# BofA US Home Sales Indicators

# Near-term blips, but new and existing home sales poised for 2H growth

**Industry Overview**

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Equity
United States
Homebuilders

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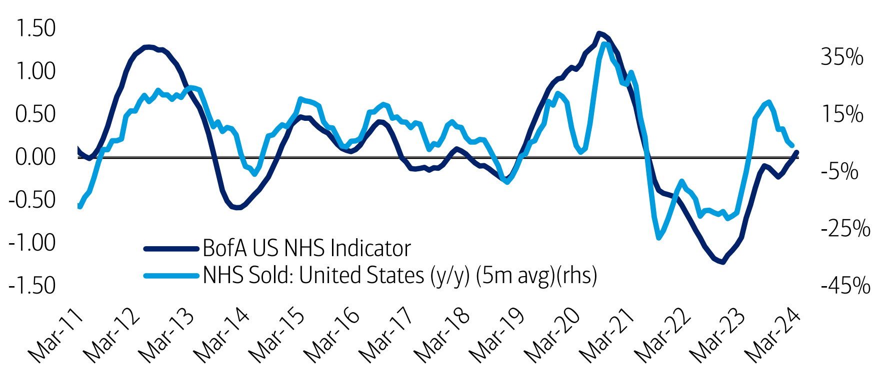
## BofA US Home Sales Indicators point to 2H growth

The BofA US Home Sales Indicators suggest the housing market recovery will sustain into 2H24 despite a moderation in recent months, which was likely driven by the spike in mortgage rates. Potential homebuyers appear to be accepting that higher home prices / rates are here to stay and are no longer waiting for prices to drop. More specifically, the percent of consumers that believe it's a good time to buy has now increased in four consecutive months (albeit off very low levels) even though affordability is relatively unchanged over that same period. In addition, inventory has increased, which should support sales going forward both for new (homebuilders have increased starts) and existing (higher resale listings). See the BofA US Home Sales Indicators launch note for an explanation of the methodology, disclaimers and limitations of the variables.

## NHS Indicator remains positive

Our New Home Sales Indicator is still improving as 5 out of 8 variables are tracking neutral or positive, which suggests growth will continue in 2H24 despite the recent slowdown against tougher comparisons. Favorable demographics, resilient job market and low vacancy rates should all support demand.

**Exhibit 2: BofA US New Home Sales Indicator vs. new family houses sold year over year**
The indicator leads new home sales by three months with a positive correlation (0.77) since 2013




**Source:** BofA Global Research.US Census Bureau. **Note:** The BofA US New Home Sales Indicator identified above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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## EHS Indicator still points to backhalf inflection

Our EHS Indicator is still improving as 6 out of 9 variables are tracking neutral or positive. Existing home sales recovered in January and February but fell in March and continue to track near the lowest levels since 2010. Near-term sales will likely remain muted due to rates, but the recent increase in listings should support sales in 2H24.

**Exhibit 1: Trends of key inputs**
Directional trends of indicators' inputs

| **BofA US New Home Sales Indicator** | |
|---|---|
| **Input** | **Trend** |
| Financing and affordability | ▼ |
| Demographics | ▲ |
| Homebuyer confidence | ▲ |
| Homebuilder confidence | ▲ |
| Housing supply | ▲ |
| Real-Time Trends | ■ |
| **BofA US Existing Home Sales Indicator** | |
| **Input** | **Trend** |
| Financing and affordability | ▼ |
| Demographics | ▲ |
| Homebuyer confidence | ▲ |
| Housing supply | ■ |
| Real-Time Trends | ▲ |

**Source:** BofA Global Research

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# BofA US New Home Sales Indicator

## NHS Indicator driven by buyer confidence and supply

New home sales continued their recovery in March, when they jumped to highest level since September and above estimates. The strong job market, favorable demographics (growing number of households), buyer confidence, and low existing home supply remain tailwinds to the new home market in our view. Percent of consumer confidence who say rates will go up and buyer confidence inflected positive this past month, and our NHS Indicator is still rising with 5 out of 8 variables tracking neutral or positive. The indicator suggests growth may slow in 2Q24 after a strong 1Q24 acceleration. The NHS Indicator ticked up to 0.06, as compared to (0.03) in February.

