenges to push harder on corporate group contracts, although we appreciate that pushing up corporate ADR when demand could not be induced is tricky.
- June presented a better storyline for full-service profit margins despite lower RevPAR growth and a more leisure-focused month. Similar to April, June data may be noisier due to holiday shift impact and the midweek timing of Juneteenth.

Aggregated Full Service/Luxury Hotel Operating Performance:							
April 2024 vs. Prior Years							
			<u>y/y %</u>		<u>5-yr %</u>		
	<u> Apr-24</u>	<u>Apr-23</u>	<u>change</u>	<u>Apr-19</u>	change		
Occupancy	72.8%	71.5%	1.8%	80.6%	-9.7%		
ADR	\$283	\$283	0.1%	\$241	17.5%		
RevPAR	\$206	\$202	1.9%	\$194	6.2%		
Total RevPAR	\$338	\$324	4.4%	\$313	7.9%		
Room Margin	74.0%	75.0%	-1.3%	74.8%	-1.1%		
F&B Margin	35.2%	33.4%	5.4%	33.4%	5.4%		
Operating Department Margin	61.6%	62.6%	-1.6%	61.5%	0.2%		
GOP Margin	38.9%	40.4%	-3.7%	39.3%	-1.0%		
GOP Per Available Room	\$131	\$131	0.5%	\$123	6.7%		
Total Hotel Payroll							
(% of Total Revenue)	34.8%	33.4%	4.2%	33.5%	3.9%		
Total Hotel Payroll (Per Available Room) Total Hotel Payroll	\$118	\$108	8.7%	\$105	12.2%		
(Per Occupied Room)	\$161	\$151	6.8%	\$130	24.1%		

Note: HotStats sample is somewhat skewed to U.S. full-service hotels although individual hotel results vary widely today by hotel location and customer base.

Source: Truist Securities Research; HotStats

Aggregated Full Serv	ice/Luxury	Hotel Ope	erating Perf	ormance	
Ma	y 2024 vs.	Prior Yea	rs		
	,				
			<u>v/v %</u>		5-yr %
	May 24	May 22		May 10	
0	May-24	May-23	<u>change</u>	May-19	<u>change</u>
Occupancy	72.9%	70.9%	2.8%	79.2%	-8.0%
ADR	\$281	\$276	1.9%	\$237	18.4%
RevPAR	\$205	\$196	4.7%	\$188	9.0%
Total RevPAR	\$335	\$320	4.9%	\$309	8.4%
	-				
Room Margin	73.1%	73.7%	-0.8%	73.8%	-0.9%
F&B Margin	31.1%	32.0%	-2.8%	33.3%	-6.6%
Operating Department Margin	60.1%	60.8%	-1.2%	60.2%	-0.2%
GOP Margin	37.1%	37.9%	-2.1%	38.1%	-2.6%
GOP Per Available Room	\$124	\$121	2.7%	\$118	5.6%
		V		****	
Total Hotel Payroll					
(% of Total Revenue)	36.1%	34.9%	3.4%	34.8%	3.7%
Total Hotel Payroll			57.75	/ 5	/5
(Per Available Room)	\$121	\$111	8.4%	\$108	12.4%
Total Hotel Payroll	Ψ121	ΨΙΙΙ	0.4/0	Ψ100	12.4/0
	0400	6453	F F0/	#400	00.40/
(Per Occupied Room)	\$166	\$157	5.5%	\$136	22.1%

Note: HotStats sample is somewhat skewed to U.S. full-service hotels although individual hotel results vary widely today by hotel location and customer base.

