

SMID Cap Focus Point

The SMID cap investor's guide to the Consumer sector

Small Cap

For small cap investors, our data says prefer Disc.>Staples

Ahead of BoFA's Consumer Conference (3/11-3/12), we publish an investor's guide to the SMID Consumer sectors. As highlighted in our concurrent [large cap note](#), consumption trends have slowed, but have remained resilient. Consumer Discretionary has jumped to #2 in our small cap sector ranks, while defensive sectors including Staples rank at the bottom. Discretionary has seen better revision trends and more BoFA rating upgrades vs. downgrades in recent months (vs. more downgrades in Staples); rating changes are also more positive than in large cap Discretionary. Small cap Discretionary looks historically cheap vs. Staples, with the relative multiple 13% below history on avg. across metrics we track (mid & large Staples, in contrast, look cheap vs. Discretionary). Discretionary also increasingly aligns with Value (we like Value>Growth).

Early cycle? Small Discretionary. Downturn? Large Staples

Muddled macro signals suggest challenges for Consumer investors: our [US Regime Indicator](#) has been bouncing between Downturn and Recovery, most recently suggesting a potential shift back to Recovery, a phase where small Discretionary stocks have outperformed the index and large peers >75% of the time. Downturns have been more positive for Staples, which also tends to outperform in trade-down environments (see [Consumer crosscurrents](#)) – but while still elevated, trade-down mentions are declining.

SMID Consumer sector risks: guidance, positioning

Guidance has been weak in small and mid Discretionary (sparse in Staples), and some positioning risk is present: small cap core/growth/value funds (plus mid cap core/value funds) are overweight Discretionary, while Staples is overweight by small and mid cap core/value funds. Small cap Discretionary has also lagged the index (and Staples) after the first Fed cut, though this usually coincided with recessions (not BoFA's base case). Policy uncertainty around the US election (tax/immigration policy, etc) is also a risk.

How to pick stocks in SMID Cap Consumer

In a year where we expect market leadership to broaden and stock-picking to be fruitful ([Strategy Snippet](#)), the Consumer sectors may offer among the best opportunities for stock selection. Guide to picking stocks in Consumer inside — *Jill Carey Hall*

Converts offer asymmetric exposure to Consumer stocks

Having grown to the third-largest convertible bond (CB) market sector in light of the pandemic-era issuance boom, CBs from Consumer names can offer investors unique opportunities to participate in consumer equity performance with bond-like downside support—a key advantage as markets trend higher despite lack of conviction and concerns that interest rates will remain higher-for-longer. We've found that both Discretionary and Staples names tend to capture greater portions of their underlying stocks' upside than downside, resulting in better risk-adjusted returns, particularly during economic recovery periods. Though 2024 performance is off to a difficult start, consumer CBs offer opportunities for yield, and there's little manager crowding. — *Michael Youngworth*

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

BoFA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 28 to 30.

12668986

Timestamp: 11 March 2024 02:46AM EDT

11 March 2024

Small/Mid Cap Research
United States

Equity & Quant Strategy
Jill Carey Hall, CFA
Equity & Quant Strategist
BoFA
+1 646 855 3327
jill.carey@bofa.com

Nicolas Woods
Equity & Quant Strategist
BoFA
+1 646 556 4179
nicolas.woods_barron@bofa.com

CB Research
Michael Youngworth, CFA
CBs, Pfds & Derivs Strategist
BoFA
+1 646 855 6493
michael.youngworth@bofa.com

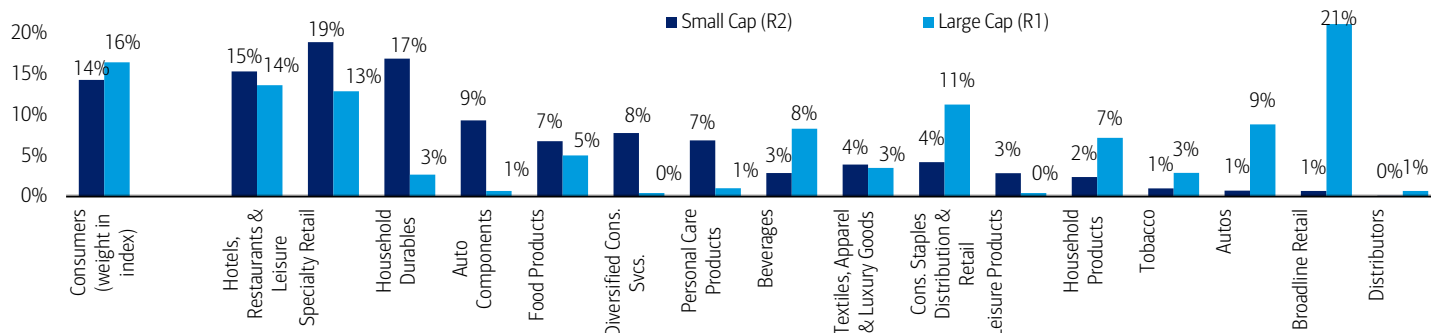
See Team Page for List of Analysts

SMID investor's guide: Consumer sector

Ahead of BofA's Consumer Conference in Miami (3/11-3/12), we publish a collaborative investor's guide to the SMID cap Consumer sector – from macro/cycle implications, to valuation/sentiment/positioning, to the M&A/IPO backdrop, to how to pick stocks, to opportunities in Convertible Bonds and more. Overall, we see momentum for the US consumer as solid, albeit slowing (see [large cap note](#)), and have a favorable outlook on the Consumer Discretionary sector (which we prefer to Staples in both large and small).

Exhibit 1: Consumers represent 14% of the small cap Russell index vs 16% of the large cap Russell index

Consumer Discretionary & Staples: weight in index, and industries' weights in the Consumer sector: Russell 2000 (small) vs Russell 1000 (large) (as of 2/21/24)



Source: Bloomberg, BofA US Equity & US Quant Strategy

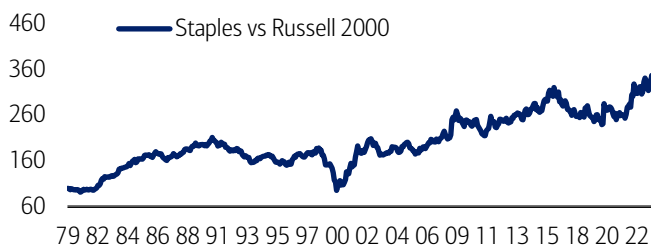
BofA GLOBAL RESEARCH

Large Discretionary, small Staples better L/T performers...

Discretionary has been a better recent and long-term performer within large caps, while Staples has a better recent and long-term performer within small caps.

Exhibit 2: Staples has been a better long-term performer vs the index...

Cumulative relative performance of R2000 Consumer Staples vs Russell 2000 (monthly, indexed to 100 as of 12/31/1979 through 1/31/24)

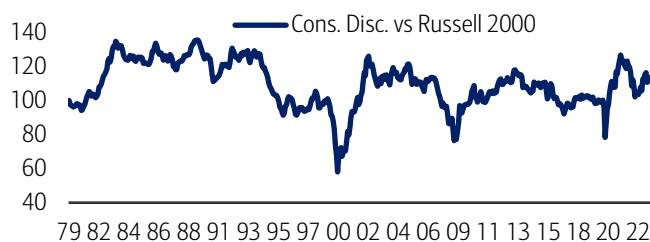


Source: Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 3: ...than Consumer Discretionary has relative to the index

Cumulative relative performance of R2000 Consumer Discretionary vs Russell 2000 (monthly, indexed to 100 as of 12/31/1979 through 1/31/24)

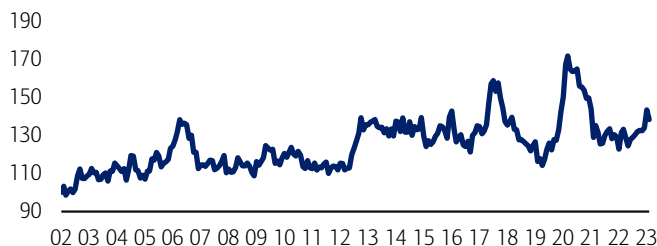


Source: Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 4: Small cap Staples has outperformed large cap Staples by 5ppt in the last twelve months

Cumulative relative performance of Russell 2000 vs Russell 1000 Staples (monthly, indexed to 100 as of 12/31/2002 through 1/31/24)

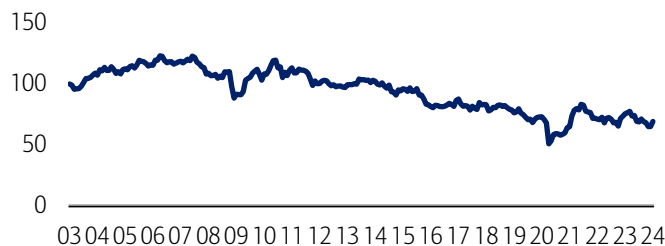


Source: Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 5: Small cap Discretionary has underperformed large cap Discretionary by 15ppt in the last twelve months

Cumulative relative performance of Russell 2000 vs Russell 1000 Discretionary (monthly, indexed to 100 as of 12/31/2002 through 1/31/24)



Source: Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

...but sentiment may be shifting

Based on our fundamental analysts' upgrades relative to downgrades in the Consumer sector in recent months, our analysts are getting more positive on small cap Discretionary (equal proportion of upgrades vs. downgrades, vs more downgrades at the start of the year), while large cap Discretionary is seeing slightly more downgrades. Meanwhile, they're currently getting more bearish on small cap Staples (net 14% downgrades over last three months) vs. 2% net upgrades for large cap Staples). And overall, [BofA client flow trends](#) suggest Consumer Discretionary single stock selling has slowed while both single stock selling has picked up in Staples.

Exhibit 6: BofA fundamental analysts are getting more positive on small cap Discretionary and on large cap Staples

Net % ratings upgrades (upgrades-downgrades over last 3 months) by BofA fundamental analysts in Russell 2000 Consumer sectors vs. Russell 1000 Consumer sectors

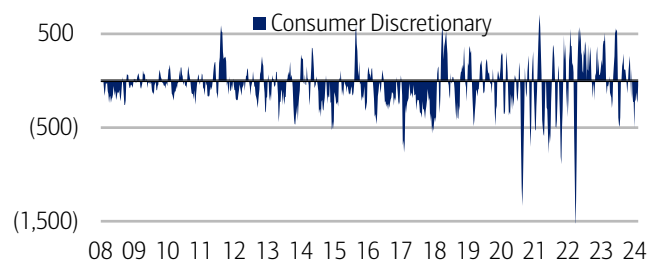
| | Current Net % Upgrades-Downgrades (3m) | Chg. (in ppt) since start of year |
|---------------------|--|-----------------------------------|
| Small Discretionary | 0% | 4 |
| Small Staples | -14% | 2 |
| Large Discretionary | -2% | 0 |
| Large Staples | 2% | 0 |

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 7: Our clients are selling Discretionary stocks, though pace is slowing...

BofA Securities clients' net buys of Discretionary stocks (\$mn; 4-wk avg)

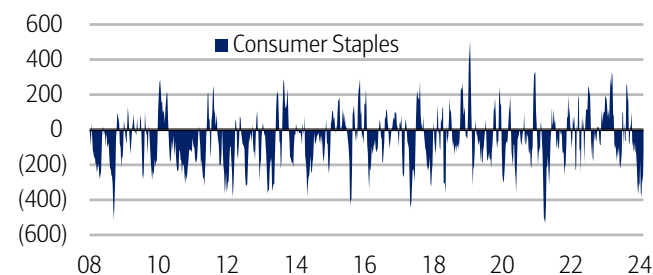


Source: BofA Securities

BofA GLOBAL RESEARCH

Exhibit 8: Our clients have recently become bigger sellers of Staples stocks...

BofA Securities clients' net buys of Staples stocks (\$mn; 4-wk avg)



Source: BofA Securities

BofA GLOBAL RESEARCH

Potential shift to Recovery positive for small Discretionary

Our team's [US Regime Indicator](#) attempts to identify where we are in the cycle (Early, Mid, Late, or Downturn) based on top-down macro indicators; see Appendix for details. The indicator has recently been in a macro muddle, oscillating between the "Downturn" and "Recovery" phases. Most recently, it has been back in a "Downturn, but improved last month – a second month of improvement would suggest we are back in the "Recovery" or "Early Cycle" phase. A shift to Recovery would be most positive for small cap Discretionary, which has outperformed both the index and large cap Discretionary in this phase (75% and 88% of the time, respectively). Staples overall fares better in Downturn regimes (with large outperforming small) and underperforms Discretionary and the market in Recoveries, but a shift to Recovery typically sees small cap Staples lead large cap Staples (63% hit rate and median outperformance of 9ppt).

Within small cap Consumer, industries which have outperformed both the index and large cap peers in both Downturns and Recoveries: Personal Care Products, Autos and Household Durables

Exhibit 9: Small cap Cons. Disc. typically underperforms in Downturns, but tends to outperform in Early Cycles

Russell 2000 & Russell 1000 Cons. Disc. relative performance (ppt) and hit rate (% of times outperforming) during phases of our US Regime Indicator (since 1990)

| Phase | Rel. Return | Small Cap Cons. Disc vs. Index | Large Cap Cons. Disc. vs. Index | Small Cap Cons. Disc. vs. Large Cap Cons. Disc. |
|-----------------------|-------------|--------------------------------|---------------------------------|---|
| Early Cycle/ Recovery | Avg. | 17.0 | 8.2 | 19.2 |
| | Median | 12.2 | 8.3 | 8.9 |
| | Hit Rate | 75% | 75% | 88% |
| Mid-Cycle | Avg. | (2.1) | (1.7) | 6.1 |
| | Median | 1.3 | (3.0) | 5.6 |
| | Hit Rate | 56% | 44% | 56% |
| Late-Cycle | Avg. | 0.3 | (2.4) | (3.9) |
| | Median | 0.2 | (2.6) | (8.7) |
| | Hit Rate | 56% | 44% | 22% |
| Downturn | Avg. | 1.7 | 6.2 | (11.1) |
| | Median | (0.9) | 7.7 | (14.8) |
| | Hit Rate | 43% | 57% | 29% |

Source: FactSet, Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 10: Diversified Cons. Svcs. has typically fared best in Downturns and Autos in Early Cycles

Relative performance of Russell 2000 and Russell 1000 Cons. Disc. industries during Downturns/Early Cycle regimes since 1990

| Downturn | Small Caps vs. Mkt. | | Large Caps vs. Mkt. | | Small Caps vs. Large Caps | |
|--------------------------------|---------------------|------------|---------------------|------------|---------------------------|------------|
| | Median | Hit Rate | Median | Hit Rate | Median | Hit Rate |
| Auto Components | (0.7) | 43% | (21.3) | 14% | 6.1 | 71% |
| Autos | 23.6 | 71% | (7.0) | 43% | 5.0 | 71% |
| Household Durables | 8.4 | 71% | (7.5) | 43% | 1.5 | 71% |
| Leisure Products | 5.9 | 57% | (1.9) | 43% | 8.2 | 57% |
| Textiles, Apparel & Lux. Goods | (9.3) | 29% | (9.6) | 29% | (14.4) | 29% |
| Hotels, Restaurants & Leisure | 1.3 | 57% | (15.9) | 29% | (1.3) | 43% |
| Diversified Cons. Svcs. | 18.3 | 71% | (3.4) | 29% | 20.2 | 71% |
| Distributors | 5.6 | 57% | (3.9) | 43% | 10.0 | 57% |
| Broadline Retail | 5.3 | 86% | 5.7 | 57% | (2.6) | 43% |
| Specialty Retail | (4.5) | 29% | 8.2 | 71% | (3.9) | 29% |
| Cons. Disc. | (0.9) | 43% | 7.7 | 57% | (14.8) | 29% |
| Early Cycle | Small Caps vs. Mkt. | | Large Caps vs. Mkt. | | Small Caps vs. Large Caps | |
| | Median | Hit Rate | Median | Hit Rate | Median | Hit Rate |
| Auto Components | 12.5 | 88% | 12.4 | 63% | 15.2 | 88% |
| Autos | 37.6 | 75% | 10.1 | 63% | 26.9 | 88% |
| Household Durables | (2.7) | 50% | 1.7 | 50% | 2.3 | 50% |
| Leisure Products | (9.2) | 38% | (6.7) | 38% | (4.7) | 38% |
| Textiles, Apparel & Lux. Goods | 22.6 | 75% | 7.2 | 50% | 18.5 | 88% |
| Hotels, Restaurants & Leisure | 10.5 | 50% | (7.3) | 25% | 14.0 | 75% |
| Diversified Cons. Svcs. | (14.5) | 50% | (12.7) | 38% | 2.3 | 50% |
| Distributors | (0.3) | 50% | (13.0) | 38% | 5.0 | 63% |
| Broadline Retail | 13.7 | 75% | (1.0) | 50% | 20.2 | 63% |
| Specialty Retail | 6.8 | 75% | (8.1) | 38% | 8.1 | 75% |
| Cons. Disc. | 12.2 | 75% | 8.3 | 75% | 8.9 | 88% |

Source: FactSet, Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 11: Small cap Cons. Staples typically outperforms the index in Downturns, but mixed results vs. large caps in Early Cycles

Russell 2000 & Russell 1000 Cons. Staples relative performance (ppt) and hit rate (% of times outperforming) during phases of our US Regime Indicator (since 1990)

| Phase | Rel. Return | Small Cap Cons. Staples vs. Index | Large Cap Cons. Staples vs. Index | Small Cap Cons. Staples vs. Large Cap Cons. Staples |
|-----------------------|-------------|-----------------------------------|-----------------------------------|---|
| Early Cycle/ Recovery | Avg. | (5.3) | (8.3) | 13.4 |
| | Median | (7.4) | (12.0) | 8.7 |
| | Hit Rate | 38% | 38% | 63% |
| Mid-Cycle | Avg. | (5.7) | (11.4) | 12.2 |
| | Median | 0.5 | (11.0) | 9.4 |
| | Hit Rate | 56% | 22% | 56% |
| Late-Cycle | Avg. | 7.4 | 10.2 | (9.5) |
| | Median | 11.0 | 11.0 | (5.4) |
| | Hit Rate | 78% | 56% | 22% |
| Downturn | Avg. | 8.9 | 4.5 | (2.3) |
| | Median | 4.5 | 0.6 | (6.0) |
| | Hit Rate | 100% | 57% | 14% |

