

Quick RIC

Diamonds in the rough

Valentines and ashes

Investors love expensive stocks and Fed-dependent bonds. It's an odd time for a blind date, one that may come to naught if inflation reaccelerates. US "super-core" inflation's been stuck around 3.9% the past seven months. Consumer, corporate & government activity remain 1-2 standard deviations too hot (Exhibit 2) and the secular shift from a 2% to 5% world rolls on (see page 2). Treasuries are losers again (TLT -4.8% YTD) while Prudent Yield credit & commodities are outperforming.

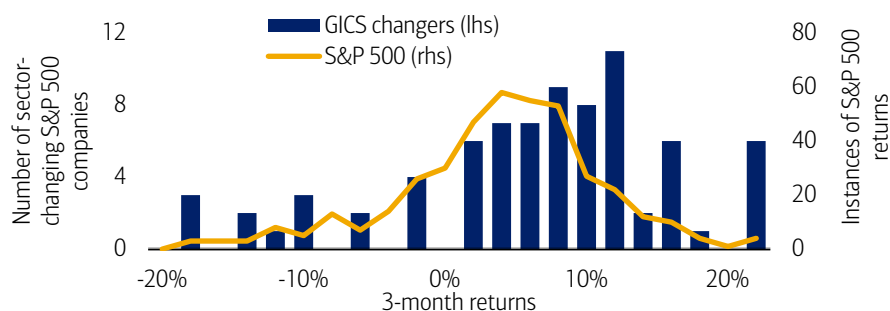
These "irrelevant" catalysts can mean higher stock returns

We describe three catalysts that do not affect company fundamentals yet, historically, have signaled "diamonds in the rough" among equities, with higher average returns:

1. **Buy-rated sector changes:** stocks reclassified to a more suitable sector have led the S&P 500 by 2-4% three months after the shift, on average. This simple change requires \$6tn of investment funds to rebalance. We show the history of sector changes and flag five Buy-rated stocks that could be moved soon (see Exhibit 16).
2. **Index additions:** membership has its perks. Stocks added to the S&P 500 index typically outperform by 5-8% in six months. 24 Buy-rated stocks could be added in the near term with KKR, WDAY, PLTR among the plausible additions (Exhibit 20).
3. **Stock splits:** stocks that announce share splits outperform the S&P 500 by an average of 13% over the next year. Walmart is the latest company to announce a split & 36 others in the index have prices >\$500 (Exhibit 24).

Exhibit 1: After a change of sector, the average stock returns 6% over the next 3 months

Distribution of 3-month total returns for sector-changing companies and the S&P 500, 1990-2023



Source: BofA Research Investment Committee, Bloomberg, see page 7 for details

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Refer to important disclosures on page 21 to 25. Analyst Certification on page 17. Price Objective Basis/Risk on page 16.

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The RIC Outlook

We still prefer credit > equities > government bonds in 2024. Loans, emerging market bonds, and non-US equities offer 6-12% total return potential per our strategists' forecasts, while benchmark equity and bond returns are expected to be flat.

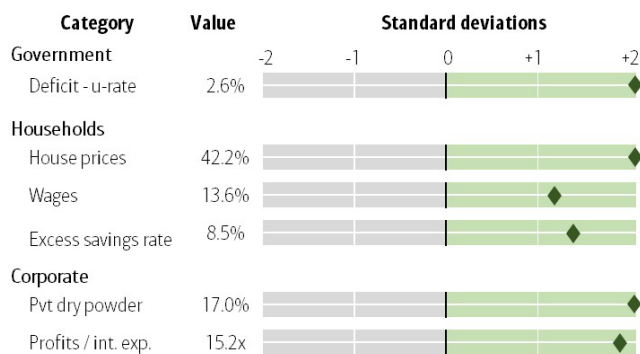
Inflation can reaccelerate in a 5% world

We noted in our [year ahead](#) that many parts of the economy have been impervious to rate hikes. Government deficits, household savings, wages, and corporate balance sheets look stretched at 1-2 standard deviations above historical norms (Exhibit 2).

Claudio Irgoyen warns that [inflation could reaccelerate](#) if nominal spending and labor markets remain robust. Markets are underpricing inflation risks and could be anticipating too many Fed cuts this year. US core CPI excluding housing ("supercore") is still running close to 4%/year, nearly double its pre-COVID pace (Exhibit 3)

Exhibit 2: The lack of slack

Many economic variables are still much stronger & more inflationary than normal, despite Fed hikes

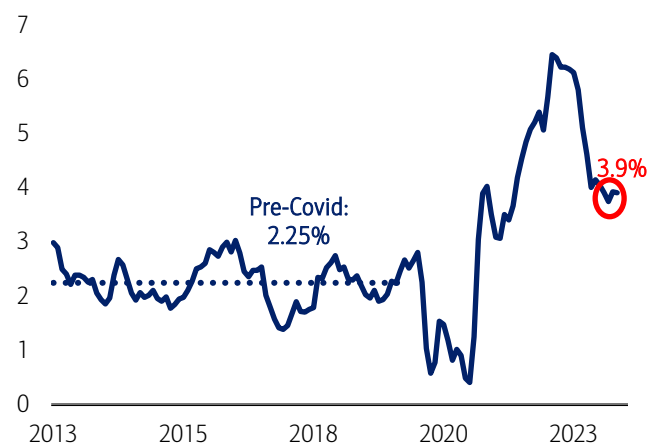


Source: BofA Research Investment Committee, Budget deficit minus unemployment rate measures the spread between the US budget deficit and US unemployment rate (Bloomberg, start date = Jan. 1969); House price = 3-year change in FHFA US House Price Index NSA (Bloomberg, start date = Mar. 1975); Wages = 3 year change in Employment Cost Index (ECI, Bloomberg, start date = Mar. 1982); Savings rate = 4 year annualized savings rate, % disposable income (Bloomberg, start date = Jan 1993); Private credit dry powder (Prequin) divided by total commercial and industrial loans outstanding (Federal Reserve, start state = 200), Profits divided by interest expense (Haver, start date = Jan. 1948)

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Exhibit 3: US "supercore" inflation is still well above target

US CPI core services less housing, y/y%



Source: BofA Research Investment Committee, Bloomberg

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Demographics, debt, and de-globalization will drive the shift from a 2% to 5% world, marked by structurally higher inflation, yields, and policy rates:

- **Aging demographics** have flipped from a deflationary to stagflationary force. Higher dependency ratios mean smaller tax bases must fund larger entitlement pools, with higher consumption but no gain in productivity.
- **De-globalization** means the era of unchecked flows of people, goods & capital is over. Tensions over trade, migration, and capital controls raise the cost of capital and spark macro volatility.
- **Record debt burdens** mean more spending on unproductive programs and interest expense. US debt held by the public is 98% of GDP, the highest since WWII, and [on pace to double](#) over the next 30 years in a conservative baseline scenario.
- **Underinvestment** in natural resources has led to tight and fragile markets. Energy security & decarbonization will require copious quantities of scarce resources.

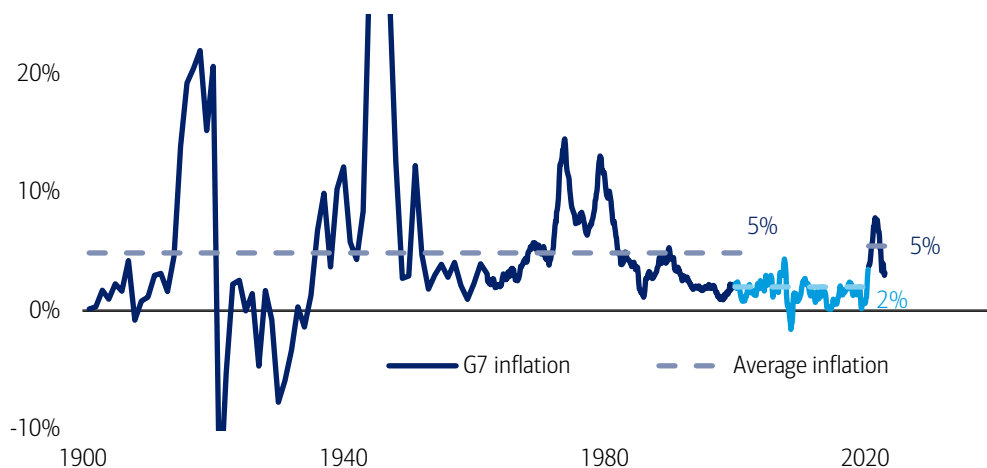
Past 20 years suggests disinflation, but the past 100 warrants caution

G7 CPI has decelerated to 3% year-over-year, after rising at the fastest clip in four decades (Exhibit 4). Inflation surges are not uncommon in history and the past 20 years of low inflation, yields, and policy rates is not the historical norm.

Today's macro backdrop marked by hot wars, expansionary fiscal policy, tight energy markets, and rising political tensions means inflation could reaccelerate toward the 5% average observed between 1900 and 2000.

Exhibit 4: The next era of global disentanglement could drive inflation higher

G7 CPI, YoY



Source: BofA Research Investment Committee, Global Financial Data, US nominal GDP weighted G7 price indices; Annual 1900-1962, monthly 1963-2024

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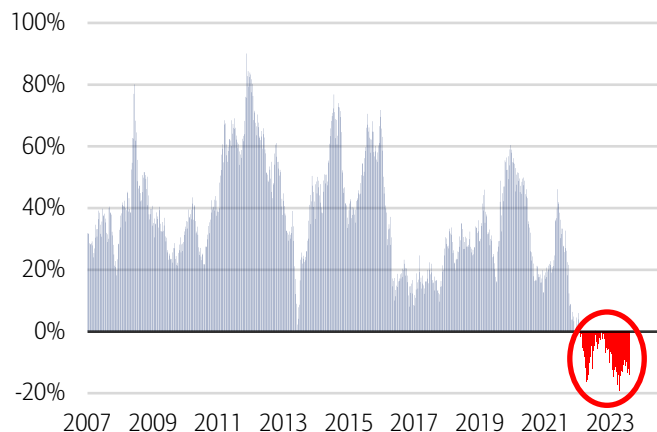
Treasuries are still just for trading

Structurally higher yields and inflation make government bonds less attractive. TLT, the largest government bond ETF, has lost money this year and is down >12% since 2019 (Exhibit 5).

[Our rates strategists](#) expect the US 10-year yield to end 2024 at 4.25% and think the rally in 5-year bonds is over. Paul Ciana highlights technical signals that point to the potential for [a 4.5-4.6% 10-year yield in 1Q24](#). Long-term bonds are now just as volatile as stocks, with less upside potential barring a prolonged recession (Exhibit 2).

