

Lodging

REIT restack: 4 for '24 = Buy Ryman and Host, lowering Apple and Pebblebrook

Rating Change

Lodging REIT ratings restack: 4 names for 2024

We are revisiting our Lodging REIT coverage and adjusting ratings as we enter 2024. Lodging REITs performed well in 2023, rising +15% vs. +9% for the RMZ, +24% for the S&P 500, though underperforming Lodging C-Corps (+31%). The entire outperformance came in 4Q (+19%), boosted by rate cut optimism and falling Treasury yields (-15%). The rally makes sense cyclically but was in spite of a -12% cut to EBITDA estimates through 2023, largely driven by cuts to margins due to inflation. Rising stocks and falling estimates means valuations are back in-line with the long-term average, presenting less attractive risk-rewards, especially as cycle fundamentals are in the mid or late stages.

RHP: The gold standard in Group; maintain Buy

We revisit Ryman Hospitality (RHP) and raise our PO to \$125 (2025E EBITDA and avg multiple of 14.5x). RHP remains the best in class Lodging REIT driven by idiosyncratic organic growth across unique and concentrated group hotels. Shares outperformed in 2023 (+35% vs. +15% for REITs) but we see growth continuing driven by 1) group outperformance, 2) negligible large scale group supply/construction, 3) expansion at the Rockies and optimization of Hill Country, 4) M&A potential with an advantaged cost of capital. Our updated EBITDA bridge gives us \$720-750M of EBITDA potential by 2025.

HST: Raising to Buy on valuation and growth potential

We double upgrade Host Hotels & Resorts (ticker HST, \$14.1B market cap) to Buy from Underperform. We have been underweight Host for years, but HST has 1) steadily improved capital allocation under current management, 2) markets and geographic exposures should be favorable with overexposure to group/urban and more cost levers in full-service than select service, 4) reopening of 2 Naples properties and compelling valuation relative to the sector overall.

APLE: Lower to Neutral; selecting full service over select

We lower Apple Hospitality (ticker APLE) to Neutral from Buy. Apple (ticker APLE, \$3.9B) remains the best of breed select service Lodging REIT name, the first to exit its cash burn position during COVID. APLE is also less levered, leaving room for further growth through acquisitions. We are however concerned by lower RevPAR growth risk, coupled with higher margin pressures given fewer cost offsets in select service. Our call is less idiosyncratic to Apple but puts us net underweight across select service (APLE, RLJ, INN). Our PO goes to \$18 from \$19 based on a long term multiple (12x) on 2025E EBITDA.

PEB: Lower to U/P as geographies weigh on returns

We lower Pebblebrook (ticker PEB, \$1.9B market cap) to Underperform from Neutral. Pebblebrook's heavy West Coast and business transient exposure was an asset in the early to mid 2010's but has turned into a challenge post-COVID among union, labor and social issues. We see risks from 1) continued overexposure to more challenged markets with less operating flexibility, and 2) don't see pressures abating, while they miss out on group and Northeast urban rebounds. La Playa reopening and some leisure green shoots are positives, but PEB still faces an elongated recovery for equity holders given leverage.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 14 to 18. Analyst Certification on page 13. Price Objective Basis/Risk on page 12.

08 January 2024 Equity

Equity United States Lodging

Shaun C. Kelley Research Analyst BofAS +1 646 855 1005 shaun.kelley@bofa.com

Dany Asad Research Analyst BofAS +1 646 855 5238 dany.asad@bofa.com

Julie Hoover Research Analyst BofAS +1 646 855 0674 julie.hoover@bofa.com

Exhibit 1: Summary of ratings and price objective changes

We raise HST to Buy, lower PEB to Underperform and lower APLE to Neutral

	Rating		P	0
Ticker	Old	New	Old	New
HST	U/P	Buy	\$18	\$23
PEB	Neutral	U/P	\$13.50	\$13.50
APLE	Buy	Neutral	\$19	\$18
RHP	Buy	Buy	\$100	\$125

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 2: Summary of estimate changes We tweak our estimates to reflect Ryman's

We tweak our estimates to reflect Ryman' ROI capex investments (see Exhibit 11)

		2024		2025		
	Ticker	Old	New	Old	New	
_	RHP	\$703	\$706	\$714	\$729	

Source: BofA Global Research estimates

Restacking Lodging REIT ratings for 2024

We are revisiting our Lodging REIT coverage and adjusting ratings as we enter 2024. Lodging REITs performed well in 2023, rising +15% vs. +9% for the RMZ, +24% for the S&P 500, though underperforming Lodging C-Corps (+31%). The entire outperformance came in 4Q (+19%), boosted by rate cut optimism and falling Treasury yields (-15%).

The rally makes sense cyclically but was in spite of a -12% cut to EBITDA estimates through 2023, largely driven by lower margins due to inflation. Rising stocks and falling estimates means valuations are back in-line with long-term average, presenting less attractive risk-rewards, especially as cycle fundamentals are in the mid or late stages.

- Estimate Revisions. Lodging REITs on average saw EBITDA estimates decline 12% in 2024, and RHP was the only company with positive revisions due to the Hill Country acquisition and strong group RevPAR growth.
- Valuations vs. History. Lodging REIT valuations are back to in-line with LT averages at 11.9x EV/EBITDA vs. their LT average of 11.9x. HST is the cheapest at 10.1x while RHP is the most expensive at 13.9x.
- Valuation vs. Real Estate. Lodging REIT cap rates are 580bps above the 10-year currently, in-line with the long-term average of 577bps. Meanwhile, spreads to the 10-Year Treasury are -73bps below for all other asset classes of real estate, driven by manufactured housing (-211bps), industrial (-199bps), healthcare (-156bps) and self-storage (-84bps).

