Residential REITs

Residential earnings recap week 3: AMH, INVH, KW, SUI, VRE

Price Objective Change

26 February 2024

Equity
United States
REITs

Joshua Dennerlein
Research Analyst
BofAS
+1 646 855 1681
joshua.dennerlein@bofa.com

Jeffrey Spector
Research Analyst
BofAS
+1 646 855 1363
jeff.spector@bofa.com

Steven Song
Research Analyst
BofAS
+1 646 855 0049
huainan.song@bofa.com

REITs Team
BofAS

See Team Page for List of Analysts

SFR is our top sub-sector in Resi; AMH has better growth

Within Residential REITs, we are most positive on the single family rental REIT sub-sector given (1) lack of existing inventory for sale, (2) depressed housing starts and (3) relative affordability favors rentals over purchasing. The initial guides from AMH and INVH support this view. That said, we believe AMH is better positioned than INVH going forward. Our thesis is driven by AMH's development platform and its ability to improve its portfolio as internally developed properties become a growing share of the overall portfolio. We expect AMH to deliver an AFFO CAGR of 7.7% (2028 vs 2023) vs INVH's 6.5%. We lower AMH PO to $42 from $44, update estimates for AMH & INVH, and reiterate Buys on AMH & INVH. AMH is on Spector's Top pick list and the bank's 2024 SMID Cap Ideas list (see note).

SUI: taking down our 2025 growth estimates

We remain very positive on the outlook for MH, RV and Marinas. SUI's 2024 core guide is consistent with our thesis on these asset classes. We moved SUI to Neutral (see note) last Summer given our concern that this core growth would not flow to the bottom line in 2024. SUI's initial outlook confirmed our concern. After updating our model, we lowered our 2025 FFO growth to 6.0% from 9.7%. Reiterate Neutral.

SUI's simplification plan is a step in the right direction

The biggest negative surprise from SUI was that it reported a “material weakness over financial reporting”. On the call SUI noted that it is “specific to the design of accounting controls over assessing goodwill at Park Holidays as a result of the material weakness in the design of this control”. SUI became twice as complex in a short period of time via the entry into the Marina sector and also the UK. The concern we have is that SUI's internal operational controls have not kept pace with this increased complexity. We will be looking for signs that SUI's efforts to “getting back to the basics to focus on core growth” includes improving internal systems.

KW: we are concerned about the dividend sustainability

We update estimates and reiterate our Underperform on KW as the quarter came in below our expectations. We remain highly focused on the dividend which our analysis (see note) found to not be 100% covered by reoccurring cash flows and instead by asset sales. The unrealized decline in the real estate value of KW's co-investment portfolio (non-cash charge but impacts their adjusted EBITDA) points to higher cap rates that likely will reduce proceeds on future sales.

VRE continues to execute on its value creation plan

VRE's initial 2024 outlook came in below our expectations. We note that management was extremely conservative with their limited initial guide for 2023. Positively, VRE completed its transition to a 100% multifamily portfolio and continues to look at ways to optimize the portfolio. Management continues to position the company for a potential sale. Timing remains uncertain given the capital markets backdrop. We update estimates and reiterate Neutral.

See inside for Key comments from the earnings calls

See page 11 for Key terms

Exhibit 1: Summary of PO changes
Updated price objective after review of models

Ticker	Old PO	New PO
AMH	$44.00	$42.00

Source: BofA Global Research, prices as of 2/23/2024

BofA GLOBAL RESEARCH

BofA's Residential REITs earnings update
See inside for more details on PO & estimate changes

Key metrics

Exhibit 2: Lease rate growth: BofA estimates before and after 4Q23 earnings

We modified our assumptions for lease rate growth post earnings.

	FY2024				FY2025			
	New		Renewal		New		Renewal	
	Before	Post	Before	Post	Before	Post	Before	Post
Apartment								
AVB	1.1%	0.1%	4.1%	4.0%	1.4%	1.5%	4.5%	4.5%
CPT	-2.4%	-2.0%	4.4%	3.5%	1.3%	0.0%	4.9%	3.4%
EQR	0.0%	-0.4%	5.5%	4.0%	1.3%	1.0%	5.3%	4.3%
ESS	1.3%	1.2%	4.8%	1.8%	3.0%	2.1%	4.5%	3.5%
MAA	-2.4%	-3.3%	4.9%	4.6%	1.1%	0.0%	4.8%	4.8%
UDR	-1.4%	-1.5%	3.5%	3.1%	1.9%	1.0%	5.5%	3.9%
SFR								
AMH	4.3%	4.4%	6.0%	5.8%	4.3%	4.1%	5.3%	5.0%
INVH	2.0%	1.4%	6.0%	6.2%	3.8%	2.5%	4.6%	4.6%

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 3: Lease rate growth: company guidance for FY24

Companies provided guidance for FY24 lease rate growth.

	New	Renewal	Blended
Apartment			
AVB	0.0%	4.0%	2.0%
CPT	-0.6%	3.6%	1.2%
EQR	0.0%	4.0%	2.0%
ESS	1.3%	1.8%	n.a.
MAA	-3.1%	4.8%	1.0%
UDR	-1.5%	3.0%	0.7%
SFR			
AMH	Low 4%	5% area	High 4%
INVH	n.a.	n.a.	High 4% to low 5%

Source: company filings, conference calls

BofA GLOBAL RESEARCH

Exhibit 4: Same store occupancy: actual vs. company guidance for FY24

Companies provided guidance for FY24 occupancy.

	4Q23 actual	2023 actual	January	FY24 guidance
Apartment				
AVB	95.6%	95.8%	n.a.	95.8%
CPT	94.9%	95.3%	95.0%	95.3%
EQR	95.8%	95.9%	96.2%	95.9%
ESS	96.2%	96.5%	96.2%	96.2%
MAA	95.5%	95.6%	96.2%	95.7%
UDR	96.9%	96.7%	97.2%	96.7%
SFR				
AMH	96.2%	96.7%	96.0%	Low 96%
INVH	97.1%	97.4%	97.5%	97.4%

Source: company filings, conference calls

Note: UDR did not provide separate occupancy guidance but commented "we expect the combination of occupancy and bad debt to be roughly flat in 2024." in 4Q23 earnings call.