Exhibit 5: TLT is still losing money

Rolling 5-year total return

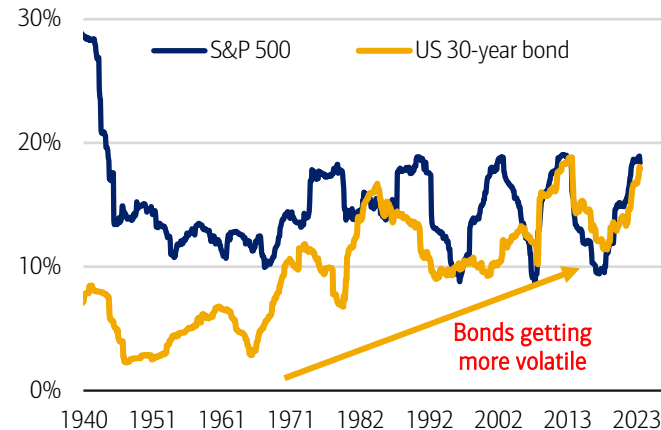


Source: BofA Research Investment Committee, Bloomberg.

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Exhibit 6: Government bonds are as volatile as stocks

5-year realized volatility, annualized



Source: BofA Research Investment Committee, Global Financial Data

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Three “irrelevant” catalysts that can boost returns

Investors can still find bullish signals when the macro backdrop is muddled. Stock performance can be materially impacted by seemingly arbitrary catalysts like 1) sector changes; 2) S&P 500 index additions; and 3) stock splits.

Massive fund flows can drive new demand

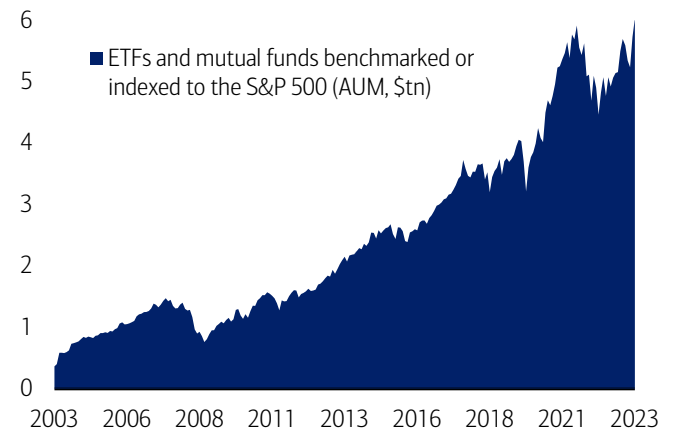
Changes to stock sectors and indexes can cause significant reallocation of capital. \$6tn of AUM is indexed or benchmarked to the S&P 500 and sector funds account for another \$2.5tn.

Every change must be reflected in these funds benchmarked to the S&P 500. Active portfolio managers might also be impacted as they try to outperform their broad index or sector benchmark.

Historically, average returns between 1990 and 2023 have been strong after these stock shifts happen even as company fundamentals stay the same. We explore the history below and screen for today’s top contenders.

Exhibit 7: \$6tn of AUM has to readjust when sectors change

Total AUM of sector funds (\$tn)



Source: BofA Research Investment Committee, EPFR. Data as of 12/31/2023.

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1. Buy-rated sector changes are bullish

The global industry classification standard (GICS) is the conventional method for assigning stocks with similar businesses to a sector and industry group.

Two types of GICS sector changes can impact stock performance: 1) broad GICS sector or industry reclassification; and 2) single stock reclassifications into existing sectors.

Sector reclassifications can create new winners & losers

Three GICS sector reclassifications happened in the seven years between 2016 and 2023. Each case caused underlying stocks to behave differently.

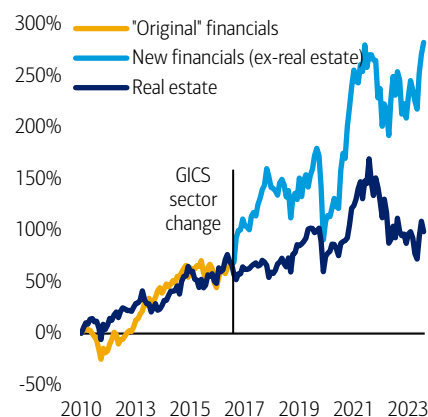
- **August 31st, 2016:** real estate companies were spun out of the financials sector to create the 11th GICS “level 1” sector. The change reflected growth in equity REITs as a distinct investment option. Financials, comprised of industries like banks & insurance, has outpaced real estate by >6%/year since the split (Exhibit 8).
- **September 21st, 2018:** the telecommunications sector was renamed communication services and the sector weight increased from 2% of the S&P 500 to 10%. Stocks previously classified in tech like Google and Meta (nee Facebook) were moved along with former consumer discretionary stocks like Netflix and Disney. Traditional telecoms (e.g., Verizon, AT&T) have lost money since 2018 while the new communication services sector has returned 10% per year (Exhibit 9).
- **March 17th, 2023:** 14 S&P 500 companies accounting for about 3% of S&P 500 market cap were reclassified to new sectors. Retail stocks like Target were moved to consumer staples from consumer discretionary while transaction and payment companies like Visa and Mastercard moved from tech to financials.

Financials gained about 3% weight in the S&P 500 at the expense of tech. [Jill Hall](#) noted that stocks migrating out tech experienced selling pressure in the near term while tech and discretionary ETFs got more concentrated.

The impact on single stocks was clear. For example, Visa became more correlated with the financials sector than the tech sector after the reclassification even though its underlying business didn’t change (Exhibit 10).

Exhibit 8: Financials outpace REITs since '16

Cumulative total return since 2010

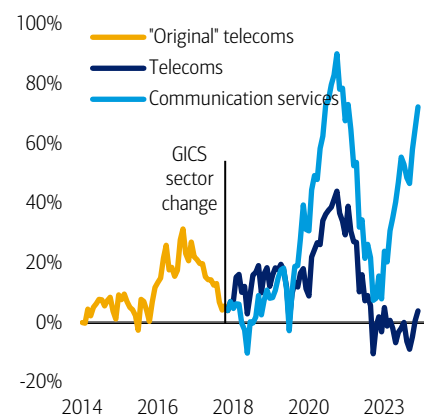


Source: BofA Research Investment Committee, Bloomberg; "Original" financials and New financial (ex-real estate) = XLF; Real estate = XLRE

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Exhibit 9: New media has led old since '18

Cumulative total return since 2014

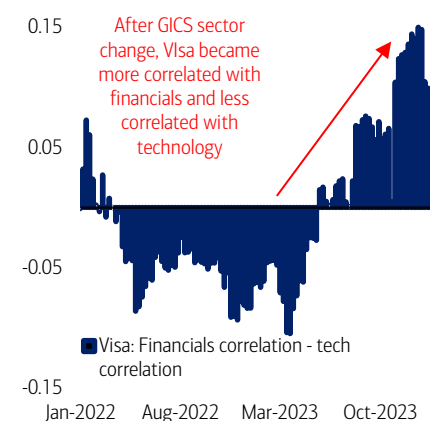


Source: BofA Research Investment Committee, Bloomberg; "Original" telecoms and Telecoms = IY; Communication services = XLC

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Exhibit 10: Correlations flip after migration

Visa net 52w correlation with old & new sector



Source: BofA Research Investment Committee, Bloomberg; Financials = S5FINL; Tech = S5INFN.

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Stocks tend to better when they're in the appropriate sector

A company might also be reclassified because its business evolves, or it was arguably in the wrong sector to begin with. Sector reclassifications are meaningful for portfolio managers trying to outperform an index, ETF holders, and owners of the underlying stock.

One way to anticipate these changes is by comparing a company's BofA cluster coverage to its assigned GICS sector. Our analysts constantly review company changes like new product lines, divestures, and appropriate peer groups for comparison. Mismatches are a strong signal that our analysts view the forward trajectory of the company differently than rigid, slow changing GICS definitions.

Exhibit 11 shows 5 historical examples where BofA cluster classifications were at odds with a company's GICS classification. These companies then changed sectors, becoming more aligned with BofA clusters.

Potential sector changes can also be anticipated quantitatively with a relatively simple rule set and generated some outperformance in our sample between 1990 and 2023.

A simple rule set to anticipate sector changes

- 1) find a company's 52-week rolling correlation to its assigned sector (e.g., Apple's correlation to the tech sector); and
- 2) subtract by the S&P 500's pairwise correlation, a measure that shows how correlated all stocks in the index are to one another.

Normalizing by the S&P 500's pairwise correlation helps adjust for periods of extreme market correlation and gives a purer expression of a stock's relationship to its sector.

Single stocks that are appropriately classified should be highly correlated to their sector. On average, S&P 500 stocks have a 0.36 normalized correlation with their sector today.

Exhibit 11: Coverage clusters can highlight misunderstood companies

Past GICS sector changes, sector, BofA cluster

Year	Ticker	Old sector	New sector	BofA coverage cluster
2022	TGT	Discretionary	Staples	Broadlines, Hardlines, Food Retailers & Leisure
2022	MA	Info tech	Financials	Payments, Processors, Specialty Finance and IT services
2021	LDOS	Info tech	Industrials	Aerospace and Defense
2018	PARA	Discretionary	Communications	Cable, Entertainment and Satellite
2018	CVS	Staples	Health care	Healthcare Technology & Distribution

Source: BofA Research Investment Committee, BofA Global Research

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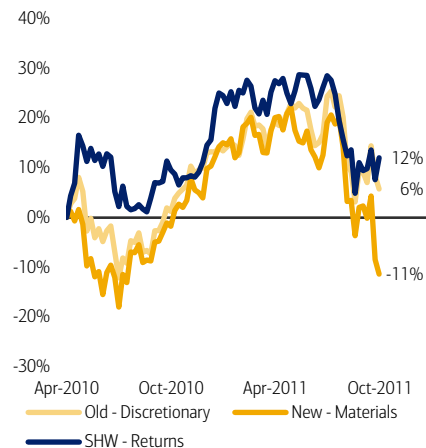
Weaker correlations could indicate a potential change

A normalized correlation that falls below 0.05 suggests that a stock is deviating from its sector and might need to be reclassified. We identify 3 potential causes for this shift using specific stock examples that highlight:

- **Misunderstood from the start:** Stock returns may diverge significantly from the underlying sector because its business is different. For example, Sherwin Williams, was originally classified in consumer discretionary despite its core business looking more like a materials company. In 2010, the paint producer was moved to materials, and the stock outperformed both sectors over the next 18 months (Exhibit 12).
- **Business evolution:** Reclassification can also occur if a company changes its business model. But sometimes timing can be unfavorable. Corning Glassware divested from its consumer product line in the late 1990s to focus its glass and material production on technology customers. Corning was added to the tech sector right before the 2001 crash (Exhibit 13).
- **Sector evolution:** GICS changes might come as other businesses in a sector are changing but a company stays unchanged. Charter, a cable company, was isolated as other consumer discretionary companies became more focused on retail, delivery, and app development. Charter found a home in the newly formed communication services sector and outperformed both sectors by 45-60% (Exhibit 14).