Source: FactSet, Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 12: Most Staples industries tend to underperform in Early Cycle

Relative performance of Russell 2000 and Russell 1000 Cons. Disc. industries during Downturns/Early Cycle regimes since 1990

| Downturn | Small Caps vs. Mkt. | | Large Caps vs. Mkt. | | Small Caps vs. Large Caps | |
|---------------------------------|---------------------|-------------|---------------------|------------|---------------------------|------------|
| | Median | Hit Rate | Median | Hit Rate | Median | Hit Rate |
| Beverages | 17.3 | 71% | (1.6) | 29% | 6.1 | 57% |
| Food Products | 6.6 | 86% | (0.4) | 43% | 4.6 | 57% |
| Cons. Staples Distrib. & Retail | 3.1 | 71% | 9.4 | 71% | (7.6) | 29% |
| Household Products | 0.4 | 57% | 3.8 | 57% | (3.5) | 29% |
| Personal Care Products | 8.1 | 71% | (12.2) | 29% | 20.3 | 57% |
| Tobacco | 2.8 | 57% | (0.6) | 43% | (6.2) | 43% |
| Cons. Staples | 4.5 | 100% | 0.6 | 57% | (6.0) | 14% |
| Early Cycle | Small Caps vs. Mkt. | | Large Caps vs. Mkt. | | Small Caps vs. Large Caps | |
| | Median | Hit Rate | Median | Hit Rate | Median | Hit Rate |
| Beverages | (7.7) | 25% | (16.6) | 25% | 5.6 | 63% |
| Food Products | (10.9) | 25% | (9.7) | 25% | 9.5 | 75% |
| Cons. Staples Distrib. & Retail | (12.2) | 25% | (14.4) | 25% | 17.1 | 75% |
| Household Products | (2.7) | 50% | (16.6) | 13% | 13.1 | 50% |
| Personal Care Products | 32.7 | 63% | 7.0 | 50% | 32.2 | 88% |
| Tobacco | (24.8) | 25% | (16.7) | 38% | 4.8 | 63% |
| Cons. Staples | (7.4) | 38% | (12.0) | 38% | 8.7 | 63% |

Source: FactSet, Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

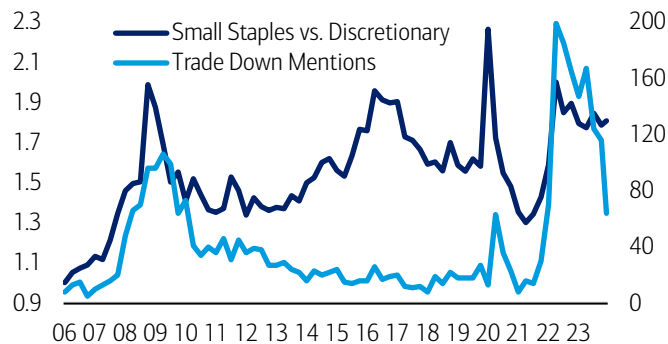
Staples=trade-down beneficiary, but trade-down lessening

As we highlighted in our [Consumer crosscurrents](#) note last year, Staples stocks have historically outperformed Discretionary stocks during periods of trade-down within small and large caps (with the highest correlation in small caps). 4Q earnings commentary suggests that trade-down mentions are still elevated (and Walmart noted a growing

customer base of households that make over \$100k/year), but are coming down from their peak, suggesting Discretionary could outperform from here.

Exhibit 13: Small cap Staples historically tends to outperform Discretionary in trade-down backdrops (though trade-down mentions are declining after recent highs)

Cumulative relative performance of Russell 2000 Staples vs. Discretionary vs. trade-down mentions on earnings calls, March 2006-Feb 2024

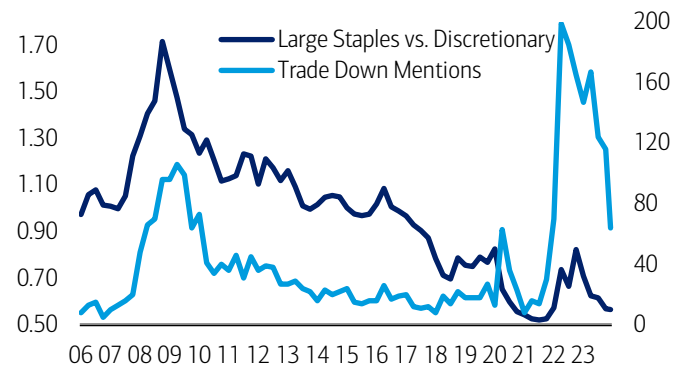


Source: AlphaSense, FactSet, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 14: ...which has also been true for large cap Staples vs. Discretionary

Cumulative relative performance of Russell 2000 Staples vs. Discretionary vs. trade-down mentions on earnings calls, March 2006-Feb 2024



Source: AlphaSense, FactSet, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

Perf. after prior Fed cuts may not be playbook for today

BofA economists expect the Fed to begin cutting rates in June of this year, with three cuts in 2024 and four in 2025. Performance of small cap Consumer sectors has been mixed following the first cut: Staples has typically outperformed the index (but lagged large cap peers) in the subsequent 1/3/6/12 months, while Discretionary has typically outperformed immediately before/after the cut but slightly underperformed in the 3/6/12 months after (with mixed performance vs. large peers).

However, the Fed has typically cut rates ahead of or during an economic recession, which BofA does not expect today – and macro/cycle indicators including PMIs, the Global Wave, our US Regime Indicator, etc. have been inflecting – suggesting that Discretionary could fare better this time.

Exhibit 15: Small cap Discretionary has typically outperformed immediately following the first rate cut but closer to a coin flip after; Staples typically outperforms after rate cuts

% of time sectors outperformed the Russell 2000 around the first Fed cut since 1974

| | # of months before/after first cut | | | | | | | |
|-------------|------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| | -12 | -6 | -3 | -1 | 1 | 3 | 6 | 12 |
| Comm. Svcs. | 57% | 29% | 57% | 57% | 43% | 43% | 43% | 43% |
| Cons. Disc. | 29% | 43% | 29% | 86% | 57% | 43% | 43% | 43% |
| Staples | 57% | 43% | 71% | 57% | 86% | 57% | 86% | 86% |
| Energy | 57% | 71% | 57% | 29% | 57% | 43% | 43% | 43% |
| Financials | 29% | 29% | 43% | 57% | 57% | 71% | 57% | 57% |
| Health Care | 57% | 57% | 57% | 43% | 86% | 71% | 86% | 86% |
| Industrials | 57% | 71% | 43% | 43% | 29% | 43% | 43% | 43% |
| Tech | 57% | 57% | 43% | 57% | 29% | 57% | 14% | 29% |
| Materials | 29% | 29% | 29% | 43% | 71% | 43% | 57% | 29% |
| Real Estate | 57% | 29% | 29% | 29% | 57% | 43% | 71% | 57% |
| Utilities | 57% | 43% | 57% | 71% | 71% | 57% | 86% | 57% |

Source: BofA US Equity & Quant Strategy, FactSet, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 16: Comparing small vs. large peers, large Staples have typically fared better in the short- and medium-term following Fed cuts; mixed within Discretionary

% of time Russell 2000 sectors outperformed the Russell 1000 sectors around the first Fed cut since 1974

| | # of months before/after first cut | | | | | | | |
|-------------|------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| | -12 | -6 | -3 | -1 | 1 | 3 | 6 | 12 |
| Comm. Svcs. | 71% | 57% | 57% | 29% | 43% | 57% | 14% | 14% |
| Cons. Disc. | 43% | 43% | 71% | 57% | 29% | 57% | 43% | 29% |
| Staples | 43% | 14% | 43% | 57% | 29% | 43% | 43% | 14% |
| Energy | 43% | 57% | 57% | 14% | 57% | 43% | 43% | 43% |
| Financials | 29% | 43% | 14% | 57% | 43% | 57% | 57% | 57% |
| Health Care | 29% | 57% | 57% | 71% | 29% | 57% | 29% | 29% |
| Industrials | 14% | 29% | 43% | 43% | 29% | 43% | 43% | 57% |
| Tech | 43% | 29% | 43% | 57% | 14% | 43% | 57% | 43% |
| Materials | 57% | 29% | 14% | 43% | 29% | 29% | 29% | 43% |
| Real Estate | 29% | 14% | 29% | 29% | 71% | 57% | 29% | 71% |
| Utilities | 43% | 43% | 57% | 71% | 29% | 43% | 29% | 71% |

Source: BofA US Equity & Quant Strategy, FactSet, Bloomberg

BofA GLOBAL RESEARCH

Consumer one of the higher quality areas in small caps

While we're positive on small>large caps this year, the Russell 2000 has a historically elevated weight in low quality stocks (20% of market cap/one-third of companies). As such, we've advocated owning the index ex-non-earners or focusing on themes/stock selection. The good news for Consumer investors is that both Discretionary and Staples



are two of the higher quality parts of the index, with just 8% of Discretionary market cap and 2% of Staples market cap non-earners. The risk is higher as a percent of companies (20% of small cap Staples/25% of small cap Discretionary), though still below the index.

Exhibit 17: Low proportion of non-earners in Consumer sectors vs. most other small cap sectors

Cap-weighted % non-earners by Russell 2000 sector today

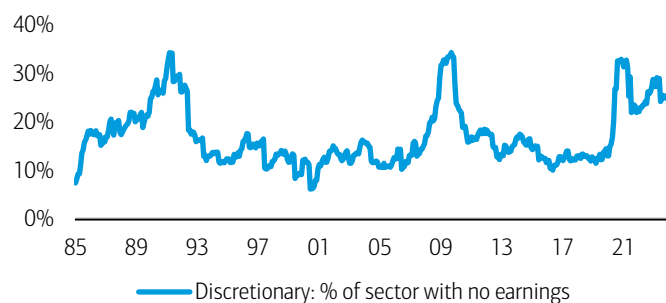


Source: FactSet, BofA US Equity & Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 18: ...but the risk is higher on an equal-weighted basis (with 25% of small cap Discretionary stocks being non-earners today)

% of Russell 2000 non-earners from Discretionary and % of Russell 2000 Discretionary w/ no earnings (1986-present)

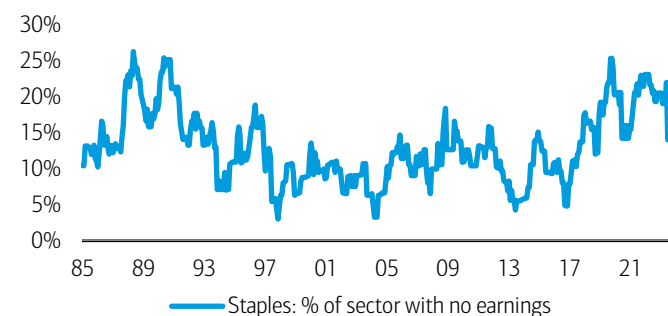


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 19: and a risk on an equal-weighted basis for Staples (with 18% of small cap Staples stocks being non-earners today)

% of Russell 2000 non-earners from Staples and % of Russell 2000 Staples w/ no earnings (1986-present)



Source: FactSet, BofA US Equity & US Quant Strategy

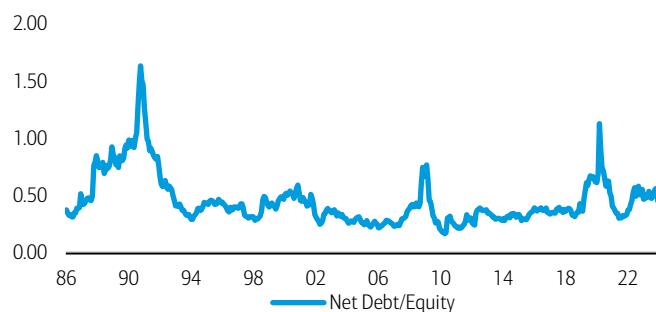
BofA GLOBAL RESEARCH

Lower leverage but potentially higher refi risk in Staples

Leverage is well off peaks within small cap Discretionary, and near historic lows in small cap Staples. But based on Staples' debt profile, Staples has among the shortest weighted avg. debt maturities in small caps and is expected to see a bigger potential EPS hit over the next several years if it must refinance at higher rates vs. Discretionary.

Exhibit 20: Leverage for small cap Discretionary is not at historical highs

Small cap (Russell 2000) Discretionary leverage ratios 1986-present

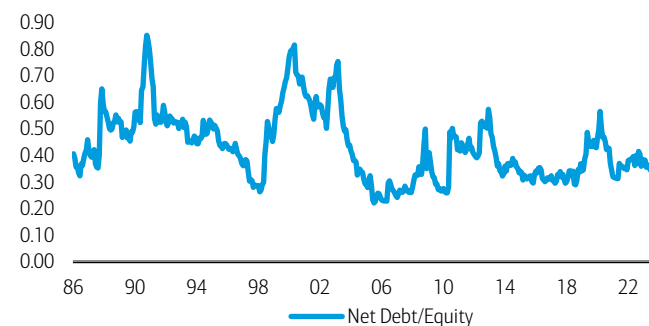


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 21: Leverage for small cap Staples is near the low end of history

Small cap (Russell 2000) Staples leverage ratios 1986-present



Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 22: Staples has among the shortest debt maturities in small caps

Russell 2000 non-Financial debt: weighted avg maturity (as of 4Q22)

| Sector | Overall |
|------------------------|------------|
| Communication Services | 5.0 |
| Consumer Discretionary | 4.9 |
| Consumer Staples | 2.5 |
| Energy | 4.0 |
| Health Care | 3.5 |
| Industrials | 4.5 |
| Information Technology | 2.5 |
| Materials | 3.1 |
| Real Estate | 3.7 |
| Utilities | 11.7 |
| Russell 2000 | 4.5 |

Source: Bloomberg, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 23: Our analysis suggests 2% incremental hit to small cap non-Financials EBIT from higher net interest expense in 2024 vs. 2022; impact likely to ramp up after, with Staples more impacted in the next several years than Discretionary

Increase in Russell 2000 net interest expense relative to current (2022) as a % of '22 EBIT from floating rate debt + refi of fixed rate coming due

| Sector | Change in net interest exp. vs. 2022 (% of 2022 EBIT) | | | | |
|---------------------------------|---|-------------|-------------|--------------|--------------|
| | 2023 | 2024 | 2025 | 2026 | 2027 |
| Comm. Svcs. | 10.2% | 8.3% | 12.5% | 24.6% | 48.7% |
| Cons. Disc. | 2.2% | 0.9% | 4.4% | 8.6% | 13.1% |
| Staples | 6.0% | 7.3% | 16.7% | 25.6% | 42.9% |
| Energy | (0.2%) | (0.2%) | 1.8% | 3.8% | 6.2% |
| Health Care | NM | NM | NM | NM | NM |
| Industrials | 3.3% | 3.5% | 7.3% | 12.2% | 15.9% |
| Tech | (2.7%) | (4.3%) | 4.7% | 19.1% | 30.2% |
| Materials | 1.8% | 0.6% | 5.1% | 8.1% | 10.3% |
| Real Estate | 27.5% | 35.3% | 59.0% | 79.9% | 100.9% |
| Utilities | 10.6% | 14.8% | 18.0% | 22.1% | 27.7% |
| Russell 2000 ex. Fins | 2.1% | 1.8% | 8.2% | 16.3% | 25.5% |
| ex. Fins & Utilities | 1.8% | 1.3% | 7.8% | 16.1% | 25.4% |

Source: Bloomberg, BofA US Equity & US Quant Strategy

Note: Uses 3m LIBOR + credit spread (where we assume weighted average of HY and IG spreads based on HY vs. IG weight in small cap debt) for interest expense (using BofA forecasts for Fed Funds rate trajectory through 2024 and then holding at those levels thereafter); BofA cash yield forecasts through 2024 and constant thereafter for interest income.

