Equity Research Report

CONSUMER: Lodging

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

C. Patrick Scholes

Patrick.Scholes@truist.com

Vishaal Shekara 212-319-5834 Vishaal.Shekara@truist.com

18 Page Document

Reasons for this report

✓ Deep dive analysis of recent U.S. hotel revenues and profits, a proxy for the Lodging REIT portfolios and within Lodging C-corps an excellent overview of franchisee health/fee generation of institutional hotel owners.

✓ The analysis is also a read-through on Ccorp base and incentive management fees (IMFs) and owned/leased margins.



July Hotel P&L Analyzer: 2Q owned margins -310 bps y/y as plateauing demand + rising costs = declining margins

In our analysis of over 1,000 U.S. full-service hotels (data source HotStats), 2Q23 hotel profit margins were 38.8%, down 310 bps y/y and down 60 bps vs. 2Q19. These figures are worse than 1Q23 (+150 bps y/y given an easy Omicron comp and flat vs. 1Q19). We view plateauing demand/insufficient midweek sellout days and continued cost pressures/service inefficiency as headwinds to profit margin growth for 2Q23 and probably 3Q23.

Our "Bottom Line": For the average full-service REIT-owned hotel, we expect margin pressures will continue to challenge the EBITDA recovery trajectory.

Companies most impacted in this note: HLT, H, MAR, and Lodging REITS.

(Please note our data set continues to skew slightly above the average Upper Upscale hotel and to institutionally-owned urban and resort hotels which may add some variance to STR data and individual public company results. **Please view the PDF version of this note for superior quality of exhibits.**)

Major takeaways:

Full-Service Lodging REITS: We see several indicators of plateauing demand well below 2019 levels/slowing room rate growth, at least for the time being, combined with labor and other cost pressures (i.e. insurance) as headwinds to EBITDA margins. This setup of RevPAR growth moderation and EBITDA margins with a slight decline is somewhat like the 2018-2019 period. Unlike in 2018-2019, there is still a post-pandemic lagging demand recovery story, especially in Fall 2023 and into 2024, driven by the continued recovery of convention demand and international inbound. What is additive for margin growth and missing today are more days of midweek hotel sellouts (effectively demand compression) in the major U.S. urban hotel markets through a combination of robust convention activity and high-paying individual corporate travel where both pieces of demand would be paying more for their stays due to high occupancy. Also unlike 2018-2019, the REITS have in many cases increased their non-Top 25 market resort and leisure exposure where we see tougher y/y near-term revenue and profit comps continuing for the foreseeable future.

• Investor expectations are low, in our view, and any beats/positive indicators may lead to short-term stock jumps; Pebblebrook (PEB, Hold) was an example last Friday.

Global C-corps: We expect same-store U.S. base and incentive management fees (IMFs) sequentially higher in 2Q23 due to normal seasonality. Our analysis suggests **U.S. full-service hotels contributed positive MSD base fee growth y/y but IMFs** down single digits. As a result, we expect increasing reliance on the strength of international performance to drive earnings beats, helped by rooms growth in Asia-Pacific where unlike the U.S. there are fewer managed hotels with profit hurdle thresholds. We assume conservative forecasting/guidance for international markets will lead to strong base and IMF contribution and tailwinds for possible EBITDA beats.

 Investor expectations assume stronger IMF results -- we do not expect as many investors to be positively surprised as they were in 1Q23. That said, forecasting global IMFs with granularity and accuracy remains next to impossible.

Profit forecasting beyond 2Q23:

 Still tricky with limited visibility. We view U.S. 3Q23 profits partly challenged by the tough summer leisure comp and the timing of the High Holidays (both in September this year whereas Yom Kippur was in October last year). Additional headwinds include insurance adjustments that have only been partly reflected in REIT guidance.

- We are cautious on union activism/negotiations that has occurred in Boston, suburban NYC, and now prominently in Los Angeles. We would not be surprised to see other union markets facing strikes and/or rising labor cost pressures.
- GOP margin seasonality has largely returned to pre-pandemic norms. Full-service margins are flattish-to-down to 2019 whereas
 some institutional-quality select-service hotels' margins remain well below 2019 (our data set of hundreds of hotels shows
 margins roughly -10%). For now, we see no major deviations from the recent trends.

