

# Global Research Highlights

## Artificial intelligence in focus (again)

Investment Strategy

### AI theme maintains strength in 24

One can hardly talk markets without mentioning AI (artificial intelligence) and NVDA, a clear leader in the space as a chip provider. The company reported yet another incredible quarter and guide. There was some concern going into numbers about possible slowdown ahead of new product launches in the 2H, but growth remained on track, with Q4 sales 8% ahead and Q1 sales outlook 10% ahead of consensus. In Vivek Arya's view, the most important point from the call was that 40% of NVDA's sales are now for inference. This is critical because inference is the second stage in AI after training, and growing inference demand means AI is actually being well monetized by NVDA's customers across multiple industry verticals. The next catalyst for the company is the upcoming flagship GPU Tech Conf or GTC scheduled for March 18, which has historically been a positive event as it brings a lot of important headlines about the pipeline and partners.

Vertiv (VRT) is another company focused on the AI-related theme as a manufacturer of power, precision cooling and infrastructure management systems. With 70% of its revenue in the data center market, its thermal management products should benefit from AI adoption within data centers.

### Looking ahead to software results

Software companies have started to report earnings, and client conversations are focused on a few key themes. They want to understand whether demand from small-medium businesses is turning positive. They are focused on trends in consumption-based models. They want to know which companies are most vulnerable if any slowdown were to result in seat rationalization. Finally, these considerations must be compared to where valuation is for the sector and individual stocks within the sector.

### A big deal in the payments space

The holiday-shortened week began with a bang in the payments space, with Capital One Financial (COF) announcing its intention to acquire Discover Financial (DFS). These are two of the major players in the consumer finance space, and such an acquisition would potentially create the largest consumer credit card issuer by loans outstanding. The deal still needs to go through regulatory hurdles, but were it to pass analyst Mihir Bhatia highlights some potential synergies. Capital One would be acquiring Discover's payment network, which could potentially help them as they attempt to compete with American Express (AXP) in the super premium category. Mihir highlights a potential strategic fit as Capital One has taken a more barbell approach with its portfolio (near-prime and super-prime). Adding Discover's portfolio should give it more presence in the core prime segment.

23 February 2024

Global

Investment Strategy  
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Timestamp: 23 February 2024 10:10AM EST

## Market Analysis Comment

## Growing YTD 2024 bearish divergences

Market Analysis

**Bearish weekly Demark 13 on the SPX last week**

Although bearish weekly Demark 13s in late December and mid-January did not trigger a meaningful drop on the S&P 500 (SPX) earlier this year, another bearish 13 last week occurs as negative divergences have grown between the lower highs across indicators and last week's higher high above 5000 on the SPX. We view the 4800 and 4600 areas as the big supports on the SPX if last week's Demark 13 triggers a tactical pullback (see our report, [Nothing magical about SPX 5000](#)).

**Most active A-D line shows a growing bearish divergence**

The US top 15 most active advance-decline (A-D) line did not confirm last week's probe above 5000 on the SPX. A potential February lower high for this "big money" breadth and volume indicator marks a growing YTD 2023 bearish divergence against the higher highs on the SPX.

**% of stocks above MAs show weakening breadth**

The percentage (%) of stocks above 10, 50 and 200-day moving averages (MAs) have formed lower highs from December 2023 into February 2024 to suggest growing YTD bearish divergences against the higher highs across the major US equity indices. These divergences are a risk for US equities in 1H 2024.

**Bullish: BAA to US 10-year spread remains benign**

The US corporate BAA to US 10-year T-note spread has remained benign below 2.0 since mid June 2023 and reached a cycle low at 1.5357 last week. Staying below 2.0 is a positive sign for this macro credit market indicator. Readings from 2.0 to 2.5 area neutral, and spikes above 2.5 tend to coincide with bearish risk-off events.

**Bullish: Global breadth pushes weekly A-D line to new high**

The weekly A-D line of 73 country indices remains bullish after achieving another all-time high last week. Although many US equity market breadth indicators have YTD 2024 bearish divergences, a stronger global A-D line suggests a bullish backdrop (see our report, [It's complicated](#)).

**Risk: Margin debt more than double free credit**

FINRA margin debt was more than double free credit from July 2021-November 2021, which was a sign of excess ahead of the 2022 correction for US equities. Margin debt has been more than double net free credit since June 2023. A decline back below 2.0 in the margin debt to free credit ratio would provide a risk-off signal. The last time this happened was in December 2021, which was ahead of the early 2022 peak on the SPX.