Exhibit 12: SHW - misunderstood

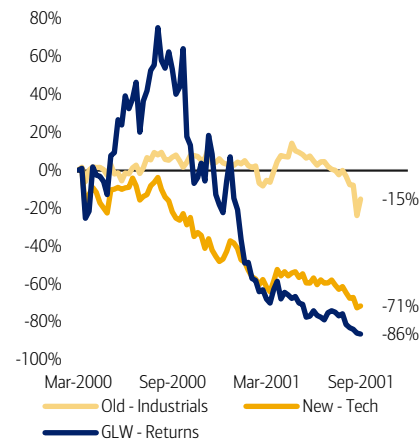
Stock returns relative to new and old GICS



Source: BofA Research Investment Committee, Bloomberg;
Start date is date of change, there was no preannouncement.
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Exhibit 13: GLW – business evolution

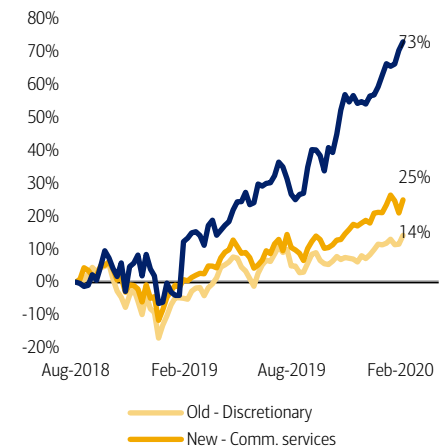
Stock returns relative to new and old GICS



Source: BofA Research Investment Committee, Bloomberg;
Start date is date of change, there was no preannouncement.
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Exhibit 14: CHTR – sector evolution

Stock returns relative to new and old GICS



Source: BofA Research Investment Committee, Bloomberg;
Start date is date of sector change preannouncement.
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Stocks can outperform by 2-4% in 3 months after change

There were 161 companies with sector changes from 1990 to December 2023. These stocks outperformed their old sector and the S&P 500 by 2% on average in the first three months. Stocks also led their new sector by 1% on average in the three months after the shift.

Stocks that hit our threshold described above (i.e., a >5% normalized correlation to its sector and a BofA Buy-rating at time of sector change) outperformed their new sector by 3% in the first three months after the change and led the S&P 500 by 4% on average (Exhibit 15).

The average 3-month return for a stock that hit our threshold is 6%. Many negative outliers were a result of market bubbles. The median return for the same group is 4%.

5 stocks that look misplaced in their sectors today

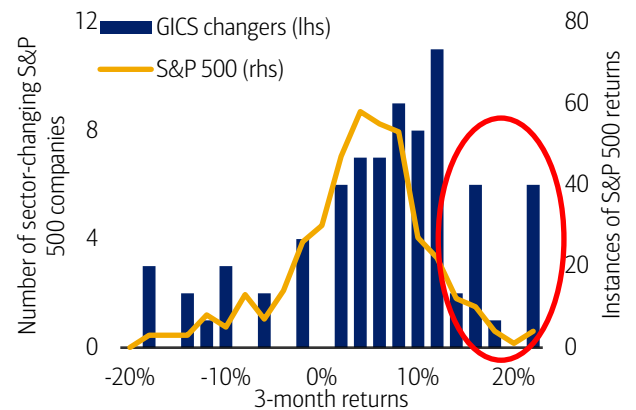
Exhibit 16 shows 5 Buy-rated stocks with low normalized correlations to their assigned sector. Layering our analyst ratings onto our quantitative screen allows us to identify high-quality companies that have been vetted by our analysts.

First Solar is a good example of a stock that looks misclassified today in the Tech sector but is covered by our Utilities analyst Julien Dumoulin-Smith. Its normalized correlation to the Tech sector is negative and they make solar panels not semiconductors.

In our interview this month, Julien points out that if clean energy companies were moved from tech to industrials, they would be compelling on a relative valuation basis and would likely have higher earnings growth than their new sector.

Exhibit 15: Average return is 6% 3m after GICS change

Returns distribution for companies identified by threshold, S&P 500



Source: BofA Research Investment Committee, Bloomberg; Note: Returns of companies identified by threshold; Returns start date as of announcement (if preannounced) or actual change. Companies without 3 month returns and companies that were acquired within 3 months of sector change are not included.

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Exhibit 16: Sector switch candidates include well-known companies

Companies with low correlation to GICS level 1 sector; Buy rated

Ticker Name	Sector	1Y correlation to current sector	Corr. to potential sector	Lookalike company & sector	BofA Cluster	BofA Rating
FSLR	First Solar	Tech	-0.20	Industrials = 0.13	SPWR - Industrials	Alt Energy (Energy, utilities, industrials) BUY C-1-9
BG	Bunge Global	Staples	-0.18	Materials = 0.06	NTR - Materials	Chemicals (Materials) BUY B-1-7
TDY	Teledyne	Tech	0.06	Industrials = 0.34	SAABF - Industrials	Aerospace & Defense (Industrials) BUY B-1-9
UBER	Uber	Industrials	0.22	Discretionary = 0.27	EBAY - Discretionary	Internet (Discretionary) BUY C-1-9
PTC	PTC	Tech	0.38	Industrials = 0.49	EXLS - Industrials	Multi-Industrials/Eng. (Industrials) BUY B-1-9

Source: BofA Research Investment Committee, Bloomberg; Correlations normalized using S&P 500 pairwise correlation; Correlations = 1Y, weekly rolling. This screen is not a recommended list either individually or as a group of stocks and may not be consistent with our fundamental view. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

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2. Index additions are bullish

Stocks typically gain 5-8% once they're in the S&P 500

Changes to an equity index might seem arbitrary but classifications can be an important signal to investors that a stock has high quality earnings and provides strong liquidity. The criteria for S&P 500 inclusion are based on:

- **Profitability:** the sum of the prior 4 quarters of GAAP earnings must be positive for all S&P 1500 companies
- **Market cap:** stock must be in the 85th percentile of the S&P 1500, approximately 500 companies.

The index management committee has some discretion when it comes to final addition and deletion decisions including sector composition weights, turnover, and floating shares outstanding.

Index changes have usually come after strong runs

More churn in the S&P 500 is expected after periods of strong returns (Exhibit 17). Six stocks were added in 4Q2023, including Uber, Jabil, and Builders FirstSource while Sealed Air, Alaska Air Group, and SolarEdge Technologies fell out.



Exhibit 20 shows 24 stocks that meet the S&P 500 criteria. [Craig Siegenthaler](#) expects KKR to be added to the index in the next six months and potentially as early as the March 15th rebalance (announced on March 1st).

Craig notes that the Hess/Chevron and Pioneer/Exxon Mobil mergers could open spots in the index. There are also 13 candidates for index deletions detailed in Exhibit 21.

Stocks typically gain 5-8% once they're in the S&P 500

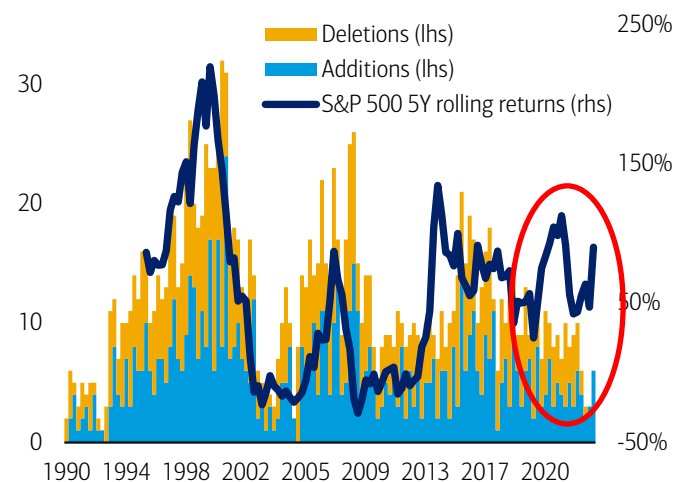
A recent academic paper found that stocks added to the S&P 500 have 5% annualized price increase two months after their addition and 5% annualized decreases if the stock falls out of the index¹.

Our work suggests that companies added to the S&P 500 since 1990 return 4.3% (8.7% annualized) on average in the subsequent 6 months with 22 stocks gaining >65% (Exhibit 18).

The impact of index deletions is debated, but our sample suggests that stocks perform worse than the index one they are removed with a negative skew (Exhibit 19). Deleted stocks typically lose 7% in the 6 months following removal.

Exhibit 17: Strong returns suggest the S&P 500 will see some change

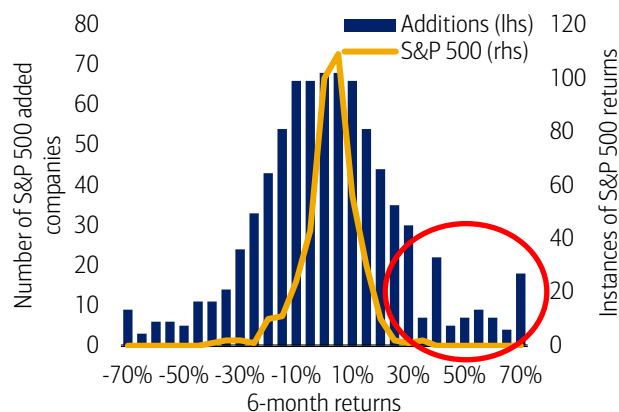
Quarterly S&P 500 additions & deletions vs 5-year rolling returns



Source: BofA Research Investment Committee, Bloomberg; Note: Quarterly data
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Exhibit 18: Addition into the S&P 500 can be positive for stocks...