Other takeaways:

- Food and beverage (F&B) margins are starting to fall on a comparative 2019 basis, and we see evidence of F&B cost growth in excess of revenues in some cases. Staffing is also more fully back than in 2022.
- Service standards anecdotally remain challenged at some full-service hotels due to staffing shortages, particularly urban hotels. We view a combination of a tight labor market, inefficiencies from below-normal occupancy, and room rates that challenge hiring as contributing factors.
- · Utility costs are plateauing/moderating due to lower gas prices.

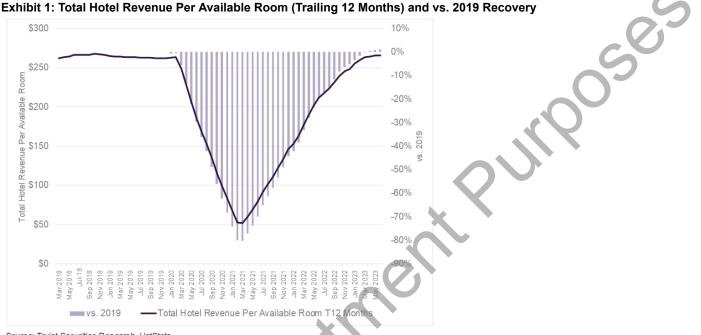
Stock calls:

 No changes to our ratings. We continue to view C-corps largely better positioned than REITS given the C-corps' international demand/pipeline growth relative to the choppier U.S. hotel profit margins and continued headwinds from labor and other cost growth. We are more cautious on profit margins from luxury hard brands that have stringent labor and operating standards; several of our Hold-rated REITS (and non-covered REITS) have bought luxury resorts since 2021.

YTD results, forecasts, and readthrough to earnings:

For the C-corps, the good news is the recovery of group demand is of particular benefit to U.S. base management fees given outsideof-room spend such as food and beverage (F&B)/catering flowing to greater total revenues.

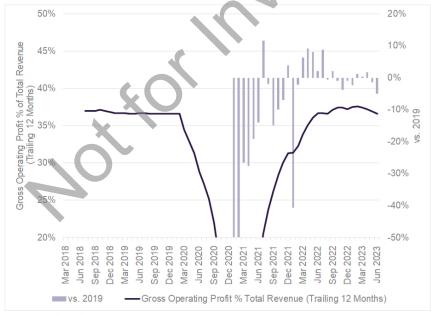
We can see the trend of the recovery of U.S. total hotel revenues and gross operating profits in the following exhibits. We assume inflationary cost pressures to push room rates and outside-the-room price increases on F&B, recreation, and meetings combined with strong group demand are drivers to Total RevPAR growth and therefore higher base management fees despite below normal occupancy. Even though total revenues have now slightly surpassed 2019 levels, the not-so-good news is total revenues remain well behind prepandemic levels when factoring in inflation.





The tougher news is headline margins on a trailing 12-month basis (to take out seasonality) has moderated this year. In an environment of slowing RevPAR growth and flattish-to-declining margins, we view today's environment somewhat similar to the 2018-2019 period where C-corps were more favored by investors than the REITS.

Exhibit 2: Gross Operating Profit % of Total Revenue (Trailing 12 Months) and vs. 2019 Recovery



Source: Truist Securities Research, HotStats

Source: Truist Securities Research, HotStats

On incentive management fees (IMFs), we view the U.S. same store 2Q23 setup less favorably than 1Q23. We evaluated how hotel profits have trended for a possible read-through for U.S. C-corp IMFs (fees driven by the profitability of hotels that are managed by the C-corps). As we capture just U.S. hotels on a same-store basis, we are excluding new hotel openings/conversions both in the U.S. and globally. That said, in order for IMFs to continue to be a tailwind for EBITDA, we view new supply as the main driver today. GOP margins per available room relative to 2019 appear 200 bps worse in 2Q23 versus 1Q23.