BofA GLOBAL RESEARCH

Exhibit 5: FY24 same store revenue growth guidance vs. our assumption
Companies provided guidance range for FY24 same store revenue growth.

	Guidance		BofA assumption
	Low	High	
Apartment			
AVB	1.6%	3.6%	3.1%
CPT	0.5%	2.5%	1.5%
EQR	2.0%	3.0%	2.6%
ESS	0.7%	2.7%	1.9%
MAA	0.2%	1.7%	0.9%
UDR	0.0%	3.0%	1.8%
SFR			
AMH	3.8%	5.8%	5.1%
INVH	4.5%	5.5%	5.1%

Source: company filings, conference calls

BofA GLOBAL RESEARCH

Exhibit 6: FY24 market rent growth assumption
Companies provided assumptions for FY24 market rent rate growth.

	Company assumption
Apartment	
AVB	2.4%
CPT	1.4%
EQR	n.a.
ESS	1.3%
MAA	0.0%
UDR	1.0%
SFR	
AMH	n.a.
INVH	n.a.

Source: company filings, conference calls

BofA GLOBAL RESEARCH

Key comments from the earnings calls

AMH - key quotes from the earnings call on 2/23

- **Guidance / building blocks for 2024**:
    - **Earn in**: approximately 3%
    - **Loss to lease**: low 3% range today
    - **January occupancy**: "For the month of January, same home average occupied days was 96%."
    - **January leasing rates**: "new and renewal spreads were 4.3% and 5.7%, respectively. This resulted in blended rate growth of 5.3% for the month."
    - **February performance so far**: "February is off to a fantastic start. I would expect new and renewal leases to be a tick better in terms of rate growth over January"
    - **New / renewal lease rate guide**: "for the full year, our expectation on new lease rate growth will be in the low 4%s and renewal rate growth to be in the 5% area"
    - **New / renewal dynamics**: "On the renewal side, there's going to be an expectation that it returns to kind of normal seasonality where the renewal strength is relative to news is strong in Q1 and Q4, with news outpacing renewals during the spring leasing season. And that's our expectation for this year."
    - **Renewal notice**: "February and March, we've gotten many of those results back already, and those are trending slightly better than January. We're sending out renewals in the 5% to 6% range into April."
    - **Blended lease rate guide**: "2024 spread in the high 4% area"
    - **Occuanpcy guide**: low 96% area
    - **Bad debt**: "our outlook contemplates that bad debt remains in the low 1% area or so over the course of this year." "hypothetically, if our bad debt returned to normal on a full-year calendar basis, that would translate into about, call it, 30 basis points to 40 basis points of additional same-home revenue contribution." "long-term run-rate of 80 basis points to 100 basis-points or so."
    - **Expense**:
        - **Property tax**: "property tax growth in the low 7% area"
        - **Insurance**: "high single digits based on a successful renewal campaign that becomes effective at the end of this month.'
        - **Other expenses**: "5.25% growth on all other expenses reflecting the general inflationary environment"
- **Disposition cap rate**: "an average disposition cap rate in the mid-3% area"
- **Payoff maturing debt in 2024**: "we recently gave notice to pay off one of our upcoming maturities by the end of the first quart" "With respect to our remaining

2024 maturity, we expect to opportunistically monitor the market for refinancing windows and have contemplated a midyear payoff in guidance."

- **Development yield**: "last year, we delivered in the high 5%s as we underwrite. That's still 100 basis points higher than anything that we are seeing today from National Builders or MLS" "Probably high 5%s, maybe a little bit at 6%, but let's keep ourselves in the high 5%s at this point for deliveries in 2024."

- **Long term run rate for property tax growth**: "4% to 5%"

VRE - key quotes from the earnings call on 2/22

- **Guidance for 2024**:

    - **Rental revenue**: "At the midpoint, the growth is comprised of approximately 350 basis points of rental revenue growth, primarily driven by recapture of loss to lease, and 100 basis points from Haus25 due to the impact of retail leasing and concessions burning off as a result of the lease-up." "rental revenue growth will be higher than our annual projection in the first quarter as a result of Haus's relative performance this year versus last, before returning to a more normal seasonal bell curve."

    - **Occupancy**: "In terms of occupancy, it's not really the primary metric that I would say we target, I would say that we do try to maintain that around the 95% understanding that it may fluctuate from time to time by the slightly above or below that"

    - **Expense**: "At the midpoint, we see 160 basis points related to increases in insurance, as we believe premiums will continue realizing double-digit increases, and about 175 basis points related to expense inflation, which is offset by anticipated savings from various operational initiatives." "We will also have about 215 basis points of expense growth, primarily in the second quarter, when we lap the recognition of the credits received last year on the tax appeals on the two Jersey City assets."

    - **Property management expense and G&A**: "we expect overhead costs of real estate services, which is where we record our property management expenses, and G&A to remain relatively flat"

- **Strategy going forward**: "First, continued operational art performance through a number of platform and portfolio optimization strategies. Second, capital allocation initiatives focused on generating earnings and value creation to further boost the positive baseline performance from our multi-family portfolio. And third, further strengthening of our balance sheet."

- **Supply**: "Almost half of our properties are located along the Jersey City waterfront, with very limited supply as virtually no new projects were completed last year, and approximately 1,200 units expected to be completed within the next two years."

- **Guidance low / high end assumption**: "Our guidance at the low end is assuming that the macroeconomic headwinds discussed by Mahbod result in a decline in job and wage growth in our market, thus slowing the pace of rent growth coupled with elevated expenses. On the high end of our range, we've assumed higher rental revenue growth given the low supply in our market, albeit below 2022 and 2023 levels, but still with elevated expense growth due to insurance and real estate taxes, which are difficult to predict from largely outside of the company's control."

KW - key quotes from the earnings call on 2/22

- **Updates on cost reduction and asset sales**: "Thus far, two months into this year, we have either implemented or identified approximately 70% of the cost cuts and have either completed or are under contract in over half of the asset sales, which would generate cash to KW of $320 million and GAAP gains on sale in excess of $100 million."

- **NOI growth from multifamily stabilization**: "we look to find new opportunities to grow our stabilized multifamily portfolio. A large part of this growth will be driven by the near-term stabilization of the approximately 4,000 units that is expected to add $43 million of estimated annual NOI to KW."