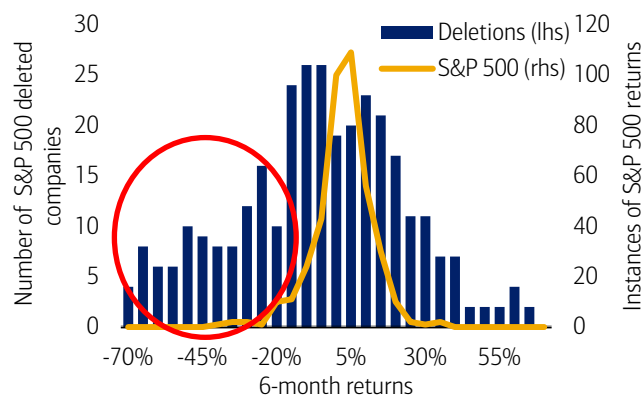
of stocks added to S&P 500 with subsequent 6 month return



Source: BofA Research Investment Committee, Bloomberg; Note: Quarterly data, 1990-2023
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Exhibit 19: ...while deletions can have a negative impact

of stocks deleted from S&P 500 with subsequent 6 month return



Source: BofA Research Investment Committee, Bloomberg; Note: Quarterly data, 1990-2023
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Exhibit 20: 24 S&P 500 addition candidates

BofA Buy-rated S&P 500 index addition candidates, based on S&P US Indices Methodology

Ticker	Name	Mkt Cap (\$bn)	1Y return	What changed?	Last 4 Quarters, GAAP EPS	BofA Rating
KKR	KKR & Co Inc	86.6	71%	Market cap	4.1	BUY B-1-7
WDAY	Workday Inc	78.6	60%	Market cap, earnings	0.2	BUY B-1-9
PLTR	Palantir Technologies Inc	54.0	231%	Market cap, earnings	0.1	BUY C-1-9
ARES	Ares Management Corp	42.3	66%	Market cap	2.4	BUY B-1-7
TW	Tradeweb Markets Inc	23.7	37%	Market cap	1.7	BUY B-1-7
VRT	Vertiv Holdings Co	23.4	325%	Market cap	0.7	BUY C-1-7
DECK	Deckers Outdoor Corp	21.6	103%	Market cap	27.8	BUY B-1-9
BAH	Booz Allen Hamilton Holding Corp	19.1	55%	Market cap	3.1	BUY B-1-7
RPRX	Royalty Pharma PLC	17.3	-22%	Market cap	1.3	BUY B-1-7
BMRN	BioMarin Pharmaceutical Inc	16.6	-19%	Market cap	0.8	BUY B-1-9

¹ Kumar, Rajnish et al., "Additions to and deletions from the S&P 500 index: A resolution to the asymmetric price response puzzle," Journal of Bank & Finance, September 2023

Exhibit 20: 24 S&P 500 addition candidates

BofA Buy-rated S&P 500 index addition candidates, based on S&P US Indices Methodology

Ticker	Name	Mkt Cap (\$bn)	1Y return	What changed?	Last 4 Quarters, GAAP EPS	BofA Rating	
DT	Dynatrace Inc	15.5	21%	Market cap	0.7	BUY	C-1-9
VST	Vistra Corp	15.4	92%	Market cap	3.8	BUY	B-1-7
AVTR	Avantor Inc	15.2	-6%	Market cap	0.5	BUY	B-1-9
SAIA	Saia Inc	14.8	105%	Market cap	13.3	BUY	B-1-9
XPO	XPO Inc	13.6	232%	Market cap	1.6	BUY	C-1-9
OC	Owens Corning	13.3	54%	Market cap	13.0	BUY	B-1-7
NBIX	Neurocrine Biosciences Inc	13.0	26%	Market cap	2.4	BUY	B-1-9
BURL	Burlington Stores Inc	12.7	-12%	Market cap	4.6	BUY	C-1-9
BLD	TopBuild Corp	12.7	105%	Market cap	19.3	BUY	B-1-9
ACM	AECOM	12.2	1%	Market cap	0.9	BUY	B-1-7
RNR	RenaissanceRe Holdings Ltd	12.0	5%	Market cap	51.2	BUY	B-1-7
FND	Floor & Decor Holdings Inc	11.9	19%	Market cap	2.6	BUY	C-1-9
OVV	Ovintiv Inc	11.7	-10%	Market cap	10.1	BUY	C-1-7
REXR	Rexford Industrial Realty Inc	11.3	-14%	Market cap	1.1	BUY	B-1-7

Source: BofA Research Investment Committee, Bloomberg, S&P Dow Jones methodology; GAAP EPS as of calendar quarter. This screen is not a recommended list either individually or as a group of stocks and may not be consistent with our fundamental view. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

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Exhibit 21: 13 S&P 500 deletion candidates

BofA Underperform-rated S&P 500 index deletion candidates, based on S&P US Indices Methodology

Ticker	Name	Mkt Cap (\$bn)	1Y return	What changed?	Last 4 Quarters, GAAP EPS	BofA Rating	
ZION	Zions Bancorp NA	6.1	-17%	Market cap	4.4	UNDERPERFORM	C-3-7
WHR	Whirlpool Corp	6.2	-16%	Market cap	8.7	UNDERPERFORM	B-3-7
FMC	FMC Corp	6.7	-58%	Market cap	10.5	UNDERPERFORM	B-3-7
VFC	VF Corp	6.8	-30%	Market cap, earnings	-2.0	UNDERPERFORM	B-3-8
MHK	Mohawk Industries Inc	7.4	1%	Market cap, earnings	-6.9	UNDERPERFORM	B-3-9
RHI	Robert Half Inc	8.8	0%	Market cap	3.9	UNDERPERFORM	B-3-7
CHRW	CH Robinson Worldwide Inc	8.9	-25%	Market cap	2.7	UNDERPERFORM	B-3-7
PARA	Paramount Global	9.0	-36%	Market cap, earnings	-2.0	UNDERPERFORM	C-3-7
PEAK	Healthpeak Properties Inc	9.6	-31%	Market cap	0.6	UNDERPERFORM	B-3-7
AAL	American Airlines Group Inc	9.8	-8%	Market cap	1.1	UNDERPERFORM	C-3-9
HSIC	Henry Schein Inc	9.8	-12%	Market cap	3.4	UNDERPERFORM	B-3-9
CPT	Camden Property Trust	10.0	-20%	Market cap	3.7	UNDERPERFORM	B-3-7
QRVO	Qorvo Inc	11.1	10%	Market cap, earnings	-2.2	UNDERPERFORM	B-3-9

Source: BofA Research Investment Committee, Bloomberg, S&P Dow Jones methodology; GAAP EPS as of calendar quarter. This screen is not a recommended list either individually or as a group of stocks and may not be consistent with our fundamental view. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

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3. Stock splits are bullish

Walmart's 3:1 stock split announcement in late January was the 12th since 2022 (see [The RIC Report: Bullish stock splits, bearish rate hits](#)). Current owners will get three shares for each one they own today. Splits do not affect company fundamentals but can increase liquidity by making shares more accessible.

Split stocks beat index by double digits on average

Historically, stocks have notched 25% total returns in the 12 months after a split is announced, compared to 12% for the broad index (Exhibit 22). Splits have boosted returns in every decade including the early 2000s when the S&P 500 struggled.

Comparing the distribution of stock split returns relative to the S&P 500 shows us that a few strong companies may pull up average performance (Exhibit 23). Outliers like Copart gained 56% in the 12 months following its October 2022 split announcement. Palo Alto Networks was another top performer last year, up 39% after its August 2022 split announcement.

Outperformance is no guarantee. While splits could be an indication of strong momentum, companies can struggle in a challenging macro environment. Companies like Amazon, Google, Tesla, and Dexcom struggled in the 12 months after splits were announced in 2022 as interest rates spiked.



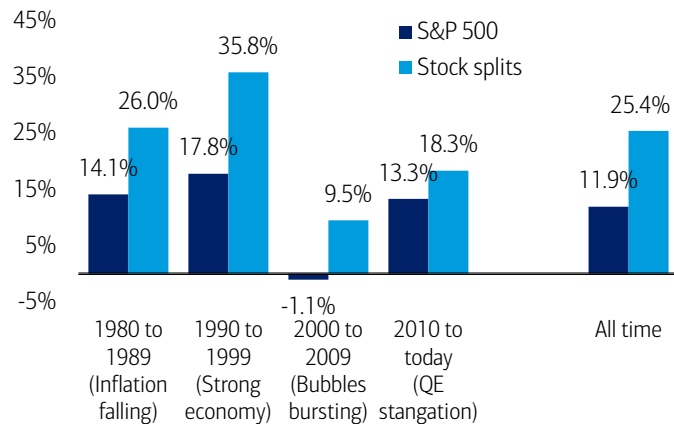
36 S&P 500 stocks trade above \$500/share

Stocks with high share prices are typically prime candidates for split announcements. Management teams might feel that lower stock prices broaden access to the stock or, in the case of Walmart where the share price is not high, signal shareholder friendly policies. Stocks trading >\$500/share are in the 95th percentile of prices.

Exhibit 24 shows 36 companies trading above \$500 per share in the S&P 500, representing 15% of total index market cap.

Exhibit 22: Stocks that split tend to beat the index

Average 12m total returns after stock split is announced

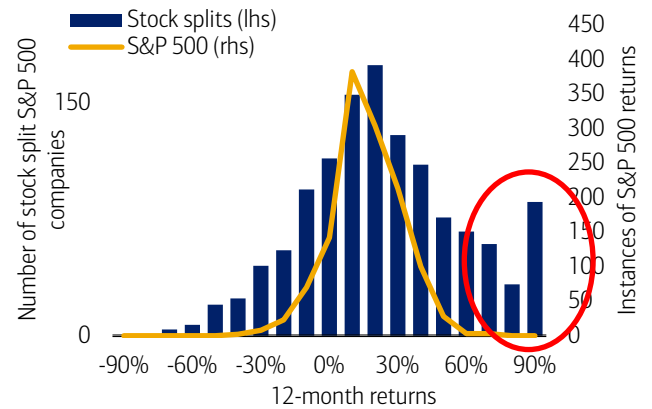


Source: BofA Research Investment Committee, Bloomberg, Global Financial Data

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Exhibit 23: Stock split returns have a positive skew

12m stock performance distribution, stock splits, S&P 500



Source: BofA Research Investment Committee, Bloomberg

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Exhibit 24: \$6.6 trillion in market cap (15% of S&P 500) trade >\$500/share

S&P 500 companies trading above \$500 per share*

Ticker Name	Sector	Price/share	BofA Rating
NVR NVR Inc	Consumer Discretionary	7447.99	Buy B-1-9
BKNG Booking Holdings Inc	Consumer Discretionary	3758.18	Neutral B-2-9
AZO AutoZone Inc	Consumer Discretionary	2680.00	Neutral B-2-9
CMG Chipotle Mexican Grill Inc	Consumer Discretionary	2638.35	Buy B-1-9
FICO Fair Isaac Corp	Information Technology	1323.81	n/a n/a
AVGO Broadcom Inc	Information Technology	1283.44	Buy B-1-7
MTD Mettler-Toledo International Inc	Health Care	1174.51	Neutral B-2-9
TDG TransDigm Group Inc	Industrials	1119.89	Buy B-1-9
ORLY O'Reilly Automotive Inc	Consumer Discretionary	1025.82	Buy B-1-9
GWW WW Grainger Inc	Industrials	959.01	n/a n/a
REGN Regeneron Pharmaceuticals Inc	Health Care	953.42	Underperform B-3-9
LRCX Lam Research Corp	Information Technology	911.58	Buy C-1-7
EQIX Equinix Inc	Real Estate	855.76	Buy B-1-7
NOW ServiceNow Inc	Information Technology	812.94	Buy B-1-9
BLK BlackRock Inc	Financials	797.21	Buy B-1-7
MPWR Monolithic Power Systems Inc	Information Technology	752.31	n/a n/a
LLY Eli Lilly & Co	Health Care	740.16	Buy B-1-7
COST Costco Wholesale Corp	Consumer Staples	723.40	Buy B-1-7
NVDA NVIDIA Corp	Information Technology	721.33	Buy C-1-7
INTU Intuit Inc	Information Technology	658.16	Buy B-1-7
URI United Rentals Inc	Industrials	650.35	Buy C-1-7
KLAC KLA Corp	Information Technology	649.80	Buy B-1-7
ADBE Adobe Inc	Information Technology	627.21	Buy B-1-9
CTAS Cintas Corp	Industrials	618.22	Buy B-1-7
MSCI MSCI Inc	Financials	592.42	Underperform B-3-7
SNPS Synopsys Inc	Information Technology	575.30	Buy B-1-9
IDXX IDEXX Laboratories Inc	Health Care	572.21	Neutral B-2-9
NFLX Netflix Inc	Communication Services	561.32	Buy B-1-9
TMO Thermo Fisher Scientific Inc	Health Care	550.75	Buy B-1-7
ROP Roper Technologies Inc	Information Technology	550.26	n/a n/a