In the below summary chart, we can see that even though occupancy remains depressed, total RevPAR and profits continue to hover in the -5% to +5% range versus 2019. That said, margin trends were worse in 2Q23 versus 1Q23 in part due to leisure travelers shifting internationally, slowing RevPAR and Total RevPAR growth (both rooms and outside-the-room spend), and operating cost growth headwinds.

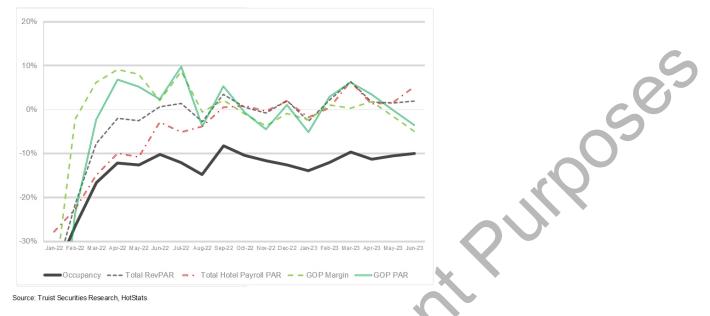


Exhibit 4: Occupancy, Total Revenue, Margins, and Labor Costs vs. Same Month 2019

For international base management fees, we view the Europe, the Middle East, and East Asia (China, Japan, SE Asia) with the greatest fee tailwinds for 2Q23, positive in particular to Hyatt (H, Buy) and Marriott (MAR, Hold). Given international demand uncertainty built into 2Q guidance, we assume the recovery would benefit MAR, H, and Hilton (HLT, Hold) in that order. The Caribbean continues to be the strongest market relative to 2019 levels in the world driven in part by continued ADR growth which we think should flow nicely to profits. These results should benefit all-inclusives including H and Playa (PLYA, Buy) although not much of a surprise to investors, in our view.

Forecasting IMFs are incredibly challenging. What we continue to advise investors is to focus on regional performance and rooms growth in Asia-Pacific given these management contracts are not as subject to operating profit thresholds before a C-corp receives IMFs. Conversely, in the U.S., many hotel contracts use GOP or NOI hurdles before the C-corp receives an IMF.

MAR receives considerable IMF generation due to many higher-rated managed hotels across the world. 2Q23 IMF consensus of \$185M is 37% above 2Q22 whereas 1Q23 IMFs finished 97% higher y/y (helped by an easy Omicron comp). We do not have as much conviction on a material beat in 2Q as we did in 1Q, but we view 2Q23 IMF consensus of \$185M possibly quite light to 1Q23 actuals of \$201M given normal seasonality from 1Q to 2Q and the recovery of international demand.

Shifting to the full-service Lodging REITS: We see a tougher overall setup relative to 1Q23. As our HotStats' data set is skewed somewhat more to institutional-quality higher-priced urban and resort hotels than the Luxury/Upper Upscale hotels from STR, we can be somewhat more narrow in analyzing trends that may be more germane to the REITS. Results in 2Q23 suggest the impact of leisure travel shifting overseas and the hiring of F&B/catering staff more fully baked into results. As evident below, 2Q23 total RevPAR (including outside the room spend) was up about 2% versus 2019, similar to 1Q23, but GOP on a percentage basis was down sequentially.

Exhibit 5: 2Q23 Versus Prior Years Hotel Performance (Our Data Set)

Aggregated U.S. Hotel Operating Performance:							
2Q23 vs. Prior Years							
			y/y %		4-yr %		
	<u>2Q23</u>	2Q22	change	2Q19	change		
Occupancy	72.0%	71.2%	1.1%	80.6%	-10.7%		
ADR	\$256	\$252	1.6%	\$224	14.3%		
RevPAR	\$184	\$179	2.9%	\$180	2.2%		
Total RevPAR	\$283	\$275	3.1%	\$279	1.7%		
Room Margin	74.0%	75.6%	-2.1%	74.4%	-0.5%		
F&B Margin	31.0%	34.6%	-10.4%	32.3%	-4.0%		
Operating Department Margin	62.3%	64.3%	-3.1%	62.1%	0.3%		
GOP Margin	38.8%	41.9%	-7.4%	39.4%	-1.5%		
GOP Per Available Room	\$110	\$115	-4.6%	\$110	-0.1%		
Total Hotel Payroll							
(% of Total Revenue)	33.6%	31.1%	8.0%	33.2%	1.2%		
Total Hotel Payroll (Per Available Room)	\$95	\$85	11.5%	\$93	2.6%		
Total Hotel Payroll							
(Per Occupied Room)	\$132	\$120	10.0%	\$115	14.6%		