- **Fair value depreciation in co-investment**: "our unconsolidated investments, which are largely held at fair value, were impacted by non-cash adjustments. In Q4, we saw valuations depreciate by 4%, resulting in $176 million of fair value reductions, with estimated values being impacted by higher implied cap rates as a result of the overall interest rate environment."

- **Loss to lease for US multifamily assets**: "In the U.S., we saw seasonal leasing trends pick up in the fourth quarter, with renewal leasing spreads totaling 3.3% and loss to lease totaling approximately 2% at quarter end."

- **January multifamily leasing**: "renewal spreads increasing to 3.8% and asking rents up 2%"

SUI - key quotes from the earnings call on 2/21

- **Guidance for 2024**:

    - **Acquisition / disposition**: "our guidance includes acquisitions and dispositions and capital markets activity through February 20, but it does not include the impact of prospective acquisitions, dispositions or capital markets activities"

    - **Transient revenue expectation**: "transient revenue expectations in total for RV are expected to be down 2.75%. In Marina, we are expecting an increase or underwriting, an increase in Marina transient revenue of about 10% for the year. And in the U.K., we are expecting transient revenue to increase just about 2.5% for the year."

    - **UK home sale margin**: "For 2024, our margin expectations are higher than in 2023, given the contribution to overall margin from home sales at Sandy Bay."

    - **Operating expense**: "in supply and repair, we saw a decrease year-over-year, for example, in '23, and we are growing off of that base north of 10% from an expectation standpoint."

    - **Interest expense**: "there were increases to underlying rates over the course of 2023. So there is a full year of that impact at the higher rates than where they started in 2023, which should help bridge that gap." "Given that we are spending less on the ground-up development and expansion side, there is a reduction year-over-year in capitalized interest."

- **Goodwill impairment**: "Based on the macroeconomic dynamics in the U.K., we have recognized total non-cash impairments of approximately $370 million related to the goodwill associated with the Park Holidays platform acquisition. As part of our year-end audit process, it was determined that the impairments should have been recognized in earlier periods, resulting in a material weakness and internal control over financial reporting."

- **UK loan resolution**: "Separate from Park Holidays and as previously disclosed, in late December, we obtained title to three real estate assets securing the U.K. note. Additionally, we recently completed the receivership and disposition processes related to the manufacturing businesses that represented the remaining collateral on the U.K. note. As we previously have stated, because we did not wish to operate the manufacturing businesses, we moved expeditiously to dispose of them. As of this month, the U.K. note has been completely resolved."

- **Business simplification**: "in this effort to get back to basics and focus on this strong growth in our core businesses and translate that directly to per share growth, we're looking to simplify our business, to remove complexities, both from a modeling standpoint, but also from an investment standpoint"

  - **Non-strategic assets**: "To simplify our business and reduce exposure to variable rate debt, in the fourth quarter, we made strong progress toward monetizing assets no longer deemed to be strategic."

  - **JVs**: "Given our focus on simplifying how we own properties, we sold our majority equity interest in three joint venture properties and acquired their minority interest in 14 joint venture properties so that we now own 100% of them."

  - **Rezplot**: "we also sold our ownership interest in Rezplot, whose Campspot software is a valuable tool that we continue to use for managing our RV bookings. Given the strong position we helped Campspot achieve over the past several years, it was an opportune time to divest our interest."

  - **Consumer loan portfolio**: "During the quarter, we recycled capital from a $53 million portfolio of Manufactured Housing consumer loans held on our balance sheet and used the net proceeds to pay down debt."

INVH - key quotes from the earnings call on 2/14

- **Building blocks / guidance for 2024**:

  - **Earn in**: 2.5-3%

  - **Loss to lease**: "high single-digit"

  - **January lease rate growth**: "January blended rent growth was 3.5%, comprised of renewal rent growth of 5.9% and a negative new lease growth of 1.5%. Early indications lead us to believe that new lease rates have already begun to turn positive again in February's activity to date."

  - **Blended lease rate growth assumption**: "guidance assumes same store blended rent growth in the high 4% to low 5% range" "there could be some upside to those numbers throughout the year. We're certainly not baking that into our guidance."

  - **Renewal notice**: "As you look forward now, we went out in February in the low eights, in April and May in the high sevens."

  - **January occupancy**: 97.5%

- **Occupancy**: "assumes 2024 average occupancy will be similar to our full year 2023 result"

- **Bad debt**: "continued improvement in our bad debt as a percentage of rental revenue to an expected range of 65 basis points to 95 basis points." "steady improvements over the course of this year"

- **Expenses**: "property tax expense growth in a range of 8% to 10%, and insurance expense growth in the mid-to-high teens."

- **SS NOI cadence**: "we anticipate same store NOI growth will be higher in the second half of the year than in the first half."

- **Capex growth**: "With respect to CapEx, I think that that is going to continue to grow at sort of an inflationary rate."

* **Occupancy strategy in 4Q**: "As we typically do in the slower winter leasing season, we prioritized higher occupancy in the fourth quarter to better position the portfolio as we head into our upcoming peak leasing season."

* **Property tax expectation**: "we are not assuming any improvement in millage rates. I think we are taking a somewhat more conservative approach, as I think our experience over the last couple of years warrant."

* **Impact from property/asset management business**: "the $0.02 that we outlined in the bridge, just to be clear, that is the net contribution based on the property management and asset management fees that we will earn, net of the incremental cost that we expect to incur to manage those additional 14,000 homes. As far as what the opportunity could be over time and distance, yes, as we talked about, we believe that this will allow us to enhance the efficiency with which we manage our owned portfolio. I would say that those efficiency gains are not factored into our guidance."

* **Disposition cap rates**: "it certainly feels like we can continue to sell our dispositions back into the MLS kind of in the mid-to-high threes, low fours, depending on the marketplace."

* **Acquisition cap rates**: "we just have a growing backlog of opportunities to work with them on buying partial and full community deals. And I think we feel good about where the spread is on potential cap rates for us. And I think it's consistent with what we're -- it's clearly, call it, in the high fives, low sixes in terms of where we think there are opportunities for that."