Exhibit 24: \$6.6 trillion in market cap (15% of S&P 500) trade >\$500/share

S&P 500 companies trading above \$500 per share*

Ticker Name		Sector	Price/share	BofA Rating	
MLM	Martin Marietta Materials Inc	Materials	527.14	Neutral	B-2-7
ULTA	Ulta Beauty Inc	Consumer Discretionary	522.63	Neutral	B-2-9
PH	Parker-Hannifin Corp	Industrials	521.38	Buy	B-1-7
UNH	UnitedHealth Group Inc	Health Care	518.22	Buy	B-1-7
ELV	Elevance Health Inc	Health Care	506.08	Buy	B-1-7
MCK	McKesson Corp	Health Care	501.35	Buy	B-1-7

Source: BofA Research Investment Committee, Bloomberg. *As of close on 2/9/2024. This screen is not a recommended list either individually or as a group of stocks and may not be consistent with our fundamental view. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

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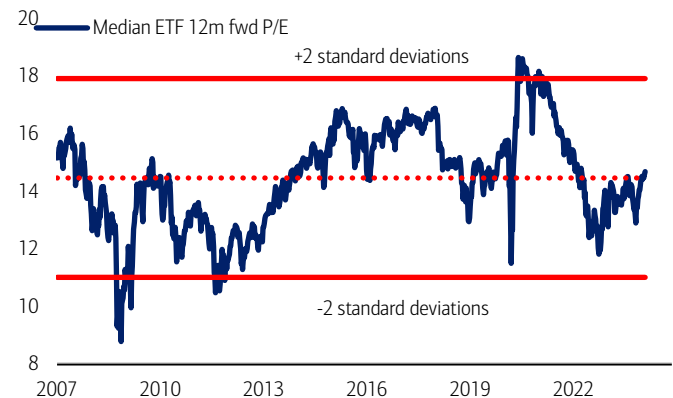
ETF Valuation

January median ETF P/E climbs higher

- The median equity ETF in our coverage ended January at 14.7x forward earnings, slightly above average (Exhibit 25).
- Composite valuations rose across the board except for clean energy. ICLN fell 11% in January.
- Large cap ETF valuation continue to diverge from small and mid-cap ETFs. The average large cap ETF trades at 23x P/E, vs 18x for small cap.
- Information technology further cements itself as the most expensive sector. With a 1.7x composite valuation and a 26x average P/E, tech is twice as expensive as energy.
- Japan ETF valuations continue to climb, driven by strong performance from hedged ETFs like DXJ. China remains the cheapest among international equity ETFs.

Exhibit 25: Equity ETF valuations approaching historical norms

Median 12 month forward P/E ratio across BofA equity ETF coverage



Source: BofA ETF Research, Factset. Note: Median calculated using 12m fwd P/E ratios for all equity ETFs in our coverage.

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Exhibit 26: Equity ETF valuations by category

ETF valuation ratios and composite score (lower is better)

Sub-category	Composite Valuation (stdev)	12m fwd P/E	12m fwd P/B	12m fwd EV/EBITDA	12m fwd P/FCF	Top-rated fund	Bottom-rated fund	Link
US Equity Sector	Communication Services	-0.36	17.39	2.74	9.12	15.88	XLC IYZ	Getting so defensive
	Real Estate	-0.26	15.63	2.58	16.75	19.35	XLRE SCHH	Getting so defensive
	Utilities	-0.03	14.92	1.67	10.55	-78.41	XLU RSPU	ETFs for the cyclical extremes
	Energy	-0.03	11.31	1.86	6.00	n.a.	XLE PXI	ETFs for the cyclical extremes
	Consumer Staples	0.43	18.41	4.88	12.68	20.31	IYK RSPS	Getting so defensive
	Consumer Discretionary	0.56	21.47	6.15	12.49	21.56	VCR IYC	ETFs for the cyclical extremes
	Financials	0.75	14.27	1.76	na	na	XLF FXO	ETFs for the cyclical extremes
	Materials	0.94	17.80	2.48	10.14	22.59	FXZ IYM	ETFs for the cyclical extremes
	Industrials	1.08	19.06	4.71	12.71	20.86	XLI FXR	ETFs for the cyclical extremes
	Health Care	1.29	18.56	4.18	14.38	18.72	XLV PTH	Getting so defensive
Single Factor	Information Technology	1.71	25.88	7.23	17.83	27.25	XLK QTEC	ETFs for the cyclical extremes
	International Dividend	-0.63	10.42	1.37	7.50	14.46	VYMI PID	Going global: markets to rent & markets to own
	Dividend	-0.24	13.15	2.57	9.68	15.92	SPYD AIVL	Follow the money with Dividend & Buyback ETFs
	Buybacks	-0.05	12.97	2.67	9.11	13.00	DIVB IPKW	Follow the money with Dividend & Buyback ETFs
	Value	0.25	13.66	2.22	9.93	16.29	VTV RPPV	Initiating coverage of value ETFs
	Quality	1.29	18.70	5.05	12.78	20.37	COWZ QLC	One factor to rule them all
US Size	Growth	1.45	26.18	8.26	17.19	26.74	SCHG IWV	Growth for contrarians
	Small Cap Equity	-0.33	17.82	1.72	9.73	19.90	CALF FYX	Shopping small
	Mid Cap	-0.05	15.29	2.29	10.62	18.44	SCHM IJH	The Sweet Middle
	Large Cap Non Market Cap	0.60	17.01	3.35	11.99	19.64	FNDX LRGF	The Sweet Middle
Thematic	Large Cap Market Cap	1.56	22.97	4.29	13.71	22.62	IVV OEF	The Sweet Middle
	Clean Energy	0.03	-19.90	1.73	17.86	-17.46	ICLN PBW	Valuations up, catalysts down: Neutral clean energy ETFs
	ESG Broad	0.64	17.73	3.33	12.61	21.99	ESGV VSGX	ESG ETFs get a better model and a VOTE
Int'l Equity	AI	0.78	28.09	3.61	16.16	37.33	AIQ DTEC	Some AI ETFs are smarter than others
	China	-0.97	8.42	0.95	7.58	12.94	KBA EWH	All the global growth you don't own
	Latin America	-0.85	8.83	1.48	5.22	11.06	EWL ECH	Going global: markets to rent & markets to own
	Global ex-US	-0.32	11.98	1.47	8.23	16.82	VEU ACWX	Going global: markets to rent & markets to own
	Emerging Markets	-0.32	11.29	1.44	7.73	16.80	EMXC DBEM	All the global growth you don't own
	Developed Markets ex-US	-0.15	12.71	1.51	8.61	17.83	HEFA RODM	Going global: markets to rent & markets to own
	Canada	-0.07	13.83	1.73	9.61	19.09	FLCA EWC	Going global: markets to rent & markets to own
	Europe	-0.03	12.06	1.65	8.41	16.61	FEZ FDD	Going global: markets to rent & markets to own
	Single-country Emerging Market	-0.02	11.72	1.21	7.33	15.89	KSA VNM	Going global: markets to rent & markets to own
	Japan	0.62	14.55	1.36	9.95	23.27	DXJ JPXN	Going global: markets to rent & markets to own
	India	1.71	21.32	3.39	14.14	33.20	EPI SMIN	Going global: markets to rent & markets to own

Source: BofA ETF Research, Factset. Note: All valuation metrics are based on next twelve month (NTM) I/B/E/S estimates. "Composite Valuation" is the market-cap weighted average standard deviation of each fund's P/E, P/B, EV/EBITDA, and P/FCF ratios. A higher number indicates that funds are more expensive relative to history while lower numbers suggest that funds are inexpensive.

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RIC Themes Watch

February is fully invested for 3rd month in a row

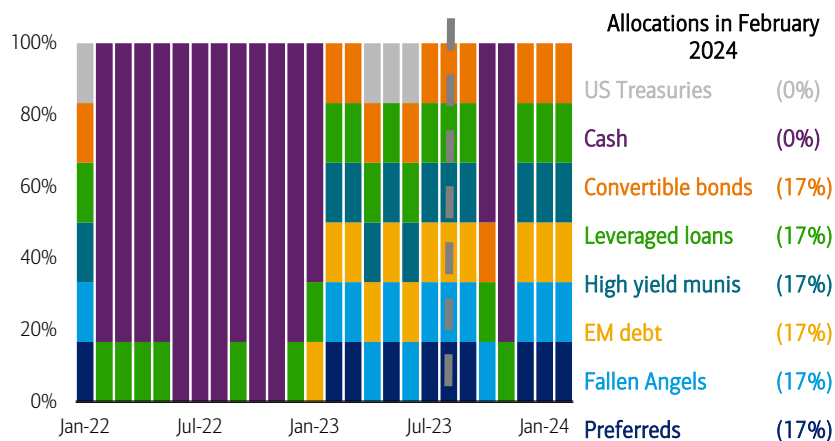
The BofA Dynamic Prudent Yield strategy remains fully invested, with no changes for February. In January, most fixed income sector returns were muted. The 10-year US Treasury yield hovered above 4% for most of the month before falling to 3.9% after Fed announcements on January 31st. Our economics team anticipates the [first rate cut](#) to come in June, despite market hopes for cuts beginning in March.

For details on the Dynamic Prudent Yield Strategy including the full Appendix see: [The RIC Report: A new bond strategy for the end of 60/40](#).

Monthly updates can be received via email immediately after publishing by subscribing to “The ETF Angle”. Full ETF coverage can be found on our ETF Research Library.