JIROSES

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

Exhibit 6: 1Q23 Versus Prior Years Hotel Performance (Our Data Set)

Aggregated U.S. Hotel Operating Performance:							
1Q23 vs. Prior Years							
			<u>y/y %</u>		<u>4-yr %</u>		
	<u>1Q23</u>	<u>1Q22</u>	<u>change</u>	<u>1Q19</u>	<u>change</u>		
Occupancy	64.9%	54.2%	19.7%	73.5%	-11.7%		
ADR	\$255	\$240	5.9%	\$221	15.2%		
RevPAR	\$165	\$130	26.8%	\$162	1.7%		
Total RevPAR	\$262	\$201	30.7%	\$257	2.3%		
Room Margin	72.7%	72.9%	-0.3%	72.7%	0.0%		
F&B Margin	30.7%	25.3%	21.3%	30.6%	0.3%		
Operating Department Margin	60.5%	61.1%	-1.0%	59.8%	1.2%		
GOP Margin	35.8%	34.3%	4.4%	35.8%	0.0%		
GOP Per Available Room	\$94	\$69	36.2%	\$92	2.2%		
Total Hotel Payroll							
(% of Total Revenue)	35.8%	35.9%	-0.3%	35.9%	-0.3%		
Total Hotel Payroll (Per Available Room)	\$94	\$72	30.2%	\$92	1.8%		
Total Hotel Payroll (Per Occupied Room)	\$144	\$133	8.7%	\$125	15.3%		

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

Exhibit 7: 2Q23 Versus 1Q23 Hotel Performance (Our Data Set)

Aggregated U.S. Hotel Operating Performance:							
2Q23 vs. 1Q23							
				Abs,			
	<u>2Q23</u>	<u>1Q23</u>	<u>% change</u>	<u>variance</u>			
Occupancy	72.0%	64.9%	10.9%	710	bps		
ADR	\$256	\$255	0.6%	\$1.42			
RevPAR	\$184	\$165	11.6%	\$19.15			
Total RevPAR	\$283	\$262	8.0%	\$20.95			
				•			
Room Margin	74.0%	72.7%	1.8%	130	bps		
F&B Margin	31.0%	30.7%	1.0%	30	bps		
Operating Department Margin	62.3%	60.5%	3.0%	180	bps		
GOP Margin	38.8%	35.8%	8.4%	300	bps		
GOP Per Available Room	\$110	\$94	17.0%	\$15.97	Ē		
Total Hotel Payroll							
(% of Total Revenue)	33.6%	35.8%	-6.1%	-220	hns		
Total Hotel Payroll	00.070	00.070	0.770	2207	spo		
(Per Available Room)	\$95	\$94	1.5%	\$1.36			
Total Hotel Payroll		÷2.					
(Per Occupied Room)	\$132	\$144	-8.8%	-\$12.66			
(ψ. ισ L	.	5.070	÷.2.00			

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

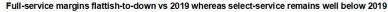
posez

Exhibit 8-9: Gross Operating Profit Margins as a Percentage of Revenues (top exhibit) and vs. 2019 (bottom exhibit)

Please note that while we receive an aggregation of hundreds of U.S. select-service hotels, it is possible that our data is not a clear representation of the performance of the higher-rated select-service and extended-stay hotels in the U.S.









Note: We have intentionally not presented the deeply negative margins in 2020 for easier visuals. Source: Truist Securities Research, HotStats

Profit forecasting beyond 2Q23

We still view profit forecasting as quite challenging due to relatively limited demand visibility. For U.S. hotel profits, we view 3Q23 partly challenged by the tough summer leisure comp and the timing of the High Holidays being in September this year, therefore likely leading to corporate groups/conventions being pushed into early-mid September and early-mid October. We also view annual insurance growth which could be on average in the +40-60% range (but likely more variable by company) as a headwind that may not be fully accounted for in sell-side modeling.