Exhibit 3: Lodging REIT Industry Bull/Bear 2024 Outlook

Broader sector bull/bear debates around macro, demand, supply and the M&A landscape

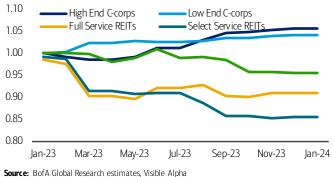
Topic	Bull Case	Bear Case
	BofA Lodging Macro Activity Tracker (LMAT) improving	Macro demand indicators remain anemic in absolute terms
Macro	"Soft landing" more likely and interest rates have peaked	Still mixed signals across BofA proprietary indicators
	Multiple Fed rate cuts likely is good for commercial real estate	Lodging not a big cap interest rate beneficiary vs. other real estate
	Occupancy still 200bps below pre-COVID esp. midweek	Rates are +20% above pre-COVID and up more on weekends (+27-30%)
Dd	Group RevPAR tailwinds from multi-year resets and low supply	Leisure normalization still a risk in certain markets
Demand	Corporate trans still recovering but modest tailwinds	Structural factors in business demand; esp large corporate
	Leisure normalization a risk, but already normalized in many mkts	China/West Coast inbound structurally impaired
	Low industry supply of just 1% half of LT average	Conversions and soft brands could dilute owners
Supply	New construction subdued due to rates and inflation	Brand pipelines still healthy should inflation/rates cool
	Even lower urban and group supply is a tailwind for Full Service	
	Public equity currency could trump private equity	Current volumes heavily impacted by high interest rates
M&A	HT buyout shows private equity still interested in asset class	Levered balance sheets provide less room for M&A
	Lack of public mkt interest could create willing sellers	Lackluster REIT to REIT M&A track record
	Stocks should trade at a premium to history if cycle improves	Multiples should trade below LT average
Valuation & Risk / Reward	Revisions in '23 are unlikely to repeat without a recession	-12% neg. revisions in '23; margin risk in '24 if inflation doesn't subside
	+23% upside to group on midcycle numbers	-17% downside risk to group on midcycle numbers

Source: BofA Global Research



Exhibit 4: EBITDA Estimate Revisions in 2023 by subsector

C-corps revisions were positive while REITs revisions were negative

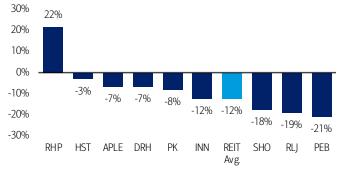


urce: BotA Global Research estimates, Visible Alpha

BotA GLOBAL RESEARCH

Exhibit 5: EBITDA Estimate Revisions in 2023 by company

REIT earnings revisions were -12% in 2023; RHP was the lone positive

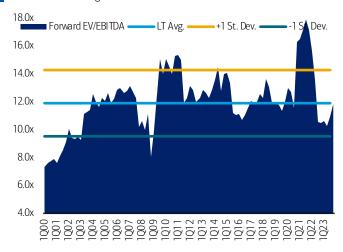


Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 6: Lodging REIT Historical Forward EV/EBITDA Valuation

Lodging REITs are currently trading at 11.8x 2024E EV/EBITDA, in-line with their 11.9x LT average.

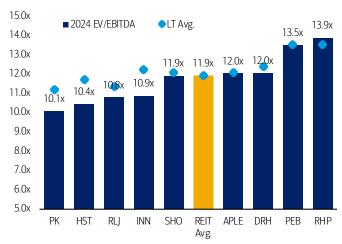


Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 7: Lodging REIT 2024E EV/EBITDA by Company

There is still a fairly wide difference across Lodging REIT valuations, with PK and HST the least expensive while PEB and RHP are the most expensive.



Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 8: Historical Valuation by Gaming, Lodging & Leisure sub-sector

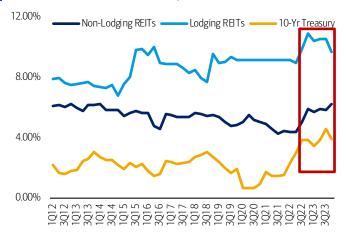
Lodging REITs are currently trading right in-line with their long-term average valuation of 11.9x but slightly below the 2010-2019 cycle of 12.7x. With higher interest rates we think the long-term average makes sense to use.