Exhibit 27: Dynamic Prudent Yield remains fully invested

Historical allocation of backtested Dynamic Prudent Yield Strategy, 2022-2024



Source: BofA ETF Research, Bloomberg, ICE Data Services LLC. Note: weights rounded from 16.7%. This performance is backtested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. See appendix for more details

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Exhibit 28: Stocks mentioned

Ticker, name, price, rating

Ticker	Name	Last price	BofA Rating	
GOOG	Alphabet Inc	148.73	BUY	B-1-9
GOOGL	Alphabet Inc	147.53	BUY	B-1-9
META	Meta Platforms Inc	468.9	BUY	C-1-7
NFLX	Netflix Inc	557.85	BUY	B-1-9
DIS	Walt Disney Co/The	109.29	BUY	B-1-7
V	Visa Inc	275.07	BUY	B-1-7
MA	Mastercard Inc	458.71	BUY	B-1-7
TGT	Target Corp	149.4	BUY	B-1-7
LDOS	Leidos Holdings Inc	114.56	BUY	B-1-7
PARA	Paramount Global	13.41	UNDERPERFORM	C-3-7
CVS	CVS Health Corp	77.29	BUY	B-1-7
FSLR	First Solar Inc	157.22	BUY	C-1-9
BG	Bunge Global SA	90.68	BUY	B-1-7
TDY	Teledyne Technologies Inc	427.07	BUY	B-1-9
UBER	Uber Technologies Inc	69.12	BUY	C-1-9
PTC	PTC Inc	178.54	BUY	B-1-9
SHW	Sherwin-Williams Co/The	310.42	UNDERPERFORM	B-3-7
GLW	Corning Inc	32.18	BUY	B-1-7
CHTR	Charter Communications Inc	297.91	NEUTRAL	B-2-9
JBL	Jabil Inc	140.46	BUY	B-1-7
BLDR	Builders FirstSource Inc	187.12	BUY	C-1-9
SEE	Sealed Air Corp	36.64	BUY	B-1-7
ALK	Alaska Air Group Inc	37.33	BUY	B-1-9
SEDG	SolarEdge Technologies Inc	83.3	UNDERPERFORM	C-3-9
SPWR	SunPower Corp	4.16	UNDERPERFORM	C-3-9
NTR	Nutrien Ltd	50.06	BUY	B-1-7
SAABF	Saab AB	72.62	BUY	B-1-7
EBAY	eBay Inc	43.49	NEUTRAL	B-2-7
EXLS	ExlService Holdings Inc	31.04	BUY	B-1-9
KKR	KKR & Co Inc	97.62	BUY	B-1-7
WDAY	Workday Inc	299.09	BUY	B-1-9
PLTR	Palantir Technologies Inc	25.05	BUY	C-1-9
ARES	Ares Management Corp	137.06	BUY	B-1-7
TW	Tradeweb Markets Inc	100.07	BUY	B-1-7
VRT	Vertiv Holdings Co	61.32	BUY	C-1-7
DECK	Deckers Outdoor Corp	844.67	BUY	B-1-9
BAH	Booz Allen Hamilton Holding Corp	145.89	BUY	B-1-7
RPRX	Royalty Pharma PLC	29.05	BUY	B-1-7
BMRN	BioMarin Pharmaceutical Inc	88.18	BUY	B-1-9
DT	Dynatrace Inc	52.42	BUY	C-1-9
VST	Vistra Corp	42.81	BUY	B-1-7
AVTR	Avantor Inc	22.56	BUY	B-1-9
SAIA	Saia Inc	560.4	BUY	B-1-9
XPO	XPO Inc	117.63	BUY	C-1-9
OC	Owens Corning	149.25	BUY	B-1-7
NBIX	Neurocrine Biosciences Inc	130.43	BUY	B-1-9
BURL	Burlington Stores Inc	197.82	BUY	C-1-9
BLD	TopBuild Corp	399.82	BUY	B-1-9
ACM	AECOM	90.17	BUY	B-1-7
RNR	RenaissanceRe Holdings Ltd	226.24	BUY	B-1-7
FND	Floor & Decor Holdings Inc	111.82	BUY	C-1-9
OVV	Ovintiv Inc	42.59	BUY	C-1-7
REXR	Rexford Industrial Realty Inc	52.34	BUY	B-1-7
ZION	Zions Bancorp NA	41.24	UNDERPERFORM	C-3-7
WHR	Whirlpool Corp	112.12	UNDERPERFORM	B-3-7
FMC	FMC Corp	53.61	UNDERPERFORM	B-3-7
VFC	VF Corp	17.44	UNDERPERFORM	B-3-8
MHK	Mohawk Industries Inc	117.24	UNDERPERFORM	B-3-9
RHI	Robert Half Inc	81.96	UNDERPERFORM	B-3-7
CHRW	CH Robinson Worldwide Inc	75.76	UNDERPERFORM	B-3-7
PEAK	Healthpeak Properties Inc	17.54	UNDERPERFORM	B-3-7
AAL	American Airlines Group Inc	14.93	UNDERPERFORM	C-3-9
HSIC	Henry Schein Inc	75.73	UNDERPERFORM	B-3-9
CPT	Camden Property Trust	94.19	UNDERPERFORM	B-3-7

Exhibit 28: Stocks mentioned

Ticker, name, price, rating

Ticker	Name	Last price	BofA Rating	
QRVO	Qorvo Inc	113.73	UNDERPERFORM	B-3-9
NVR	NVR Inc	7617.24	BUY	B-1-9
BKNG	Booking Holdings Inc	3790.23	NEUTRAL	B-2-9
AZO	AutoZone Inc	2703.88	NEUTRAL	B-2-9
CMG	Chipotle Mexican Grill Inc	2608.23	BUY	B-1-9
FICO	Fair Isaac Corp	1298.35	N/A	N/A
AVGO	Broadcom Inc	1265	BUY	B-1-7
MTD	Mettler-Toledo International Inc	1190.04	NEUTRAL	B-2-9
TDG	TransDigm Group Inc	1109.17	BUY	B-1-9
ORLY	O'Reilly Automotive Inc	1026.39	BUY	B-1-9
GWW	WW Grainger Inc	947.21	N/A	N/A
REGN	Regeneron Pharmaceuticals Inc	947.06	UNDERPERFORM	B-3-9
LRCX	Lam Research Corp	908	BUY	C-1-7
EQIX	Equinix Inc	849.98	BUY	B-1-7
NOW	ServiceNow Inc	787.35	BUY	B-1-9
BLK	BlackRock Inc	801.76	BUY	B-1-7
MPWR	Monolithic Power Systems Inc	729.87	N/A	N/A
LLY	Eli Lilly & Co	737.26	BUY	B-1-7
COST	Costco Wholesale Corp	722.41	BUY	B-1-7
NVDA	NVIDIA Corp	722.48	BUY	C-1-7
INTU	Intuit Inc	656.99	BUY	B-1-7
URI	United Rentals Inc	663.53	BUY	C-1-7
KLAC	KLA Corp	648.05	BUY	B-1-7
ADBE	Adobe Inc	611.84	BUY	B-1-9
CTAS	Cintas Corp	613.69	BUY	B-1-7
MSCI	MSCI Inc	590.19	UNDERPERFORM	B-3-7
SNPS	Synopsys Inc	568.93	BUY	B-1-9
IDXX	IDEXX Laboratories Inc	565.56	NEUTRAL	B-2-9
TMO	Thermo Fisher Scientific Inc	546.86	BUY	B-1-7
ROP	Roper Technologies Inc	542.31	N/A	N/A
MLM	Martin Marietta Materials Inc	532.3	NEUTRAL	B-2-7
ULTA	Ulta Beauty Inc	525.06	NEUTRAL	B-2-9
PH	Parker-Hannifin Corp	518.2	BUY	B-1-7
UNH	UnitedHealth Group Inc	517.64	BUY	B-1-7
ELV	Elevance Health Inc	505.24	BUY	B-1-7
MCK	McKesson Corp	494.48	BUY	B-1-7

Source: BofA Global Research, Bloomberg

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Exhibit 29: ETFs mentioned

Ticker, name, price, rating

Ticker Name	Last price	BofA Rating	
XLC Communication Services Select Sector SPDR Fund	79.42	MORE ATTRACTIVE	1-UF
XLRE Real Estate Select Sector SPDR Fund	38.29	MORE ATTRACTIVE	1-NV
XLU Utilities Select Sector SPDR Fund	60.97	MORE ATTRACTIVE	1-NV
XLE Energy Select Sector SPDR Fund	84.23	MORE ATTRACTIVE	1-FV
IYK iShares U.S. Consumer Staples ETF	194.1285	MORE ATTRACTIVE	1-FV
VCR Vanguard Consumer Discretionary ETF	308.65	MORE ATTRACTIVE	1-UF
XLF Financial Select Sector SPDR Fund	39.26	MORE ATTRACTIVE	1-FV
FXZ First Trust Materials AlphaDEX Fund	66.9	MORE ATTRACTIVE	1-NV
XLI Industrial Select Sector SPDR Fund	117.12	MORE ATTRACTIVE	1-NV
XLV Health Care Select Sector SPDR Fund	144.2	MORE ATTRACTIVE	1-FV
XLK Technology Select Sector SPDR Fund	206.26	MORE ATTRACTIVE	1-UF
VYMI Vanguard International High Dividend Yield ETF	65.71	MORE ATTRACTIVE	1-FV
SPYD SPDR Portfolio S&P 500 High Dividend ETF	38.53	MORE ATTRACTIVE	1-FV
DIVB iShares Core Dividend ETF	41.77	MORE ATTRACTIVE	1-FV
VTI Vanguard Value ETF	153.27	MORE ATTRACTIVE	1-FV
COWZ Pacer US Cash Cows 100 ETF	52.76	MORE ATTRACTIVE	1-FV
SCHG Schwab U.S. Large-Cap Growth ETF	89.93	MORE ATTRACTIVE	1-FV
CALF Pacer US Small Cap Cash Cows 100 ETF	48.82	MORE ATTRACTIVE	1-FV
SCHM Schwab U.S. Mid-Cap ETF	76.4	MORE ATTRACTIVE	1-FV
FNDX Schwab Fundamental U.S. Large Company Index ETF	63.78	MORE ATTRACTIVE	1-NV
IVV iShares Core S&P 500 ETF	503.38	MORE ATTRACTIVE	1-NV
ICLN iShares Global Clean Energy ETF	14.64	MORE ATTRACTIVE	1-NV