It is harder for us to gauge the severity of hotel union activism and impact to margins, but we are cautious on what is occurring in Los Angeles and other union markets that have not had material contract negotiations in recent years. As hotel unions have been active in other markets this year, we do not view Los Angeles as isolated.

Our 2023 full-service GOP margin assumptions for now:

- Base case: Some softening on the macro, but hoteliers can adapt through reductions in variable costs (staffing). Strength in group demand very meaningful. We view the trends in Exhibit 9 as holding where full-service margins remain flattish-to-down versus 2019 and select-service remaining below 2019.
- Bull case: If the macro holds, driven in part by strong group occupancy/ADR and recovering transient corporate, rising costs are kept somewhat in check. Hotel IMF contributions are more robust. REIT EBITDA guidances could rise intraquarter and through 4Q. We could assume flattish to positive y/y margin growth in this scenario.
- Bear case: The biggest hit to many hotels' margins would be soft in-house group and leisure demand followed by declining ADR, leading to underutilization of rehired F&B staff.

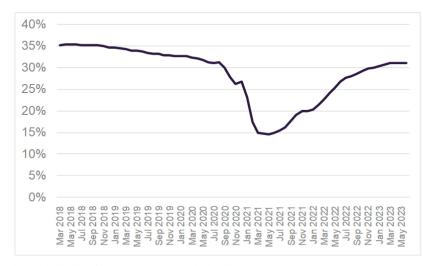
Truist Securities

20505

Other takeaways:

Group: We see clear evidence of the recovery of Group revenues in recent quarters although the group revenue mix is still ~3-5 points below 2018-2019 levels. We have seen a plateauing of group mix that may be partly driven by convention demand not fully returning, weaker international inbound, some leisure group that was pent-up in 2022 (i.e. weddings), and some corporate groups shifting to virtual.





Source: Truist Securities Research, HotStats

Exhibit 11: Group Rooms Revenue Mix (Group % of Rooms Revenue) vs. 2019



Source: Truist Securities Research, HotStats



Subsegment trends show corporate and SMERF group ADRs remaining +10-20% over 2019 levels but apparently plateauing for now. These subsegments remain well ahead of association/convention (flattish to 2019). We can interpret from ADR trends of the continued challenges in some large associations/conventions due to hybrid and virtual meetings as well as lower attendance both from domestic and international travel. As a consequence, big cities have less opportunity for citywide hotel sellouts and pushing higher room rates. The pricing trends of corporate groups and SMERF or SMERFE (social/military/educational/religious/fraternal/ethnic group which is often lower-rated and weekend-led) remain strong by comparison.

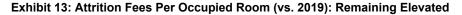
The benefiting hotels cater to in-house groups. We view Ryman (RHP, Buy) as best positioned within the REITS for large in-house corporate group.





poses

Further diving into the detail, we see that cancellation and attrition fees are still well above 2019 levels. Compared to April, we see cancellation fees now coming down again as opposed to being relatively stable at +100% earlier this year.



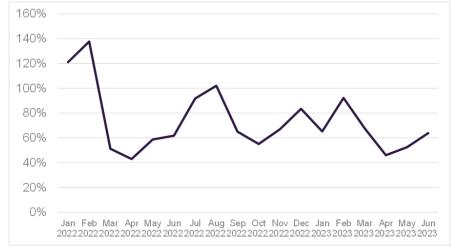
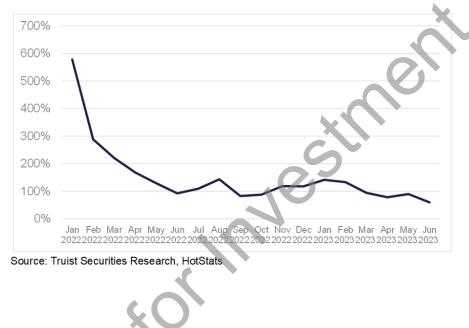




Exhibit 14: Cancellation Fees Per Occupied Room (vs. 2019): Elevated but Moderating



S.