	EV/EBITDA	Long-Term	Last Cycle	2024	Cumulative	Theoretical (1)	2024	Cumulative
<u>Subsector</u>	<u>2024</u>	Average	<u>Average</u>	<u>Difference</u>	<u>Distribution</u>	LT Avg.	<u>Difference</u>	<u>Distribution</u>
All Gaming	10.2x	10.3x	10.7x	-5%	66%	10.6x	-4%	64%
Macau	10.2x	13.9x	13.4x	-24%	98%	12.0x	-15%	89%
Las Vegas	7.2x	10.2x	10.6x	-32%	100%	8.0x	-10%	74%
Regionals	8.2x	8.9x	8.8x	-7%	69%	7.9x	3%	41%
Gaming REITs	15.5x	14.7x	14.7x	5%	23%	14.7x	5%	23%
All Lodging	12.1x	12.0x	12.4x	-2%	57%	12.4x	-2%	57%
Lodging C-Corp* (EBITDA)	14.1x	13.1x	13.7x	3%	44%	14.4x	-3%	57%
Lodging C-Corp* (P/E)	21.4x	21.1x	21.6x	-1%	53%	21.6x	-1%	53%
Lodging REITs	12.0x	11.9x	12.7x	-5%	64%	11.9x	1%	49%
Timeshare	7.2x	7.5x	7.5x	-4%	58%	7.5x	-4%	50%

Source: BofA Global Research estimates, Bloomberg

Exhibit 9: Lodging REIT vs. Non-Lodging REIT cap rates

Lodging REITs saw cap rate compression from elevated levels in 2023 while other sub-sectors of real estate saw cap rates rise $\,$

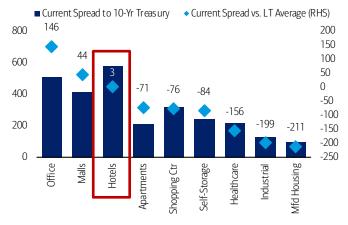


Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 10: REITs cap rate spreads vs. 10-Year Treasury

Spreads to the 10-Year Treasury are in-line with LT averages for Lodging REITs but -73bps below for all other asset classes of real estate, largely driven by manufactured housing, industrial, healthcare and self-storage



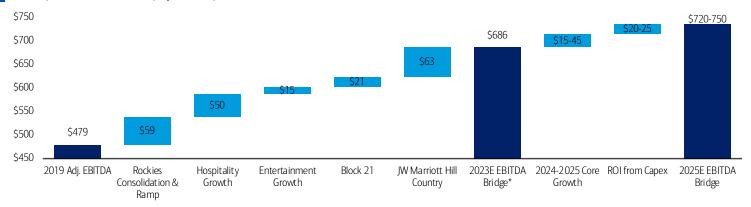
Source: BofA Global Research estimates, Bloomberg

RHP: The gold standard in Group; maintain Buy

We are revisiting Ryman Hospitality (ticker RHP, \$7.1B market cap) and raise our PO to \$125 (2025E EBITDA on an avg multiple of 14.5x). RHP remains the best in class Lodging REIT driven by idiosyncratic organic growth across its unique and concentrated group hotel portfolio. Shares outperformed in 2023 (+35% vs. +15% for REITs) but we see growth continuing driven by 1) outperformance in the group segment, 2) negligible large scale group supply/construction, 3) expansion at the Rockies and optimization of Hill Country, 4) M&A potential with an advantaged cost of capital. Our updated EBITDA bridge gives us \$720-750M of EBITDA potential by 2025. We raise our 2025 EBITDA estimates to \$730M from \$714M to reflect partial returns on deployed ROI capex.

Exhibit 11: Ryman Hospitality 2019-2025E EBITDA bridge

We think RHP can lay out the path to \$720-750M of EBITDA through 2025 with a conservative +1-3% growth environment and only 20-25M of the \$150-200M of EBITDA potential from \$1B of deployed ROI capex



Note: 2023E Bridge includes a full year of JW Marriott Hill Country, actual estimates only reflect a stub year given mid-2023 acquisition. 2024-2025 core growth assumed at +1-3%. ROI assumes \$1B spent over 5 years beginning in 2024 with an initial return of 10-13%. Adj. EBITDA backs out non-controlling interest.

Source: BofA Global Research estimates, company documents, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 12: Ryman estimated 2025 targets/KPIs

We think RHP lays out mid-single digit CAGR targets at their Jan analyst day

	Low	Base	Upside	Upside+
2023 EBITDA PF	\$686	\$686	\$686	\$686
Core Growth	-1%	1%	3%	5%
Core EBITDA	\$672	\$700	\$728	\$756
Capex Investment	\$200	\$200	\$200	\$200
ROI	8%	10%	13%	15%
EBITDA	\$15	\$20	\$25	\$30
Total EBITDA	\$687	\$720	\$753	\$786
2025 CAGR	2%	5%	7%	9%
Releveraging				
Beg. Net Debt	\$2,685	\$2,685	\$2,685	\$2,685
Plus Capex	\$200	\$200	\$200	\$200
Less: Excess Cash	\$306	\$312	\$318	\$325
End Net Debt	\$2,579	\$2,573	\$2,567	\$2,560
End Leverage	3.8x	3.6x	3.4x	3.3x
Target	4.0x	4.0x	4.0x	4.0x
Releverage	\$170	\$306	\$444	\$585
Target Multiple	12.5x	13.0x	13.5x	13.5x
Incr. EBITDA Growth for M&A	\$14	\$24	\$33	\$43
Total Adj. EBITDA potential	\$701	\$743	\$786	\$830
CAGR	3%	6%	9%	12%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 13: Ryman estimated 2028 targets/KPIs

By 2028 with deployed ROI capex, RHP could achieve \$900-1,000M of EBITDA and mid- to high-single digit CAGRs