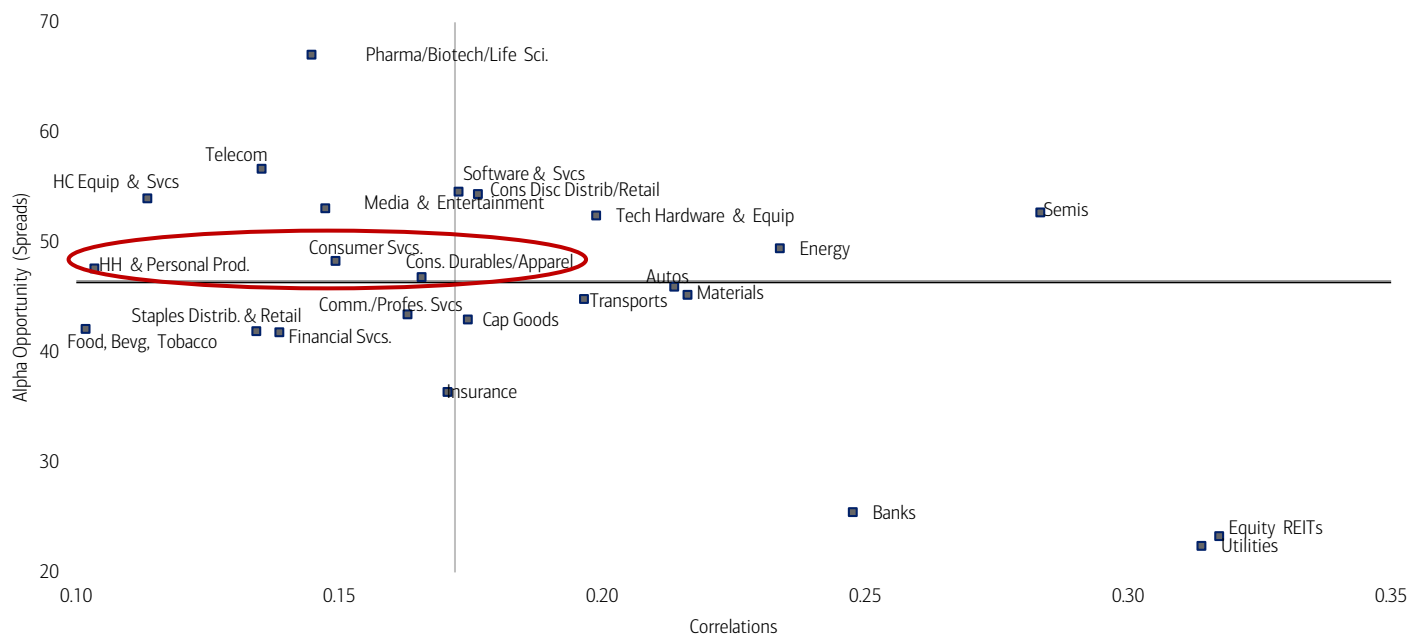
BofA GLOBAL RESEARCH

Consumer sectors good for stock-picking

In a year where we expect market leadership to broaden out and stock-picking to be fruitful (see [Strategy Snippet](#)), the Consumer sectors offer some of the best opportunities for stock selection within small caps given the combination better alpha opportunity (wider long-short performance spreads) than the overall index and lower pair-wise stock correlations – particularly in Consumer Services, Household & Personal Products, and Consumer Durables & Apparel.

Exhibit 24: Consumer industries are good for stock-picking

Historical median pairwise correlations and long-short performance spreads of Russell 2000 industry groups, 1Q86-4Q23



Source: FactSet, BofA US Equity & US Quant Strategy



Exhibit 24: Consumer industries are good for stock-picking

Historical median pairwise correlations and long-short performance spreads of Russell 2000 industry groups, 1Q86-4Q23

BofA GLOBAL RESEARCH

Small cap sector ranks: Discretionary > Staples

Consumer Discretionary has recently risen to #2 in our small cap quantitative sector ranks, which ranks sectors on relative valuations, relative estimate revisions, relative technicals, and BofA analyst sentiment (upgrades-downgrades). Meanwhile, Staples ranks near the bottom of the pack (second to last after Utilities), where defensive sectors have overall screened more poorly.

Exhibit 25: Cons. Discretionary ranks #2 vs. Cons. Staples second-to-last in our small cap sector framework

Small cap quantitative sector ranks (as of 2/29/24)

| Sector | Combined Rank (highest to lowest) | Valuation Rank | Revisions Rank | Momentum Rank | BofA Sentiment Rank |
|------------------------|-----------------------------------|----------------|----------------|---------------|---------------------|
| Financials | 11 | 10 | 9 | 10 | 10 |
| Consumer Discretionary | 10 | 7 | 8 | 7 | 8 |
| Industrials | 9 | 6 | 11 | 11 | 1 |
| Real Estate | 8 | 9 | 6 | 6 | 6 |
| Materials | 7 | 4 | 7 | 4 | 11 |
| Communication Services | 5 | 8 | 2 | 5 | 9 |
| Energy | 5 | 11 | 1 | 8 | 4 |
| Information Technology | 4 | 1 | 3 | 9 | 7 |
| Health Care | 3 | 2 | 10 | 2 | 5 |
| Consumer Staples | 2 | 5 | 5 | 3 | 2 |
| Utilities | 1 | 2 | 4 | 1 | 3 |

Source: FactSet, BofA US Equity & US Quant Strategy

Note: for details/methodology on our framework, see our monthly [Small/Mid-Cap Valuations](#) report.

BofA GLOBAL RESEARCH

Valuation: small Discretionary cheap vs. mid/large peers

While relative valuations of small cap Consumer Discretionary stocks vs. the index are mixed (expensive vs. history on some metrics, cheap on others), the sector looks historically cheap across the board when comparing it to large or mid cap peers. Small cap Staples, meanwhile, looks expensive vs. its own history and relative to both small and mid cap peers.

Exhibit 26: Small cap Discretionary mixed on valuations vs. history but inexpensive vs. large cap peers

Small & Mid Cap Discretionary valuations vs. history (1985-2/2024)

| Metric | Relative valuation vs. history: % above (below) avg. | | Relative valuation vs. peers: % above (below) avg. | |
|------------|--|---------------|--|-------------------------------------|
| | Small Cap | Mid Cap | Small Cap Discretionary vs. Large Cap | Small Cap Discretionary vs. Mid Cap |
| | Discretionary | Discretionary | Discretionary | Discretionary |
| PEG | 24% | 9% | -4% | -7% |
| P/Sales | -6% | -11% | -29% | -15% |
| P/BV | 9% | 25% | -44% | -34% |
| Trail P/E* | 12% | -4% | -15% | -13% |
| Fwd P/E* | 6% | -6% | -13% | -8% |
| EV/FCF** | -17% | -17% | -29% | -23% |

Source: BofA US Equity & Quant Strategy, Russell Investment Group, I/B/E/S, Compustat

Note: *Trailing and forward P/E excludes negative earners; **EV/FCF excludes companies with negative free cash flow.

BofA GLOBAL RESEARCH

Exhibit 27: Staples is broadly expensive vs history in small caps (but not for mid caps), and expensive vs large caps

Small & Mid Cap Staples valuations vs. history (1985-2/2024)

| Metric | Relative valuation vs. history: % above (below) avg. | | Relative valuation vs. peers: % above (below) avg. | |
|------------|--|---------|--|-------------------------------|
| | Small Cap | Mid Cap | Small Cap Staples vs. Large Cap | Small Cap Staples vs. Mid Cap |
| | Staples | Staples | Staples | Staples |
| PEG | 48% | -8% | 16% | 28% |
| P/Sales | 20% | -19% | 11% | 27% |
| P/BV | 6% | -36% | 11% | 25% |
| Trail P/E* | 18% | 0% | -14% | -15% |
| Fwd P/E* | 50% | -4% | 24% | 23% |
| EV/FCF** | -17% | -4% | -31% | -33% |

Source: BofA US Equity & Quant Strategy, Russell Investment Group, I/B/E/S, Compustat

Note: *Trailing and forward P/E excludes negative earners; **EV/FCF excludes companies with negative free cash flow.

BofA GLOBAL RESEARCH

Relative value opportunity in small cap Disc. vs. Staples

The relative valuation multiple of small cap Discretionary vs. small cap Staples trades at a discount to history on almost all of the metrics we track (except P/B – roughly in-line), with an average historical discount of 13%. Valuations are more mixed vs. history for

mid cap Discretionary vs. Staples...while large cap valuations skew in favor of Staples being historically cheap relative to Discretionary

Exhibit 28: Discretionary looks historically cheap vs. Staples across most metrics in small; the opposite is true in large

Relative valuation vs. history: Consumer Discretionary vs. Consumer Staples (1985-2/2024)

| Cons. Disc. vs. Staples Metric | % above (below) historical avg. | | |
|-----------------------------------|---------------------------------|------------|------------|
| | Small Cap | Mid Cap | Large Cap |
| PEG | -18% | 13% | 0% |
| P/Sales | -26% | 10% | 16% |
| P/BV | 1% | 88% | 90% |
| Trail P/E* | -3% | -6% | -2% |
| Fwd P/E* | -29% | -3% | 5% |
| EV/FCF** | -1% | -16% | -5% |
| Avg. | -13% | 14% | 17% |

Source: FactSet, BofA US Equity & US Quant Strategy

*Excludes non-earners; **Excludes companies with negative free cash flow

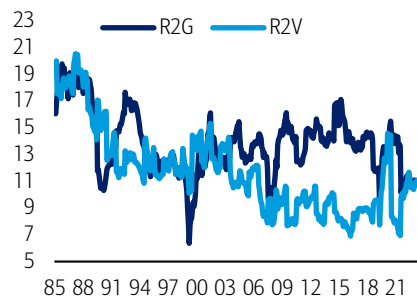
BofA GLOBAL RESEARCH

Shifts in Growth/Value skews of small Consumer sectors

For the last decade, Consumer Discretionary has had a higher weight in the Russell Growth indices than the Russell Value indices in both small/mid and large caps – where the skew toward Growth in large has continued to widen. But for the first time in over a decade (outside of briefly in 2021), small cap Discretionary has a slightly higher weight in the Value index than the Growth index. Small cap Staples, meanwhile, has seen the opposite shift – it has seen a widening relative skew toward Growth in small, but toward Value in large.

Exhibit 29: Discretionary's Growth vs Value skew tightening in small

Discretionary weight in Russell 2000 style indices, 1985-2/2024

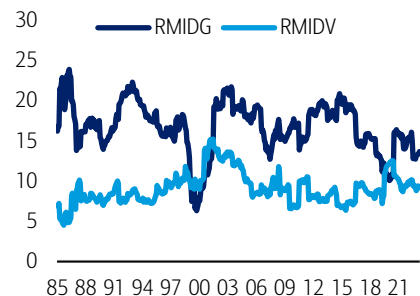


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 30: ...also starting to narrow from recent extremes in Mid

Discretionary weight in Russell MidCap style indices, 1985-2/2024

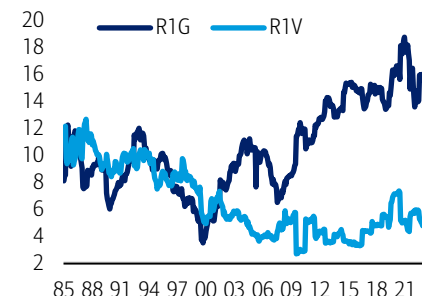


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 31: Large cap Staples remains increasingly skewed toward Growth

Discretionary weight in Russell 1000 style indices, 1985-2/2024

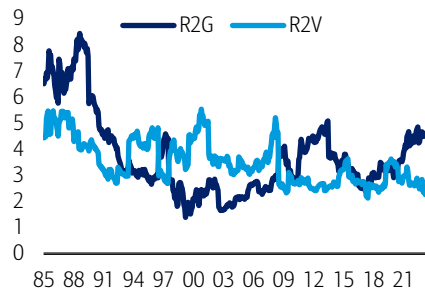


Source: FactSet, BofA US Equity & US Quant Strategy

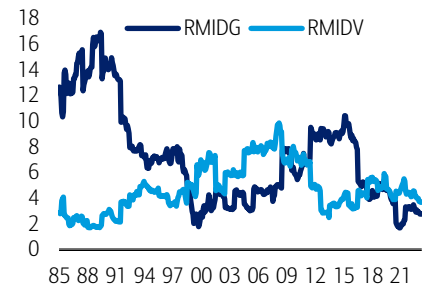
BofA GLOBAL RESEARCH

Exhibit 32: Small cap Staples seeing a widening skew toward Growth

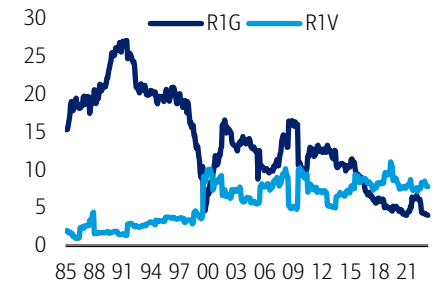
Staples weight in Russell 2000 style indices, 1985-2/2024

Source: FactSet, BofA US Equity & US Quant Strategy
BofA GLOBAL RESEARCH**Exhibit 33: More representation of Staples in Mid Cap Value index**

Staples weight in Russell MidCap style indices, 1985-2/2024

Source: FactSet, BofA US Equity & US Quant Strategy
BofA GLOBAL RESEARCH**Exhibit 34: Large Staples has seen a higher weight in Value/lower weight in Growth**

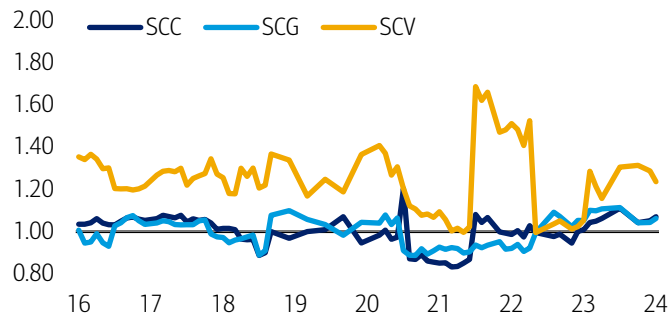
Staples weight in Russell 1000 style indices, 1985-2/2024

Source: FactSet, BofA US Equity & US Quant Strategy
BofA GLOBAL RESEARCH**Positioning risk**

Small cap funds are overweight Consumer Discretionary, though only 6% overweight by core/growth funds vs. a 24% overweight by value funds. Mid cap core and value funds are also overweight Discretionary. Staples is similarly overweight by both core and value managers in both small and mid, vs. slightly underweight by growth funds.

Exhibit 35: Small cap funds across the board are overweight, with Small cap Value funds the most overweight

Small cap active funds' relative weight in Discretionary vs the index (as of 1/24)

Source: FactSet Ownership, BofA US Equity & US Quant Strategy
BofA GLOBAL RESEARCH**Exhibit 36: Mid cap Growth funds are underweight while Mid cap Core and Value funds are overweight**

Mid cap active funds' relative weight in Discretionary vs the index (as of 1/24)

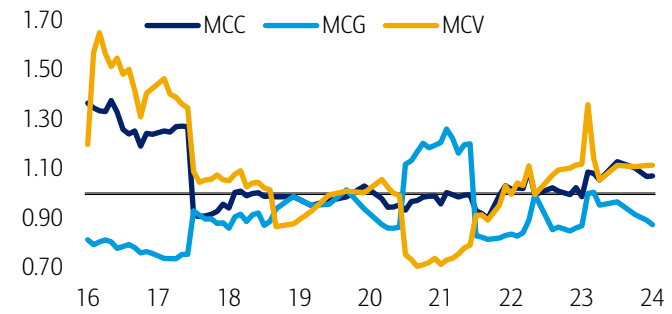
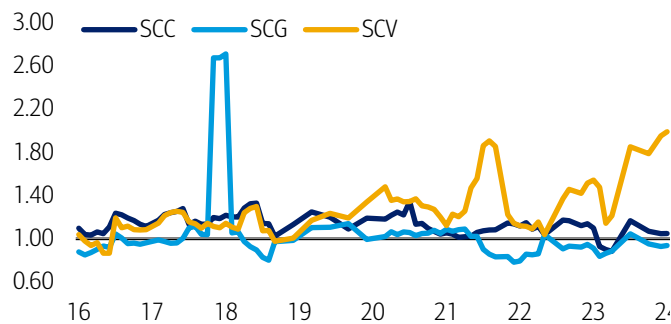
Source: FactSet Ownership, BofA US Equity & US Quant Strategy
BofA GLOBAL RESEARCH

Exhibit 37: Small cap Growth funds are underweight while Small cap Core and Value funds are overweight

Small cap active funds' relative weight in Staples vs the index (as of 1/24)

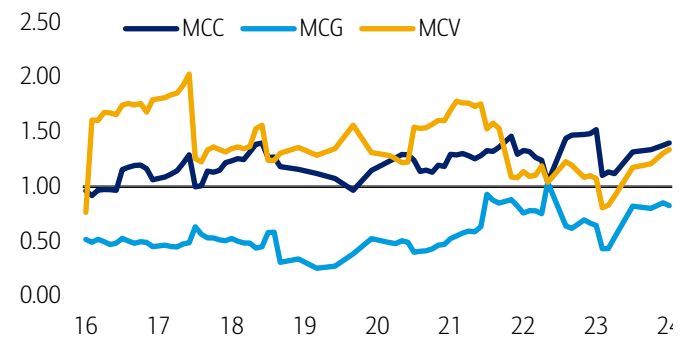


Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 38: Mid cap Growth funds are underweight while Mid cap Core and Value funds are overweight

Mid cap active funds' relative weight in Staples vs the index (as of 1/24)



Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 39: Consumer sectors are generally two of the most crowded sectors by SMID cap funds

Small and mid cap funds' relative weights for 11 GICS sectors (as of 1/2024)

Rel. Wgt in Fund Holdings

| Sectors | SCC | SCG | SCV | MCC | MCG | MCV |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Consumer Discretionary | 1.07 | 1.06 | 1.24 | 1.07 | 0.87 | 1.11 |
| Consumer Staples | 1.05 | 0.94 | 1.99 | 1.40 | 0.83 | 1.34 |
| Communication Services | 0.82 | 0.72 | 0.72 | 0.50 | 0.73 | 1.03 |
| Financials | 1.26 | 1.71 | 0.82 | 1.19 | 1.08 | 1.05 |
| Energy | 0.84 | 0.81 | 1.00 | 0.93 | 0.55 | 1.11 |
| Health Care | 0.54 | 0.81 | 0.56 | 0.81 | 0.97 | 1.35 |
| Tech | 0.76 | 0.93 | 1.56 | 0.69 | 1.07 | 0.89 |
| Industrials | 1.28 | 1.15 | 1.32 | 1.13 | 1.01 | 0.99 |
| Real Estate | 0.95 | 1.33 | 0.48 | 0.92 | 2.10 | 0.62 |
| Utilities | 0.92 | 0.38 | 0.62 | 0.98 | 1.56 | 0.82 |
| Materials | 1.60 | 0.92 | 1.92 | 1.26 | 2.03 | 1.00 |
| Overall Index | 1.21 | 2.56 | 1.47 | 1.20 | 1.44 | 1.13 |

Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 40: Leisure Products, Distributors and Broadline Retail are the most broadly overweight industries by small cap funds

Small cap funds' relative weight in Consumer Discretionary industries (as of 1/2024)

| Small Cap Funds Industry | Core | Growth | Value |
|----------------------------------|-------------|-------------|-------------|
| Auto Components | N/A | N/A | N/A |
| Autos | 0.87 | 2.74 | 0.99 |
| Household Durables | 0.99 | 1.18 | 0.59 |
| Leisure Products | 1.72 | 1.46 | 2.91 |
| Textiles, Apparel & Luxury Goods | 2.91 | 0.81 | 3.74 |
| Hotels, Restaurants & Leisure | 0.99 | 0.99 | 3.12 |
| Diversified Consumer Services | 0.60 | 0.65 | 1.61 |
| Distributors | 8.95 | N/A | 1.30 |
| Broadline Retail | 1.99 | 4.30 | 9.10 |
| Specialty Retail | 0.91 | 1.27 | 0.74 |
| Cons. Disc. | 1.07 | 1.06 | 1.24 |

Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 41: Diversified Consumer Services and Textiles Apparel & Luxury Goods are the most crowded by mid cap funds across styles

Mid cap funds' relative weight in Consumer Discretionary industries (as of 1/2024)

| Mids Cap Funds Industry | Core | Growth | Value |
|----------------------------------|-------------|-------------|-------------|
| Auto Components | N/A | N/A | N/A |
| Autos | 0.93 | N/A | 0.75 |
| Household Durables | 0.79 | 4.63 | 0.41 |
| Leisure Products | 1.33 | 0.33 | 2.03 |
| Textiles, Apparel & Luxury Goods | 1.74 | 1.07 | 2.60 |
| Hotels, Restaurants & Leisure | 0.86 | 0.81 | 1.07 |
| Diversified Consumer Services | 1.64 | 1.05 | 1.86 |
| Distributors | 2.51 | 0.80 | 0.77 |
| Broadline Retail | 0.28 | 0.24 | 0.05 |
| Specialty Retail | 1.14 | 0.87 | 1.62 |
| Cons. Disc. | 1.07 | 0.87 | 1.11 |

Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 42: Consumer Staples Distribution and Retail is overweight by all three small cap fund styles

Small cap funds' relative weight in Consumer Staples industries (as of 1/2024)

| Small Cap Funds Industry | Rel. Wgt. in Fund Holdings | | |
|--|----------------------------|-------------|-------------|
| | Core | Growth | Value |
| Beverages | 1.06 | 0.89 | 1.91 |
| Food Products | 1.52 | 0.81 | 3.72 |
| Consumer Staples Distribution & Retail | 1.54 | 1.98 | 3.26 |
| Household Products | 1.35 | 0.37 | 2.58 |
| Personal Care Products | 0.30 | 0.88 | 0.24 |
| Tobacco | 0.26 | 0.18 | 0.20 |
| Cons. Staples | 1.05 | 0.94 | 1.99 |

Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 43: Consumer Staples Distribution and Retail and Personal Care Products are broadly overweight by mid cap fund styles

Mid cap funds' relative weight in Consumer Staples industries (as of 1/2024)

| Mid Cap Funds Industry | Rel. Wgt. in Fund Holdings | | |
|--|----------------------------|-------------|-------------|
| | Core | Growth | Value |
| Beverages | 2.55 | 0.70 | 2.63 |
| Food Products | 0.81 | 0.97 | 1.02 |
| Consumer Staples Distribution & Retail | 1.41 | 2.56 | 1.25 |
| Household Products | 1.90 | 0.18 | 3.63 |
| Personal Care Products | 5.82 | N/A | 5.23 |
| Tobacco | N/A | N/A | N/A |
| Cons. Staples | 1.40 | 0.83 | 1.34 |

Source: FactSet Ownership, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Earnings recovering in SMID Discretionary

While analysts are still making more cuts than raises to estimate in small caps, the pace of cuts has slowed, and Discretionary has one of the highest revision ratios of the 11 sectors within small caps on both earnings and sales (vs. Staples in middle of the pack). Within mid caps, the opposite is true – revision trends are strongest (and positive) for mid cap Staples, vs. more in the middle of the pack for mid cap Discretionary.

Both small and mid cap Discretionary are expected to see earnings growth accelerate this year after a negative year in 2023 (vs. large cap Discretionary, which will see earnings slow). Small cap Staples earnings are expected to remain negative, and decelerate in the other size segments.

Table 1: Revisions: Discretionary>Staples in small, opposite in Mid

EPS & Sales Revision Ratio (ERR/SRR) for S&P 600 & S&P 400 (as of 2/2024), sorted descending by small cap ERR

| Sector | Small Cap (S&P 600) | | Mid Cap (S&P 400) | |
|--------------|---------------------|-------------|-------------------|-------------|
| | ERR | SRR | ERR | SRR |
| Industrials | 0.89 | 0.70 | 0.82 | 1.02 |
| Health Care | 0.75 | 0.72 | 1.00 | 1.36 |
| Financials | 0.75 | 0.80 | 1.04 | 1.55 |
| Cons. Disc. | 0.72 | 0.81 | 0.84 | 1.00 |
| Materials | 0.71 | 0.74 | 0.84 | 0.92 |
| Real Estate | 0.70 | 1.15 | 0.38 | 1.87 |
| Index | 0.68 | 0.70 | 0.81 | 1.01 |
| Staples | 0.67 | 0.51 | 1.53 | 1.63 |
| Utilities | 0.56 | 1.50 | 1.05 | 0.46 |
| Info Tech | 0.49 | 0.42 | 0.63 | 0.63 |
| Comm. Svcs. | 0.48 | 0.50 | 1.33 | 0.47 |
| Energy | 0.27 | 0.29 | 0.37 | 0.29 |

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 44: Small cap Consumer Discretionary earnings expected to grow faster than the overall index; Staples earnings to worsen

S&P 600, 500 and 400: consensus earnings growth 2023-24

| Sector | 2023E | | | 2024E | | |
|--------------------|-------------|-------------|------------|------------|-----------|------------|
| | Small | Mid | Large | Small | Mid | Large |
| Cons. Disc. | -24% | -19% | 40% | 7% | 7% | 12% |
| Staples | -2% | 17% | 8% | -8% | 9% | 7% |
| Energy | 11% | -34% | -31% | -7% | -3% | -7% |
| Financials | 8% | -1% | 8% | 3% | 8% | 6% |
| Health Care | -45% | 11% | -21% | 59% | 12% | 15% |
| Industrials | -12% | -7% | 19% | 3% | 10% | 10% |
| Tech | -28% | -4% | 5% | -4% | -7% | 17% |
| Materials | -20% | -37% | -24% | -1% | 10% | -1% |
| Real Estate | -118% | -28% | -8% | 339% | 1% | -5% |
| Comm. Svcs. | -35% | -33% | 21% | -57% | 42% | 17% |
| Utilities | -6% | 72% | 8% | 2% | 1% | 8% |
| Index | -17% | -12% | 1% | 5% | 7% | 10% |

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Sticky inflation hasn't totally derailed margins

Consumer Discretionary is one of the most labor-intensive sectors in small caps (high employee/sales ratio), and margins have contracted over the last two years amid elevated inflation. But margins still have been relatively healthy relative to the historical range, and in Staples, margins are historically elevated. Easing of inflation and a focus on efficiency gains via productivity/automation AI is likely to help.

Exhibit 45: Discretionary = one of the most labor-intensive sectors in small caps

Current employee/sales(\$mn) ratio for Russell 2000 sectors: aggregate and median (LTM sales and latest year employees as of 2/29/24)

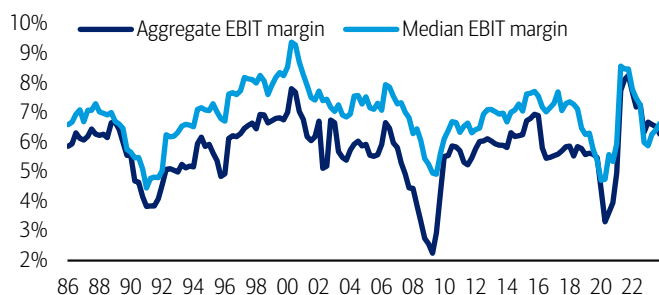
| Sector | Employees/Sales(\$mn) Ratio | Median Employee/Sales(\$mn) ratio |
|------------------------|-----------------------------|-----------------------------------|
| Health Care | 3.7 | 3.2 |
| Industrials | 3.5 | 2.9 |
| Consumer Discretionary | 3.3 | 2.8 |
| Information Technology | 3.3 | 3.2 |
| Overall index | 2.5 | 2.3 |
| Consumer Staples | 2.1 | 1.8 |
| Communication Services | 2.0 | 2.1 |
| Materials | 1.7 | 1.5 |
| Real Estate | 1.3 | 0.4 |
| Financials | 1.3 | 1.8 |
| Utilities | 0.9 | 1.2 |
| Energy | 0.7 | 1.0 |

Source: BofA US Equity & Quant Strategy, FactSet

BofA GLOBAL RESEARCH

Exhibit 46: Small cap Discretionary margins contracted since early 2022 though ticked up since April

Russell 2000 Discretionary net margins (aggregate and median), 1Q86-4Q23

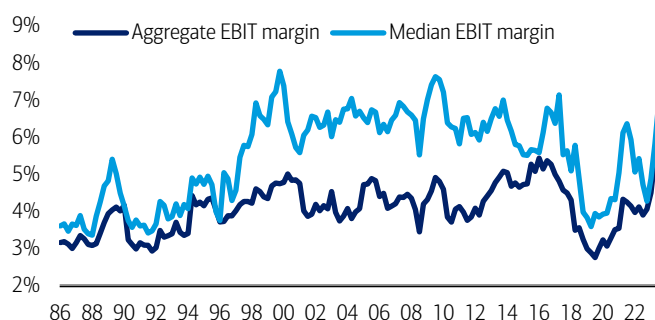


Source: BofA US Equity & Quant Strategy, FactSet

BofA GLOBAL RESEARCH

Exhibit 47: Small cap Staples margins topped in 3Q23

Russell 2000 Staples net margins (aggregate and median), 1Q86-4Q23



Source: BofA US Equity & Quant Strategy, FactSet

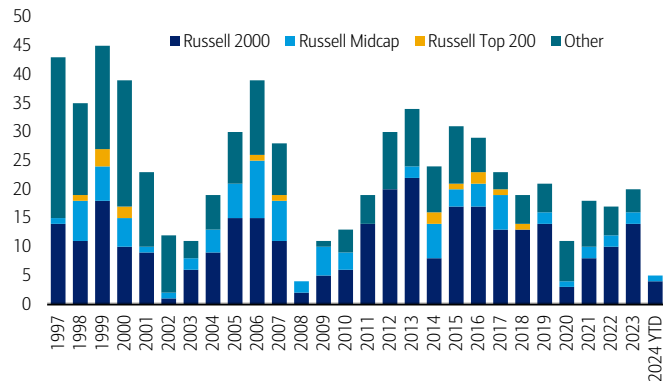
BofA GLOBAL RESEARCH

M&A lackluster; pick-up could be (+) for small cap Staples

The M&A backdrop has remained lackluster, where the pick-up in deal activity since the start of last year has generally been concentrated in Health Care. Discretionary M&A did pick up slightly in '23 and we have seen several deals this year, leading to a rising share for the sector of total M&A. Meanwhile, Staples has seen a slowdown in deals since last year (none YTD). But on our recent Global Research Unlocked podcast on M&A, Staples analysts Bryan Spillane and Peter Galbo noted that Staples companies with healthy balance sheets could engage in M&A as it becomes difficult to push price further and these companies seek other ways to grow (see: [Merger Monday not yet ready to take over but expect M&A headlines in certain areas 08 February 2024](#)) – which could benefit performance in the sector (more below).

Exhibit 48: M&A targets in Discretionary are mostly small cap

US Consumer Discretionary M&A deal count: 1997-YTD 2022 (as of 2/29/24)

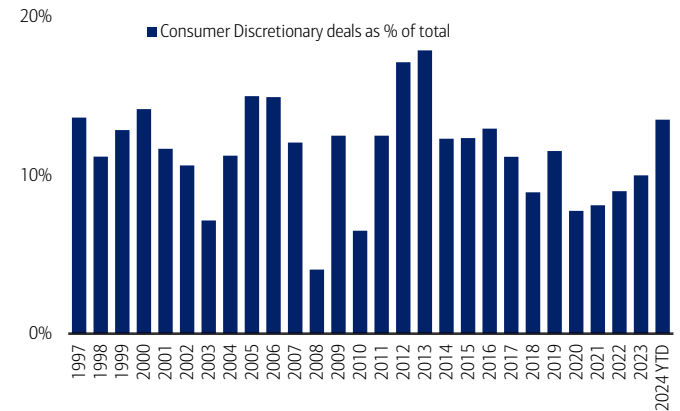


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 49: Discretionary share of M&A picking up

Consumer Discretionary deals as % of US total, 1997-YTD 2022 (as of 2/24)

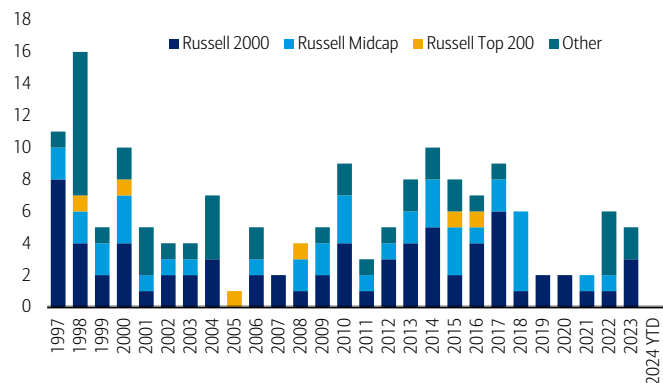


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 50: M&A targets in Staples are mostly small caps

US Consumer Staples M&A deal count: 1997-YTD 2022 (as of 2/29/24)

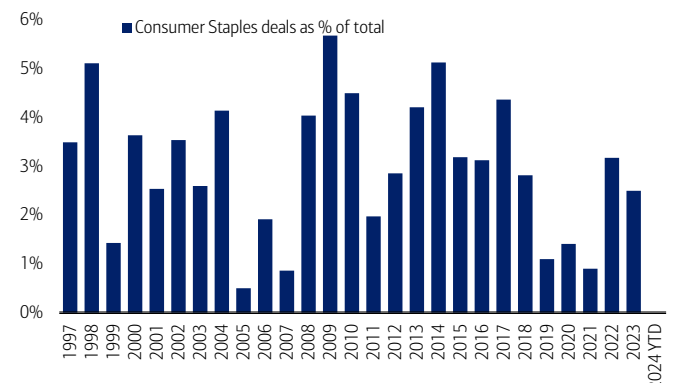


Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 51: Staples share of M&A remains tiny (& no Staples M&A YTD)

Consumer Staples deals as % of US total, 1997-YTD 2022 (as of 2/24)



Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

M&A doesn't drive small cap index performance, but does help small cap Staples

While small caps overall have not consistently outperformed in heavy M&A years (in fact, the opposite has been true), M&A activity has mattered to performance in several small cap sectors. While performance spreads have been most extreme in Health Care, Staples is another example of a small cap sector that has benefitted from heavy M&A backdrops – it has outperformed the Russell 2000 80% of the time in years of above-average deal activity (by an average of 6ppt) vs outperformed only 71% of the time in light M&A years (by 5ppt on average). Conversely, small cap Discretionary has actually seen better returns in light M&A years in the sector.

Exhibit 52: M&A pick ups are generally positive for small cap Staples

Relative performance and hit rates of Russell 2000 sectors vs the index in above-average (heavy) vs below-average (light) M&A years by deal activity (1997-2023)

| | Median Rel. Perf. | | | Hit Rate | | |
|-------------|-------------------|-----------------|-------|-----------------|-----------------|-------|
| | Heavy M&A Years | Light M&A Years | Diff. | Heavy M&A Years | Light M&A Years | Diff. |
| Health Care | 5% | 1% | 4% | 67% | 60% | 7% |
| Tech | 6% | 1% | 5% | 71% | 55% | 16% |
| Cons. Disc. | -4% | 4% | -8% | 30% | 71% | -41% |
| Staples | 6% | 5% | 1% | 80% | 71% | 9% |
| Energy | -25% | 4% | -29% | 22% | 50% | -28% |
| Financials | -2% | 2% | -4% | 33% | 61% | -28% |
| Industrials | 6% | 5% | 1% | 64% | 81% | -18% |
| Materials | 6% | 1% | 5% | 56% | 56% | 0% |

Exhibit 52: M&A pick ups are generally positive for small cap Staples

Relative performance and hit rates of Russell 2000 sectors vs the index in above-average (heavy) vs below-average (light) M&A years by deal activity (1997-2023)

| | Median Rel. Perf. | | | Hit Rate | | |
|-------------|-------------------|-----|-----|----------|-----|------|
| Real Estate | 0% | 6% | -6% | 38% | 63% | -26% |
| Utilities | 7% | -2% | 9% | 80% | 35% | 45% |
| Comm. Svcs. | -6% | -4% | -2% | 45% | 31% | 14% |

Source: FactSet/Mergerstat, BofA US Equity & US Quant Strategy

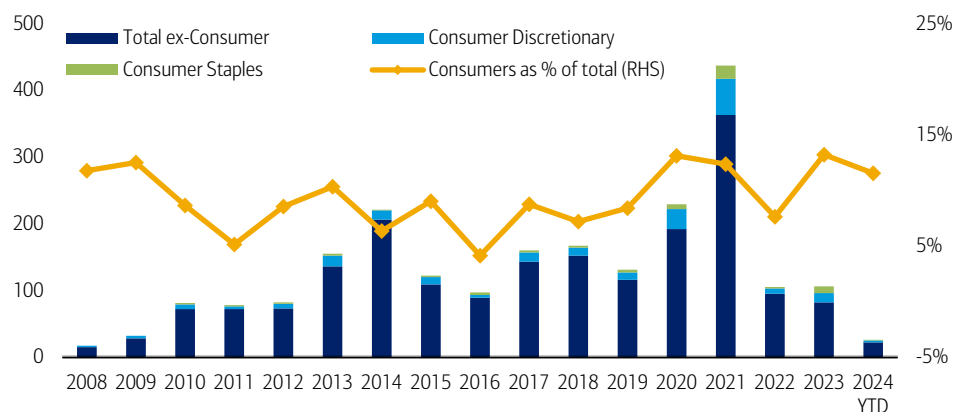
BofA GLOBAL RESEARCH

Consumer IPOs remain relatively sparse

IPO activity has remained relatively muted after the 2020-21 IPO boom, and the Consumer sectors continue to represent a small (<15% share) of total IPO activity.