Click [Market Analysis Comment](#) for full report including important disclosures.

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Market Analysis  
United States

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**BofA Technical Strategy notes**  
[Market Analysis Comment: Nothing magical about SPX 5000](#)

[Stock Flash: Four bulls: AAPL, DOV, JBHT and SPG. Two bears: CPT and SWKS](#)

[Stock Flash: Four bulls: INSM, RL, THC and UNP. Two bears: WEN and WHR](#)

[Market Analysis Comment: It's complicated](#)

[Chart Blast: Bullish January Barometer supports 5000+ for the S&P 500 in 2024](#)

**Acronyms**

A-D: Advance-decline  
CPI: Consumer price index  
GICS: Global Industry Classification Standard  
HY: High yield  
ICI: Investment Company Institute  
IG: Investment grade  
INDU: Dow Jones Industrial Average  
MA: moving average  
MACD: Moving average convergence divergence  
MLP: Master Limited Partnership  
NYA: NYSE Composite  
OAS: Option adjusted spread  
P&C: Property and Casualty  
SPX: S&P 500

# BofA Securities Equity Client Flow Trends

## Record small cap ETF inflows

### ETFs > stocks last week; opposite still true YTD

- **Overall inflows:** Last week (where S&P 500 was -0.4%), clients were net buyers of US equities (+\$1.2B) after selling equities the week before. Clients bought both single stocks and ETFs, with ETF inflows outpacing single stock flows for the third week – opposite of YTD trends, where clients have been bigger buyers of stocks.
- **Institutional clients were the sole buyers** (besides corporates), while hedge fund and retail clients were net sellers last week.
- **Corp. client buybacks accelerated** but are tracking below the typical seasonal levels at this time for the first time in 14 weeks. YTD, buybacks as a percentage of S&P 500 market cap (0.30%) are above '23 highs (0.27%) at this time.

### More record Comm. Svcs. inflows

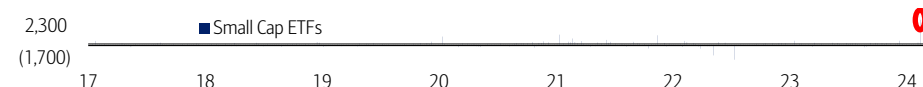
- **Comm. Svcs. flow momentum continues:** Clients bought stocks in six of the 11 sectors, led by Comm. Svcs. (where the last three weeks have been the three biggest weeks of Comm. Svcs. net buying in the history of the sector since '18. The sector also has the longest recent buying streak of any sector (16 weeks).
- **Health Care and Tech saw the largest outflows:** Net sales of Health Care were the largest since Dec., while Tech saw its fourth consecutive week of outflows – the longest selling streak in Tech since June 2022. Rolling 4-wk. avg. Tech flows are now the most negative since June 2021.
- **Other sector flows to know:** Financials saw their biggest weekly inflow since Sept., and Industrials has now seen inflows in 3 of the last 4 weeks, with rolling 4-wk. avg. flows for the sector turning positive for the first time since Oct.

### ETFs: record small cap inflows

- **Clients bought equity ETFs for a fourth week**, with inflows across all styles (Growth/Value/Blend) and in Small Cap & Broad Market ETFs. Large and Mid Cap ETFs saw outflows after inflows the week before. Most sector ETFs saw outflows led by Staples ETFs, while Cons. Disc. ETFs led inflows.
- **Small cap ETF momentum continued**, with inflows in 22 of the 23 past weeks, and largest weekly inflow in our data history since '17 (mainly Retail-driven buying). Despite more positive sentiment, positioning in small caps remains light (see [SMID Year Ahead](#)) and valuations remain inexpensive vs. history (see [SMID Valuations](#)).

#### Exhibit 3: Record breaking Small Cap ETFs weekly inflow

Weekly inflows/outflows for Small Cap ETFs



Source: BofA Securities

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Click [BofA Securities Equity Client Flow Trends](#) for full report including important disclosures.