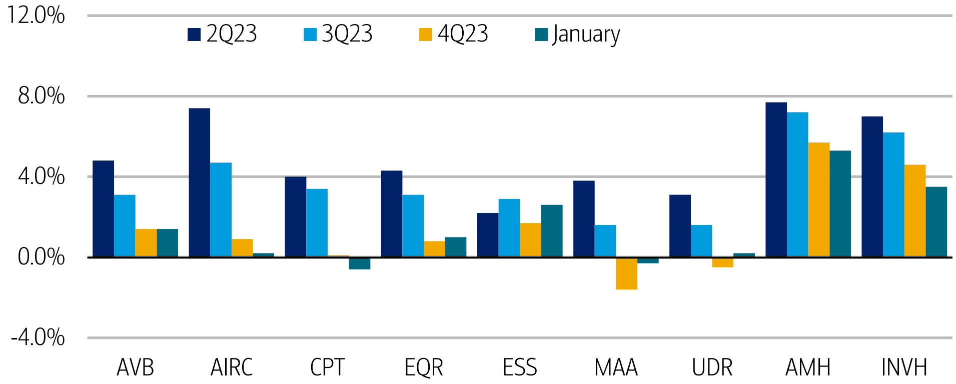
Please see below to find comments from companies that reported in previous weeks:

* Residential REITs: Residential earnings recap week 1: AVB, CPT, ELS, EQR

* Residential REITs: Residential earnings recap week 2: ESS, MAA, UDR

Leasing rates

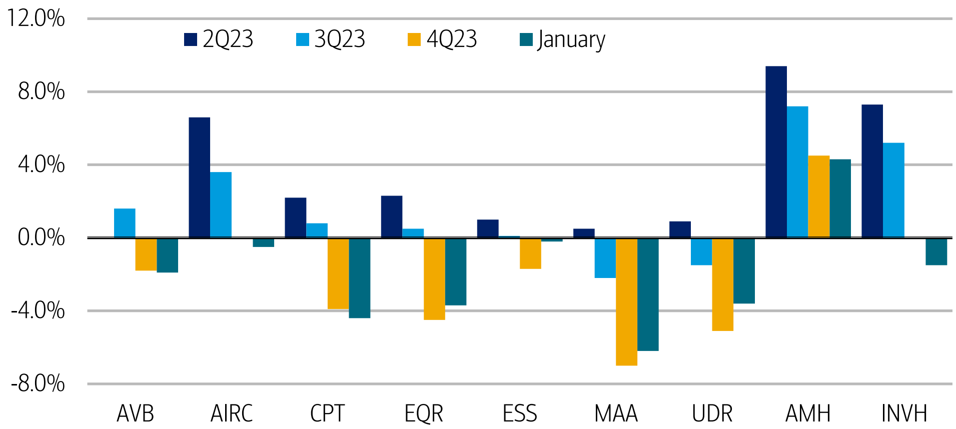
Exhibit 7: Residential REITs blended lease rate growth Y/Y
Last 3 quarters' blended lease growth have been trending down



Source: Company filings

BofA GLOBAL RESEARCH

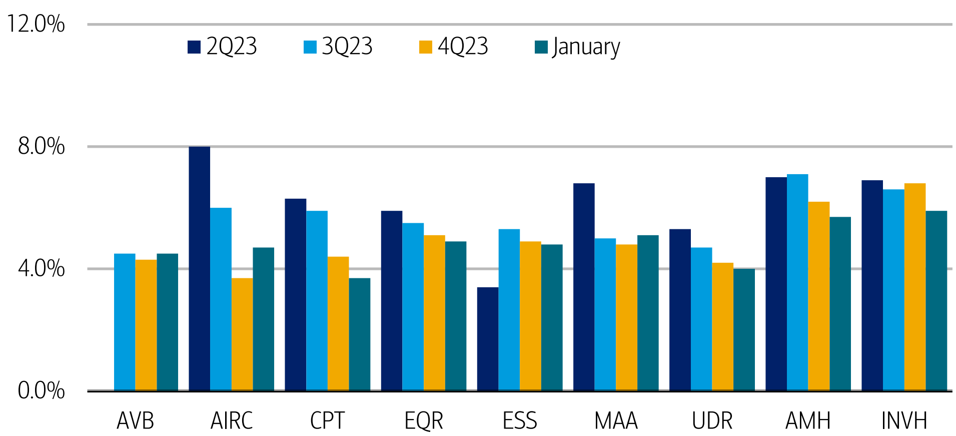
Exhibit 8: Residential REITs new lease rate growth Y/Y
Last 3 quarters' new lease growth have been trending down



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 9: Residential REITs renewal lease rate growth Y/Y
Last 3 quarters' renewal lease growth have been trending down