	Low	Paca	Uncido	Upside+
2022 EDITO A DE		Base	Upside	
2023 EBITDA PF	\$686	\$686	\$686	\$686
Core Growth	-1%	1%	3%	5%
Core EBITDA	\$652	\$721	\$795	\$876
Capex Investment	\$1,000	\$1,000	\$1,000	\$1,000
ROI	10%	15%	20%	20%
EBITDA	\$100	\$150	\$200	\$200
Total EBITDA	\$752	\$871	\$995	\$1,076
2028 CAGR	3%	6%	9%	10%
Releveraging				
Beg. Net Debt	\$2,685	\$2,685	\$2,685	\$2,685
Plus Capex	\$1,000	\$1,000	\$1,000	\$1,000
Less: Excess Cash	\$753	\$791	\$833	\$878
End Net Debt	\$2,932	\$2,894	\$2,852	\$2,807
End Leverage	3.9x	3.3x	2.9x	2.6x
Target leverage	4.0x	4.0x	4.0x	4.0x
Releverage	\$77	\$590	\$1,129	\$1,495
Target Multiple	12.5x	13.0x	13.5x	13.5x
Incr. EBITDA Growth for	\$6	ÇAE	ĊOA	\$111
M&A	ĴΩ	\$45	\$84	٦١١١
Total Adj. EBITDA	ĊZEO	¢016	¢1.070	¢1 10C
potential	\$759	\$916	\$1,079	\$1,186
CAGR	3%	7%	10%	13%

Source: BofA Global Research estimates



HST: Upgrading to Buy on valuation and growth potential

We are double upgrade Host Hotels & Resorts (ticker HST, \$14.1B market cap) to Buy from Underperform. We have been underweight Host for years, but HST has 1) steadily improved capital allocation under current management, 2) markets and geographic exposures should be favorable with overexposure to group/urban and more cost levers in full-service than select service, 3) has meaningful EBITDA growth potential (+20%) relative to peers for M&A through releveraging, allowing it to be offensive, 4) has 2 properties in Naples that should help support Y/Y EBITDA growth and 5) has compelling valuation relative to the sector overall. Our new PO of \$23 is based on 12x our 2025E EBITDA of \$1.63B.

Exhibit 14: Host Hotels & Resorts Bull/Bear Summary

We view Host's risk/reward as favorable with one of the lowest valuation multiples across the group and a portfolio

Implied value per share = \$25.50 (+30% upside potential)

	D. II C	
Topic	Bull Case	Bear Case
	Overweight group (32%), corporate (33%) and urban (~50-55%) demand growth which should outperform	Leisure (~32%) is over earning, with the Florida Gulf Coast accounting for 7% portfolio exposure and Orlando another 9%
RevPAR and Demand	Corporate and group demand recovery should drive outsized growth in 2024, with definite group room nights on the books for 2024 up +15% from 2Q23 to 3Q23	The remaining \sim 10-12% points of international inbound travel recovery could take longer to fully recover; particularly in Host's West Coast markets.
	International Inbound travel is still -88% below 2019 levels as of September 2023	
Geographies and	New York, San Diego, DC and New Orleans (nearly 30% market exposure) demand should be healthy in 2024 driven by corporate and group demand	Orlando and South Florida 16%, Hawaii (10%) could take longer to recover following the wildfires in 2023, Japanese travelers to Hawaii could continue to lag
Markets	Citywide convention calendar is favorable; total group revenue pace is up $\pm 13\%$ vs. the same time in 2022 with lengthening booking windows	San Francisco continues to be challenged, with the convention calendar down Y/Y in 2024 over 2023 (2H24 driven)
	Ritz Carlton Naples and Hyatt Regency Coconut Point re-ramp should add \$80M of EBITDA	Naples EBITDA will be offset by reduced business interruption insurance proceeds in 2024 from 2023
EBITDA, margins and costs	Comparable hotel EBITDA margins are up +20-60bps in 2023E from 2019 from operating model changes	In an environment where RevPAR is up +2-4% and costs are up +4-6%, same store margins growth is less likely achievable, further pressured by normalizing resort rates and margins
	~\$1.5B in ROI capex between 2019-2023E incl. the Marriott Transformational capital program, driving RevPAR index +9pts; Hyatt Transformational Capital Program (\$550-600M) with \$40M op. guarantees is targeting similar returns	
V-l+: 0 D:-l. /	One of lowest valuation REITs and still -18% below LT avg.	
Valuation & Risk / Reward	Midcycle to near-peak cycle multiple = 12.8x EV/EBITDA on peak 2025E EBITDA of \$1,634M	Midcycle to near-trough multiple = 10.5x EV/EBITDA on normalized/recessionary EBITDA of \$1,395M

Source: BofA Global Research estimates, Bloomberg

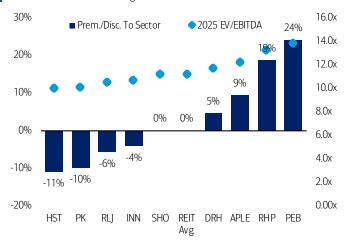
BofA GLOBAL RESEARCH

Implied value per share = \$17.00 (-14% downside potential)



Exhibit 15: Lodging REIT 2025E Relative Valuation

HST is currently trading the cheapest to the entire sector, despite solid execution and its low leverage bal. sheet



Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 17: Host Hotels re-leveraging capacity

By taking leverage up to the sector average of 4x, HST could buy over \$300M of incremental EBITDA at normal valuations; this would add +20% growth and should allow HST to be an aggressive acquiror if the cycle stabilizes