Exhibit 28: Stocks mentioned

Ticker, name, price, rating

Ticker	Name	Last price		BofA Rating
ESGV	Vanguard ESG US Stock ETF	89.79	ATTRACTIVE	2-NV
AIQ	Global X Artificial Intelligence & Technology ETF	32.86	MORE ATTRACTIVE	1-NV
KBA	KraneShares Boseri MSCI China A 50 Connect Index ETF	20.1881	MORE ATTRACTIVE	1-UF
EWV	iShares MSCI Mexico ETF	67.54	MORE ATTRACTIVE	1-FV
VEU	Vanguard FTSE All-World ex-US ETF	56.03	MORE ATTRACTIVE	1-NV
EMXC	iShares MSCI Emerging Markets ex China ETF	55.98	MORE ATTRACTIVE	1-FV
HEFA	iShares Currency Hedged MSCI EAFE ETF	32.64	MORE ATTRACTIVE	1-NV
FLCA	Franklin FTSE Canada ETF	33.01	MORE ATTRACTIVE	1-FV
FEZ	SPDR EURO STOXX 50 ETF	48.85	MORE ATTRACTIVE	1-NV
KSA	iShares MSCI Saudi Arabia ETF	43.84	MORE ATTRACTIVE	1-FV
DXJ	WisdomTree Japan Hedged Equity Fund	98.68	MORE ATTRACTIVE	1-FV
EPI	WisdomTree India Earnings Fund	42.95	MORE ATTRACTIVE	1-FV
IYZ	iShares U.S. Telecommunications ETF	22.65	LESS ATTRACTIVE	3-UF
SCHH	Schwab U.S. REIT ETF	19.78	LESS ATTRACTIVE	3-NV
RSPU	Invesco S&P 500 Equal Weight Utilities ETF	52.53	LESS ATTRACTIVE	3-NV
PXI	Invesco Exchange-Traded Fund Trust Invesco Dorsey Wright Energy Momentum ETF	44.2475	LESS ATTRACTIVE	3-FV
RSPS	Invesco S&P 500 Equal Weight Consumer Staples ETF	31.22	LESS ATTRACTIVE	3-FV
IYC	iShares U.S. Consumer Discretionary ETF	78.53	LESS ATTRACTIVE	3-UF
FXO	First Trust Financial AlphaDEX Fund	43.93	ATTRACTIVE	2-FV
IYM	iShares U.S. Basic Materials ETF	133.85	ATTRACTIVE	2-NV
FXR	First Trust Industrials/Producer Durables AlphaDEX Fund	67.16	LESS ATTRACTIVE	3-NV
PTH	Invesco Exchange-Traded Fund Trust Invesco Dorsey Wright Healthcare Momentum ETF	44.15	LESS ATTRACTIVE	3-FV
QTEC	First Trust NASDAQ-100 Technology Index Fund	189.91	LESS ATTRACTIVE	3-UF
PID	Invesco International Dividend Achievers ETF	18	LESS ATTRACTIVE	3-FV
AIVL	WisdomTree US AI Enhanced Valu	96.3437	LESS ATTRACTIVE	3-FV
IPKW	Invesco International BuyBack Achievers ETF	36.9	LESS ATTRACTIVE	3-FV
RPV	Invesco Exchange-Traded Fund Trust - Invesco S&P 500 Pure Value ETF	82.54	LESS ATTRACTIVE	3-FV
QLC	FlexShares US Quality Large Cap Index Fund	55.7954	LESS ATTRACTIVE	3-FV
IWV	iShares S&P 500 Growth ETF	81.62	LESS ATTRACTIVE	3-FV
FYX	First Trust Small Cap Core AlphaDEX Fund	91.48	LESS ATTRACTIVE	3-FV
IJH	iShares Core S&P Mid-Cap ETF	282.9	ATTRACTIVE	2-FV
LRGF	iShares U.S. Equity Factor ETF	51.01	LESS ATTRACTIVE	3-NV
OEF	iShares S&P 100 ETF	238.33	LESS ATTRACTIVE	3-NV
PBW	Invesco WilderHill Clean Energy ETF	25.93	LESS ATTRACTIVE	3-NV
VSGX	Vanguard ESG International Stock ETF	55.16	LESS ATTRACTIVE	3-NV
DTEC	ALPS Disruptive Technologies ETF	41.6046	LESS ATTRACTIVE	3-NV
EWV	iShares MSCI Hong Kong ETF	16.2	LESS ATTRACTIVE	3-UF
ECH	iShares MSCI Chile ETF	24.91	LESS ATTRACTIVE	3-FV
ACWX	iShares MSCI ACWI ex U.S. ETF	50.89	LESS ATTRACTIVE	3-NV
DBEM	Xtrackers MSCI Emerging Markets Hedged Equity ETF	23.051	LESS ATTRACTIVE	3-FV
RODM	Hartford Multifactor Developed Markets ex-US ETF	26.905	LESS ATTRACTIVE	3-NV
EWC	iShares MSCI Canada ETF	36.45	ATTRACTIVE	2-FV
FDD	First Trust STOXX European Select Dividend Index Fund	11.195	LESS ATTRACTIVE	3-NV
VNM	VanEck Vietnam ETF	13.145	LESS ATTRACTIVE	3-FV
JPXN	iShares JPX-Nikkei 400 ETF /US	70.3723	LESS ATTRACTIVE	3-FV
SMIN	iShares MSCI India Small-Cap ETF	71.98	ATTRACTIVE	2-FV
TLT	iShares 20+ Year Treasury Bond ETF	93.96	MORE ATTRACTIVE	1-NV

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Price objective basis & risk**First Solar, Inc. (FSLR)**

Our price objective is \$179/share, based on an EV/EBITDA method. We apply a 3.1x multiple from a group of Chinese and other international solar comp group/module peers, and add a 0.5x premium for FSLR's lower risk to protectionist trade policies. We value FSLR's core EBITDA at a lower than historical multiple given significant pressure to 2027+ pricing from Chinese oversupply. We also add net cash balance and \$84/share net present value to account for production tax credits stipulated in Inflation Reduction Act.

Downside risks: 1) worse/declining price environment, 2) declining margins or worse-than-expected cost structure, 3) unfavorable trade policy dynamics, 5) worse Chinese/global demand environment, 6) worse execution on systems business, and 7) technology fails to live up to expectations 8) FSLR capture of production tax credits fall short of expectations

KKR & Co. Inc. (KKR)

Our price objective for KKR is \$111 and is derived from 17.5x 2026E cash earnings. Our definition of cash earnings uses the company's distributable earnings metric and adds back stock-based comp. We apply the multiple on our normalized cash earnings forecast for KKR's asset management business.

Downside risks: Strong capital deployment activity in the frothy years (2020-21), valuation complexity with FRE, expense allocations, insurance business and capital intensive model, business model is private equity heavy and this business is experiencing multiple cyclical headwinds (returns - inflation & bear market, fundraising - crowded backdrop, denominator effect), insider-selling potential, KKR's voting structure may prevent an S&P 500 Index add.

Analyst Certification

We, Jared Woodard, Craig Siegenthaler, CFA and Julien Dumoulin-Smith, 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.

Special Disclosures

BofA Securities is currently acting as financial advisor to Alaska Air Group Inc in connection with its proposed combination with Hawaiian Holdings Inc, which was announced on December 3rd, 2023. The proposed transaction is subject to approval by shareholders of Hawaiian Holdings Inc. This research report is not intended to provide voting advice, serve as an endorsement of the proposed transaction, or result in the procurement, withholding or revocation of a proxy.

BofA Securities is currently acting as financial advisor to Bunge Ltd in connection with its proposed merger with Viterra Ltd, together with certain affiliates of Glencore PLC, Canada Pension Plan Investment Board, and British Columbia Investment Management Corp, which was announced on June 13, 2023.

BofA Securities is currently acting as financial advisor to Physicians Realty Trust in connection with its proposed merger of equals with Healthpeak Properties Inc., which was announced on October 30, 2023. The proposed transaction is subject to approval by shareholders of Physicians Realty Trust and Healthpeak Properties Inc. This research report is not intended to provide voting advice, serve as an endorsement of the proposed transaction, or result in the procurement, withholding or revocation of a proxy.

BofA Securities is currently acting as buy-side advisor to Frontier Tower Associates Philippines Inc, a regional telecom infrastructure platform backed by KKR to acquire a portion of telecoms towers from Smart Communications, a wholly owned subsidiary of PLDT Inc, which was announced on March 17, 2023.

BofA Securities is currently acting as a Financial Advisor to Canadian Solar Inc in connection with its subsidiary Recurrent Energy LLC's secured preferred equity investment commitment, convertible into common equity, for Recurrent Energy BV



from BlackRock Inc through a fund managed by its Climate Infrastructure business, which was announced on January 23, 2024.

North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alliant Energy Corporation	LNT	LNT US	Julien Dumoulin-Smith
	Array Technologies	ARRY	ARRY US	Julien Dumoulin-Smith
	Atlantica Sustainable Infrastructure	AY	AY US	Julien Dumoulin-Smith
	Atmos Energy Corporation	ATO	ATO US	Julien Dumoulin-Smith
	CenterPoint Energy	CNP	CNP US	Julien Dumoulin-Smith
	Cheniere Energy Inc	LNG	LNG US	Julien Dumoulin-Smith
	Clearway Energy	CWENA	CWEN/A US	Julien Dumoulin-Smith
	Clearway Energy	CWEN	CWEN US	Julien Dumoulin-Smith
	CMS Energy	CMS	CMS US	Julien Dumoulin-Smith
	Consolidated Edison	ED	ED US	Julien Dumoulin-Smith
	DTE Energy	DTE	DTE US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	ENLT	ENLT US	Julien Dumoulin-Smith
	Enlight Renewable Energy Ltd	XENLF	ENLT IT	Julien Dumoulin-Smith
	Entergy	ETR	ETR US	Paul Zimbardo
	First Solar, Inc.	FSLR	FSLR US	Julien Dumoulin-Smith
	Fluence Energy	FLNC	FLNC US	Julien Dumoulin-Smith
	Hannon Armstrong	HASI	HASI US	Julien Dumoulin-Smith
	Hydro One	YH	H CN	Julien Dumoulin-Smith
	MDU Resources Group, Inc.	MDU	MDU US	Julien Dumoulin-Smith
	Nexttracker Inc	NXT	NXT US	Julien Dumoulin-Smith
	NiSource Inc	NI	NI US	Julien Dumoulin-Smith
	NorthWestern Energy Group	NWE	NWE US	Julien Dumoulin-Smith
	NRG Energy	NRG	NRG US	Julien Dumoulin-Smith
	PG&E Corporation	PCG	PCG US	Julien Dumoulin-Smith
	PNM Resources Inc.	PNM	PNM US	Julien Dumoulin-Smith
	PPL Corporation	PPL	PPL US	Paul Zimbardo
	Public Service Enterprise Group	PEG	PEG US	Julien Dumoulin-Smith
	Sempra	SRE	SRE US	Julien Dumoulin-Smith
	Sunnova Energy	NOVA	NOVA US	Julien Dumoulin-Smith
	SunRun	RUN	RUN US	Julien Dumoulin-Smith
	TPI Composites	TPIC	TPIC US	Julien Dumoulin-Smith
	Vistra Corp	VST	VST US	Julien Dumoulin-Smith
	Xcel Energy Inc	XEL	XEL US	Julien Dumoulin-Smith
NEUTRAL				
	AES	AES	AES US	Julien Dumoulin-Smith
	Algonquin Power & Utilities Corp	AQN	AQN US	Paul Zimbardo
	Algonquin Power & Utilities Corp	YAQN	AQN CN	Paul Zimbardo
	AltaGas	YALA	ALA CN	Cameron Lochridge
	Ameren Corporation	AEE	AEE US	Julien Dumoulin-Smith
	Ameresco	AMRC	AMRC US	Julien Dumoulin-Smith
	American Electric Power	AEP	AEP US	Julien Dumoulin-Smith
	ChargePoint Holdings	CHPT	CHPT US	Cameron Lochridge
	Constellation Energy Corp	CEG	CEG US	Paul Zimbardo
	Duke Energy	DUK	DUK US	Julien Dumoulin-Smith
	Emera Inc	YEMA	EMA CN	Julien Dumoulin-Smith
	Essential Utilities	WTRG	WTRG US	Julien Dumoulin-Smith
	Evergy, Inc	EVRG	EVRG US	Julien Dumoulin-Smith
	Exelon	EXC	EXC US	Paul Zimbardo
	Generac Holdings Inc.	GNRC	GNRC US	Julien Dumoulin-Smith
	Idacorp	IDA	IDA US	Paul Zimbardo
	Maxeon Solar Technologies	MAXN	MAXN US	Julien Dumoulin-Smith
	New Fortress Energy	NFE	NFE US	Cameron Lochridge
	NextEra Energy	NEE	NEE US	Julien Dumoulin-Smith
	NextEra Energy Partners	NEP	NEP US	Julien Dumoulin-Smith
	OGE Energy Corp	OGE	OGE US	Julien Dumoulin-Smith
	Ormat Technologies	ORA	ORA US	Julien Dumoulin-Smith
	Pinnacle West	PNW	PNW US	Julien Dumoulin-Smith
	Portland General Electric Company	POR	POR US	Julien Dumoulin-Smith
	Southern Company	SO	SO US	Julien Dumoulin-Smith
	Southwest Gas Holdings	SWX	SWX US	Julien Dumoulin-Smith
	TransAlta Corp	TAC	TAC US	Julien Dumoulin-Smith
	TransAlta Corporation	YTA	TA CN	Julien Dumoulin-Smith