Source: Truist Securities Research; HotStats

Aggregated Full Service/Luxury Hotel Operating Performance:							
June 2024 vs. Prior Years							
			<u>y/y %</u>		<u>5-yr %</u>		
	<u>Jun-24</u>	<u>Jun-23</u>	<u>change</u>	<u>Jun-19</u>	<u>change</u>		
Occupancy	74.4%	74.2%	0.3%	81.7%	-8.9%		
ADR	\$275	\$273	0.7%	\$238	15.6%		
RevPAR	\$205	\$203	1.0%	\$195	5.2%		
Total RevPAR	\$327	\$322	1.6%	\$309	5.7%		
Room Margin	73.6%	73.8%	-0.3%	74.8%	-1.6%		
F&B Margin	30.1%	29.4%	2.4%	32.6%	-7.7%		
Operating Department Margin	61.1%	61.0%	0.2%	61.8%	-1.1%		
GOP Margin	37.9%	38.1%	-0.5%	39.7%	-4.5%		
GOP Per Available Room	\$124	\$123	1.0%	\$123	0.8%		
Total Hotel Payroll							
(% of Total Revenue)	35.1%	34.7%	1.2%	33.4%	5.1%		
Total Hotel Payroll							
(Per Available Room)	\$115	\$112	2.7%	\$103	11.2%		
Total Hotel Payroll							
(Per Occupied Room)	\$154	\$151	2.4%	\$126	22.2%		
1							

Note: HotStats sample is somewhat skewed to U.S. full-service hotels although individual hotel results vary widely today by hotel location and customer base.

Source: Truist Securities Research; HotStats

A few asides on our data: our data sets had minor revisions due to sample changes. However, our data set of over 1,000 institutional quality hotels remains in our opinion to be an excellent directional read-through to the financial performance of U.S. select- and full-service hotels. We decided to split full- and select-service for analysis as trends are simply quite distinct.

Companies Mentioned in This Note

DiamondRock Hospitality Company (DRH, \$8.33, Hold, C. Patrick Scholes) Hyatt Hotels Corporation (H, \$149.85, Buy, C. Patrick Scholes) Hilton Worldwide Holdings Inc. (HLT, \$215.61, Hold, C. Patrick Scholes) Host Hotels & Resorts, Inc. (HST, \$17.45, Hold, C. Patrick Scholes) Marriott International, Inc. (MAR, \$236.60, Hold, C. Patrick Scholes) Pebblebrook Hotel Trust (PEB, \$13.73, Hold, Gregory Miller) Park Hotels & Resorts Inc. (PK, \$14.93, Buy, C. Patrick Scholes) RLJ Lodging Trust (RLJ, \$9.52, Buy, Gregory Miller)

Sunstone Hotel Investors, Inc. (SHO, \$10.40, Hold, C. Patrick Scholes)

Analyst Certification

I, Gregory J. Miller, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

I, C. Patrick Scholes, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

Required Disclosures

Analyst compensation is based upon stock price performance, quality of analysis, communication skills, and the overall revenue and profitability of the firm, including investment banking revenue.

As a matter of policy and practice, the firm prohibits the offering of favorable research, a specific research rating or a specific target price as consideration or inducement for the receipt of business or compensation. In addition, associated persons preparing research reports are prohibited from owning securities in the subject companies.

Charts indicating changes in ratings can be found in recent notes and/or reports at our website or by contacting Truist Securities. Please see our disclosures page for more complete information at https://truist.bluematrix.com/sellside/Disclosures.action

Important Disclosures on Equity Research Dissemination, Ratings, Designations, and Coverage Universe

Dissemination of Research

Truist Securities, Inc. ("Truist Securities") seeks to make all reasonable efforts to provide research reports simultaneously to all eligible clients. Reports are available as published in the restricted access area of our website to all eligible clients who have requested a password. Institutional investors, corporates, and members of the Press may also receive our research via third party vendors including: Thomson Reuters, Bloomberg, FactSet, and S&P Capital IQ. Additional distribution may be done by sales personnel via email, fax, or other electronic means, or regular mail.

For access to third party vendors or our Research website: https://truistresearch.bluematrix.com/client/library.jsp

Please email the Research Department at EquityResearchDepartment@truist.com or contact your Truist Securities sales representative.

Truist Securities Rating System for Equity Securities

Truist Securities, Inc. ("Truist Securities") rates individual equities using a three-tiered system. Each stock is rated relative to the broader market (generally the S&P 500) over the next 12-18 months (unless otherwise indicated).

Buy (B) the stock's total return is expected to outperform the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Hold (H) – the stock's total return is expected to perform in line with the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Sell (S) – the stock's total return is expected to underperform the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Not Rated (NR) – Truist Securities does not have an investment rating or opinion on the stock

Coverage Suspended (CS) – indicates that Truist Securities' rating and/or target price have been temporarily suspended due to applicable regulations and/or Truist Securities Management discretion. The previously published rating and target price should not be relied upon.