**Exhibit 3: Key inputs of BofA US New Home Sales Indicator**

2 variables flipped to tracking positive, 1 variable improved to neutral and 1 variable fell to neutral in March, and now 5 out of 8 of the variables are tracking neutral or positive

| Component | Data | Last Updated | Y/Y Direction | Sequential Direction | Discretionary Direction Classification | Direction Explanation |
|---|---|---|---|---|---|---|
| **1) Financing and affordability** | | | | | | |
| Freddie Mac 30-year mortgage rate | 7.10% | Weekly as of April 18th, 2024 | ↑ | ↑ | ▼ | Mortgage rates ticked up to over 7% in March, first time since October |
| % Consumer Confidence Respondents Who Say Mortgage Rates Will: Go Up | 34.0% | Monthly as of March 2024 | ↓ | ↑ | ▲ | Home buyer confidence rose in March with pent up demand |
| Affordability: P&I by Median Household Income* | 0.96 | Monthly as of March 2024 | ↑ | ↑ | ▼ | Affordability remains historically low |
| **2) Demographics** | | | | | | |
| Number of US Households (thousands) | 131,229 | Monthly as of March 2024** | ↑ | ↑ | ▲ | Household estimates are still higher than historical average |
| **3) Homebuyer confidence** | | | | | | |
| % Respondents Who Say it is a Good Time to Buy | 21% | Monthly as of March 2024 | ↑ | ↑ | ▲ | % of respondents that believe it is a good time to buy rose MoM (although near historically low levels) |
| **4) Homebuilder confidence** | | | | | | |
| Homebuilder Confidence Survey: Single-Family Sales over next six-months | 60 | Monthly as of April 2024 | ↑ | ↓ | ▼ | Homebuilder confidence has decreased recently following mortgage rate increase |
| **5) Housing Supply** | | | | | | |
| Homeowner Vacancy Rate | 0.80 | Quarterly as of March 2024** | = | ↓ | ▲ | Historically low vacancy rates |
| **6) Real-time trends** | | | | | | |
| Mortgage Banker's Association Mortgage Application Index | 202 | Weekly as of April 18th, 2024 | ↓ | ↑ | ■ | Home buying demand increased recently with spring selling season, but is still below historical average |

**Source:** BofA Global Research, Bloomberg, Freddie Mac, Fannie Mae, US Census Bureau, Mortgage Bankers Association, US Bureau of Economic Analysis

* Median P&I / Median Household income assumes New Home Median Price based on the 30yr FRM with 80% LTV. The monthly P&I is then divided by Median Household Income.

**December number of US households and homeowner vacancy rate is the rolling average of the past three months.

▲ = Favorable; ■= Neutral; ▼= Unfavorable

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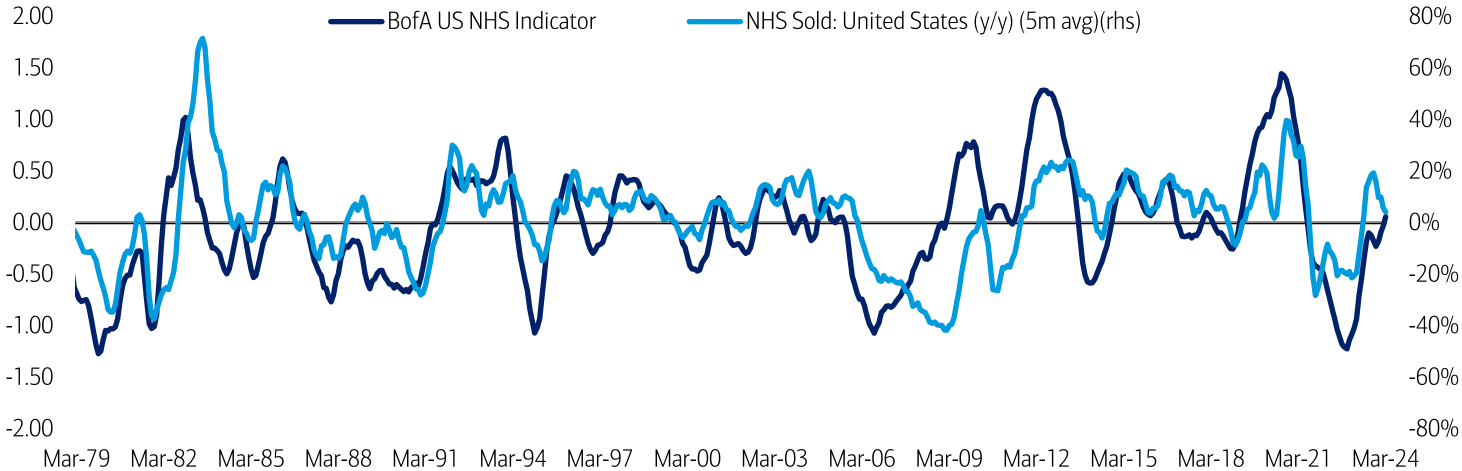
**Exhibit 4: The indicator leads new home sales by three months with a positive correlation (0.64) from 1979**
US New Home Sales Indicator vs. new family homes sold year over year since 1979