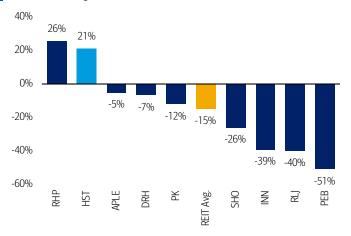
2025E HST Leverage	1.8x
Sector Average Leverage	4.2x
Releveraging Potential	2.4x
2025E EBITDA	\$1,634
M&A Capacity	3,926
Acquisition Multiple	12.0x
EBITDA Purchased	327
% Growth on Existing	20%

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 18: HST AFFO/Share Growth 2015 to 2023

HST is one of only two Lodging REITs (along with RHP) to have grown AFFO per share since the middle of last cycle; this is due to well-timed M&A before COVID and strong cost control before and after

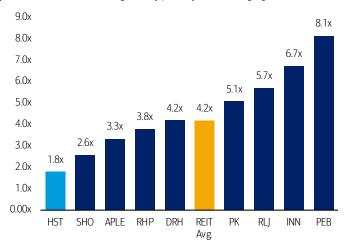


Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 16: Lodging REIT 2025E Net Leverage (Debt + Pref. to EBITDA)

HST has the lowest leverage of any publicly traded Lodging REIT

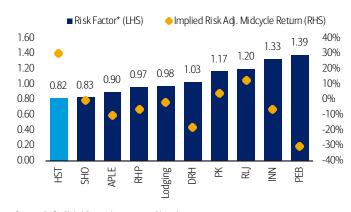


Source: BofA Global Research estimates, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 19: Lodging REIT relative risk and Midcycle Returns

HST has the lowest risk* (financial leverage, equity beta and equity risk premium) of all the Lodging REITs and the highest risk-adjusted midcycle return potential



 $\textbf{Source:} \ \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research} \ \mathsf{estimates} \text{, } \mathsf{Bloomberg}$



APLE: Lower to Neutral; selecting full service over select

We lower Apple Hospitality (ticker APLE) to Neutral from Buy. Apple (ticker APLE, \$3.9B) remains the best of breed select service Lodging REIT name, the first to exit its cash burn position during COVID. APLE is also less levered, leaving room for further growth through acquisitions which we estimate could amount to \$500M of buying power at normalized valuations.

Our call is less idiosyncratic to Apple and we continue to think highly of this management team's execution and capital allocation decisions. We are however concerned by 1) the risk of lower RevPAR growth going forward given their earlier recovery, 2) coupled with higher margin pressures given fewer cost offsets in select service and a highly efficient portfolio.

As a result we are now net underweight across select service (APLE, RLJ, INN). Our PO goes to \$18 from \$19 based on a long-term multiple (12x) on 2025E EBITDA.

Exhibit 25: Apple Hospitality Bull/Bear Summary

APLE's risk/reward is more balanced at this stage of the cycle, as such we move to a Neutral rating

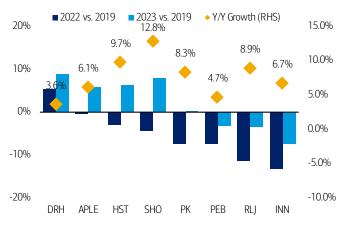
Topic	Bull Case	Bear Case
RevPAR and	APLE was first to exit out of a cash burn position from the pandemic and is one of the earliest portfolios to recover	Group is expected to be the driver of domestic RevPAR growth in 2024, where select service portfolios are relatively underweight
Demand	Suburban and secondary/tertiary skew results in a low dependence on international inbound travel to drive demand	APLE's select service portfolio has less out of room spend opportunity to drive revenues beyond RevPAR than full-service peers
Geographies and	Portfolio is very well diversified; no single market makes up more than 6% and is present in 87 different markets across the country	Suburban select service markets (48% exposure) are more recovered than other hotel types, leaving less room for outsized RevPAR growth
Markets	APLE's supply landscape is more favorable than pre-COVID - nearly 50% of APLE's hotels do not have any exposure to new projects within a 5-mile radius today	Recent brand launches have been more focused on select service, could ultimately drive new competitive supply in APLE's markets
EBITDA, margins	At 37% on a TTM basis, APLE's Hotel EBITDA margins are the highest among all Lodging REIT peers, with best in class AFFO conversion from EBITDA above 75%	In an environment where RevPAR is up +2-4% and costs are up +4-6%, same store margins growth is less likely achievable
and costs	Has been a net acquirer since the onset of the pandemic given its strong liquidity and balance sheet, with another ~\$500M of buying power based on releveraging potential	There are fewer cost offsets to inflation late in the cycle given APLE's highly efficient operating structure
Valuation & Risk / Reward	Midcycle to near-peak cycle multiple = 13.0x EV/EBITDA on peak re-levered 2025E EBITDA of \$486M Implied value per share = \$21.00 (+24% upside potential)	Midcycle to near-trough multiple = 11.5x EV/EBITDA on normalized/recessionary EBITDA of \$384M Implied value per share = \$12.00 (-28% downside potential)

Source: BofA Global Research estimates, Bloomberg



Exhibit 21: RevPAR by company

APLE was one of the first to recover on RevPAR, but trails peers on Y/Y growth basis as a result



Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 28: Apple Hospitality re-leveraging capacity

By taking leverage up to \sim 5x, APLE could buy \sim 550M of incremental EBITDA at normal valuations; this would add \sim 10% growth and should allow APLE to continue being a net acquiror