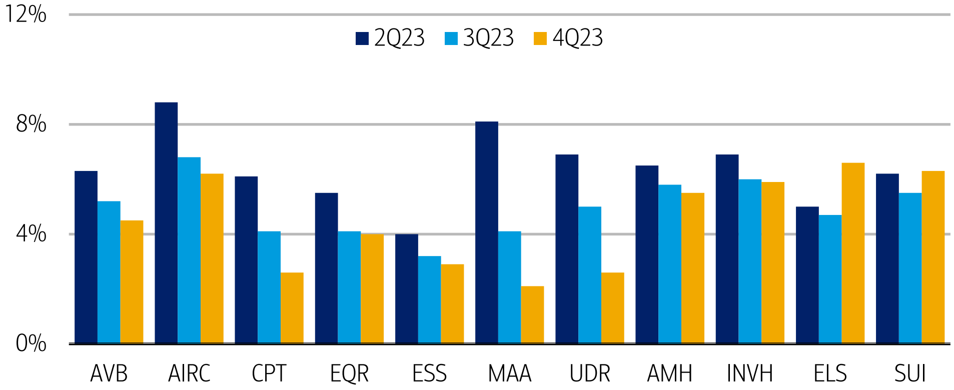
Source: Company filings

BofA GLOBAL RESEARCH

Same store

Exhibit 10: Residential REITs SS revenue growth Y/Y

Last 3 quarters' same store revenue growth have been trending down

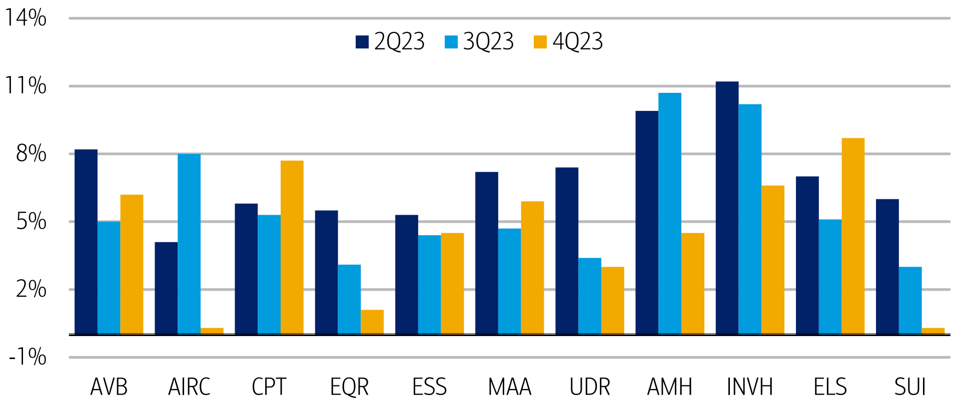


Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 11: Residential REITs SS expense growth Y/Y

Last 3 quarters' same store expense growth have been trending down

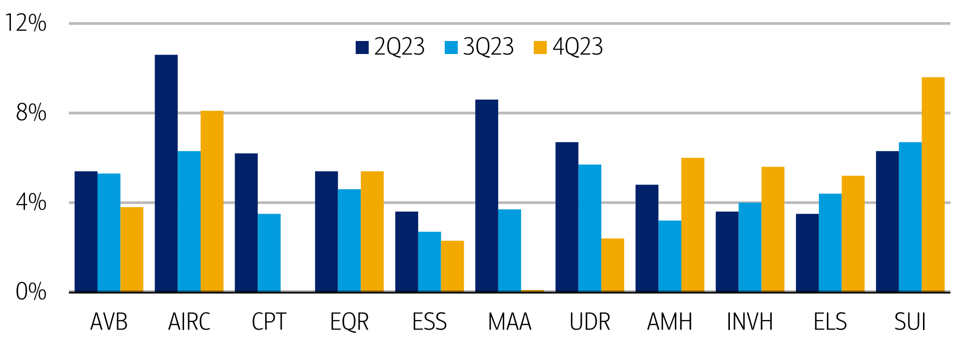


Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 12: Residential REITs SS NOI growth Y/Y

Last 3 quarters' same store NOI growth have been trending down for Apartment REITs

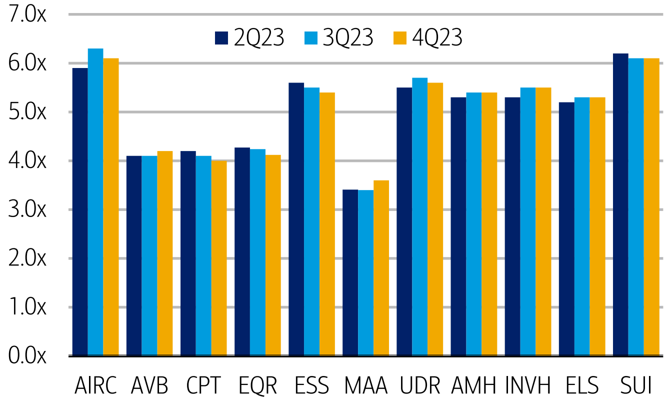


Source: Company filings

BofA GLOBAL RESEARCH

Leverage & annualized turnover

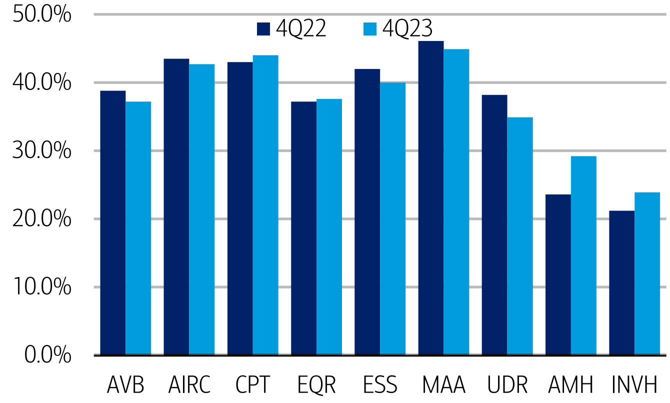
Exhibit 13: Residential REITs leverage
Last 3 quarters' Net debt / EBITDA is trending steady



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 14: Residential REITs annualized turnover
Apartments have higher turnover than SFR



Source: Company filings

BofA GLOBAL RESEARCH

Key terms

Apts: Apartments
Avg.: average
bp: basis point
CA: California
Cap rate: capitalization rate
FY: full year
IRR: internal rate of return
MH: manufactured housing
Nareit: National Association of Real Estate Investment Trusts
NOI: net operating income
PO: price objective
QTD: quarter to date
RV: recreational vehicle
SE: southeast
SFR: single family rental
SS: same store
Y/Y: year over year
YE: year end
AIRC: Apartment Income REIT Corp
AVB: AvalonBay Communities Inc
CPT: Camden Property Trust
EQR: Equity Residential
ESS: Essex Property Trust Inc
MAA: Mid-America Apartment Communities Inc
UDR: UDR, Inc.
AMH: American Homes 4 Rent
INVH: Invitation Homes Inc
ELS: Equity LifeStyle Properties Inc
SUI: Sun Communities Inc

PO & estimate changes

Exhibit 15: Summary of PO changes
Updated price objective after review of models

Ticker	Old PO	New PO	QRQ	Price
AMH	$44.00	$42.00	B-1-7	$35.24

Source: BofA Global Research, prices as of 2/23/2024

BofA GLOBAL RESEARCH

Exhibit 16: Summary of estimate changes
Updated published estimates after review of models

	2024		2025		2026		2027		2028	
Ticker	Old	New	Old	New	Old	New	Old	New	Old	New
AMH	$1.77	$1.74	$1.89	$1.87	$2.01	$2.02	$2.15	$2.19		$2.38
INVH	$1.88	$1.87	$1.96	$1.99	$1.92	$2.11	$1.92	$2.24		$2.38
KW	($0.02)	($1.36)	($0.03)	($0.06)	$0.07	$0.00	$0.23	$0.02		$0.13
SUI	$7.15	$7.12	$7.84	$7.55	$8.36	$7.96	$8.75	$8.25		$8.57
VRE	$0.58	$0.52	$0.54	$0.59	$0.58	$0.64	$0.58	$0.69		$0.71

Source: BofA Global Research

BofA GLOBAL RESEARCH

AMH (B-1-7): After updating our model for 4Q23 earnings, we are modifying our estimates (see table above) and lowering our PO to $42 from $44. Our $42 price objective for AMH trades in line (previously 10% premium) with our new forward NAV estimate of $42. The macro backdrop no longer supports our premium. We derive our NAV estimate by applying a 5.0% cap rate (unchanged) to our forward NOI estimate of $987.7mn. We use a 5.0% cap rate based on our outlook for interest rates and current market/transaction comps.