North America - Utilities and Alt Energy Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
UNDERPERFORM				
	Allete Inc	ALE	ALE US	Julien Dumoulin-Smith
	American Water Works	AWK	AWK US	Julien Dumoulin-Smith
	Avangrid	AGR	AGR US	Paul Zimbardo
	Avista	AVA	AVA US	Julien Dumoulin-Smith
	Black Hills Corporation	BKH	BKH US	Julien Dumoulin-Smith
	Bloom Energy	BE	BE US	Julien Dumoulin-Smith
	Dominion Energy	D	D US	Paul Zimbardo
	Edison International	EIX	EIX US	Paul Zimbardo
	Enphase Energy	ENPH	ENPH US	Julien Dumoulin-Smith
	Eversource Energy	ES	ES US	Paul Zimbardo
	FirstEnergy	FE	FE US	Julien Dumoulin-Smith
	Fortis	YFTS	FTS CN	Julien Dumoulin-Smith
	Fortis Inc	FTS	FTS US	Julien Dumoulin-Smith
	FREYR Battery	FREY	FREY US	Julien Dumoulin-Smith
	FTC Solar	FTCI	FTCI US	Julien Dumoulin-Smith
	Hawaiian Electric Industries	HE	HE US	Julien Dumoulin-Smith
	MGE Energy	MGEE	MGEE US	Julien Dumoulin-Smith
	New Jersey Resources Corp	NJR	NJR US	Julien Dumoulin-Smith
	ONE Gas, Inc.	OGS	OGS US	Julien Dumoulin-Smith
	SolarEdge Technologies	SEDG	SEDG US	Julien Dumoulin-Smith
	Spire	SR	SR US	Julien Dumoulin-Smith
	Stem, Inc.	STEM	STEM US	Julien Dumoulin-Smith
	SunPower Corp.	SPWR	SPWR US	Julien Dumoulin-Smith
	UGI Corp.	UGI	UGI US	Julien Dumoulin-Smith
	WEC Energy Group Inc	WEC	WEC US	Julien Dumoulin-Smith

US - Brokers, Asset Managers, & Exchanges Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	AllianceBernstein	AB	AB US	Craig Siegenthaler, CFA
	Ameriprise Financial	AMP	AMP US	Craig Siegenthaler, CFA
	Ares Management Corp	ARES	ARES US	Craig Siegenthaler, CFA
	BlackRock, Inc.	BLK	BLK US	Craig Siegenthaler, CFA
	Blackstone	BX	BX US	Craig Siegenthaler, CFA
	Blue Owl Capital	OWL	OWL US	Craig Siegenthaler, CFA
	Cboe Global Markets	CBOE	CBOE US	Craig Siegenthaler, CFA
	Interactive Brokers	IBKR	IBKR US	Craig Siegenthaler, CFA
	Intercontinental Exchange	ICE	ICE US	Craig Siegenthaler, CFA
	KKR & Co. Inc.	KKR	KKR US	Craig Siegenthaler, CFA
	Raymond James Financial	RJF	RJF US	Mark McLaughlin, CFA
	TPG Inc	TPG	TPG US	Craig Siegenthaler, CFA
	Tradeweb Markets Inc.	TW	TW US	Craig Siegenthaler, CFA
	Victory Capital Holdings, Inc.	VCTR	VCTR US	Craig Siegenthaler, CFA
	Virtu Financial	VIRT	VIRT US	Craig Siegenthaler, CFA
NEUTRAL				
	Affiliated Managers Group	AMG	AMG US	Craig Siegenthaler, CFA
	Apollo Global Management	APO	APO US	Craig Siegenthaler, CFA
	Brookfield Asset Management	BAM	BAM US	Craig Siegenthaler, CFA
	CME Group Inc	CME	CME US	Craig Siegenthaler, CFA
	Invesco	IVZ	IVZ US	Craig Siegenthaler, CFA
	Janus Henderson Group	JHG	JHG US	Craig Siegenthaler, CFA
	LPL Financial Holdings	LPLA	LPLA US	Craig Siegenthaler, CFA
	Patria	PAX	PAX US	Craig Siegenthaler, CFA
UNDERPERFORM				
	Charles Schwab Corp.	SCHW	SCHW US	Craig Siegenthaler, CFA
	Franklin Resources	BEN	BEN US	Craig Siegenthaler, CFA
	Nasdaq	NDAQ	NDAQ US	Craig Siegenthaler, CFA
	Robinhood Markets	HOOD	HOOD US	Craig Siegenthaler, CFA
	T. Rowe Price	TROW	TROW US	Craig Siegenthaler, CFA

US - Brokers, Asset Managers, & Exchanges Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	The Carlyle Group	CG	CG US	Craig Siegenthaler, CFA

Disclosures

Important Disclosures

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	8	47.06%	Buy	8	100.00%
Hold	5	29.41%	Hold	3	60.00%
Sell	4	23.53%	Sell	1	25.00%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

Equity Investment Rating Distribution: Industrials/Multi-Industry Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	45	50.56%	Buy	25	55.56%
Hold	26	29.21%	Hold	13	50.00%
Sell	18	20.22%	Sell	7	38.89%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

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.

Exchange-Traded Funds Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R2}	Count	Percent
Buy	80	19.61%	Buy	53	66.25%
Hold	317	77.70%	Hold	241	76.03%
Sell	11	2.70%	Sell	7	63.64%

^{R2} Exchange-traded funds (ETFs), or the ETF providers, 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 ETFs. An ETF rated 1-FV is included as a Buy; an ETF rated 2-FV, 3-FV, 1-NV, 2-NV, 3-NV, 1-UF or 2-UF is included as a Hold; and an ETF rated 3-UF 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 ^{R3}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R3} 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.

EXCHANGE-TRADED FUNDS (ETF) INVESTMENT OPINION KEY: Opinions reflect both an Outlook Rating and a Category Rating. **OUTLOOK RATINGS** reflect the analyst's assessment of the ETF's attractiveness relative to other ETFs within its category (including sector, region, asset class, thematic, and others). There are three outlook ratings: 1 - the ETF is more attractive than covered peers in the same category over the next 12 months; 2 - the ETF is similarly attractive to covered peers in the same category over the next 12 months; and 3 - the ETF is less attractive than covered peers in the same category over the next 12 months. **CATEGORY RATINGS**, indicators of the analyst's view of the ETF's category and which incorporate published views of BofA Global Research department analysts, are: FV - Favorable view, NV - Neutral view and UF - Unfavorable view.

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: 1st Trust Financ ETF, 1st Trust Indus Fund, 1st Trust Mater ETF, 1st Trust Techn ETF, Fair Isaac, First Solar, FirstTrust SmCap ETF, FlexShares Qual LC, Franklin Canada ETF, FT STX EUROPE ETF, Global X AI & Tech, Hartford Dev Mkt ETF, Inv DWA EnrgMomentum, Invesco Cons ETF, Invesco DWA ETF, Invesco Intl Div, Invesco IntlBuyback, Invesco S&P EWU ETF, Invesco Wh Cln Ener, InvescoSP500 PureVal, iShares ACWI ex US, iShares Canada ETF, iShares Chile ETF, iShares Cons Srv ETF, iShares Core S&P ETF, iShares Currency ETF, iShares Div&Buyback, iShares Edg MSCI ETF, iShares EM ex China, iShares Global Clean, iShares India SC ETF, iShares JPX-NIKK ETF, iShares Long UST, iShares Material ETF, iShares Mexico ETF, iShares MSCI HK ETF, iShares S&P 100 ETF, iShares S&P 500 ETF, iShares S&P Mid ETF, iShares Saudi Arabia, iShares US, iShares-DJ Telecom, KKR & Co. Inc., Pacer US S Cap C Cow, Pacer USCashCows ETF, Schwab L Cap Grw, Schwab US Large ETF, Schwab US MidCap ETF, Schwab US REIT ETF, SPDR Comm Serv ETF, SPDR Energy ETF, SPDR EuroStoxx50 ETF, SPDR Financ ETF, SPDR Healthca ETF, SPDR High Div ETF, SPDR Industr ETF, SPDR REIT ETF, SPDR Tech ETF, SPDR Utilities ETF, VanEck Vietnam ETF, Vanguard Cons ETF, Vanguard ESG US, Vanguard Intl Div, Vanguard Intl ESG, Vanguard Value ETF, Vanguard World ex US, WSDTRE JPN Hdg ETF, WT Ex-Val ETF, WTree India Earnings, WW Grainger Inc, Xtrackers EM Hdg ETF.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: BlackRock, Inc., Charles Schwab, State Street.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: BlackRock, Inc., Charles Schwab, Deutsche Bank, Fair Isaac, First Solar Inc., Franklin Resources, Grainger W.W., Invesco, KKR & Co. Inc., Northern Trust Corp, State Street, The Hartford, WisdomTree.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: BlackRock, Inc., Charles Schwab, Deutsche Bank, Fair Isaac, First Solar Inc., Franklin Resources, Grainger W.W., Invesco, KKR & Co. Inc., MiraeAsset Sec, Northern Trust Corp, Pacer Advisors, State Street, The Hartford, Vaneck, Vanguard Group Inc, WisdomTree.

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: BlackRock, Inc., Charles Schwab, Deutsche Bank, Fair Isaac, First Solar Inc., Franklin Resources, Grainger W.W., Invesco, KKR & Co. Inc., MiraeAsset Sec, Northern Trust Corp, Pacer Advisors, State Street, The Hartford, Vaneck, Vanguard Group Inc, WisdomTree.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: BlackRock, Inc., Charles Schwab, First Solar Inc., Franklin Resources, Grainger W.W., Invesco, KKR & Co. Inc., Northern Trust Corp, State Street, The Hartford, WisdomTree.

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: BlackRock, Inc., Charles Schwab, Deutsche Bank, Fair Isaac, Franklin Resources, Invesco, KKR & Co. Inc., Northern Trust Corp, State Street, The Hartford, WisdomTree.

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