**Source:** BofA Global Research. **Note:** The BofA US New Housing Indicator identified above is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark

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## Potential stock implications of stronger new home sales

When the BofA US New Home Sales Indicator is rising, we see positive implications across multiple sectors from stronger new home demand and increased pace of new construction. In homebuilders and building products, we expect homebuilders and new construction leveraged building product distributors and manufacturers to outperform. In forest products/materials, lumber, panel, siding and distribution companies should benefit from an increase in housing starts. In consumer finance, mortgage insurers would likely benefit from higher origination of mortgages for new home sales, as well as lower affordability (causes increased mortgage insurance usage).

**Exhibit 5: When the New Home Sales Indicator is rising…**
BofA fundamental analysts see positive impact on these sub-sectors

| Sector (Region) | Analyst | Sub-sector \| stock (Ticker) |
|---|---|---|
| Homebuilders (US) | Rafe Jadrosich | Homebuilders, new construction building products, distributors \| TopBuild (BLD US), Builders FirstSource (BLDR) |
| Paper, Packaging & Forest Products (US) | George Staphos | Lumber, panels, siding, distribution \| Weyerhaeuser (WY US), PotlatchDeltic (PCH US), Louisiana-Pacific (LPX US), Boise Cascade (BCC US) |
| Consumer Finance (US) | Mihir Bhatia | Mortgage Insurers |
| Australia Building Materials (AU) | Shaurya Visen | Building Products \| James Hardie (JHX AU) |

**Source:** BofA Global Research

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### March US new home sales at 693k vs. 656k long-term average

Reported by the US Census Bureau, US new home sales measures the sales of new single-family homes with seasonally adjusted rates. Since 1963, new home sales SAAR in the US have averaged at a rate of 656K. US home sales peaked in 2005 at 1.389mm homes sold during the housing bubble partially due to a drop in credit requirements that led to high mortgage demand. Post housing crash and the Global Financial Crisis, new home sales troughed at a rate of 270K in 2011. At present, we see a housing backdrop similar to the early 1980s, when interest rates spiked due to elevated inflation, and the 30-year fixed mortgage rate reached a peak of 18.4% in 1981. New home sales rebounded sharply and recovered to pre-mortgage rate spike levels by 1983. In March, new home sales SAAR rose to 693k, as compared to the revised 637k in February.

# BofA US Existing Home Sales Indicator

## Rising EHS Indicator driven by buyer confidence & trends

Rising percent of consumers that say mortgage rates will go up and Rising mortgage rates, higher MBA mortgage applications, and rising number of respondents who say it's a good time to buy inflected in the last month, and our EHS Indicator is still improving as 6 out of 9 variables are tracking neutral or positive. While existing home sales fell sequentially in March, it is tracking near its long-term historical average and is expected to improve with additional inventory. The EHS indicator suggests inventory levels likely need to increase to get a significant (>15%) recovery in 2024. Existing home inventory is historically low with 77% of current homeowners locked in at <5% mortgage rates. Lower mortgage rates could be a catalyst to unlock additional supply. The EHS indicator score ticked up to (0.02), as compared to (0.11) in February.

