

# July's Hotel P&L Analyzer- How profitable were hotels last month?

July: -100 bps of GOP margin growth on approx. +0.4% Total RevPAR.

#### What's Incremental To Our View

In our monthly analysis of operational level P&L metrics of nearly a thousand U.S. upper-tier full service hotels (data source: HotStats), we continue to forecast slightly positive margins for the full-year 2018 - this is being driven by modestly stronger transient demand in recent months.

Results in July were negatively impacted on the Group/convention side from the July 4th calendar shift. July's Rooms RevPAR was just +1.2% and GOP margins were -100 bps. We continue to observe rising labor costs in 2018. Efforts by hotel owners to minimize labor cost growth have had some positive effects.

We have analyzed monthly P&L metrics of nearly a thousand high-rated full-service hotels in the U.S. (luxury and upper upscale hotels, both private and publicly owned).

- The hotels in our July data set saw profitability losses with GOP margins -100 bps. y/y, driven by RevPAR growth of +1.2% and Total RevPAR (includes F&B) of +0.4%. We note that June benefited from the July 4th calendar shift (Rooms RevPAR was +4.4%, Total RevPAR was +4.7%, and GOP Margins were +170 bps). Combining the margins of June and July together, GOP margins of +70 bps is moderately above the YTD margins of +30 bps. The July 4th shift pushed groups into June and out of July, which particularly impacted GOP margins for both months. Weaker relative food and beverage/banquet spend impacts the bottom line somewhat more for labor-intensive higher-rated hotels.
- How we view August and September: August is not a particularly significant corporate group month due to summer vacations, whereas September is an important corporate group month. That being said, in light of continued strength in the luxury leisure demand, there should be more opportunities for margin improvement in strong leisure markets. We believe September will be impacted negatively by the shift of Yom Kippur to a weekday evening and that is likely to weigh moderately on margins for the month given a group shift into other weeks of September and October.
  - o For "clean comp" hotels not impacted by one-time events (see below), we believe EBITDA margins will be flattish in 3Q. We caveat in this projection that there will be noise for some properties due to the impact of Hurricane Lane in Hawaii (which may result in some cancelations towards the end of this month and into September). Further, the y/y comparables have noise from: the solar eclipse (for select markets in the eclipse path) and the hurricanes that struck Texas and Florida.

C. Patrick Scholes 212-319-3915 patrick.scholes@suntrust.com

Gregory J. Miller 212-303-4198 gregory.j.miller@suntrust.com

Jeffrey Stantial 212-590-0993 jeffrey.stantial@suntrust.com

#### What's Inside

An analysis of recent hotel labor cost trends, one of the critical components impacting hotel EBITDA margins



We continue to believe that margins would be more impaired without significant cost control efforts by hotel owners, an operational strategic priority (in our view). This topic has been discussed on earnings calls, at industry conferences, and by our private hotel owner contacts.

- We continue to emphasize to investors that there is a marked difference between top and bottom line returns. There was 220 bps differential in July between Rooms RevPAR and GOP margin growth. We note that RevPAR growth exceeded GOP margin "growth" by 270 bps in June, 90 bps in May, 460 bps in April, 250 bps in March, 190 bps in February and 130 bps in January.
- The July results compare to YTD results of GOP margins +30 bps y/y, driven by comp RevPAR growth of +2.7% and Total RevPAR of +3.1%.
- We note that many Lodging REITS currently estimate Rooms RevPAR growth of +2-3% is needed to maintain flat EBITDA margins.
  - Output of the Additionally, Marriott (MAR, \$123.11, Hold) noted the following labor cost trends at a conference earlier this year: "If you look at the United States...we see labor costs rising in the mid-single digit range, not in the low single digit range... When we look at cities across the country, there aren't any places where wages labor costs are growing at 2%. They're growing at faster rates, and that labor markets are tight. So that's one of the factors that I think at a 2.5% to 3% RevPAR growth you're kind of fighting to keep percentage margins about flat profit margins about flat." We add that MAR has had success with synergy savings which has helped margins in the U.S.
  - We met with many hotel owners, both public and private, at the NYU and NAREIT conferences in early June. One of the common takeaways is that hotel owners are actively trying to hold onto margin growth in part through operational efficiencies. We believe these efforts are manifesting in our data set. For GOP margins to be positive despite modest Rooms RevPAR growth speaks to said efforts. We believe these efforts may have picked up in pace in 2018.