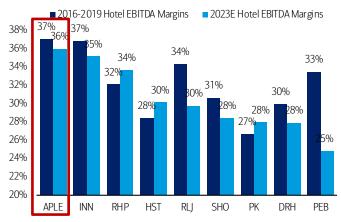
	All Lodging REITs	Average	Select Service Peers
2025E APLE Leverage	3.5x	3.5x	3.5x
Sector Average Leverage	4.2x	5.4x	6.6x
Releveraging Potential	0.7x	1.9x	3.1x
2025E EBITDA	\$439	\$439	\$439
M&A Capacity	\$296	\$830	\$1,363
Acquisition Multiple	12.0x	12.0x	12.0x
EBITDA Purchased	\$25	\$69	\$114
% Growth on Existing	6%	16%	26%

Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 22: Hotel EBITDA margins by company

APLE's margins are the highest among all Lodging REITs, but offer fewer cost offsets to inflation late in the cycle given the high efficiency operations

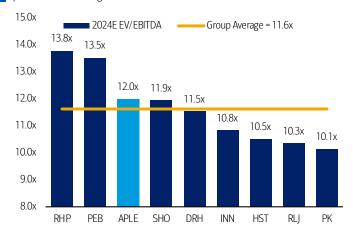


Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 24: 2024 EV/EBITDA by company

APLE trades above select service peers INN and RLJ and above the broader group average which we think is warranted given the strength of APLE's position and management's execution



Source: BofA Global Research estimates, company documents, Bloomberg

PEB: Lower to U/P as geographies weigh on returns

We lower Pebblebrook Hotels (ticker PEB, \$1.9B market cap) to Underperform from Neutral. Strategically, PEB's heavy West Coast and business transient exposure was an asset in the early to mid-2010's but has turned into a challenge post-COVID (see Ex. 18).

We see continued pressure from 1) overexposure to more challenged markets incl. San Fran, LA, Portland, Chicago, 2) less exposure to in-house group which is likely the most visible/best growth driver in '24, 3) risk of over-earning across resorts and ADRs broadly which have outperformed, offsetting some expected gains in occupancy, 4) focus on asset sales/deleveraging, vs. growth/releveraging given extended balance sheet.

La Playa reopening, \$300M on renovation projects, and some leisure green shoots are positives, but PEB still faces an elongated, occupancy based recovery from here. We maintain our \$13.50 PO based 13x our 2025E EBITDA of \$345M.

Exhibit 20: Pebblebrook Hotel Trust Bull/Bear Summary

Pebblebrook's risk/reward skews negative as it faces a tough operational environment and an elongated recovery, particularly in its west coast

Topic	Bull Case	Bear Case
RevPAR and	Group (30%), corporate (25%) and the top 5 urban CBDs (~50-55%) should drive better than industry average RevPAR	Resorts, which are over-earning, are 46% of EBITDA, 41% of NAV and 25% of rooms
Demand International Inbou 2023	International Inbound travel is still -88% below 2019 levels as of September 2023	The remaining ~10-12% points of international inbound travel recovery could take longer to fully recover; particularly in Pebblebrook's West Coast markets.
Geographies and	Favorable group markets in 2024 include Chicago, San Diego, DC (~20% market exposure)	Overweight 1) in hard to operate West Coast markets including San Francisco, Santa Monica and Portland and 2) in resorts that could be over-earning
Markets	PEB's urban market supply growth for the next 3 years of +0.7% is below the pre-pandemic average of +1.5% per year	San Francisco continues to be challenged, with the convention calendar down Y/Y in 2024 over 2023 (2H24 driven)
EBITDA, margins	Margins are -10 percentage pts below prior cycle peak levels; PEB's portfolio of independent hotels has historically outperformed peers on margin	In an environment where RevPAR is up +2-4% and costs are up +4-6%, same store margins growth is less likely achievable
and costs	PEB has a successful track record with redevelopment projects and identified an incremental \$295M of ROI projects which should generate +10% cash on cash returns	PEB's margins were best-in-class among full service REITs pre-pandemic and are now trailing all peers, and a longer recovery especially on the West Coast could prolong this dynamic
VI (* 0.5° I /	Midcycle to near-peak cycle multiple = 14.0x EV/EBITDA	Midcycle to near-trough multiple = 12.0x EV/EBITDA
Valuation & Risk / Reward	on peak/fully recovered 2025E EBITDA of \$400M	on normalized/recessionary EBITDA of \$300M
ward	Implied value per share = \$22.50 (+44% upside potential)	Implied value per share = \$6.00 (-61% downside potential)

Source: BofA Global Research estimates, Bloomberg



Exhibit 26: PEB Property and Company EBITDA Margins

PEB's margins have contracted from a peak of 35% to only an estimated 25% in 2023. San Fran exposure, reno and La Playa disruption are partial factors but so too are over-reliance on BT and other market challenges

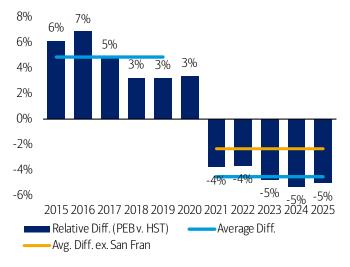


Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 27: PEB vs. HST EBITDA Margin Difference Over Time

Pre-COVID, PEB had best in-class margins that were 500bps (5pp) above HST since COVID due to market exposures and less business transient, PEB's margins are 500bps below HST and would still be 200bps below even ex. SF