**Exhibit 6: Key inputs of BofA US Existing Home Sales Indicator**
2 variables flipped to positive, and 1 variable fell to neutral in January, and 6 out of 9 of the variables are tracking neutral or positive

| Component | Data | Last Updated | Y/Y Direction | Sequential Direction | Discretionary Direction Classification | Direction Explanation |
|---|---|---|---|---|---|---|
| **1) Financing and affordability** | | | | | | |
| Freddie Mac 30-year mortgage rate | 7.10% | Weekly as of April 18th, 2024 | ↑ | ↑ | ▼ | Mortgage rates edged up in January following two months of decreasing rates after October peak |
| % Consumer Confidence Respondents Who Say Mortgage Rates Will: Go Up | 34% | Monthly as of March 2024 | ↓ | ↑ | ▲ | Home buyer confidence rose in March with pent up demand |
| Affordability: P&I by Median Household Income* | 0.96 | Monthly as of March 2024 | ↑ | ↑ | ▼ | Affordability remains historically low |
| **2) Demographics** | | | | | | |
| Number of US Households (thousands) | 131,229 | Monthly as of March 2024** | ↑ | ↑ | ▲ | Household estimates are still higher than historical average |
| **3) Homebuyer confidence** | | | | | | |
| % Respondents Who Say it is a Good Time to Buy | 21% | Monthly as of March 2024 | ↑ | ↑ | ▲ | % of respondents that believe it is a good time to buy rose MoM (although near historically low levels) |
| **4) Housing Supply** | | | | | | |
| Homeowner Vacancy Rate | 0.80 | Quarterly as of March 2024** | = | ↓ | ▲ | Historically low vacancy rates |
| US Existing Homes Inventory (millions) | 46.45 | Monthly as of March 2024 | ↑ | ↓ | ▼ | Inventory is still low compared to historical average |
| **5) Real-time trends** | | | | | | |
| Mortgage Banker's Association Mortgage Application Index | 202 | Weekly as of April 18th, 2024 | ↓ | ↑ | ■ | Home buying demand increased recently with spring selling season, but is still below historical average |
| Pending Home Sales Index (PHSI) | 142.16 | Monthly as of March 2024 | ↑ | ↑ | ▲ | Pending sales have increased YoY |

**Source:** BofA Global Research, Bloomberg, Freddie Mac, Fannie Mae, US Census Bureau, Mortgage Bankers Association, US Bureau of Economic Analysis
* Median P&I / Median Household income assumes New Home Median Price based on the 30yr FRM with 80% LTV. The monthly P&I is then divided by Median Household Income.
**December number of US households and homeowner vacancy rate is the rolling average of the past three months.
▲ = Favorable; ■= Neutral; ▼ = Unfavorable

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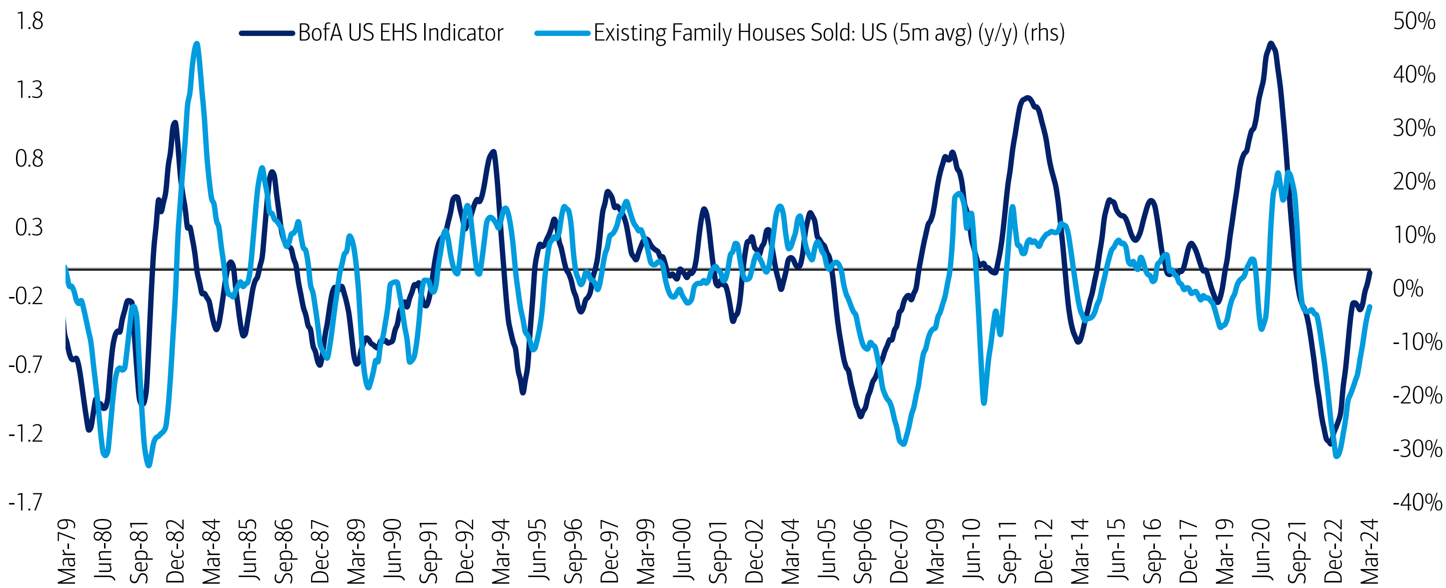
**Exhibit 7: The EHS indicator leads existing home sales by five months with a positive correlation (0.70 since 1979)**
BofA US Existing Home Sales Indicator vs. existing family houses sold year over year