The data (source: HotStats (high correlation to STR)) indicates marked increases in hotel labor costs in 2018, negatively influencing hotel margins. **Bottom line, we** remain guarded about the ability for owned hotel EBITDA margins (barring any major self-help initiatives such as with Park (PK, \$32.66 Buy)) to materially grow in 2018 as RevPAR of +2-4% in an environment of property-level operating costs of 2.5%+ does not bode well for significant margin expansion for hotel owners. Again to keep it in perspective, the fact that we are discussing any margin improvement at all nine plus years into a cycle is certainly a positive.

LaSalle (LHO, \$35.04, Hold) noted in their 4Q17 earnings call "that the sell-side community tends to focus predominately on the RevPAR...that's just one component...for [LHO] it's not only [about] RevPAR, but [also] profitability". Our analysis focuses on the profitability, a critical marker for REIT valuation and relative performance.



July profitability: Relatively weak RevPAR growth resulted in a decline in margin (we believe this is in part due to the calendar shift of July 4th impacting Group demand).

Industry Metric	Jul 2018 y/y	YTD		Jul 2018	YTD	FY2017	2017 y/y
Occupancy	-70	40	bps	80.4%	79.1%	77.2%	50 bps
ADR	2.1%	2.2%	%	\$212	\$227	\$219	1.1%
RevPAR	1.2%	2.7%	%	\$171	\$179	\$169	1.9%
Total Revenue PAR	0.4%	3.1%	%	\$261	\$296	\$278	2.5%
Total Dept. Profit % Total Rev.	-40	20	bps	58.2%	60.2%	59.6%	-10 bps
Total Hotel Labor Costs % Total Rev.	90	10	bps	37.6%	35.3%	35.5%	180 bps
Total GOP PAR	-2.5%	4.0%	%	\$88	\$113	\$103	3.0%
Total GOP % of Total Rev.	-100	30	bps	33.7%	38.2%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.

June profitability: Relatively strong RevPAR growth contributed to a moderate increase in margin (the reverse impact from the July 4th shift positively benefiting group demand).

• 2Q: Operating Department margins were ~ +50 bps in 2Q and GOP margins were ~ +100 bps.

Industry Metric	Jun 2018 y/y	YTD		Jun 2018	YTD	FY2017	2017 y/y
Occupancy	110	60	bps	83.2%	78.9%	77.2%	50 bps
ADR	3.0%	2.2%	%	\$226	\$230	\$219	1.1%
RevPAR	4.4%	2.9%	%	\$188	\$181	\$169	1.9%
Total Revenue PAR	4.7%	3.5%	%	\$305	\$302	\$278	2.5%
Total Dept. Profit % Total Rev.	90	20	bps	61.4%	60.5%	59.6%	-10 bps
Total Hotel Labor Costs % Total Rev.	-80	0	bps	33.9%	34.9%	35.5%	180 bps
Total GOP PAR	9.4%	4.9%	%	\$121	\$117	\$103	3.0%
Total GOP % of Total Rev.	170	60	bps	39.8%	38.9%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.



# May profitability: Low RevPAR growth contributed to a slight increase in margin.

Industry Metric	May 2018 y/y	YTD		May 2018	YTD	FY2017	2017 y/y
Occupancy	-50	50	bps	79.5%	78.0%	77.2%	50 bps
ADR	1.8%	2.0%	%	\$228	\$230	\$219	1.1%
RevPAR	1.1%	2.6%	%	\$181	\$180	\$169	1.9%
Total Revenue PAR	1.4%	3.2%	%	\$304	\$301	\$278	2.5%
Total Dept. Profit % Total Rev.	10	10	bps	61.0%	60.3%	59.6%	-10 bps
Total Hotel Labor Costs % Total Re	60	10	bps	34.9%	35.1%	35.5%	180 bps
Total GOP PAR	1.9%	4.0%	%	\$121	\$117	\$103	3.0%
Total GOP % of Total Rev.	20	30	bps	39.8%	38.7%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.