INVH (B-1-7): After updating our model for 4Q23 earnings, we are modifying our estimates (see table above) and maintaining our PO of $38. Our $38 price objective for INVH trades at a 5% discount to our new forward NAV estimate of $40. We derive our NAV estimate by applying a 5.1% cap rate (previously 5.0%) to our forward NOI estimate of $1.6bn. We use a 5.1% cap rate based on our outlook for interest rates and current market/transaction comps.

KW (B-3-8): After updating our model for 4Q23 earnings, we are modifying our estimates (see table above) and maintaining our PO of $7.2. Our $7.2 price objective for KW trades in line with our new forward NAV estimate of $7.2. We derive our NAV estimate by applying a 6.5% (unchanged) blended cap rate to our forward NOI estimate of $437.9mn. We use a 6.5% cap rate based on our outlook for interest rates and current market/transaction comps.

SUI (B-2-7): After updating our model for 4Q23 earnings, we are modifying our estimates (see table above) and maintaining our PO of $147. Our $147 price objective for SUI trades in line with our new forward NAV estimate of $147. We derive our NAV estimate by applying a 5.0% cap rate (previously 4.9%) to our forward NOI estimate of $1.3bn. We use a 5.0% cap rate based on our outlook for interest rates and current market/transaction comps.

VRE (B-2-7): After updating our model for 4Q23 earnings, we are modifying our estimates (see table above) and maintaining our PO of $17. Our $17 price objective for VRE trades in line (previously 10% discount) with our new forward NAV estimate of $17. We remove the discount given that VRE has completed its office assets sales. We derive our NAV estimate by applying a 6.2% cap rate (unchanged) to our forward NOI estimate of $192.4mn. We use a 6.2% cap rate based on our outlook for interest rates and current market/transaction comps.

Exhibit 17: Stocks mentioned
Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
AMH	AMH US	American Homes 4Rent	US$ 35.24	B-1-7
AVB	AVB US	AvalonBay	US$ 175.4	B-1-7
CPT	CPT US	Camden Property	US$ 94.85	B-3-7
ELS	ELS US	Equity Lifestyle	US$ 66.82	A-2-7
EQR	EQR US	Equity Residential	US$ 60.2	B-1-7
ESS	ESS US	Essex Property	US$ 229.34	B-2-7
INVH	INVH US	Invitation Homes	US$ 33.28	B-1-7
KW	KW US	Kennedy Wilson	US$ 9.34	B-3-8
MAA	MAA US	Mid-America Ap	US$ 126.32	B-3-7
SUI	SUI US	Sun Communities	US$ 131.39	B-2-7
UDR	UDR US	UDR, Inc.	US$ 35.85	B-2-7
VRE	VRE US	Veris Residential	US$ 14.85	B-2-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

American Homes 4 Rent (AMH)

Our $42 PO for AMH trades in line with our forward NAV estimate. We now apply a 5.0% cap rate to our forward stabilized NOI estimate. We use 5.0% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of AMH. Upside and downside risks to our PO are: inability to obtain financing for further acquisitions, acquisition pace of homes faster/slower than expected, home price appreciation faster/slower than expected (impacting the number of homes that can be acquired), transaction cap rates in its markets are higher/lower than what we're applying in the NAV, and stabilized NOI generated from its homes is higher/lower than expected.

AvalonBay Communities Inc (AVB)

Our $206 price objective for AVB trades in line with its forward NAV estimate. We apply a 5.7% cap rate to our forward NOI estimate to derive our NAV estimate. We use 5.7% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of AVB. The upside risks to our price objective are better-than-expected employment and operating conditions in AVB's markets and lower interest rates. The downside risks to our price objective are employment and operating conditions in AVB's markets deteriorating beyond our expectations and higher interest rates. The development pipeline also exposes AVB to project execution and lease-up risk. In addition, a reduction in GSE lending to the multifamily sector could weigh on AVB's access to capital, borrowing costs and direct real estate values.

Camden Property Trust (CPT)

Our price objective for CPT of $97 trades at a 10% discount to our forward NAV estimate. We derive our NAV estimate from applying a 6.4% cap rate to our forward NOI estimate. We use a 6.4% cap rate for CPT based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of CPT. The upside risks to our price objective are better-than-expected job growth and operating conditions in CPT's markets and lower interest rates. The downside risks to our price objective are unemployment and operating conditions in CPT's markets deteriorating beyond our expectations and higher interest rates. In addition, a reduction in GSE (government sponsored enterprise) lending to the multifamily sector could weigh on CPT's access to capital, borrowing costs, and direct real estate values.

Equity LifeStyle Properties (ELS)

Our $72 price objective for ELS trades at a 20% premium to our forward NAV estimate. We derive our NAV estimate by applying a 4.7% cap rate to our forward NOI estimate. We use a 4.7% rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of ELS. Downside risks to our PO are declining affordable manufactured housing and RV fundamentals as well as higher interest rates, while upside risks are better than expected fundamentals and accretive acquisition opportunities as well as lower interest rates.

Equity Residential (EQR)

Our $73 PO for EQR trades in line with our forward NAV. We derive our NAV estimate by applying a 5.9% cap rate to our forward NOI estimate. We use a 5.9% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of EQR. The upside risks to our price objective are better-than-expected employment and operating conditions in EQR's markets and lower interest rates. The downside risks to our price objective are employment and operating conditions in EQR's markets deteriorating beyond our expectations and higher interest rates. The development pipeline also exposes EQR to project execution and lease-up risk. In addition, a reduction in GSE (government-sponsored enterprise) lending to the multifamily sector could weigh on EQR's access to capital, borrowing costs and direct real estate values.