**Source:** BofA Global Research, National Association of Realtors. **Note:** The BofA US Existing Housing Indicator identified in this report is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark

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## Potential stock implications of stronger existing home sales

When the BofA US Existing Home Sales Indicator is rising, we see positive potential implications across multiple sectors to stronger existing home sales. In building products, we expect repair and remodel focused building products companies to benefit from turnover driven renovation projects. In Hardline/Retail, home improvement retailers, mattresses, and home furnishings could all benefit from homeowners making large purchases around housing turnover. In Internet, online real estate would benefit from increased housing transactions. In consumer finance, mortgage insurers and mortgage originators would benefit from an increase mortgage activity. In real estate, self-storage companies would benefit from an increase in homeowners moving homes.

**Exhibit 8: When the Existing Home Sales Indicator is rising…**
BofA fundamental analysts see positive impact in these sub-sectors

| Sector (Region) | Analyst | Sub-sector \| stock (Ticker) |
|---|---|---|
| Building Products (US) | Rafe Jadrosich | Building Products, mattresses \| Mohawk (MHK US), Masco (MAS US), Tempur Sealy International (TPX US) |
| Hardline Retail (US) | Robert Ohmes | Home improvement retailers, home furnishings |
| Paper, Packaging & Forest Products (US) | George Staphos | Lumber, panels, siding, distribution \| Weyerhaeuser (WY US), Potlatchdeltic (PCH US), Louisiana-Pacific (LPX US), Boise Cascade (BCC US) |
| Internet (US) | Curtis Nagle | Online Real Estate, home furnishings \| Zillow Group (ZG US), Redfin (RDFN US), Opendoor Technologies (OPEN US) |
| Consumer Finance (US) | Mihir Bhatia | Mortgage insurers & Mortgage originators |
| REITs (US) | Jeff Spector | Self-Storage \| Public Storage (PSA) |
| Australia Building Materials (AU) | Shaurya Visen | Building Products \| James Hardie (JHX AU), Reliance (RWC) |

**Source:** BofA Global Research

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### March US existing single family home sales at 3.8mm vs. 3.8mm average

Reported by the National Association of Realtors, existing home sales data measures the sales and prices of existing single-family homes for the United States overall at a seasonally adjusted annual rate (SAAR). Existing home sales SAAR in the United States averaged 3.77mm from 1969 to 2024, reaching an all-time high of 6.34mm in September 2005 and a record low of 1.37mm in March 1970. Like new home sales, we see a similar backdrop as the early 1980s when mortgage rates spiked following a period of high inflation and significant home price appreciation. Due to the lock-in effect of mortgage rates, existing home supply remains depressed.

# Methodology, Risks and Disclaimers

## Components of the Indicators (New Home Sales)

We worked with our Predictive Analytics team to analyze over 200 data series to build a proprietary indicator for the New Home Sales as reported by US Census Bureau.

We tested each variable with different lag periods to determine the best fit and identified eight variables that are not only intuitive drivers of house building activity, but also have good correlation with the S&P S15HOME Index. We then selected metrics that met key criteria including consistency, promptness of reporting (relative to month end), and economic significance. We focused on data that is available monthly with a reasonable length of history (five variables since 1976 and rest with more than 10 years of history). The indicator in its full form with all eight variables begins in December 2010. We believe this indicator helps deepen the understanding of New Home Sales with U.S. macro factors.