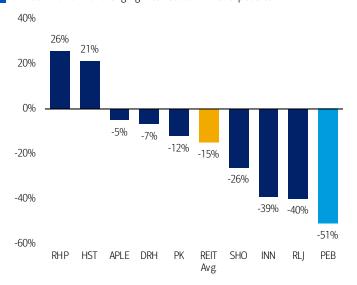


Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 28: PEB AFFO/Share Growth 2015-2023

PEB has the most challenged AFFO/share growth across Lodging REITs since the middle of last cycle, due in part to the timing of the Lasalle acquisition, and San Fran and challenging West Coast market exposures

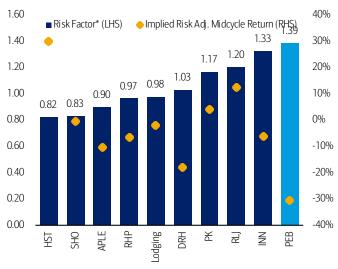


Source: BofA Global Research estimates, company documents

BofA GLOBAL RESEARCH

Exhibit 29: Lodging REIT relative risk and Midcycle Returns

PEB has the highest risk* (financial leverage, equity beta and equity risk premium) of all the Lodging REITs and the lowest risk-adjusted midcycle return potential



Source: BofA Global Research estimates, Bloomberg



Investment Rationale

Apple Hospitality REIT Inc.

We are Neutral rated on Apple Hospitality REIT as we think this best of breed select service REIT is 1) less levered than peers, 2) has more growth potential and 3) has industry-leading margins. We are however concerned by lower RevPAR growth risk, coupled with higher margin pressure given fewer cost offsets in select service.

Host Hotels & Resorts Inc.

We are Buy rated on HST as we believe the current valuation and strong balance sheet are attractive, combined with a better outlook for group and corporate demand, favoring full service portfolios. HST has steadily improved capital allocation under current management and we think there is room for growth based on the balance sheet should M&A activity pick up.

Pebblebrook Hotel Trust

We are Underperform rated on Pebblebrook as we think its heavy West Coast and business transient exposure, which were an asset in the early- to mid-2010s, have turned into a challenge post-COVID among union, labor and social issues. We see risks from continued exposure to challenged markets with less operating flexibility.

Price objective basis & risk

Apple Hospitality REIT Inc. (APLE)

Our \$18 PO on APLE is based on approx 12x our 2025E EV/EBITDA, a slight premium to the historical averages of peers. This is supported by APLE's solid balance sheet, higher than peer margins, and better fundamentals in the early stages of the recovery. This is however partly offset by less RevPAR growth as the recovery is now largely behind us, and our favoring of group and full service portfolios over select service.

Downside risks to our PO are 1) a longer recovery than expected, 2) a second peak of the COVID-19 outbreak, 3) rate pressure across the industry from lower than anticipated demand.

Host Hotels & Resorts Inc. (HST)

Our \$23 PO is based on approx. 12x our 2025E adjusted EBITDA, a midcycle multiple consistent with the group's multiple range and history. We believe this multiple is warranted given HST's asset quality, best-in-class management team and significant equity market liquidity, which helps differentiate the company from peers.

Risks to the downside are: 1) a weakening in the overall economic environment, leading to lower levels of business travel and depressed leisure spending, 2) higher-than-expected room supply growth, and 3) unforeseen circumstances, such as war or acts of terrorism.

Pebblebrook Hotel Trust (PEB)

Our \$13.50 PO is based on approximately 13x our 2025E EBITDA estimate, a premium to Lodging REITs peers that is consistent with historical trends. We believe this is supported PEB's highly flexible portfolio that is largely unencumbered by debt or brands.

Upside risks to our PO are: 1) an accelerating RevPAR environment, driven by better macroeconomic data, 2) greater-than-expected margin expansion, and 3) accretive acquisitions.

Downside risks to our PO are: 1) a longer than expected recovery, 2) structural decline in urban gateway lodging demand, 3) greater than expected inflationary cost pressures, and 4) rate pressure across the industry from lower than anticipated demand.



Ryman Hospitality Properties (RHP)

Our \$125 price objective is based on approximately 14.5x multiple on our 2025E EBITDA forecast, in line Ryman's long term midcycle multiple average. We think this multiple is justified by RHP's growth opportunities, relatively attractive valuation and significant group exposure which we expect to perform solidly once a therapeutic/vaccine is available to the general public.

Downside risks: 1) further weakening of macro trends, 2) a resurgence in cases of COVID-19, and 3) threat/acts of terrorism.

Analyst Certification

We, Shaun C. Kelley and Dany Asad, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