April profitability: Relatively strong RevPAR growth contributed to a moderate increase in margin.

Industry Metric	Apr 2018 y/y	YTD		Apr 2018	YTD	FY2017	2017 y/y
Occupancy	90	70	bps	82.3%	77.6%	77.2%	50 bps
ADR	4.6%	2.1%	%	\$237	\$231	\$219	1.1%
RevPAR	5.7%	3.0%	%	\$195	\$179	\$169	1.9%
Total Revenue PAR	6.8%	3.7%	%	\$322	\$301	\$278	2.5%
Total Dept. Profit % Total Rev.	60	10	bps	62.1%	60.1%	59.6%	-10 bps
Total Hotel Labor Costs % Total Re	-50	10	bps	32.6%	35.2%	35.5%	180 bps
Total GOP PAR	9.6%	4.6%	%	\$134	\$115	\$103	3.0%
Total GOP % of Total Rev.	110	40	bps	41.5%	38.4%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.



March profitability: Moderate RevPAR growth (although significantly better for Luxury hotels than Upper Upscale due largely to the Easter calendar shift) contributed to a slight increase in margin.

• 1Q: as evident in the table below, Operating Department and GOP Profit margins were flattish in 1Q.

Industry Metric	Mar 2018 y/y	YTD		Mar 2018	YTD	FY2017	2017 y/y
Occupancy	50	70	bps	82.6%	76.1%	77.2%	50 bps
ADR	2.0%	1.2%	%	\$239	\$229	\$219	1.1%
RevPAR	2.7%	2.1%	%	\$197	\$174	\$169	1.9%
Total Revenue PAR	1.6%	2.6%	%	\$322	\$294	\$278	2.5%
Total Dept. Profit % Total Rev.	20	-20	bps	62.2%	59.3%	59.6%	-10 bps
Total Hotel Labor Costs % Total Re	60	20	bps	33.4%	36.1%	35.5%	180 bps
Total GOP PAR	2.1%	2.6%	%	\$134	\$109	\$103	3.0%
Total GOP % of Total Rev.	20	0	bps	41.7%	37.2%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.

February profitability: Moderate RevPAR growth (in aggregate, although far better for Luxury hotels than Upper Upscale) contributed to a modest increase in margin.

Industry Metric	Feb 2018 y/y	YTD		Feb 2018	YTD	FY2017	2017 y/y
Occupancy	80	60	bps	76.3%	72.5%	77.2%	50 bps
ADR	1.3%	0.7%	%	\$225	\$222	\$219	1.1%
RevPAR	2.4%	1.5%	%	\$171	\$161	\$169	1.9%
Total Revenue PAR	4.2%	3.2%	%	\$295	\$277	\$278	2.5%
Total Dept. Profit % Total Rev.	-10	-40	bps	59.3%	57.6%	59.6%	-10 bps
Total Hotel Labor Costs % Total Re	-10	0	bps	36.0%	37.8%	35.5%	180 bps
Total GOP PAR	5.6%	3.0%	%	\$109	\$96	\$103	3.0%
Total GOP % of Total Rev.	50	0	bps	37.0%	34.5%	37.0%	10 bps

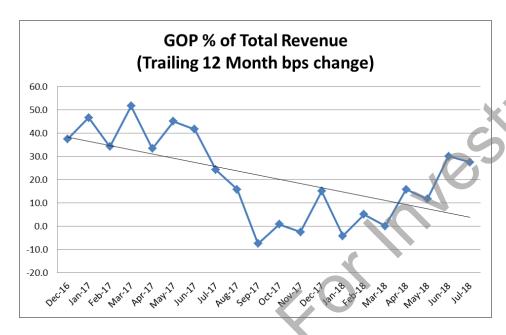
Source: STRH Research, HotStats All dollar figures are in USD.