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Equity and Quant Strategy  
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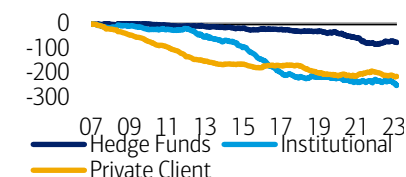
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#### Exhibit 1: Institutional clients are the biggest net sellers post-crisis

Cumulative flows (\$ bn) by client type, January 2008-present

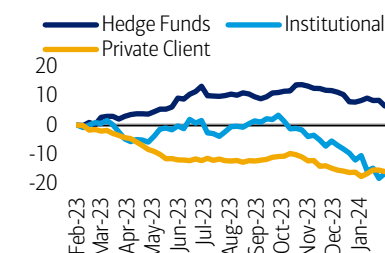


Source: BofA Securities

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#### Exhibit 2: Hedge funds are the biggest net buyers in the past 12 months

L12m cumulative flows (\$ bn) by client type, January 2023-present



Source: BofA Securities

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For more details on BofA Securities client flows and a complete methodology behind the data in this report, please see pg.15-16. Note that flows span Monday-Friday of the previous week



## BofA on USA

## Weekly spending update through Feb 17

## Key takeaways

- Total card spending per HH was down 1.0% y/y in the week ending Feb 17, according to BAC aggregated credit & debit card data.
- Retail ex auto spending per HH came at -1.9% y/y in the week ending Feb 17.
- Overall spending growth remained relatively soft, but stable in February.

**Exhibit 1: Aggregated daily card spending growth per household (HH) by major category, Feb 11 - 17 (year-over-year (y/y) % change of the 7-day moving average of spending levels)**

Total card spending per HH was down 1.0% y/y in the week ending Feb 17

	2/17	2/16	2/15	2/14	2/13	2/12	2/11
<b>Total card spending</b>	-1.0%	-0.9%	-1.2%	-1.4%	-1.7%	-1.7%	-1.5%
<b>Retail ex auto</b>	-1.9%	-1.6%	-1.8%	-1.9%	-2.1%	-2.2%	-2.6%
Airlines	-3.3%	-3.7%	-4.2%	-3.8%	-3.7%	-3.7%	-4.4%
Lodging	-3.3%	-4.4%	-5.9%	-6.2%	-6.3%	-7.1%	-7.3%
Entertainment	-5.3%	-5.8%	-5.7%	-5.3%	-7.4%	-8.5%	-8.8%
Restaurants & bars	-0.5%	-0.6%	-0.8%	-0.9%	-1.0%	-1.3%	-2.4%
Transit	2.4%	1.5%	1.4%	2.4%	3.1%	5.2%	6.4%
Gas	-4.2%	-4.4%	-5.1%	-5.6%	-6.4%	-6.6%	-7.7%
Clothing	-5.7%	-6.1%	-6.4%	-6.3%	-6.2%	-6.0%	-6.9%
Furniture	-12.1%	-14.3%	-15.9%	-16.5%	-17.4%	-17.0%	-18.2%
Department store	-7.4%	-8.0%	-8.9%	-9.1%	-10.5%	-11.3%	-14.7%
Home improvement	-9.3%	-9.5%	-9.9%	-9.1%	-9.6%	-9.5%	-10.3%
Online electronics	-7.5%	-6.6%	-6.7%	-5.9%	-5.8%	-5.3%	-4.8%
Grocery	-0.1%	1.4%	1.8%	2.0%	1.9%	1.8%	3.1%
General Merchandise	-3.0%	-2.4%	-2.4%	-2.4%	-2.7%	-2.8%	-4.3%
Total B&M retail	-3.1%	-2.6%	-2.8%	-2.8%	-3.1%	-3.1%	-3.8%
Total online retail	1.0%	0.8%	0.4%	0.3%	0.0%	-0.3%	0.2%
Total card debit	-0.3%	-0.1%	-0.4%	-0.7%	-1.2%	-1.3%	-0.9%
Total card credit	-1.8%	-1.9%	-2.2%	-2.3%	-2.3%	-2.3%	-2.3%

**Source:** BAC internal data. Note: The 1-yr % change shows the change between the current date at the head of the table column and its comparable date a year ago. Total card spending includes total BAC card activity, which captures retail sales and services that are paid with cards. Does not include ACH payments. B&M (Brick & Mortar) retail means retail purchases at the store. Online electronics and total online retail correspond to purchases in which the card was not present. These are largely online purchases but could include purchases made over the phone. Y/y growth in General Merchandise spending jumped in late Dec 2023. This was because of a change in Merchant Category Codes (MCC) for a significant portion of transactions from a major retail merchant. We have adjusted for the recategorization for the daily data from Feb 4 onwards.