Truist Securities analysts have a price target on the stocks that they cover, unless otherwise indicated. The price target represents that analyst's expectation of where the stock will trade in the next 12-18 months (unless otherwise indicated). If an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Truist Securities Research Management not to assign a target price; likewise certain stocks that trade under \$5 may exhibit volatility whereby assigning a price target would be unhelpful to making an investment decision. As such, with Research Management's approval, an analyst may refrain from assigning a target to a sub-\$5 stock.

Legend for Rating and Price Target History Charts:

_090					
B = Buy					
H = Hold					\boldsymbol{c}
S = Sell					
D = Drop Cov	/erage				
CS = Covera	ge Suspende	d			
NR = Not Rat	ted				
I = Initiate Co	verage				
T = Transfer	Coverage				
Truist Secur	ities ratings	distribution	(as of 07/29/2024):	
Coverage Uni	verse		Investment Banking	Clients Past 1	12 Months
Rating	Count	Percent	Rating	Count	Percent
Buy	434	63.64%	Buy	62	14.29%
Hold	247	36.22%	Hold	34	13.77%
Sell	1	0.15%	Sell	0	0.00%

Other Disclosures

Information contained herein has been derived from sources believed to be reliable but is not guaranteed as to accuracy and does not purport to be a complete analysis of the security, company of industry involved. This report is not to be construed as an offer to sell or a solicitation of an offer to buy any security. Truist Securities, Inc. and/or its officers or employees may have positions in any securities, options, rights or warrants. The firm and/or associated persons may sell to or buy from customers on a principal basis. Investors may be prohibited in certain states from purchasing some over the counter securities mentioned herein. Opinions expressed are subject to change without notice.

Truist Securities, Inc.'s research is primarily provided to and intended for use by Institutional Accounts as defined in FINRA Rule 4512(c). The term "Institutional Account" shall mean the account of: (1) a bank, savings and loan association, insurance company or registered investment company; (2) an investment adviser registered either with the SEC under Section 203 of the Investment Advisers Act or with a state securities commission (or any agency or office performing like functions); or (3) any other person (whether a natural person, corporation, partnership, trust or otherwise) with total assets of at least \$50 million. In addition, certain affiliates of Truist Securities, Inc., including Truist Investment Services, Inc. (an SEC registered broker-dealer and a member of FINRA, SIPC) and Truist Advisory Services, Inc. (an investment adviser registered with the SEC), may make Truist Securities, Inc. research available, upon request, to certain of their clients from time to time.

Truist Securities, Inc. is a registered broker-dealer and a member of FINRA and SIPC. It is a service mark of Truist Financial Corporation. Truist Securities, Inc. is owned by Truist Financial Corporation and affiliated with Truist Investment Services, Inc. Despite this affiliation, securities recommended, offered, sold by, or held at Truist Securities, Inc. or Truist Investment Services, Inc. (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Truist Bank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Truist Bank may have a lending relationship with companies mentioned herein. Certain clients may compensate Truist Securities, Inc. for research via hard dollar payments, and Truist Securities, Inc. may be deemed to be an investment adviser to such clients as a result of such payments.

Please see our Disclosure Database to search by ticker or company name for the current required disclosures, including valuation and risks. Link: https://truist.bluematrix.com/sellside/Disclosures.action

Please visit the Truist Securities equity research library for current reports and the analyst roster with contact information. Link: https:// truistresearch.bluematrix.com/client/library.jsp

Truist Securities, Inc., member FINRA and SIPC. Truist, Truist Bank, Truist Securities, Truist Investment Services, and Truist Advisory Services are service marks of Truist Financial Corporation.

If you no longer wish to receive this type of communication, please request removal by sending an email to EquityResearchDepartment@truist.com

© Truist Securities, Inc. 2024. All rights reserved. Reproduction or quotation in whole or part without permission is forbidden.

ADDITIONAL INFORMATION IS AVAILABLE at our website, TruistSecurities.com, or by writing to: Truist Securities, Research Department, 3333 Peachtree Road N.E., Atlanta, GA 30326-1070