January profitability: Low RevPAR growth, particularly among Upper Upscale hotels, contributed to a moderate reduction in margin.

Industry Metric	Jan 2018 y/y		Jan 2018	FY2017	2017 y/y
Occupancy	40	bps	68.9%	77.2%	50 bps
ADR	0.1%	%	\$219	\$219	1.1%
RevPAR	0.7%	%	\$151	\$169	1.9%
Total Revenue PAR	2.1%	%	\$259	\$278	2.5%
Total Dept. Profit % Total Rev.	-70	bps	55.9%	59.6%	-10 bps
Total Hotel Labor Costs % Total Re	30	bps	39.7%	35.5%	180 bps
Total GOP PAR	0.0%	%	\$83	\$103	3.0%
Total GOP % of Total Rev.	-60	bps	31.9%	37.0%	10 bps

Source: STRH Research, HotStats All dollar figures are in USD.

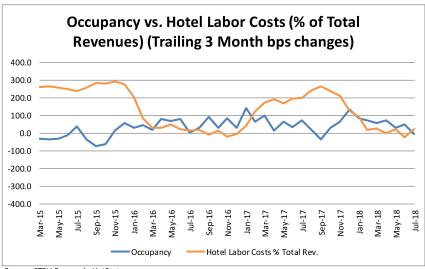


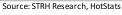
Source: STRH Research, HotStats

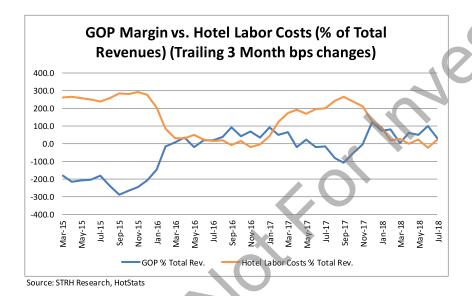
As we have previously noted, hote labor is the primary operating cost for most hotels and is particularly significant for full-service hotels (food and beverage, catering/meetings, and resort facilities are labor intensive). Our general view is that higher room rates generally equate to greater service expectations by guests. Being that most of the Lodging REITS focus on the highest-rated hotels, the recent trend of rising labor costs is especially impactful to EBITDA margins. We analyzed HotStats' aggregated hotel P&L data to better grasp recent monthly trends in labor costs and margins. We note the following takeaways:

- While rising operating costs attributable to labor increased significantly in 2017, labor costs as a percentage of total revenue has fallen to more modest growth
  y/y (see the following charts below). This compares to flattish growth y/y in 2016, +150 bps y/y in mid-2017 and +190 bps by year-end 2017. Combined with just
  2% RevPAR growth in 2017, GOP margins were flattish in 2017 y/y.
  - O How we interpret the recent trends: Based on commentary from recent earnings calls, meetings with the REITS in recent months, and conversations with private hotel owners, we do not see labor cost growth abating in 2018. There may be some seasonality factors (including calendar shifts) and cost containment measures being undertaken (particularly around the end/start of the year) that have influenced the recent flattish trend in labor costs as a percentage of revenue. Headwinds such as restrictive immigration policies, low unemployment, and recent minimum wage ordinances are contributing to rising hotel labor costs -- and we do not expect these increases to plateau in the near-term.

• The following charts highlight trends in labor costs vs. occupancy and GOP margins.









How we view property-level margins in the current low RevPAR growth environment: Over the past few years, in a low RevPAR growth environment, hotel labor costs have had a highly significant influence on EBITDA margins. The correlation between labor costs as a percentage of hotel revenue and GOP as a percentage of total revenue is approximately -80%. Thus, the ability for hotel owners and managers to keep labor cost increases as low as possible will be critical in 2018.

• Among our REIT coverage, our aggregated Adjusted EBITDA Margin estimate (weighted average by market cap.) is flattish y/y growth for 2018 (ex-San Francisco hotels it would be closer to -50 to -100 bps). Please note that there are anomalies for specific REITS due to portfolio changes and property renovations, hurricane impact, DC Inauguration, etc. thus we focus on the aggregate numbers. Hotels owned by the REITS orient more heavily to Upper Upscale versus Luxury, thus our expectations for margin growth for REITS reflects that differential. We expect REITS with a greater proportion of Luxury hotels (ex-idiosyncratic factors as aforementioned) to have a greater opportunity for slight margin expansion in 2018.