Essex Property Trust, Inc. (ESS)

Our $250 price objective trades in line with our forward NAV estimate. We derive our one year forward NAV estimate by applying a 5.6% cap rate to our forward NOI estimate. We use 5.6% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of ESS. We like the high quality nature of ESS' West Coast markets that are expected to see above average job and wage growth. The upside risks to our price objective are better than expected employment and operating conditions in ESS's markets and lower interest rates. The downside risks to our price objective are employment and operating conditions in ESS's markets deteriorating beyond our expectations and higher interest rates. Also, developments expose ESS to project execution and lease-up risk. In addition, a reduction in GSE lending to the multifamily sector could weigh on ESS's access to capital, borrowing costs, and direct real estate values.

Invitation Homes Inc (INVH)

Our $38 PO for INVH trades at a 5% discount to our forward NAV estimate. We apply a 5.1% cap rate to our forward stabilized NOI estimate. We derived current cap rates based on our view of interest rates over the next year, current private market/transaction comps, and INVH's current market exposure. Upside and downside risks to our PO are: access to financing, lower/higher interest rates, high/lower macro growth, lower/higher mortgage availability for homeowners, home price appreciation faster/slower than expected (impacting the number of homes that can be acquired and/or NAV), acquisition pace of homes faster/slower than expected, transaction cap rates in its markets are lower/higher than what we're applying in the NAV, and stabilized NOI generated from its homes is higher/lower than expected.

Kennedy Wilson (KW)

Our $7.20 price objective for KW is in line with our forward 12-month NAV. We apply a 6.5% cap rate to our forward NOI estimate of $438mn to calculate our NAV. We use a 6.5% cap rate for KW based on our view of interest rates over the next year, comparable transaction comps, and the market exposure of KW. Based on asset management peers and perceived stickiness of KW's investment management fees, we apply a 15x multiple to the annualized EBITDA from this business. Our NOI growth estimate is +2.0% for the commercial portfolio and +4.4% for the multifamily portfolio. We also apply a 11.5x multiple to Hotel EBITDA to arrive at a market value for these assets.

Upside risks to our PO are capital raises, operating conditions and development yields above our expectations.

Downside risks are operating conditions and yields below our expectations. KW is also exposed to global shocks and changes to monetary policy by the ECB. Further, a prolonged period of tight credit market conditions could weigh on access to capital, borrowing costs, and direct real estate values.

Mid-America Apartment Communities, Inc. (MAA)

Our $132 price objective implies a 10% discount to our forward NAV estimate. We derive our one year forward NAV estimate by applying a 6.3% cap rate to our forward NOI estimate. We use a 6.3% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of MAA.

Downside risks to our PO are the company's high exposure to rising levels of supply, increasing tax and insurance expenses, and slowing inbound migration.

Upside risks to our PO are positive suburban trends, less of an impact from supply on fundamentals, and long-term demand in the Sunbelt.

Sun Communities (SUI)

Our $147 price objective for SUI trades in line with our forward NAV estimate. We derive our NAV estimate by applying a 5.0% cap rate to our forward NOI estimate. We use a 5.0% rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of SUI. Downside risks to our PO are declining affordable manufactured housing and RV fundamentals as well as higher interest rates, while upside risks are better than expected fundamentals and accretive acquisition opportunities as well as lower interest rates.

UDR, Inc. (UDR)

Our $40 price objective for UDR assumes the stock trades in line with our forward NAV estimate. We apply a 6.0% cap rate to our forward NOI estimate to derive our NAV. We use a 6.0% cap rate based on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of UDR. The downside risks are operating conditions in UDR's markets deteriorating beyond our expectations, increased project execution and lease-up risk from development projects, timing risk from JVs, and higher interest rates. A reduction in GSE lending to the multifamily sector could weigh on UDR's access to capital, borrowing costs and direct real estate values. The upside risks to our price objective are better-than-expected employment and operating conditions in UDR's markets, and lower interest rates.

Veris Residential Inc (VRE)

Our price objective of $17.00 for VRE is in line with our forward NAV estimate. We apply a 6.2% blended cap rate to our forward NOI estimate. We base our cap rates on our view of interest rates over the next year, current private market/transaction comps, and the market exposure of VRE. Upside risks to our PO are plan execution, operating conditions and investment yields above our expectations, and capital focused on VRE's markets driving asset values higher. Downside risks to our PO are plan execution, operating conditions, investment yields and disposition cap rates below our expectations. Further, a prolonged period of tight credit market conditions could weigh on the shares.