Exhibit 53: 2023 saw ~14 Discretionary & 10 Staples IPOs, combined <15% of total IPO activity

US IPO count by year: 2008-YTD 2024



Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Stock selection within SMID cap Consumer sectors

Below we show which have historically been the best stock selection factors within each Consumer industry group based on a combination of the highest average Quintile 1 - Quintile 5 spreads and best probability of Q1 outperforming Q5, based on backtested monthly performance of our [small cap \(Russell 2000\)](#) and [mid cap \(Russell MidCap\)](#) factors (1989-2/2024). **See Appendix for full set of performance exhibits.**

Estimate revisions has been a good stock-selection factor across small cap Discretionary industries, while free cash flow (FCF) based valuation metrics have been consistent factors in small Discretionary but not in mid cap Discretionary. The best factors in Staples have varied a lot based on industry.

Exhibit 54: Best factors within small and mid-cap Consumer Discretionary industry groups

Based on combination of highest avg Q1-Q5 spreads and lowest probability of loss (Q5 outperforming Q1), based on monthly factor performance 1989-2/29/24

| | Small Cap | | | | Mid Cap | | | |
|-----------------|-----------------------------|--------------------|--|---|--|--------------------|--|-----------------------------------|
| Factor Category | Consumer Durables & Apparel | Consumer Services | Consumer Discretionary Distribution & Retail | Automobiles & Components | Consumer Durables & Apparel | Consumer Services | Consumer Discretionary Distribution & Retail | Automobiles & Components |
| Growth | EPS estimate revision | Estimate Diffusion | Estimate Diffusion, EPS estimate revision | Estimate Diffusion, EPS estimate revision, Operating Margin | Estimate Diffusion, Trailing 5Y Sales Growth | Estimate Diffusion | Estimate Diffusion, FY1/FY0 Growth | Earnings Surprise, FY1/FY0 Growth |

Exhibit 54: Best factors within small and mid-cap Consumer Discretionary industry groups

Based on combination of highest avg Q1-Q5 spreads and lowest probability of loss (Q5 outperforming Q1), based on monthly factor performance 1989-2/29/24

| | Small Cap | | | | Mid Cap | | | |
|--------------------|---|--|--|--|---|---|--|---|
| Value | FCF/EV, EBITDA/EV, FCF Yield | FCF Yield, FCF/EV, CFO/P (LTM) | CFO/P (LTM), FCF Yield, EBITDA/EV, FCF/EV | CFO/P (LTM), FCF Yield, EBITDA/EV, FCF/EV | Forward E/P, Sales/Price, EBITDA/EV | Sales/Price | FCF Yield, EBITDA/EV | Forward PEG, Trailing EG/P, Sales/EV |
| Quality | Earners/Nonearners | Earners/Nonearners, Cash Flow ROIC | Cash Flow ROIC, FCF ROA, Return on Capital | Cash Flow ROIC, FCF ROA, Return on Capital | Cash Flow ROIC, FCF ROA | ROE 1 Year Change | Cash Flow ROIC, Earners/Nonearners | Return on Capital, ROE, FCF ROA |
| Momentum/Technical | 1M Change 200 Day MA, Avg 1m price reversal & 12m price return rank | 10Wk/40Wk MA | 1M Change 200 Day MA, 30wk/75wk MA, 12M Price Change | 1M Change 200 Day MA, 30wk/75wk MA | Avg 1m price reversal & 12m price return rank | 12M Price Change, Avg 1m price reversal & 12m price return rank, 1M Change 200 Day MA | Avg 1m price reversal & 12m price return rank, 5Wk/30Wk MA, 1M Change 200 Day MA | 10Wk/40Wk MA, 1M Change 200 Day MA, Avg 1m price reversal & 12m price return rank |
| Liquidity | Cumulative trading volume (-1m) | 3M Avg Daily Volume, Cumulative trading volume (-1m) | Cumulative trading volume (-1m) | 3M Avg Daily Volume, Cumulative trading volume (-1m) | Cumulative trading volume (-1m) | 3M Avg Daily Volume, Cumulative trading volume (-1m) | 3M Avg Daily Volume, Cumulative trading volume (-1m) | 3M Avg Daily Volume, 3M Avg Daily \$ Volume, Cumulative trading volume (-1m) |
| Cash Deployment | Share Repurchase | Share Repurchase | Share Repurchase | Share Repurchase | Share Repurchase | Share Repurchase, Dividend Yield (Payers Only) | Share Repurchase, Dividend Growth | Share Repurchase |
| Miscellaneous | Short interest 12m z-score | Foreign Sales (%) | Closing Price, Number of I/B/E/S FY1 Est. | Closing Price, Number of I/B/E/S FY1 Est. | Short interest 12m z-score | Short interest 12m z-score | Closing Price | Number of I/B/E/S FY1 Est. |

Note: Based on factors with best return vs hit rate combo in charts below. This performance is back-tested 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 full performance details.

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH

Exhibit 55: Best factors within small and mid-cap Consumer Staples industry groups

Based on combination of highest avg Q1-Q5 spreads and lowest probability of loss (Q5 outperforming Q1), based on monthly factor performance 1989-2/29/24

| | Small Cap | | | Mid Cap | | |
|--------------------|---|---|--|--|--|---|
| Factor Category | Consumer Staples Distribution & Retail | Food, Beverage & Tobacco | Household & Personal Products | Consumer Staples Distribution & Retail | Food, Beverage & Tobacco | Household & Personal Products |
| Growth | Trailing 5Y Sales Growth, Operating Margin | Operating Margin, Trailing 5Y Sales Growth, EPS estimate revision | YoY Change in Trailing EPS, Estimate Diffusion | Earnings Surprise, Estimate Diffusion | Trailing 5Y EPS Growth | YoY Change in Trailing EPS |
| Value | Forward E/P, Trailing EG/P | Trailing E/P, EBITDA/EV | FCF Yield, FCF/EV, CFO/P (LTM) | FCF/EV | CFO/P (LTM), Forward E/P, FCF Yield | CFO/P (LTM), FCF Yield, Trailing E/P |
| Quality | Earners/Nonearners | Return on Avg Assets LTM, FCF ROA, Earners/Nonearners, ROE | Earners/Nonearners, FCF ROA, ROE 1 Year Change | FCF ROA, Return on Capital | Earners/Nonearners | Earners/Nonearners, ROE 1 Year Change |
| Momentum/Technical | 1M Change 200 Day MA, Avg 1m price reversal & 12m price return rank, 10Wk/40Wk MA | Avg 1m price reversal & 12m price return rank, 1M Change 200 Day MA, 10Wk/40Wk MA | 30wk/75wk MA | 10Wk/40Wk MA | Avg 1m price reversal & 12m price return rank | 12M Price Change, 30wk/75wk MA |
| Liquidity | 3M Avg Daily Volume | Market Cap | Cumulative trading volume (-1m) | 3M Avg Daily Volume | Cumulative trading volume (-1m), 3M Avg Daily Volume | 3M Avg Daily Volume |
| Cash Deployment | Dividend Yield (Payers Only) | Share Repurchase | Share Repurchase | Dividend Growth | Dividend Yield (Payers Only) | Dividend Yield (Payers Only), Dividends: Nonpayer-Payer, Share Repurchase |
| Miscellaneous | Short interest 12m z-score | Closing Price | Share Repurchase, Dividends: Nonpayer-Payer | Closing Price | Number of I/B/E/S FY1 Est. | Closing Price, Number of I/B/E/S FY1 Est. |

Note: Based on factors with best return vs hit rate combo in charts below. This performance is back-tested 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 full performance details.

Source: FactSet, BofA US Equity & US Quant Strategy

BofA GLOBAL RESEARCH



Convertibles

CBs allow for exposure to consumer shares with less risk

Michael Youngworth, CFA

CBs, Pfd & Derivs Strategist

BofAS

+1 646 855 6493

michael.youngworth@bofa.com

Consumer names flocked to the convertibles market during the pandemic...

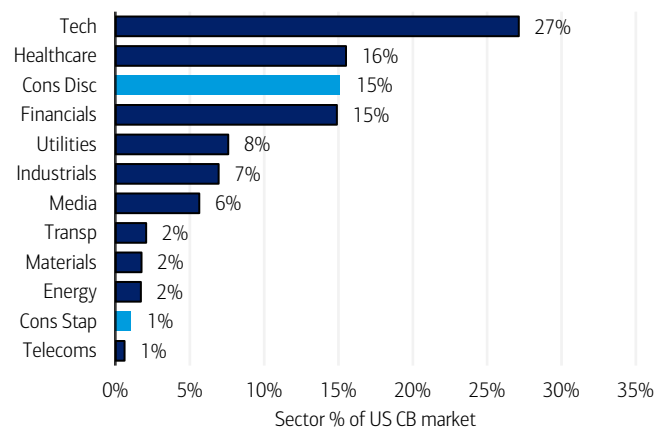
The Consumer sector has grown to be quite sizable in the converts space, now totaling nearly \$40bn in market value and comprising about 16% of the entire US space (Exhibit 57). More specifically, Consumer Discretionary names make up 15% of the market, the third-largest sector behind only tech and healthcare, while Staples are much smaller at just 1% (Exhibit 56). Compared to broad equity and credit indices, Consumer makes up a larger portion of the US HY bond market than it does US CBs, though its weight in CBs exceeds that in the Nasdaq, Russell 2000, S&P 500, and US IG credit market (Exhibit 58).

However, this was not always the case. Prior to the pandemic in 2020, the Consumer sector was a relatively small component of the CB market (just 9% at year-end 2019). When pandemic lockdowns effectively shut down many Consumer businesses, these companies (most notably cruise lines, airlines, restaurants, and retailers) flocked to convertible bonds to raise relatively cheap rescue financing compared to what they could attain in traditional credit markets. CBs allowed these borrowers to monetize the potential rebound in their depressed shares without immediate equity dilution, enabling them to more efficiently bridge the gap until their businesses could reopen (please refer to our recently updated [Global Convertibles Primer](#) for more detail on the advantages and disadvantages of the convertible bond structure). By year-end 2020, Consumer names comprised almost 20% of the US convertible bond market (Exhibit 57).

While travel and lodging (mostly cruise lines) continue to make up the bulk of the US CB Consumer space (about 35%), other notable subsectors include autos (including a sizable number of electric vehicle makers), retailers (mostly online, but also brick-and-mortar), and leisure (mostly theaters and entertainment facilities). Food and beverage, gaming, and restaurants are also present (Exhibit 59). Currently, the largest issuers in the US Consumer space (as measured by the market value of outstanding convertible debt) include Wayfair (W), Royal Caribbean (RCL), Rivian (RIVN), Carnival (CCL), and Ford (F).

Exhibit 56: US convertibles market sector breakdown

The Consumer Discretionary sector is the third largest in US CBs (15%), while Consumer Staples is among the smallest (just 1%)

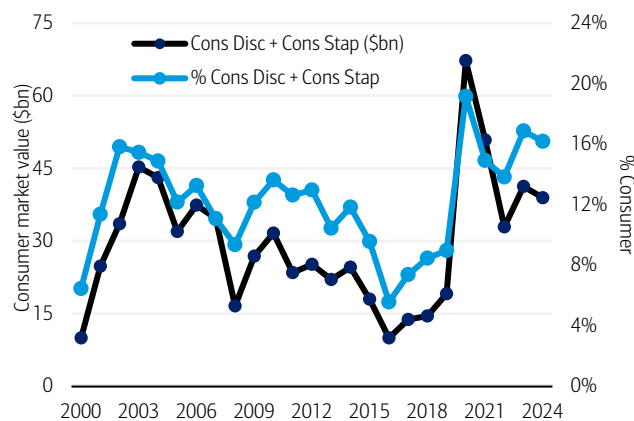


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 57: US CB consumer sector market value history

Together, the Consumer sectors comprise nearly \$40bn today, above the \$30bn average since 2000 but below the peak of close to \$70bn

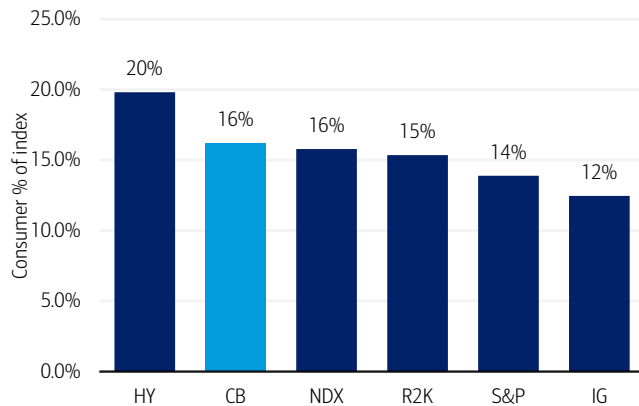


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 58: Consumer sector cross-asset comparison

The Consumer sectors' combined weight (16%) suggests it comprises a larger portion of CBs than broad equity indices and IG bonds

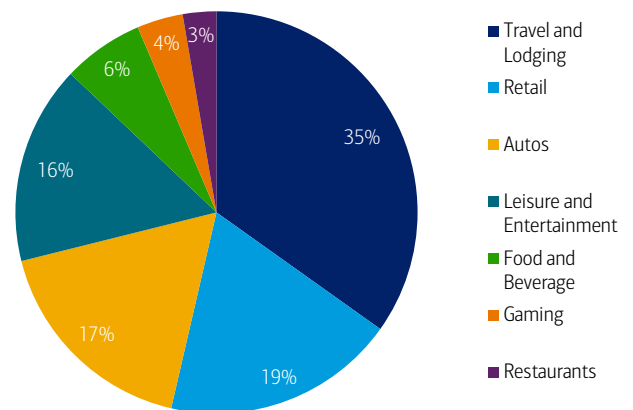


Source: BofA Global Research, Bloomberg, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 59: US CB Consumer subsector breakdown

Consumer CBs are mostly offered by travel and lodging names (particularly cruise lines), automakers, and retailers (mostly online specialty retail)



Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

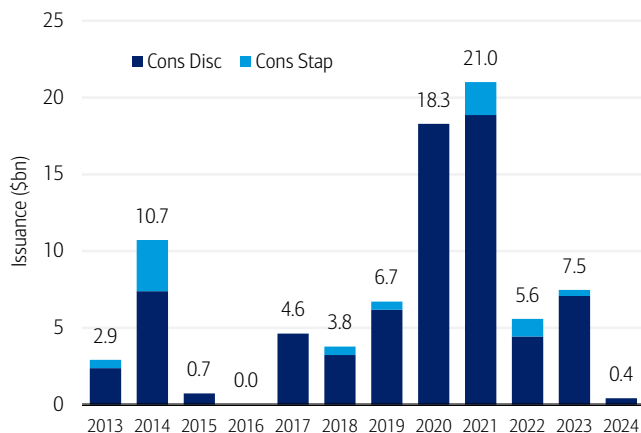
...and they continue to make up a meaningful portion of CB new deal activity

Though no longer the lockdown-era heyday, Consumer names have persisted as a CB primary market mainstay in the post-pandemic period, comprising about 19% of total volumes since 2020. In 2021, volumes peaked at \$21bn (25% of all US CB new issuance), driven heavily by high-growth Consumer tech and electric vehicle makers taking advantage of rallying share prices to raise new CB capital cheaply and opportunistically. However, the tide turned in 2022 when volumes dropped to just \$5.6bn, though that was still good enough for 19% of total issuance given the dearth of all capital markets activity following the rapid spike in borrowing costs and plunge in share prices (Exhibit 60 and Exhibit 61).

Last year, Consumer volumes were \$7.5bn, about 14% of new deal activity, led by deals from Rivian Auto (RIVN), Liberty Media (LMCA), Live Nation (LYV), Wayfair (W), and Freshpet (FRPT). Broadly, instead of a high concentration in traditional stalwarts like tech and healthcare, 2023's US CB new issuance market was much more diverse. Indeed, a product of much higher interest rates and lower equity prices, CB new volumes were led by large-cap, IG-rated utilities (see our [2023 postmortem](#)). The issuer diversity has persisted in 2024 as just 4% of volumes year-to-date have been from Consumer names.