One piece of good news for hotel owners is that lower margins can result in a slowdown of new hotel development, at least for full-service hotels. However, we note that the highest-rated hotels often take the longest to go through the approval and development process, therefore we believe any warning signs on margins will likely play a factor for hoteliers that are very early in the development process and not necessarily for hotels that are well into the planning stages (thus, hotels that are scheduled to open in 2018 are still likely to open).

How this cycle compares with the prior downturn: One question we have raised to hotel owners (both public and private owners) is "how efficient are hotels today vs. the same time last cycle?". This is an important question as many full-service hotels were able to cut costs significantly during the last cycle downturn. Hotel owners admit that there is room to cut costs if occupancies take a more significant downward trend (we are not suggesting this will happen barring a demand shock). However, owners have also admitted to us that some operating costs (labor and otherwise) that were cut during the last lodging cycle were not added and n. back, thus we believe that many hotels may be naturally leaner and more efficient today. If hotels are leaner today, the ability to cut costs in a high occupancy environment may be more difficult.



## H: Valuation and Risks

Our price target of \$86 for H is derived by applying a 14.1x target EV/EBITDA multiple (a blended average of the industry multiples for each business segment) to our estimate for 2019 EBITDA. Our valuation model for Hyatt assumes an owned-hotel 2019 EBITDA multiple of 13.0x and a franchise/management fee EBITDA multiple of 15.0x.

Upside risk: transient and group trends outperform expectations.

Downside risk: ongoing misexecution and volatility.

## **HLT: Valuation and Risks**

We apply a blended multiple of 16.0x (10.5x for Owned/leased and 16.0x for Managed/franchised) to our 2019 adjusted EBITDA estimate to derive a 12-month price target of \$95. This multiple is towards the higher end of the historical range of 10x-16x.

## Risks include:

**Growth trajectory could disappoint.** Pipeline growth could either slow down or projects scheduled for construction could be cancelled, which would diminish system growth for the firm and disappoint investors.

## **MAR: Valuation and Risks**

Our price target of \$136 for MAR is derived by applying a 15.8x target EV/EBITDA multiple (a blended average of the industry average multiples for each business segment) to our estimate for 2019 EBITDA.

Upside Risk: Significant U.S macroeconomic improvement results in large recovery in transient corporate demand (and consequential >400 bps RevPAR improvement). Owned assets sell for premium prices relative to MAR expectations.

Downside Risk: 2019 is a recession year in the US. Geopolitical and policy risks negatively impact lodging demand.

## PK: Valuation and Risks

Our \$34 price target is based on an 12.6x multiple on our 2019 EBITDA estimate. This multiple is in-line with portfolio quality.

Risks to our rating and price target: Significant supply growth and macroeconomic challenges/shocks.

## **LHO: Valuation and Risks**

Our \$32 price target is based on our estimate of a 70% probability LHO is bought out (~ \$34) and 30% chance it does not (stock valued ~ \$27).

Upside risk: ability to increase dividend. Downside risk: heavy D.C. exposure.

# **Companies Mentioned in This Note**

Hyatt Hotels Corporation (H, \$77.44, Hold, C. Patrick Scholes)
Hilton Worldwide Holdings Inc. (HLT, \$77.11, Buy, C. Patrick Scholes)
LaSalle Hotel Properties (LHO, \$35.04, Hold, C. Patrick Scholes)
Marriott International, Inc. (MAR, \$123.11, Hold, C. Patrick Scholes)
Park Hotels & Resorts Inc. (PK, \$32.66, Buy, C. Patrick Scholes)



# **Analyst Certification**

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**

SunTrust Robinson Humphrey, Inc. or an affiliate managed or co-managed a securities offering for the following companies within the last 12 months: H-US and HLT-US

The following companies are clients of SunTrust Robinson Humphrey, Inc. for investment banking services within the last 12 months: H-US and HLT-US