**Exhibit 10: Components of the BofA New Home Sales and Existing Home Sales Indicators**
The New Home Sales and Existing Home Sales Indicators are comprised of eight and nine components, respectively

| Component | Source | Measure of | Indicator |
|---|---|---|---|
| **1) Financing and affordability** | | | |
| Freddie Mac Enhanced PMMS US 30 Year FMR | Freddie Mac, Bloomberg | 30-year-fixed-rate mortgage | Both |
| Respondents Who Say Mortgage Rates Will: Go Up | Fannie Mae, Bloomberg | Home purchase sentiment | Both |
| Affordability: P&I by Median Household Income | US Bureau of Economic Analysis | Income and US affordability | Both |
| **2) Demographics** | | | |
| Household Estimates | US Census Bureau | Number of US Households (thousands) | Both |
| **3) Homebuyer confidence** | | | |
| Net Percent of Respondents Who Say it is a Good Time to Buy (%Bal) | Fannie Mae | Housing market sentiment | Both |
| **4) Homebuilder confidence** | | | |
| Homebuilder Confidence Survey: Single-Family Sales over next six-months | US Census Bureau | Future single family housing sales | New Home Sales Indicator |
| **5) Housing Supply** | | | |
| Homeowner Vacancy Rate | US Census Bureau | US Housing market | Both |
| US Existing Homes Inventory | NAR, Redfin.com | Existing home sales activity | Existing Home Sales Indicator |
| **6) Real-time trends** | | | |
| MBA US FRM Index NSA | Mortgage Bankers Association, Bloomberg | US single-family loan application activity | Both |
| Pending Home Sales Index (PHSI) | NAR, Redfin.com | Pending home sales activity | Existing Home Sales Indicator |

**Source:** BofA Global Research

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## Weighting of variables (New Home Sales)

The BofA New Home Sales Indicator is constructed by taking an equal-weighted average of the smoothened z-scores of the eight input variables. Our historical backtested correlation analysis indicates that these eight variables in aggregate have a strong correlation with New Home Sales growth, and we believe the New Home Sales can be an effective proxy to gauge New Home Builders Index. As a best practice, we believe the indicator should be viewed in context of several months, and general directionality, rather than focusing solely on monthly readings that can fluctuate.

## Components of the Indicators (Existing Home Sales)

We worked with our Predictive Analytics team to analyze over 200 data series to create a proprietary indicator for the Existing Home Sales as reported by US Census Bureau.

We tested each variable with different lag periods to determine the best fit and identified nine variables that are not only intuitive drivers of Existing Home Sales activity, but also have good correlation with their S&P S15BUILX Index. We then selected metrics that met key criteria including consistency, promptness of reporting (relative to month end) and economic significance. We focused on data that is available on a monthly basis with a reasonable length of history (five variables since 1976 and rest with more than 10 years of history). The indicator in its full form with all eight variables begins in December 2010. We believe this indicator helps deepen the understanding of Existing Home Sales relationship with U.S. macro factors.

## Weighting of variables (Existing Home Sales)

The BofA Existing Home Sales Indicator is constructed by taking an equal-weighted average of the smoothened z-scores of the eight input variables. Our historical correlation analysis indicates that these nice variables in aggregate have a strong correlation with Existing Home Sales growth, and we believe the Existing Home Sales can be an effective proxy to gauge Building Materials Index. As a best practice, we believe the indicator should be viewed in context of several months, and general directionality, rather than focusing solely on monthly readings that can fluctuate.

## Disclaimers, Risks and Limitations

The composition of our indicator will be subject to review every 6 - 12 months. We will monitor the continued relevance, availability, and timing of each variable and evaluate the inclusion of additional data series. We reserve the right to modify the setup of the, but do not intend to make frequent changes. However, any future modifications will be made to increase the statistical performance of our indicator. When the inputs have been released with a delay, we have used the last available data point for our calculation. Historical correlation may not result in future correlation.

Another risk can be attributed to divergence of the target variable from underlying components of the indicator. For example, during the period of Oct-92 to Mar-93 the NHS slowed from 22% to 3% even thought the mortgage rates and affordability improved considerably and our indicator remained flat as Household Estimates deteriorated.

Equal weighting of variables could overlook potential disproportionate impact on demand from certain variables. Changes in these inputs may significantly impact the indicator. Additionally, there could be potential correlations not accounted for among our set of variables, meaning that prediction in New Home Sales demand changes could be amplified.

These indicators are not intended to be the sole driver of our ratings but they may have an impact on our views of the Home Building stocks we cover. They are not intended to be indicative of actual or future performance of any stock individually or as a group.

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