Exhibit 60: US convertibles Consumer issuance history

In 2023, convertible bond issuance from Consumer companies totaled \$7.5bn from 10 transactions, while its totaled just \$0.4bn year-to-date



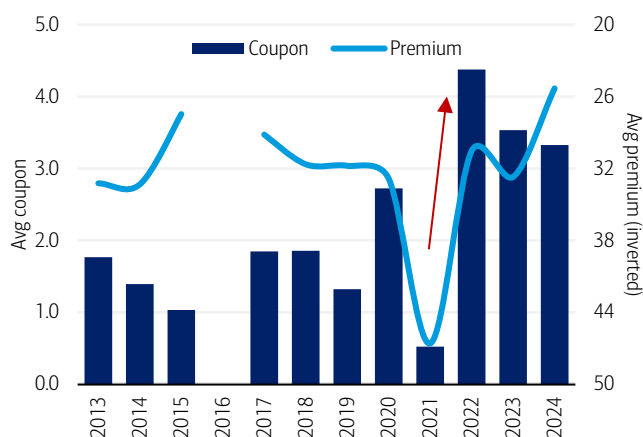
Source: BofA Global Research. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

In addition to lower volumes, pricing terms and age of borrowers in the Consumer sector underscore how significantly the market has shifted since peak in 2021. Indeed, in 2023 the average new deal coupon and initial conversion premium was 3.5% and 33%, respectively, much softer than 2021's historically aggressive average terms of 0.5% coupon and 47% premium. In fact, our data indicates Consumer CB deal terms are currently near their softest-ever levels historically (Exhibit 62). What's more, 2023's and 2024's Consumer issuers have been generally older, more mature companies as opposed to the pandemic-era's opportunistic names—in 2021, a record 44% of issuers were companies that had been publicly traded for 3 years or less, a record high, versus zero in 2022 (and 2024 so far), and just 13% in 2023—exclusively Rivian (Exhibit 63).

Exhibit 62: Average coupons and premiums of Consumer new deals

Since peaking in 2021, new deal coupons and initial premiums of consumer names have become significantly less aggressive



Source: BofA Global Research. Data as of 29-Feb-2024.

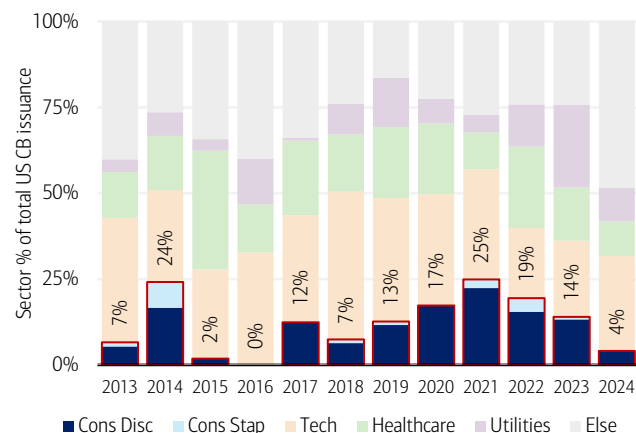
BofA GLOBAL RESEARCH

CBs allow asymmetric exposure to Consumer stocks, a benefit during "Recovery"

Though issuance has cooled relative to the 2021 peak, Consumer remains a prominent sector in the CB space, offering potential opportunities for investors to get exposure to Consumer names with less risk than stocks—an important benefit as markets trend higher despite lack of conviction and growing concern that priced-in rate cuts will not meet expectations.

Exhibit 61: Top sectors in the US convertibles primary market

Last year, Consumer Discretionary and Staples issuers comprised about 14% of all issuance, behind only tech, healthcare, and utilities

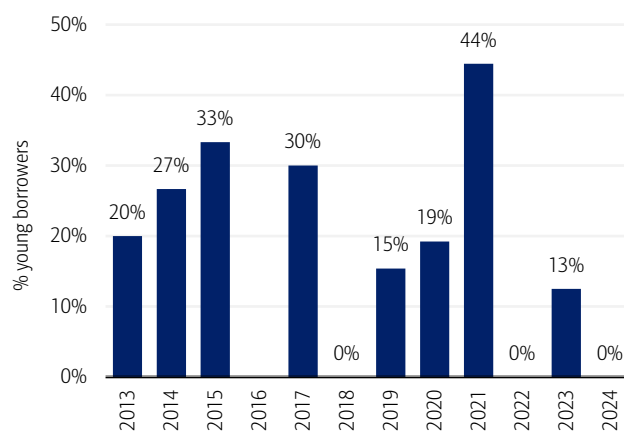


Source: BofA Global Research. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 63: Portion of Consumer CB issuers less than 3 years old

Another reflection of the less opportunistic backdrop, fewer Consumer CB issuers are young companies (with the exception of Rivian Auto)



Source: BofA Global Research. Data as of 29-Feb-2024.

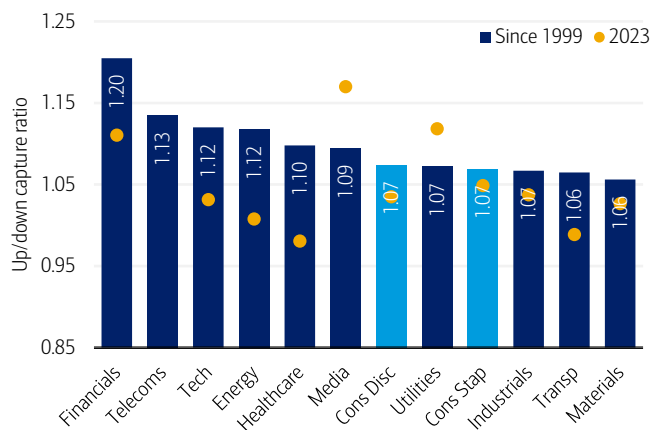
BofA GLOBAL RESEARCH

CBs' unique hybrid structure (call option on underlying stock + bond support) promotes convexity, which allows them to participate with their underlying stocks more on the upside than on the downside, typically resulting in better risk-adjusted performance. Specifically, based on daily returns since 2000, we've found that Consumer Discretionary CBs have captured about 54% of their stocks' upside versus 50% of their downside, while Consumer staples CBs have participated in 48% upside versus 45% downside—both exhibiting favorable asymmetry. Note that 2023's realized convexity (and 2024's year-to-date) was a bit weaker, albeit still positive, as many names were trading closer to bond levels than in the most convex “balanced” range (Exhibit 64).

This feature is central to CBs' ability to outperform their underlying stocks on a risk-adjusted basis. In fact, we've found that while Consumer CBs have historically outperformed their underlying stocks on a risk-adjusted basis (according to the Sharpe ratio) on average since 1995, their outperformance has been greatest during “Recovery” periods of our strategists' Regime Indicator, which attempts to identify where we are in the cycle based on eight top-down macro indicators that capture earnings and economic growth expectations, inflation, and credit conditions (Exhibit 65). Though the indicator is still in its “Downturn” phase, it is nearing “Recovery” based on improvements in EPS Revisions, GDP Forecast, 10y Treasury Yield, Leading Economic Indicators, ISM Manufacturing, and Capacity Utilization (see their [16-Feb Quantitative Profiles](#) note).

Exhibit 64: Convertible bond convexity by sector since 2000

Both Consumer Discretionary and Staples have captured more of their underlying stock's upside than downside historically

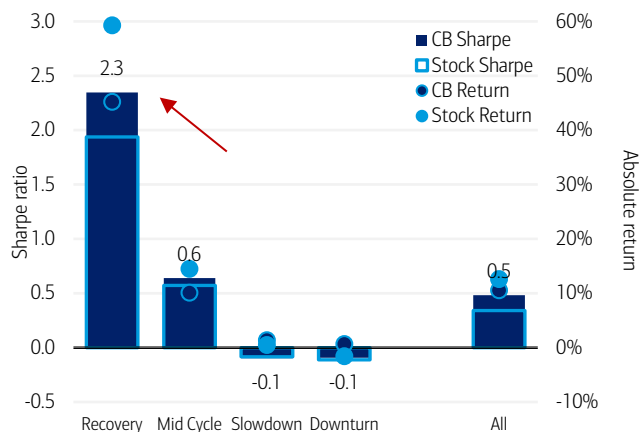


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 65: Consumer CB v. stock performance during each phase

On a risk-adjusted basis, Consumer converts have led their underlying stocks by the widest margin, on average, during the “Recovery” phase of the cycle



Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

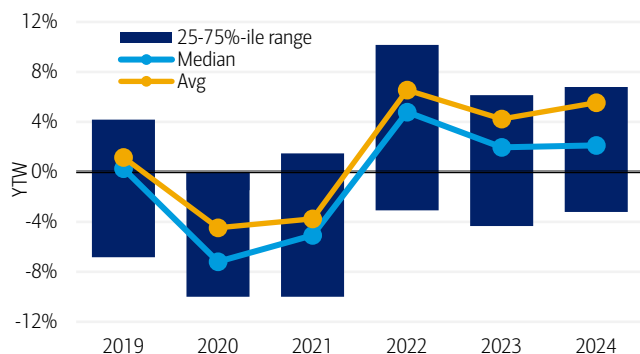
Opportunities for alternative yield remain abundant among Consumer CBs

2022's sizable drawdown in CBs from pandemic-era peaks offered a silver lining in the sense that it allowed investors to pick up sought-after yield. Within the Consumer sector (both Discretionary and Staples combined), the median yield-to-worst rose to nearly 5% in 2022, up from less than 0% the year before, as the crop of aggressively-priced deals from young, high-growth Consumer and Consumer-tech issuers struggled as interest rates rapidly rose (many of these names are now considered to be “busted” CBs, meaning their embedded option is so far out-of-the-money that they trade like pure bonds).

Today, yields among Consumer sector convertibles remain quite elevated versus history—in fact, the median yield is now 2.1% (Exhibit 66). Though much of that yield remains concentrated in the now “busted” names offered in the midst of the heavy activity in 2021, a sizable portion also sits within new deals offered since 2022, which as we discussed earlier have come to market with much higher coupons than their earlier counterparts (Exhibit 67 and Exhibit 62).

Exhibit 66: Consumer converts yield-to-worst distribution by year

Mostly a consequence of 2022's rates-driven selloff, Consumer CBs are still yielding 2.1% based on their median

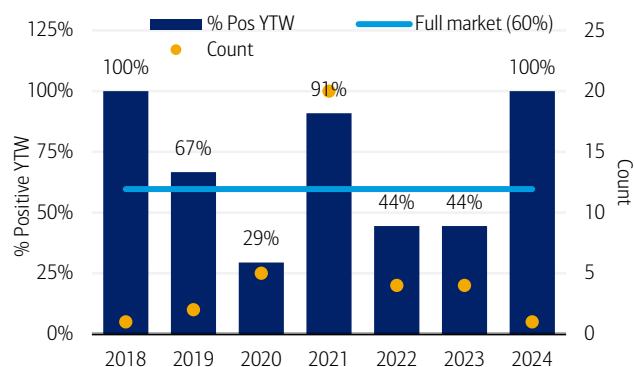


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 67: Portion of Consumer CBs with a positive YTW by issue year

A large portion of the sector's yield is concentrated in "busted" names (most offered in 2021)



Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

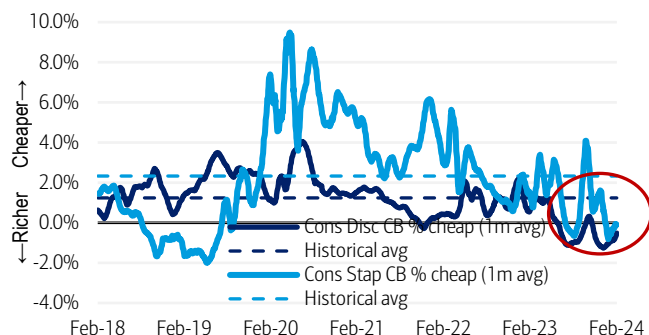
Though not crowded, Consumer CBs trade at a slight premium to fair value

Broadly, convertible bond model-implied fair values have been richening from their peak cheapness in 2020 (a result of the pandemic-led selloff and the excess of cheap new deals from lockdown-stressed companies) as net-new supply has been constrained (redemptions have offset new issuance each year since 2021). The Consumer sectors are no exception as they currently trade very close to fair value (Discretionary trades about 50bps cheap, which Staples trades about 30bps rich), though in the context of other sectors, their valuations are about average (Exhibit 68 and Exhibit 69).

Additionally, investor positioning in Consumer CBs is now below its historical average, suggesting fairly tepid demand for the sector from traditional convertible bond investors. Indeed, data from our most recent [Global Convertibles Investor Survey](#) (conducted at the end of January) indicates that manager net-positioning remains not far above all-time lows set in August 2022 (Exhibit 70). We think the relative lack of demand is reasonable given the high concentration of "busted" CBs within the sector rather than CB manager-favorite "balanced" names (see Exhibit 67 from earlier), and the sectors' relatively disappointing performance versus others—Consumer Discretionary, in particular, has dropped 5.8% year-to-date, the worst of all US CB sectors, mostly due to poor performance from EV-makers Rivian, Lucid, and Fisker, and weakness in cruise lines (Exhibit 71). However, the fact that Consumer CB valuations remain around average compared to other sectors and that there is little crowding suggests to us that today's entry point may be favorable for investors looking to participate in Consumer CBs.

Exhibit 68: Consumer CB percent cheap over time (1m rolling average)

Both Consumer Discretionary and Consumer Staples CBs now trade close to fair value, on average

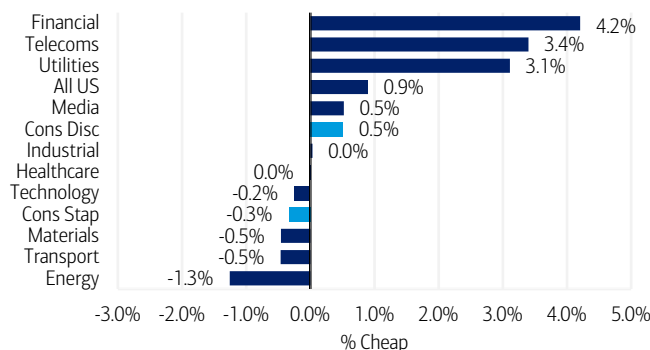


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 69: Cross-sector convertible bond current percent cheap

Versus other sectors, Consumer Discretionary and Staples CBs' valuations are near the middle of the pack

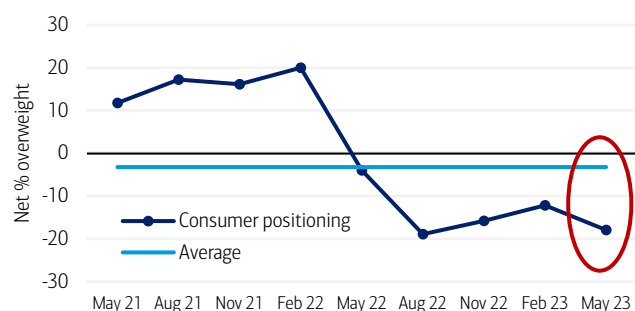


Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 70: Investor net positioning in Consumer convertibles

According to our investor survey, manager positioning among Consumer CBs remains quite low relative to history

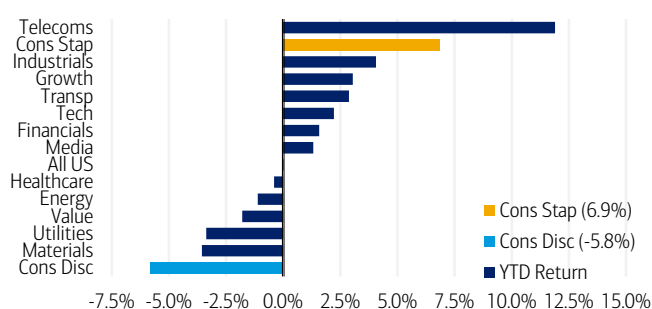


Source: BofA Global Convertibles Investor Survey. Data as of 01-Feb-2024.

BofA GLOBAL RESEARCH

Exhibit 71: 2024 year-to-date performance by sector

Consumer Discretionary CBs, in particular, have underperformed year-to-date, lagging all sectors so far this year



Source: BofA Global Research, ICE Data Indices, LLC. Data as of 29-Feb-2024.

BofA GLOBAL RESEARCH

Appendix

Stock selection factors within Discretionary & Staples

Note: The analysis of Russell 2000 and Russell Midcap factor returns within Consumer Discretionary and Staples industry groups in Exhibit 54-Exhibit 55 earlier in this report and in the four tables below is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the hypothetical back-tested performance of a particular strategy over the time period indicated. In future periods, market and economic conditions will differ and the same strategy will not necessarily produce the same results. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. In fact, there are frequently sharp differences between back-tested returns and the actual results realized in the actual management of a portfolio. Back-tested performance results are created by applying an investment strategy or methodology to historical data and attempts to give an indication as to how a strategy might have performed during a certain period in the past if the product had been in existence during such time. Back-tested results have inherent limitations including the fact that they are calculated with the full benefit of hindsight, which allows the security selection methodology to be adjusted to maximize the returns. Further, the results shown do not reflect actual trading or the impact that material economic and market factors might have had on a portfolio manager's decision-making under actual circumstances. Back-tested returns do not reflect advisory fees, trading costs, or other fees or expenses. See our monthly [small cap \(Russell 2000\) and mid cap \(Russell MidCap\) factors](#) report for complete definitions of all factors we track.