SunTrust Robinson Humphrey, Inc. or an affiliate has received compensation for investment banking services within the last 12 months: H-US and HLT-US

The following companies are clients of SunTrust Robinson Humphrey, Inc. for non-investment banking securities-related services within the last 12 months: H-US and MAR-US

SunTrust Robinson Humphrey, Inc. or an affiliate has received compensation for non-investment banking services within the last 12 months: H-US and MAR-US

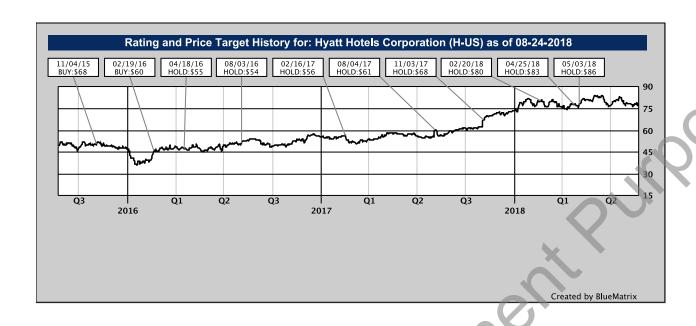
The following company is a client of SunTrust Robinson Humphrey, Inc. for non-securities-related services within the last 12 months: H-US

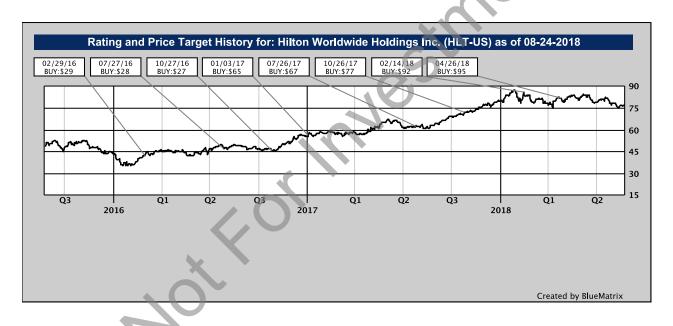
SunTrust Robinson Humphrey, Inc. or an affiliate has received compensation for non-securities related services within the last 12 months: H-US

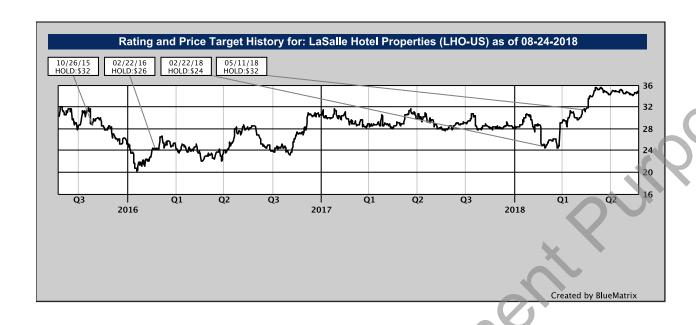
SunTrust Robinson Humphrey, Inc. makes a market in the following companies: MAR-US and PK-US

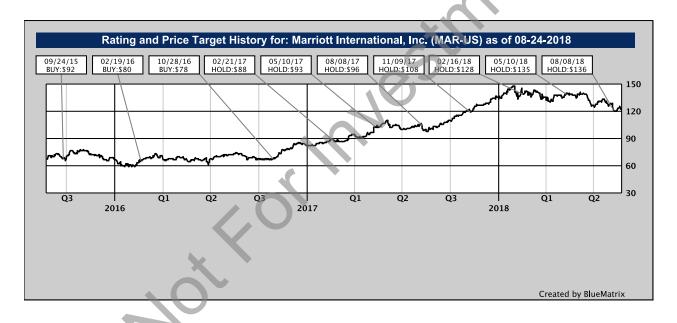
Analyst compensation is based upon stock price performance, quality of analysis, communication skills, and the overall revenue and profitability of the firm, including investment banking revenue.