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## Consumer Finance

# Capital One makes its move – plans to acquire Discover for \$35B

## Industry Overview

## COF plans to acquire DFS in an all-stock deal of \$35.3B

Credit card powerhouse Capital One (COF) announced plans to acquire Discover Financial (DFS) for \$35.3B in an all-stock transaction. The proposed deal would potentially create the largest US credit card issuer (~20% market share) by combining the current #4 and #6 largest issuers, by credit card loans outstanding. Capital One is scheduled to host a public call at 8am ET and also hold meetings at BofA's Financial Services conference today. We would also hear reactions from competitors at the conference this week. We think the potential transaction offers good strategic optionality for COF and maintain our Buy rating.

## Key financial points: all-stock, 15% EPS accretive by '27

The proposed all-stock deal is at a 27% premium to DFS' Friday stock price. At close, COF shareholders would own 60% of the proposed combined entity, and DFS' shareholders 40%. COF expects to deliver 15% non-GAAP EPS accretion by 2027, including \$2.7B in synergies (details inside). COF also highlighted that the combined company's CET1 would be 14%, and 84% of year-end '23 deposits were fully insured. COF expects the deal to close in late '24/early '25, subject to closing conditions, regulatory approvals and approval by each company's shareholders.

## All about network but also boosts prime segment

We believe COF would be most interested in DFS' network assets. Potentially owning a network would offer intriguing possibilities for a tech-savvy company like COF. Amex and DFS have long highlighted marketing, fraud, customization advantages from owning their own network and we suspect the prospect of adding more capabilities and customization could appeal to COF. In addition, our conversations with industry experts and the company itself suggest COF has historically specialized in near-prime & super-prime underwriting, so DFS' prime-heavy card holder base could be a nice strategic fit (see Exhibit 1 inside).

## Regulatory, anti-trust issues appear largely manageable

Given the highly competitive credit card industry with many large banks having a strong presence, we think anti-trust concerns appear largely manageable. COF and DFS are also well capitalized and should potentially earn high ROEs to build capital if needed. Though we acknowledge the prospect of lower near-term capital returns and book value dilution could disappoint some investors.

## COF plans to move debit and selected credit vols to DFS

While DFS cards run on its proprietary network, COF issues cards on both the V and MA networks. About 42% of COF's credit cards run on V and 58% on MA, as of 2022. COF's card volumes are split ~90% credit/~10% debit (DFS is virtually all credit). If the deal closes, COF probably would not want to make immediate major changes that could cause cardholder disruption. While flipping DFS cards to COF would enable more international acceptance, the transaction announcement indicated that COF's debit purchase volumes and selected credit card volumes would be moving to DFS in pursuit of COF's targeted network synergies of \$1.2B in 2027. In 2023, COF's US credit card volumes were \$606B, with DFS at \$218B. In 2022, we estimate COF's debit volumes were \$58.5B, most of, if not all, we believe is with MA. We estimate COF represents roughly ~25% of MA's US credit volume and 5% of US debit volume. COF represents ~9% of V's US credit volume.

**Investment decisions should not be made prior to reading the research report, which includes important information and disclosures.**

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Equity  
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Consumer Finance

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CFPB: Consumer Financial  
Protection Bureau

COF: Capital One

DFS: Discover Financial

MA: Mastercard

V: Visa





## US Oil and Gas

OIM# 657: Consolidation takes the lead ...  
but how much worse can natural gas get?

Industry Overview

## Sector rotation or fundamental recovery?

After the first month of the year where refiners led the charge for the energy sector, the E&P's have bounced back in an apparent response to slower Fed easing, as expectations of interest rate cuts have waned in just the past few weeks. At a high level we see the US oils as a beneficiary of a sector rotation – perhaps exacerbated by a position that per BofA's Global Fund Manager's Survey is the most underweight in energy since late 2020.