Transient leisure (high-end) and corporate negotiated (individual business travel): Retail ADR (proxy for high-rated leisure travel) and corporate negotiated ADR (individual business travel) continue to move in opposite directions. We see continued evidence in the last few months of Retail ADR declining on a trailing 12-month basis starting in November 2022. That said, we note that retail hotel ADR is still 15-20% above 2019 levels. Conversely, corporate negotiated ADR is trending more positively but barely even to 2019 levels. With higher-rated business travel remaining well below 2019 levels on demand combined with ADR running flattish to 2019, the net impact is lower ability for hoteliers to push room rates in the midweek due to less demand compression. We think the consequence is a negative impact for hotel profits, possible ceilings on hiring decisions (less staff due to lower occupancy and ADR growth below cost inflation), and consequently some reduced service standards given fewer high-paying travelers.

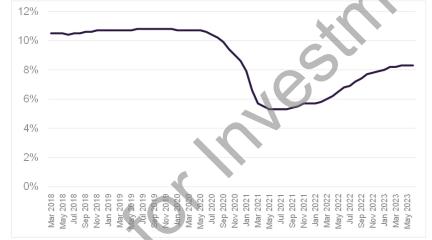


Exhibit 15: Retail and Corporate Negotiated ADR: Trailing 12 Months

Source: Truist Securities Research, HotStats

Below we can see that corporate negotiated revenue mix has effectively plateaued on a Trailing 12-month basis.

Exhibit 16: Corporate Negotiated Revenue Mix -- Trailing 12 Months (% of Rooms Revenue)

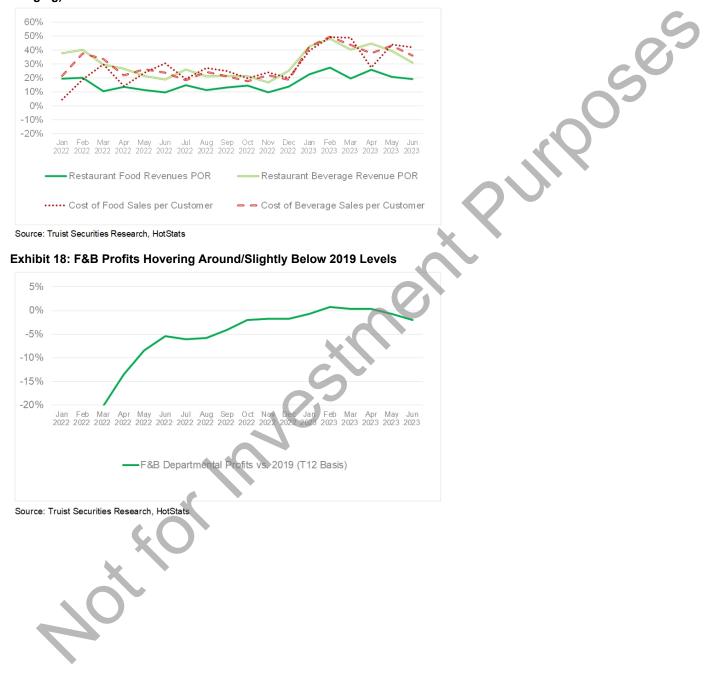


Source: Truist Securities Research, HotStats



Operations challenges and why we see issues in margins and service standards: While we see challenged margins in several departments due to labor/operating costs that appear at times well above revenue growth, we highlight the food and beverage (F&B) department as one example. While we view restaurant and bar tickets have risen significantly since the pandemic, the cost structures may be rising even faster. While we saw this spread earlier this year, we view the issue as possibly more pronounced further into 2023 (outside of summer months) now that we have shifted to more of a corporate traveler base from 1Q's greater leisure mix. We also assume staffing is more fully back than in 2022.