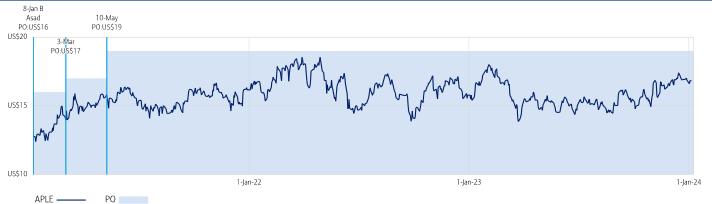
US - Gaming, Lodging and Leisure Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Boyd Gaming Corp	BYD	BYD US	Shaun C. Kelley
	Choice Hotels International	CHH	CHH US	Dany Asad
	DraftKings, Inc.	DKNG	DKNG US	Shaun C. Kelley
	Hilton Worldwide	HLT	HLT US	Shaun C. Kelley
	Host Hotels & Resorts Inc.	HST	HST US	Shaun C. Kelley
	Hyatt Hotels	Н	HUS	Shaun C. Kelley
	Marriott International Inc.	MAR	MAR US	Shaun C. Kelley
	Penn Entertainment	PENN	PENN US	Shaun C. Kelley
	Ryman Hospitality Properties	RHP	RHP US	Shaun C. Kelley
	Soho House & Co Inc	SHCO	SHCO US	Shaun C. Kelley
	Vail Resorts, Inc	MTN	MTN US	Shaun C. Kelley
	VICI Properties	VICI	VICI US	Shaun C. Kelley
	Wyndham Hotels & Resorts, Inc.	WH	WH US	Dany Asad
NEUTRAL				-
	Apple Hospitality REIT Inc.	APLE	APLE US	Dany Asad
	Caesars Entertainment Inc	CZR	CZRUS	Shaun C. Kelley
	Hilton Grand Vacations Inc	HGV	HGV US	Dany Asad
	Las Vegas Sands	LVS	LVS US	Shaun C. Kelley
	MGM Resorts International	MGM	MGM US	Shaun C. Kelley
	Park Hotels & Resorts Inc.	PK	PK US	Dany Asad
	Wynn Resorts Ltd	WYNN	WYNN US	Shaun C. Kelley
UNDERPERFORM				
	DiamondRock Hospitality	DRH	DRH US	Dany Asad
	Gaming & Leisure Properties, Inc.	GLPI	GLPI US	Shaun C. Kelley
	Marriott Vacations Worldwide	VAC	VAC US	Shaun C. Kelley
	Pebblebrook Hotel Trust	PEB	PEB US	Shaun C. Kelley
	Playa Hotels & Resorts	PLYA	PLYA US	Shaun C. Kelley
	Red Rock Resorts, Inc.	RRR	RRR US	Shaun C. Kelley
	RLJ Lodging Trust	RLJ	RLJ US	Dany Asad
	Sportradar Holding AG	SRAD	SRAD US	Shaun C. Kelley
	Summit Hotel Properties	INN	INN US	Dany Asad
	Sunstone Hotel Investors	SHO	SHO US	Dany Asad
	Travel + Leisure Co	TNL	TNL US	Dany Asad

Disclosures

Important Disclosures

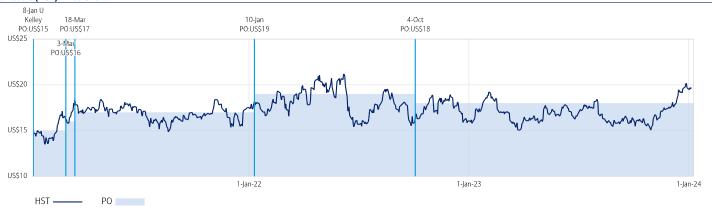
Apple Hospitality (APLE) Price Chart



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

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

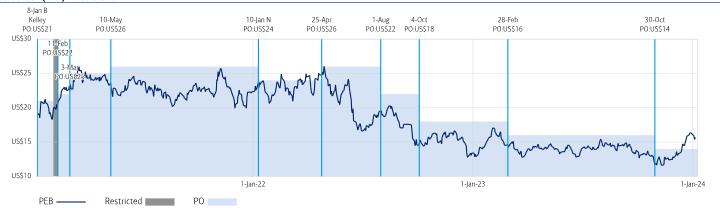
Host Hotels (HST) Price Chart



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

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

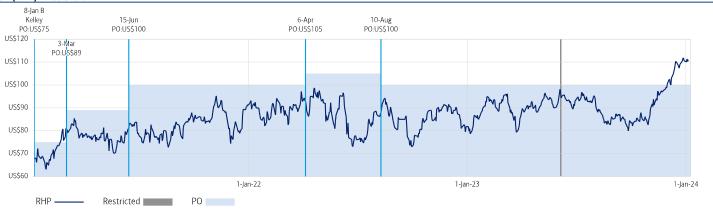
Pebblebrook (PEB) Price Chart



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

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

Ryman (RHP) Price Chart



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

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

Equity Investment Rating Distribution: Leisure - Hotel/Lodging Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	16	61.54%	Buy	12	75.00%
Hold	3	11.54%	Hold	2	66.67%
Sell	7	26.92%	Sell	5	71.43%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed. BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Apple Hospitality, Host Hotels, Pebblebrook, Ryman.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Ryman Hospitality.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Host Hotels & Res, Pebblebrook, Ryman Hospitality.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Apple Hospitality RE, Host Hotels & Res, Pebblebrook, Ryman Hospitality.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Apple Hospitality RE, Host Hotels & Res, Pebblebrook, Ryman Hospitality

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Host Hotels & Res, Pebblebrook, Ryman Hospitality.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Host Hotels & Res, Pebblebrook

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

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Apple Hospitality, Host Hotels, Pebblebrook, Ryman. The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Apple Hospitality RE, Host Hotels & Res, Pebblebrook, Ryman Hospitality.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments. Refer to BofA Global Research policies relating to conflicts of interest.

"BofA Securities" includes BofA Securities, Inc. ('BofAS') and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Áctivity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI, BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaría y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securit

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to

herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

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

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public inform

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

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

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this