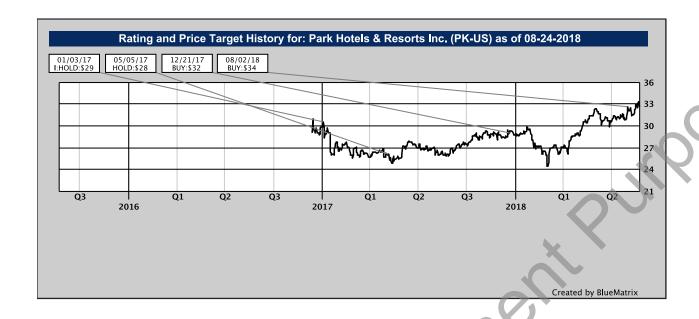
As a matter of policy and practice, the firm prohibits the offering of favorable research, a specific research rating or a specific target price as consideration or inducement for the receipt of business or compensation. In addition, associated persons preparing research reports are prohibited from owning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











## **STRH Ratings System for Equity Securities**

## **Dissemination of Research**

SunTrust Robinson Humphrey (STRH) 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://suntrustlibrary.bluematrix.com/client/library.jsp

Please email the Research Department at STRHEquityResearchDepartment@SunTrust.com or contact your STRH sales representative.

# The rating system effective as of Oct. 7, 2016:

# STRH Rating System for Equity Securities

SunTrust Robinson Humphrey (STRH) 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) – STRH does not have an investment rating or opinion on the stock

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

STRH 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 STRH 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:**

B = Buy

H = Hold

S = Sell

D = Drop Coverage

CS = Coverage Suspended

NR = Not Rated

I = Initiate Coverage

T = Transfer Coverage

## The prior rating system until Oct. 7, 2016:

3 designations based on total returns\* within a 12-month period\*\*

- · Buy total return ≥ 15% (10% for low-Beta securities)\*\*\*
- · Reduce total return ≤ negative 10% (5% for low Beta securities)
- · Neutral total return is within the bounds above
- · NR NOT RATED, STRH does not provide equity research coverage
- · CS Coverage Suspended
- \*Total return (price appreciation + dividends); \*\*Price targets are within a 12-month period, unless otherwise noted; \*\*\*Low Beta defined as securities with an average Beta of 0.8 or less, using Bloomberg's 5-year average

SunTrust Robinson Humphrey ratings distribution (as of 08/27/2018):

Coverage Univers	e		Investment Banking	Clients Past 1	2 Months
Rating	Count	Percent	Rating	Count	Percent
Buy	479	65.71%	Buy	138	28.81%
Hold	246	33.74%	Hold	33	13.41%
Sell	4	0.55%	Sell	1	25.00%

# **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 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. SunTrust Robinson Humphrey, 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. The information herein is for persons residing in the United States only and is not intended for any person in any other jurisdiction.

SunTrust Robinson Humphrey, Inc.'s research is 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.

SunTrust Robinson Humphrey, Inc. is a registered broker-dealer and a member of FINRA and SIPC. It is a service mark of SunTrust Banks, Inc. SunTrust Robinson Humphrey, Inc. is owned by SunTrust Banks, Inc. ("SunTrust") and affiliated with SunTrust Investment Services, Inc. Despite this affiliation, securities recommended, offered, sold by, or held at SunTrust Robinson Humphrey, Inc. and at SunTrust 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 SunTrust Bank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. SunTrust 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://suntrust.bluematrix.com/sellside/Disclosures.action

Please visit the STRH equity research library for current reports and the analyst roster with contact information, Link (password protected): STRH RESEARCH LIBRARY

SunTrust Robinson Humphrey, Inc., member FINRA and SIPC. SunTrust and SunTrust Robinson Humphrey are service marks of SunTrust Banks, Inc.

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

© SunTrust Robinson Humphrey, Inc. 2018. All rights reserved. Reproduction or quotation in whole or part without permission is forbidden.

**ADDITIONAL INFORMATION IS AVAILABLE** at our website, www.suntrustrh.com, or by writing to:SunTrust Robinson Humphrey, Research Department, 3333 Peachtree Road N.E., Atlanta, GA 30326-1070