Analyst Certification

We, Joshua Dennerlein and Jeffrey Spector, 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 - REITs Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Agree Realty Corp	ADC	ADC US	Joshua Dennerlein
	Alexandria Real Estate Equities	ARE	ARE US	Joshua Dennerlein
	American Homes 4 Rent	AMH	AMH US	Jeffrey Spector
	Americold Realty Trust	COLD	COLD US	Joshua Dennerlein
	AvalonBay Communities Inc	AVB	AVB US	Joshua Dennerlein
	Boston Properties	BXP	BXP US	Jeffrey Spector
	Brixmor Property Group	BRX	BRX US	Jeffrey Spector
	COPT Defense Properties	CDP	CDP US	Camille Bonnel
	Cousins Properties Inc.	CUZ	CUZ US	Camille Bonnel
	EastGroup Properties	EGP	EGP US	Jeffrey Spector
	Empire State Realty Trust	ESRT	ESRT US	Camille Bonnel
	Equity Residential	EQR	EQR US	Jeffrey Spector
	Essential Properties	EPRT	EPRT US	Joshua Dennerlein
	Federal Realty	FRT	FRT US	Jeffrey Spector
	Invitation Homes Inc	INVH	INVH US	Joshua Dennerlein
	Kimco Realty	KIM	KIM US	Jeffrey Spector
	Kite Realty Group	KRG	KRG US	Jeffrey Spector
	Phillips Edison & Company	PECO	PECO US	Jeffrey Spector
	Prologis, Inc.	PLD	PLD US	Camille Bonnel
	Public Storage, Inc.	PSA	PSA US	Jeffrey Spector
	Regency	REG	REG US	Jeffrey Spector
	Rexford Industrial Realty	REXR	REXR US	Camille Bonnel
	Sabra Health Care	SBRA	SBRA US	Joshua Dennerlein
	Simon Property	SPG	SPG US	Jeffrey Spector
	Ventas, Inc.	VTR	VTR US	Jeffrey Spector
	Welltower	WELL	WELL US	Joshua Dennerlein
NEUTRAL				
	Acadia Realty Trust	AKR	AKR US	Jeffrey Spector
	CubeSmart	CUBE	CUBE US	Jeffrey Spector
	EPR Properties	EPR	EPR US	Joshua Dennerlein
	Equity LifeStyle Properties	ELS	ELS US	Jeffrey Spector
	Essex Property Trust, Inc.	ESS	ESS US	Joshua Dennerlein
	Extra Space Storage, Inc.	EXR	EXR US	Jeffrey Spector
	Getty Realty Corp.	GTY	GTY US	Joshua Dennerlein
	Highwoods Properties	HIW	HIW US	Camille Bonnel
	InvenTrust Properties	IVT	IVT US	Jeffrey Spector
	Kilroy Realty Corporation	KRC	KRC US	Camille Bonnel
	Macerich	MAC	MAC US	Jeffrey Spector
	OMEGA Healthcare	OHI	OHI US	Joshua Dennerlein
	Realty Income	O	O US	Jeffrey Spector
	Retail Opportunity Investments Corp.	ROIC	ROIC US	Jeffrey Spector
	SL Green Realty	SLG	SLG US	Camille Bonnel
	Sun Communities	SUI	SUI US	Joshua Dennerlein
	UDR, Inc.	UDR	UDR US	Joshua Dennerlein
	Veris Residential Inc	VRE	VRE US	Joshua Dennerlein
	Vornado Realty	VNO	VNO US	Camille Bonnel
UNDERPERFORM				
	American Assets Trust	AAT	AAT US	Camille Bonnel
	Armada Hoffler Properties	AHH	AHH US	Camille Bonnel
	Camden Property Trust	CPT	CPT US	Joshua Dennerlein
	Douglas Emmett	DEI	DEI US	Camille Bonnel
	Healthpeak Properties, Inc.	PEAK	PEAK US	Joshua Dennerlein
	Hudson Pacific Properties, Inc.	HPP	HPP US	Camille Bonnel
	Kennedy Wilson	KW	KW US	Joshua Dennerlein
	LXP Industrial Trust	LXP	LXP US	Camille Bonnel
	Medical Properties Trust, Inc.	MPW	MPW US	Joshua Dennerlein
	Mid-America Apartment Communities, Inc.	MAA	MAA US	Joshua Dennerlein
	National Storage Affiliates Trust	NSA	NSA US	Jeffrey Spector
	NetSTREIT	NTST	NTST US	Joshua Dennerlein
	NNN REIT Inc	NNN	NNN US	Joshua Dennerlein
	Paramount Group	PGRE	PGRE US	Camille Bonnel
	Peakstone Realty Trust	PKST	PKST US	Joshua Dennerlein
	STAG Industrial	STAG	STAG US	Camille Bonnel

US - REITs Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Tanger Inc	SKT	SKT US	Jeffrey Spector
	WP Carey	WPC	WPC US	Joshua Dennerlein

Disclosures

Important Disclosures

Equity Investment Rating Distribution: REITs (Real Estate Investment Trusts) Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	40	46.51%	Buy	33	82.50%
Hold	27	31.40%	Hold	21	77.78%
Sell	19	22.09%	Sell	16	84.21%

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%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster R2
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

R2 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: American Homes 4Rent, AvalonBay, Camden Property, Equity Lifestyle, Equity Residential, Essex Property, Invitation Homes, Kennedy Wilson, Mid-America Ap, Sun Communities, UDR, Inc., Veris Residential.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Avalon Bay, Camden Property.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: American Homes 4Rent, Avalon Bay, Camden Property, Equity Lifestyle, Equity Residential, Essex Property, Invitation Homes, Kennedy Wilson, Sun Communities, UDR, Inc., Veris Residential.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: American Homes 4Rent, Avalon Bay, Camden Property, Equity Lifestyle, Equity Residential, Invitation Homes, Kennedy Wilson, Mid-Amer Apt, Sun Communities, UDR, Inc., Veris Residential.

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: American Homes 4Rent, Avalon Bay, Camden Property, Equity Lifestyle, Equity Residential, Essex Property, Invitation Homes, Kennedy Wilson, Mid-Amer Apt, Sun Communities, UDR, Inc., Veris Residential.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: American Homes 4Rent, Avalon Bay, Camden Property, Invitation Homes, Kennedy Wilson, Sun Communities, UDR, Inc., Veris Residential.

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: American Homes 4Rent, Avalon Bay, Camden Property, Equity Lifestyle, Equity Residential, Essex Property, Invitation Homes, Kennedy Wilson, Sun Communities, UDR, Inc.

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

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: American Homes 4Rent, AvalonBay, Camden Property, Equity Lifestyle, Equity Residential, Essex Property, Invitation Homes, Kennedy Wilson, Mid-America Ap, Sun Communities, UDR, Inc., Veris Residential.

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: Avalon Bay, Camden Property, Equity Residential, Kennedy Wilson, Mid-Amer Apt, Sun Communities, UDR, Inc., Veris Residential.

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

Other Important Disclosures

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

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

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

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

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to BofA Global Research policies relating to conflicts of interest.

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

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

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (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 Bancaria 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 prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.

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

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

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

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

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

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

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

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

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

Copyright and General Information:

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

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

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

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

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

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

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

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

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

Research Analysts

Jeffrey Spector
Research Analyst
BofAS
jeff.spector@bofa.com

Joshua Dennerlein
Research Analyst
BofAS
joshua.dennerlein@bofa.com

Camille Bonnel >>
Research Analyst
Merrill Lynch (Canada)
camille.bonnel@bofa.com

Daniel Byun
Research Analyst
BofAS
daniel.byun@bofa.com

Lizzy Doykan
Research Analyst
BofAS
lizzy.doykan@bofa.com

Steven Song
Research Analyst
BofAS
huainan.song@bofa.com

Farrell Granath
Research Analyst
BofAS
farrell.granath@bofa.com

Andrew Berger
Research Analyst
BofAS
andrew.berger2@bofa.com

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.
Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.