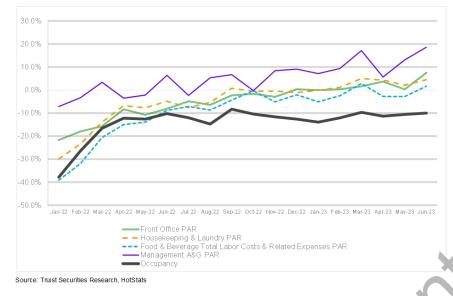
Exhibit 17: Restaurant Revenue and Expense Trends vs. 2019 Levels: Prices Up and So Are The Expenses (Not Customer Gauging)



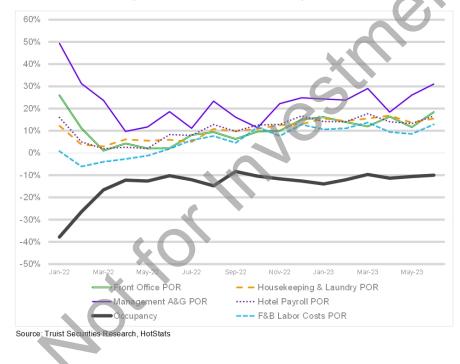
5°

Labor cost analysis suggests the property management costs are rising faster than some hourly departments. That said, the relatively good news is we are not seeing tremendous spikes in hourly labor costs even in a moderating revenue growth environment. We encourage a focus on per occupied room (POR) data today rather than per available room (PAR) now that occupancy levels are more plateaued for the time being. In the event there is a stronger recovery of business travel, international inbound, and convention demand later this year and into 2024 leading to increased hiring, we may encourage greater attention to PAR data.

Exhibit 19: Occupancy Compared to Labor Costs by Hotel Department Per Available Room (PAR) vs. Same Month 2019

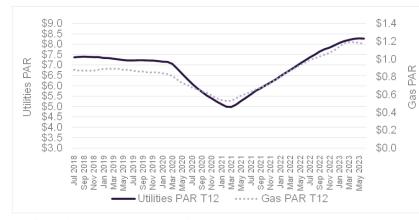






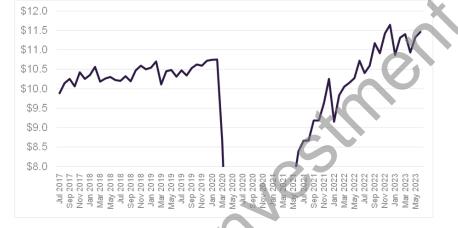
Undistributed expenses: We have seen some recovery/stabilization of utility costs as gas prices have moderated. Conversely, we are seeing further increases in the repairs and maintenance department which we view as a partial consequence of the need for staffing to handle deferred CapEx that has remained since the pandemic.

Exhibit 21: Utilities Costs Per Available Room – Spiking Costs Since Early 2022 But Gas Starting To Decline



Source: Truist Securities Research, HotStats





Source: Truist Securities Research, HotStats

NOTION

Companies Mentioned in This Note

Hyatt Hotels Corporation (H, \$125.18, Buy, C. Patrick Scholes) Hilton Worldwide Holdings Inc. (HLT, \$154.17, Hold, C. Patrick Scholes) Marriott International, Inc. (MAR, \$199.61, Hold, C. Patrick Scholes) Pebblebrook Hotel Trust (PEB, \$15.19, Hold, Gregory Miller) Playa Hotels & Resorts N.V. (PLYA, \$8.23, Buy, C. Patrick Scholes) Ryman Hospitality Properties, Inc. (RHP, \$94.92, Buy, 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

Truist Securities Ratings System for Equity Securities

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

2050

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:

B = Βι	ιy
--------	----

- H = Hold
- S = Sell
- D = Drop Coverage
- CS = Coverage Suspended
- NR = Not Rated
- I = Initiate Coverage
- T = Transfer Coverage

Truist Securities ratings distribution (as of 07/31/2023):

Coverage Universe			Investment Banking Clients Past 12 Months			
Rating	Count	Percent	Rating	Count	Percent	
Buy	463	64.48%	Buy	75	16.20%	
Hold	249	34.68%	Hold	33	13.25%	
Sell	6	0.84%	Sell	1	16.67%	

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 or 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 Ioan 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.

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. 2023. 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