Exhibit 72: Factor performance within Small Cap Consumer Discretionary

Based on Quintile 1-Quintile 5 monthly returns for Russell 2000 Consumer Discretionary industry groups, 1989-2/29/2024

| Factor | Category | Consumer Durables & Apparel | | Consumer Services | | Consumer Discretionary Distribution & Retail | | Automobiles & Components | |
|---|-----------------|-----------------------------|---------------------|---------------------------|---------------------|--|---------------------|---------------------------|---------------------|
| | | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss |
| Dividend Growth | Cash Deployment | -0.1% | 49.5% | -1.4% | 54.9% | -0.3% | 47.4% | -0.3% | 10.5% |
| Dividend Yield (Payers Only) | Cash Deployment | 0.2% | 47.9% | -1.6% | 57.3% | -0.1% | 51.9% | -0.1% | 9.6% |
| Dividends: Nonpayer-Payer | Cash Deployment | -0.2% | 54.7% | -1.1% | 58.5% | 0.1% | 47.2% | 0.1% | 4.0% |
| Share Repurchase | Cash Deployment | 0.7% | 41.9% | -0.4% | 53.6% | 0.6% | 48.3% | 0.6% | 6.8% |
| Earnings Surprise | Growth | 1.0% | 40.9% | -0.4% | 50.8% | 0.4% | 43.3% | 0.4% | 6.6% |
| EPS estimate revision | Growth | 1.6% | 39.1% | -0.2% | 49.3% | 1.2% | 42.2% | 1.2% | 7.2% |
| Estimate Diffusion | Growth | 1.0% | 40.3% | 0.0% | 47.6% | 1.3% | 40.8% | 1.3% | 7.0% |
| FY1/FY0 Growth | Growth | 1.2% | 41.0% | -0.5% | 48.8% | 0.8% | 42.2% | 0.8% | 7.6% |
| IBES Mean LT Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Operating Margin | Growth | 0.4% | 43.8% | -0.2% | 49.1% | 1.1% | 40.0% | 1.1% | 7.4% |
| Operating Margin Expansion | Growth | 0.6% | 46.4% | -0.1% | 48.1% | 0.8% | 44.8% | 0.8% | 7.0% |
| Trailing 5 Year EPS Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Trailing 5 Year Sales Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| YoY Change in Trailing EPS | Growth | 0.2% | 47.6% | -0.6% | 52.8% | 0.5% | 42.9% | 0.5% | 7.1% |
| Net Debt/EBITDA | Leverage | 0.8% | 42.7% | -0.5% | 52.1% | -0.4% | 54.0% | -0.4% | 6.8% |
| Net Debt/EBITDA Adj. | Leverage | 0.7% | 43.8% | -0.5% | 52.6% | -0.4% | 53.1% | -0.4% | 6.7% |
| Net Debt/Equity | Leverage | 0.2% | 46.7% | -0.7% | 54.0% | -0.1% | 52.8% | -0.1% | 6.9% |
| Net Debt/Mkt Cap | Leverage | 0.2% | 45.7% | -0.9% | 55.5% | 0.2% | 48.8% | 0.2% | 7.4% |
| 3M Avg Daily \$ Volume | Liquidity | 0.0% | 49.8% | -0.2% | 50.9% | 0.3% | 49.5% | 0.3% | 7.0% |
| 3M Avg Daily Volume | Liquidity | 0.8% | 43.6% | 0.0% | 51.9% | 1.3% | 42.4% | 1.3% | 6.6% |
| Cumulative trading volume (-1m) | Liquidity | 0.9% | 42.7% | -0.1% | 49.3% | 1.2% | 41.5% | 1.2% | 6.8% |
| Market Cap | Liquidity | 0.3% | 45.3% | -0.3% | 49.3% | 0.3% | 45.5% | 0.3% | 7.5% |
| Number of I/B/E/S FY1 Est. | Miscellaneous | 0.0% | 50.5% | -0.6% | 53.1% | 0.6% | 48.1% | 0.6% | 6.3% |
| Short interest 12m z-score | Miscellaneous | 0.8% | 41.4% | -0.7% | 55.7% | -0.7% | 56.2% | -0.7% | 6.7% |
| SI Ratio | Miscellaneous | -1.0% | 56.6% | -1.2% | 56.6% | -0.7% | 52.8% | -0.7% | 6.0% |
| Closing Price | Miscellaneous | 0.7% | 40.8% | -0.4% | 50.7% | 0.6% | 41.0% | 0.6% | 8.6% |
| Foreign Sales (%) - avail, 0=Q5 | Miscellaneous | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Avg 1m price reversal & 12m price return rank | Momentum | 1.1% | 40.3% | -0.3% | 52.6% | 0.6% | 44.8% | 0.6% | 7.2% |
| 10Wk/40Wk MA | Momentum | 0.9% | 41.5% | -0.1% | 47.4% | 0.8% | 40.5% | 0.8% | 9.2% |
| 12M Price Change | Momentum | 0.7% | 39.3% | -0.5% | 50.5% | 0.8% | 41.9% | 0.8% | 9.2% |
| 1M Change 200 Day MA | Momentum | 1.2% | 37.0% | -0.3% | 49.3% | 1.0% | 41.0% | 1.0% | 9.0% |
| 30wk/75wk MA | Momentum | 0.7% | 40.5% | -0.3% | 48.1% | 0.9% | 39.8% | 0.9% | 8.5% |
| 3M Price Chg | Momentum | -0.1% | 48.3% | -0.7% | 51.9% | 0.4% | 46.0% | 0.4% | 7.8% |
| 5Wk/30Wk MA | Momentum | 0.5% | 43.6% | -0.3% | 49.1% | 0.8% | 38.6% | 0.8% | 9.0% |
| 9M price change | Momentum | 0.9% | 42.7% | -0.4% | 48.6% | 0.8% | 42.7% | 0.8% | 9.2% |
| Avg 1m & 12m price return rank | Momentum | -0.1% | 49.1% | -0.7% | 53.3% | 0.5% | 41.7% | 0.5% | 8.0% |
| P/200MA | Momentum | 0.3% | 45.3% | -0.7% | 50.7% | 0.7% | 41.9% | 0.7% | 9.1% |
| Cash Flow ROIC | Quality | 1.2% | 41.5% | 0.2% | 48.6% | 1.3% | 41.7% | 1.3% | 7.6% |
| Earners/Nonearners | Quality | 1.5% | 39.0% | 0.7% | 44.8% | 1.0% | 42.1% | 1.0% | 12.5% |
| FCF ROA | Quality | 1.1% | 41.5% | 0.0% | 48.3% | 1.2% | 38.9% | 1.2% | 7.5% |
| Return on Avg Assets LTM | Quality | 0.9% | 40.0% | 0.0% | 46.2% | 1.0% | 39.1% | 1.0% | 8.3% |
| Return on Capital | Quality | 0.6% | 41.2% | -0.1% | 49.3% | 1.1% | 40.0% | 1.1% | 8.1% |
| ROE | Quality | 1.1% | 40.8% | -0.2% | 48.8% | 0.8% | 42.9% | 0.8% | 8.2% |
| ROE 1 Year Change | Quality | 0.5% | 46.0% | -0.6% | 51.4% | 0.6% | 42.7% | 0.6% | 7.4% |
| 1Yr Daily Price Volatility | Risk | -1.1% | 61.1% | -0.9% | 59.5% | -0.5% | 54.5% | -0.5% | 9.7% |
| 5Yr Beta | Risk | 0.5% | 49.8% | -0.5% | 53.8% | 0.5% | 49.3% | 0.5% | 7.4% |
| Earning Variability (5yr) | Risk | -0.2% | 54.5% | -1.2% | 58.8% | -0.1% | 52.1% | -0.1% | 5.9% |
| EPS estimate dispersion (FY2) | Risk | -0.6% | 56.2% | -1.2% | 60.7% | -0.3% | 53.6% | -0.3% | 8.0% |
| Book/Price | Valuation | 0.8% | 44.1% | -1.1% | 58.8% | 0.2% | 50.7% | 0.2% | 7.9% |
| CFO/P (LTM) | Valuation | 1.2% | 42.2% | 0.0% | 50.2% | 1.8% | 42.7% | 1.8% | 8.0% |
| EBITDA/EV | Valuation | 1.5% | 38.4% | 0.0% | 49.5% | 1.6% | 42.9% | 1.6% | 7.9% |
| FCF Yield | Valuation | 1.4% | 40.8% | 0.2% | 47.6% | 1.6% | 38.2% | 1.6% | 7.7% |
| FCF/EV | Valuation | 1.5% | 38.4% | 0.1% | 46.9% | 1.5% | 40.3% | 1.5% | 7.5% |
| Forward E/P | Valuation | 1.6% | 40.5% | -0.3% | 49.3% | 1.2% | 45.5% | 1.2% | 8.0% |
| Forward PEG | Valuation | 1.0% | 46.9% | -0.9% | 55.2% | 0.6% | 47.4% | 0.6% | 7.3% |
| Sales/EV | Valuation | 1.2% | 42.4% | -0.5% | 55.5% | 0.8% | 46.2% | 0.8% | 7.1% |
| Sales/Price | Valuation | 0.8% | 49.1% | -0.7% | 55.9% | 0.2% | 48.8% | 0.2% | 8.1% |
| Trailing E/P | Valuation | 1.2% | 43.1% | -0.1% | 48.1% | 1.1% | 42.7% | 1.1% | 7.9% |
| Trailing EG/P | Valuation | 0.6% | 46.4% | -0.6% | 55.0% | 0.5% | 48.1% | 0.5% | 7.6% |

Note: This performance is back-tested 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 full details/disclosure below.

Source: FactSet, BofA US Equity & US Quant Strategy

Exhibit 73: Factor performance within Mid Cap Consumer Discretionary

Based on Quintile 1-Quintile 5 monthly returns for Russell MidCap Consumer Discretionary industry groups, 1989-2/29/2024

| Factor | Category | Consumer Durables & Apparel | | Consumer Services | | Consumer Discretionary Distribution & Retail | | Automobiles & Components | |
|---|-----------------|-----------------------------|---------------------|---------------------------|---------------------|--|---------------------|---------------------------|---------------------|
| | | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss |
| Dividend Growth | Cash Deployment | 0.3% | 45.3% | -1.1% | 53.1% | 0.2% | 50.5% | -1.1% | 55.0% |
| Dividend Yield (Payers Only) | Cash Deployment | 0.1% | 50.2% | 0.3% | 50.5% | 0.1% | 46.9% | -0.3% | 52.9% |
| Dividends: Nonpayer-Payer | Cash Deployment | -0.1% | 50.2% | 0.2% | 47.9% | 0.1% | 43.6% | -0.4% | 52.7% |
| Share Repurchase | Cash Deployment | 0.8% | 46.7% | 0.3% | 46.2% | 0.9% | 49.0% | -0.2% | 50.0% |
| Earnings Surprise | Growth | 0.0% | 51.6% | 0.1% | 50.5% | 0.6% | 47.8% | 0.5% | 49.7% |
| EPS estimate revision | Growth | 0.4% | 46.9% | 0.8% | 45.0% | 0.7% | 49.5% | 0.1% | 47.9% |
| Estimate Diffusion | Growth | 0.6% | 44.3% | 1.0% | 42.9% | 0.3% | 46.5% | 0.2% | 46.9% |
| FY1/FY0 Growth | Growth | 0.2% | 50.5% | 0.3% | 46.2% | 0.1% | 48.7% | 0.3% | 48.3% |
| IBES Mean LT Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Operating Margin | Growth | -0.1% | 48.3% | -1.3% | 55.9% | 0.4% | 54.0% | -0.8% | 55.2% |
| Operating Margin Expansion | Growth | 0.3% | 47.4% | 0.2% | 48.1% | 0.5% | 45.1% | 0.0% | 51.7% |
| Trailing 5 Year EPS Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Trailing 5 Year Sales Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| YoY Change in Trailing EPS | Growth | -0.2% | 47.9% | 0.3% | 47.2% | -0.1% | 44.0% | -0.3% | 50.9% |
| Net Debt/EBITDA | Leverage | -0.1% | 49.1% | -0.4% | 54.0% | 0.2% | 50.9% | 0.0% | 48.6% |
| Net Debt/EBITDA Adj. | Leverage | -0.2% | 50.7% | -0.4% | 54.0% | 0.1% | 50.4% | 0.3% | 47.6% |
| Net Debt/Equity | Leverage | 0.3% | 46.4% | -0.4% | 54.3% | -0.7% | 46.5% | 1.1% | 46.7% |
| Net Debt/Mkt Cap | Leverage | -0.3% | 52.8% | -0.5% | 54.0% | 0.5% | 52.5% | 0.4% | 49.8% |
| 3M Avg Daily \$ Volume | Liquidity | -0.8% | 53.3% | -0.2% | 49.8% | N/A | 51.3% | 0.1% | 52.8% |
| 3M Avg Daily Volume | Liquidity | -0.2% | 53.6% | 1.4% | 42.9% | 0.8% | 49.7% | 0.2% | 50.0% |
| Cumulative trading volume (-1m) | Liquidity | 0.1% | 52.1% | 1.3% | 47.6% | 0.6% | 49.0% | 0.1% | 48.8% |
| Market Cap | Liquidity | -0.3% | 47.4% | -0.2% | 49.1% | 0.1% | 50.5% | -0.3% | 52.4% |
| Number of I/B/E/S FY1 Est. | Miscellaneous | 0.1% | 49.8% | 0.5% | 46.7% | 0.1% | 48.6% | 0.1% | 52.1% |
| Short interest 12m z-score | Miscellaneous | 1.0% | 41.9% | 1.0% | 45.1% | 0.3% | 49.6% | -0.4% | 50.8% |
| SI Ratio | Miscellaneous | -0.6% | 52.0% | -1.2% | 54.7% | 0.0% | 51.9% | -1.0% | 57.7% |
| Closing Price | Miscellaneous | -0.4% | 51.7% | -0.1% | 47.4% | 0.5% | 45.5% | -0.3% | 50.5% |
| Foreign Sales (%) - avail, 0=Q5 | Miscellaneous | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Avg 1m price reversal & 12m price return rank | Momentum | 0.6% | 43.6% | 1.0% | 41.5% | 0.5% | 47.6% | 0.5% | 49.3% |
| 10Wk/40Wk MA | Momentum | 0.3% | 47.6% | 0.8% | 44.8% | 0.8% | 49.0% | 1.0% | 47.6% |
| 12M Price Change | Momentum | 0.3% | 45.3% | 1.0% | 45.3% | 0.4% | 46.5% | 1.2% | 46.9% |
| 1M Change 200 Day MA | Momentum | 0.4% | 45.5% | N/A | N/A | N/A | 45.2% | 0.8% | 46.2% |
| 30wk/75wk MA | Momentum | 0.5% | 45.3% | 0.9% | 44.1% | 0.4% | 44.2% | 0.5% | 48.1% |
| 3M Price Chg | Momentum | -0.3% | 51.9% | 0.2% | 46.7% | 0.2% | 49.0% | -0.1% | 50.9% |
| 5Wk/30Wk MA | Momentum | 0.1% | 49.5% | 0.7% | 46.0% | 0.6% | 48.5% | 0.1% | 48.8% |
| 9M price change | Momentum | 0.4% | 46.0% | 0.6% | 47.6% | 0.0% | 47.5% | 0.3% | 46.7% |
| Avg 1m & 12m price return rank | Momentum | -0.1% | 51.2% | -0.1% | 49.3% | 0.7% | 52.6% | -0.3% | 50.0% |
| P/200MA | Momentum | 0.0% | 48.8% | 0.6% | 45.7% | 0.6% | 47.5% | N/A | N/A |
| Cash Flow ROIC | Quality | 0.5% | 44.8% | -0.4% | 51.4% | 0.3% | 48.2% | -0.9% | 54.5% |
| Earnings/Nonearnings | Quality | 1.4% | 47.2% | 0.3% | 46.2% | -0.4% | 37.5% | N/A | N/A |
| FCF ROA | Quality | 0.5% | 43.4% | -0.3% | 49.8% | 0.2% | 45.5% | -0.2% | 50.0% |
| Return on Avg Assets LTM | Quality | 0.2% | 45.7% | -0.9% | 54.0% | 0.4% | 50.8% | -0.4% | 51.4% |
| Return on Capital | Quality | 0.0% | 46.7% | -0.4% | 53.3% | 0.7% | 50.5% | 0.0% | 49.8% |
| ROE | Quality | 0.1% | 46.7% | -0.2% | 50.5% | 0.1% | 47.9% | -0.1% | 51.4% |
| ROE 1 Year Change | Quality | -0.1% | 49.8% | 0.6% | 48.3% | -0.9% | 44.9% | -0.5% | 51.4% |
| 1Yr Daily Price Volatility | Risk | -0.3% | 54.5% | 0.0% | 52.6% | 0.4% | 57.6% | -0.3% | 52.6% |
| 5Yr Beta | Risk | 0.1% | 52.4% | 0.3% | 49.3% | 0.9% | 54.0% | -0.3% | 54.7% |
| Earning Variability (5yr) | Risk | 0.1% | 47.9% | 0.2% | 47.6% | N/A | 51.4% | -0.3% | 51.4% |
| EPS estimate dispersion (FY2) | Risk | -0.3% | 51.2% | 0.3% | 48.6% | 0.6% | 51.9% | -0.5% | 54.7% |
| Book/Price | Valuation | 0.9% | 43.8% | -0.1% | 51.2% | 0.4% | 45.5% | -0.6% | 52.8% |
| CFO/P (LTM) | Valuation | 0.8% | 47.9% | -0.2% | 50.2% | -0.1% | 42.9% | 0.0% | 52.6% |
| EBITDA/EV | Valuation | 1.1% | 42.9% | -0.2% | 53.6% | 0.7% | 45.5% | 0.0% | 50.0% |
| FCF Yield | Valuation | 0.6% | 45.0% | -0.2% | 51.4% | 0.7% | 42.7% | 0.0% | 51.4% |
| FCF/EV | Valuation | 0.6% | 45.5% | -0.4% | 52.8% | 0.5% | 41.2% | -0.3% | 50.2% |
| Forward E/P | Valuation | 1.2% | 42.4% | 0.0% | 50.9% | -0.3% | 47.7% | -0.2% | 49.8% |
| Forward PEG | Valuation | 0.7% | 44.1% | 0.2% | 48.1% | 0.9% | 50.9% | 0.7% | 47.2% |
| Sales/EV | Valuation | 1.5% | 41.7% | 0.9% | 46.4% | 0.0% | 48.2% | 0.2% | 49.1% |
| Sales/Price | Valuation | 1.1% | 43.4% | 1.0% | 45.3% | 0.4% | 50.8% | -0.2% | 50.7% |
| Trailing E/P | Valuation | 0.8% | 45.3% | -1.2% | 56.6% | 0.4% | 47.1% | -0.7% | 52.8% |
| Trailing EG/P | Valuation | 0.6% | 44.5% | -0.2% | 51.2% | 0.3% | 51.3% | 0.3% | 47.6% |

Note: This performance is back-tested 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 full details/disclosure below.

Source: FactSet, BofA US Equity & US Quant Strategy



Exhibit 74: Factor performance within Small Cap Consumer Staples

Based on Quintile 1-Quintile 5 monthly returns for Russell 2000 Consumer Staples industry groups, 1989-2/29/2024

| Factor | Category | Consumer Staples Distribution & Retail | | Food, Beverage & Tobacco | | Household & Personal Products | |
|---|-----------------|--|---------------------|---------------------------|---------------------|-------------------------------|---------------------|
| | | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss | Avg. monthly Q1-Q5 Spread | Probability of loss |
| Dividend Growth | Cash Deployment | 0.0% | 47.3% | 0.0% | 50.7% | 0.3% | 52.8% |
| Dividend Yield (Payers Only) | Cash Deployment | 1.2% | 45.7% | 0.0% | 49.5% | 0.2% | 49.7% |
| Dividends: Nonpayer-Payer | Cash Deployment | 0.2% | 46.7% | 0.2% | 48.6% | 0.8% | 45.0% |
| Share Repurchase | Cash Deployment | 0.6% | 48.1% | 0.7% | 44.8% | 0.8% | 45.5% |
| Earnings Surprise | Growth | -1.5% | 52.7% | -0.2% | 50.5% | -0.8% | 52.2% |
| EPS estimate revision | Growth | 0.1% | 47.0% | 0.6% | 44.8% | 0.2% | 48.9% |
| Estimate Diffusion | Growth | 0.3% | 48.0% | 0.1% | 47.9% | 1.3% | 48.3% |
| FY1/FY0 Growth | Growth | -0.3% | 49.5% | -0.5% | 47.9% | -0.7% | 52.4% |
| IBES Mean LT Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| Operating Margin | Growth | 1.7% | 43.1% | 0.7% | 46.0% | 1.0% | 45.3% |
| Operating Margin Expansion | Growth | 0.2% | 49.1% | 0.2% | 49.8% | 0.9% | 49.5% |
| Trailing 5 Year EPS Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| Trailing 5 Year Sales Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| YoY Change in Trailing EPS | Growth | 0.0% | 50.0% | 0.6% | 46.0% | 1.4% | 44.8% |
| Net Debt/EBITDA | Leverage | -0.4% | 53.1% | -0.4% | 52.4% | -0.2% | 53.6% |
| Net Debt/EBITDA Adj. | Leverage | 0.0% | 51.4% | -0.6% | 52.6% | -0.2% | 50.7% |
| Net Debt/Equity | Leverage | 0.4% | 49.5% | 0.2% | 50.2% | 0.3% | 46.9% |
| Net Debt/Mkt Cap | Leverage | 0.3% | 48.8% | 0.0% | 51.4% | -0.3% | 49.3% |
| 3M Avg Daily \$ Volume | Liquidity | -0.1% | 47.4% | 0.4% | 43.8% | -0.2% | 50.7% |
| 3M Avg Daily Volume | Liquidity | 1.0% | 44.1% | 0.5% | 48.1% | 1.2% | 46.0% |
| Cumulative trading volume (-1m) | Liquidity | 0.6% | 46.0% | 0.6% | 47.4% | 1.6% | 44.5% |
| Market Cap | Liquidity | -0.2% | 48.8% | 1.0% | 42.4% | 1.2% | 44.5% |
| Number of I/B/E/S FY1 Est. | Miscellaneous | 0.2% | 48.3% | -0.3% | 49.9% | 0.7% | 45.3% |
| Short interest 12m z-score | Miscellaneous | 0.3% | 48.0% | -0.7% | 56.2% | 0.2% | 50.1% |
| SI Ratio | Miscellaneous | -1.2% | 51.2% | -0.8% | 57.7% | -1.4% | 56.5% |
| Closing Price | Miscellaneous | -0.2% | 49.8% | 0.9% | 45.3% | 1.0% | 41.0% |
| Foreign Sales (%) - avail, 0=Q5 | Miscellaneous | N/A | N/A | N/A | N/A | N/A | N/A |
| Avg 1m price reversal & 12m price return rank | Momentum | 0.8% | 45.7% | 1.5% | 41.5% | 0.8% | 46.9% |
| 10Wk/40Wk MA | Momentum | 0.7% | 48.3% | 1.3% | 41.9% | 0.4% | 46.9% |
| 12M Price Change | Momentum | 0.1% | 48.1% | 1.0% | 44.3% | 0.4% | 47.4% |
| 1M Change 200 Day MA | Momentum | 0.9% | 46.4% | 1.4% | 40.3% | 0.3% | 47.4% |
| 30wk/75wk MA | Momentum | 0.1% | 47.4% | 1.2% | 44.3% | 1.0% | 45.5% |
| 3M Price Chg | Momentum | 0.2% | 49.1% | 0.2% | 45.7% | 0.1% | 50.7% |
| 5Wk/30Wk MA | Momentum | 0.6% | 46.4% | 1.3% | 41.0% | -0.2% | 50.9% |
| 9M price change | Momentum | -0.1% | 50.7% | 0.7% | 46.0% | 0.9% | 45.0% |
| Avg 1m & 12m price return rank | Momentum | -0.3% | 50.7% | -0.3% | 50.7% | 0.2% | 47.9% |
| P/200MA | Momentum | 0.2% | 49.5% | 0.4% | 47.6% | 0.0% | 47.2% |
| Cash Flow ROIC | Quality | 1.0% | 46.7% | 1.1% | 43.6% | 1.6% | 45.3% |
| Earnings/Nonearners | Quality | 2.6% | 45.9% | 1.6% | 41.1% | 2.7% | 36.2% |
| FCF ROA | Quality | 0.5% | 49.1% | 1.6% | 38.2% | 2.6% | 41.7% |
| Return on Avg Assets LTM | Quality | 0.4% | 47.6% | 1.7% | 41.2% | 1.9% | 45.0% |
| Return on Capital | Quality | 0.6% | 49.1% | 1.5% | 44.1% | 1.2% | 45.5% |
| ROE | Quality | 0.3% | 49.3% | 1.6% | 43.4% | 1.4% | 47.9% |
| ROE 1 Year Change | Quality | -0.9% | 50.0% | 0.5% | 46.4% | 2.5% | 45.0% |
| 1Yr Daily Price Volatility | Risk | -0.2% | 53.6% | -0.9% | 58.3% | -2.0% | 60.0% |
| 5Yr Beta | Risk | -0.4% | 51.9% | 0.6% | 45.7% | 0.2% | 51.4% |
| Earning Variability (5yr) | Risk | -0.4% | 51.9% | -0.6% | 52.4% | 0.1% | 50.0% |
| EPS estimate dispersion (FY2) | Risk | -0.4% | 53.1% | -0.8% | 54.7% | -0.7% | 55.5% |
| Book/Price | Valuation | 1.2% | 47.6% | 0.1% | 50.2% | 0.6% | 45.5% |
| CFO/P (LTM) | Valuation | 0.7% | 49.1% | 1.0% | 42.2% | 2.0% | 43.8% |
| EBITDA/EV | Valuation | 1.3% | 45.5% | 1.6% | 39.1% | 1.4% | 40.0% |
| FCF Yield | Valuation | 1.0% | 47.2% | 1.0% | 42.4% | 2.8% | 41.0% |
| FCF/EV | Valuation | 1.1% | 45.3% | 1.2% | 41.9% | 2.7% | 40.0% |
| Forward E/P | Valuation | 2.2% | 44.8% | 1.0% | 44.3% | 1.3% | 45.7% |
| Forward PEG | Valuation | 1.5% | 42.6% | 0.1% | 51.9% | -0.9% | 53.7% |
| Sales/EV | Valuation | 1.3% | 51.4% | 0.9% | 42.2% | 0.9% | 46.9% |
| Sales/Price | Valuation | 0.3% | 51.9% | 0.8% | 41.2% | 0.8% | 46.2% |
| Trailing E/P | Valuation | 1.0% | 45.5% | 2.0% | 39.3% | 1.4% | 47.6% |
| Trailing EG/P | Valuation | 1.8% | 44.1% | -0.5% | 52.6% | -0.6% | 51.0% |

Note: This performance is back-tested 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 full details/disclosure below.

Source: FactSet, BofA US Equity & US Quant Strategy

Exhibit 75: Factor performance within Mid Cap Consumer Staples

Based on Quintile 1-Quintile 5 monthly returns for Russell MidCap Consumer Staples industry groups, 1989-2/29/2024

| Factor | Category | Consumer Staples Distribution & Retail | | Food, Beverage & Tobacco | | Household & Personal Products | |
|---|-----------------|--|---------------------|--------------------------|---------------------|-------------------------------|---------------------|
| | | Avg. monthly Q1-Q5 | | Avg. monthly Q1-Q5 | | Avg. monthly Q1-Q5 | |
| | | Spread | Probability of loss | Spread | Probability of loss | Spread | Probability of loss |
| Dividend Growth | Cash Deployment | 1.3% | 42.3% | -0.1% | 52.1% | -1.2% | 50.8% |
| Dividend Yield (Payers Only) | Cash Deployment | -1.0% | 50.4% | 0.6% | 46.9% | 1.0% | 46.9% |
| Dividends: Nonpayer-Payer | Cash Deployment | -0.5% | 53.9% | -0.2% | 50.4% | 0.9% | 43.6% |
| Share Repurchase | Cash Deployment | -0.2% | 53.0% | 0.3% | 49.3% | 0.9% | 49.0% |
| Earnings Surprise | Growth | 1.8% | 45.4% | 0.0% | 49.2% | 0.3% | 47.8% |
| EPS estimate revision | Growth | 0.9% | 46.7% | 0.0% | 49.5% | -0.9% | 49.5% |
| Estimate Diffusion | Growth | 1.5% | 45.2% | 0.3% | 48.6% | 0.0% | 46.5% |
| FY1/FY0 Growth | Growth | 0.4% | 48.5% | -0.2% | 51.2% | -0.3% | 48.7% |
| IBES Mean LT Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| Operating Margin | Growth | 0.9% | 47.5% | 0.4% | 45.5% | -0.4% | 54.0% |
| Operating Margin Expansion | Growth | 0.8% | 46.8% | -0.3% | 51.7% | 0.5% | 45.1% |
| Trailing 5 Year EPS Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| Trailing 5 Year Sales Growth | Growth | N/A | N/A | N/A | N/A | N/A | N/A |
| YoY Change in Trailing EPS | Growth | 1.1% | 45.8% | 0.0% | 50.7% | 1.0% | 44.0% |
| Net Debt/EBITDA | Leverage | -1.3% | 56.8% | 0.1% | 48.8% | 0.2% | 50.9% |
| Net Debt/EBITDA Adj. | Leverage | -1.3% | 55.1% | 0.4% | 47.9% | 0.6% | 50.4% |
| Net Debt/Equity | Leverage | -1.2% | 53.2% | -0.1% | 52.8% | 0.7% | 46.5% |
| Net Debt/Mkt Cap | Leverage | -0.6% | 53.7% | 0.4% | 47.6% | 0.2% | 52.5% |
| 3M Avg Daily \$ Volume | Liquidity | -0.1% | 49.2% | -0.2% | 46.7% | 0.0% | 51.3% |
| 3M Avg Daily Volume | Liquidity | 1.3% | 44.4% | 0.7% | 45.5% | 0.5% | 49.7% |
| Cumulative trading volume (-1m) | Liquidity | 1.1% | 44.2% | 1.0% | 43.4% | 0.4% | 49.0% |
| Market Cap | Liquidity | 0.5% | 46.6% | -0.4% | 53.1% | -0.6% | 50.5% |
| Number of I/B/E/S FY1 Est. | Miscellaneous | 0.2% | 49.1% | 0.1% | 51.7% | 0.8% | 48.6% |
| Short interest 12m z-score | Miscellaneous | -0.6% | 53.8% | -0.5% | 53.0% | -0.2% | 49.6% |
| SI Ratio | Miscellaneous | -0.7% | 53.6% | -0.5% | 55.3% | 0.1% | 51.9% |
| Closing Price | Miscellaneous | 0.6% | 48.0% | -0.5% | 49.8% | 0.8% | 45.5% |
| Foreign Sales (%) - avail, 0=Q5 | Miscellaneous | N/A | N/A | N/A | N/A | N/A | N/A |
| Avg 1m price reversal & 12m price return rank | Momentum | 0.5% | 44.5% | 0.2% | 48.8% | 0.7% | 47.6% |
| 10Wk/40Wk MA | Momentum | 1.3% | 44.7% | -0.3% | 51.2% | -0.3% | 49.0% |
| 12M Price Change | Momentum | -0.2% | 47.5% | -0.2% | 49.3% | 0.7% | 46.5% |
| 1M Change 200 Day MA | Momentum | 0.3% | 46.1% | -0.2% | 50.2% | 0.4% | 45.2% |
| 30wk/75wk MA | Momentum | -0.2% | 47.3% | -0.3% | 50.7% | 0.6% | 44.2% |
| 3M Price Chg | Momentum | 0.9% | 51.8% | -0.4% | 53.3% | -0.7% | 49.0% |
| 5Wk/30Wk MA | Momentum | 1.0% | 48.5% | -0.6% | 51.9% | -0.3% | 48.5% |
| 9M price change | Momentum | -0.1% | 49.4% | -0.4% | 47.9% | 0.2% | 47.5% |
| Avg 1m & 12m price return rank | Momentum | -0.2% | 48.9% | -0.7% | 54.7% | -0.4% | 52.6% |
| P/200MA | Momentum | 0.6% | 47.5% | -0.6% | 52.1% | -0.2% | 47.5% |
| Cash Flow ROIC | Quality | 1.0% | 47.7% | 0.4% | 48.1% | 0.3% | 48.2% |
| Earnings/Nonearnings | Quality | 0.7% | 49.5% | 1.3% | 43.5% | 3.3% | 37.5% |
| FCF ROA | Quality | 1.8% | 44.7% | 0.4% | 46.7% | 0.5% | 45.5% |
| Return on Avg Assets LTM | Quality | 1.2% | 45.6% | 0.1% | 48.8% | 0.0% | 50.8% |
| Return on Capital | Quality | 1.4% | 45.4% | 0.2% | 48.6% | -0.1% | 50.5% |
| ROE | Quality | 1.1% | 47.3% | -0.2% | 53.8% | 0.8% | 47.9% |
| ROE 1 Year Change | Quality | 0.9% | 46.4% | 0.0% | 51.2% | 1.4% | 44.9% |
| 1Yr Daily Price Volatility | Risk | -0.8% | 53.7% | 0.3% | 48.8% | -1.2% | 57.6% |
| 5Yr Beta | Risk | -0.3% | 49.6% | 0.1% | 49.5% | -0.7% | 54.0% |
| Earning Variability (5yr) | Risk | 0.0% | 49.9% | 0.3% | 47.9% | -0.3% | 51.4% |
| EPS estimate dispersion (FY2) | Risk | -0.6% | 53.8% | 0.0% | 51.2% | 0.1% | 51.9% |
| Book/Price | Valuation | -0.9% | 52.3% | 0.1% | 50.5% | 0.7% | 45.5% |
| CFO/P (LTM) | Valuation | 1.1% | 46.8% | 0.7% | 44.8% | 1.4% | 42.9% |
| EBITDA/EV | Valuation | 1.2% | 47.3% | 0.6% | 47.4% | 0.6% | 45.5% |
| FCF Yield | Valuation | 1.3% | 45.6% | 0.6% | 46.0% | 1.2% | 42.7% |
| FCF/EV | Valuation | 1.5% | 42.8% | 0.5% | 45.5% | 1.7% | 41.2% |
| Forward E/P | Valuation | 0.4% | 46.3% | 0.6% | 48.3% | 0.2% | 47.7% |
| Forward PEG | Valuation | 0.7% | 46.2% | 0.1% | 49.1% | 0.0% | 50.9% |
| Sales/EV | Valuation | 0.7% | 47.5% | 0.0% | 50.7% | 0.4% | 48.2% |
| Sales/Price | Valuation | 0.1% | 50.8% | 0.2% | 49.3% | 0.4% | 50.8% |
| Trailing E/P | Valuation | 1.2% | 45.4% | 0.5% | 44.1% | 1.2% | 47.1% |
| Trailing EG/P | Valuation | 0.8% | 49.3% | 0.1% | 46.4% | -0.2% | 51.3% |

Note: This performance is back-tested 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 full details/disclosure below.

Source: FactSet, BofA US Equity & US Quant Strategy



Disclosures

Important Disclosures

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 ^{R1} |
|-------------------|---|--|
| Buy | ≥ 10% | ≤ 70% |
| Neutral | ≥ 0% | ≤ 30% |
| Underperform | N/A | ≥ 20% |

^{R1} 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.

Due to the nature of the market for convertible securities, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

Due to the nature of quantitative analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

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

Other Important Disclosures

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

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

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments. Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

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

Refer to [BofA Global Research policies relating to conflicts of interest](#).

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

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

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

This information has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSCF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

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

General Investment Related Disclosures:

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

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

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

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

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

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

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

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

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

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

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

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



such rating, recommendation or investment thesis.

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

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

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

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

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

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

Research Analysts

Jill Carey Hall, CFA

Equity & Quant Strategist

BofAS

+1 646 855 3327

jill.carey@bofa.com

Nicolas Woods

Equity & Quant Strategist

BofAS

+1 646 556 4179

nicolas.woods_barron@bofa.com

Michael Youngworth, CFA

CBs, Pfds & Derivs Strategist

BofAS

+1 646 855 6493

michael.youngworth@bofa.com

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.