A closer look distills the strongest performance with consolidation leaders - and natural gas! In first place are the 'rate of change' stocks, led by FANG and CRC following material acquisitions relative to their size, with FANG's addressing inventory questions and diluting the significance of VNOM in its consolidated free cash flow. The second group of stocks is led in part by Permian 'sympathy' stocks – those seen with M&A potential such as – Vital and Permian Resources. However, we see the rebound in oil prices that is contributing to the sector move with mixed fundamental support but a supportive near-term technical outlook bifurcating sector performance between names with high leverage to spot oil prices and laggards not obviously being in the acquisition discussion, or by virtue of scale are generally lower beta (COP, CNQ).

## Disinclined to chase oil, lean in to natural gas

At the start of the 2023 we suggested the US oils will be rangebound, with trading opportunities that follow near dated commodity volatility. While M&A has boosted the broader sector, we believe this is still a good representation of the outlook. However, with the overhang from spare OPEC+ production capacity, we continue to view backwardation as a headwind to sector valuations. While spot WTI prices stand at \$78, this falls below \$70 by end 2025, which is the limit of liquidity of the forward curve that we believe the market will reasonably discount. At our base case, that assumes l/term \$70 oil from 2026, we see average upside for the US oils at ~17%. Conversely, we see a very different outlook for natural gas equities – which outside of M&A have led the rebound in E&P performance on the beginning of reducing spending in the wake of the worst gas price market in a decade. In our view this signals reduced drilling is within sight, providing a potentially supportive supply outlook as LNG plants start in 2H24.

Near term, the risk for oil prices is obviously framed by the ongoing Red Sea conflict and related logistical impacts. However, aside from those names where we see attractive valuations, with conservative oil leverage and rate of change to drive market recognition of value, we are disinclined to chase this latest bounce that looks increasingly detached from a declining forward curve. Conversely, we see extraordinary weakness in US natural gas prices, well below the incremental cost of supply resetting risk / reward by forcing an activity response, already seen from the handful of some of the natural gas names that have reported so far. In our view, weak spot prices improve the risk / reward of positioning for changing US natural gas dynamics that remains a case of when, not if. Our top sector ideas amongst the US oils remain led by XOM, CVX, OXY and CHK.

Please join us for our 21<sup>st</sup> Global refining conference in NY City on March 14<sup>th</sup>: reach out for details.

Investment decisions should not be made prior to reading the research report, which includes important information and disclosures.

Click [US Oil and Gas](#) for full report including important disclosures.

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Equity  
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## Exhibit 1: BBG vs. Actuals (mbbls)

Gasoline draws while crude inventories build

Crude Stocks	
Est	1,514
Actual	5,520
Diff	4,006
Distillate Stocks	
Est	(2,146)
Actual	(3,221)
Diff	(1,075)
Gasoline Stocks	
Est	836
Actual	(3,146)
Diff	(3,982)
Utilization	
Est	83.5%
Actual	82.4%
Diff	-1.1%

Source: EIA

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OPEC – organization of petroleum exporting countries

E&P – exploration and production

IEA – international energy agency

DOE – department of energy

OIM – oil inventory monitor

bpd – barrel per day

bbl – barrel

DUC – drilled uncompleted

VNOM – Viper Energy

## Server &amp; Enterprise Software

## Where Are We Trading Now: Off-quarter earnings here we go

## Industry Overview

## What clients are talking about

As of Feb 20, our software coverage universe was down -0.5% from the prior week (Nasdaq -0.3%) and -0.9% YTD (Nasdaq +4.0%). Last week, client conversations focused on: **1)** if SMB software demand is turning positive – our take from HUBS earnings is that SMB spending is stable though remains somewhat constrained, **2)** impact of OpenAI's beta launch of Sora (a generative video tool) on Adobe and other platform vendors, and **3)** discussion on which vendors might be most at risk if a slowdown, including layoffs seen in early 2024, results in ongoing seat rationalization.

## HCM saw the largest multiple expansion w/w

On an EV/NTM Sales basis, the HCM software group saw the largest multiple expansion w/w (+3.3%) led by PCTY, with the Design software group seeing the largest expansion relative to the 5-year median (+3.3%). On an EV/NTM FCF basis, the HCM software group saw the largest multiple expansion w/w (+5.1%) and relative to the 5-year median (+8.8%).

## Exhibit 1: HCM software saw the largest EV/NTM Sales expansion w/w, led by PCTY

Software multiple expansion/contraction by category

Category	EV/NTM Sales				EV/NTM FCF			
	Multiple		% Change		Multiple		% Change	
	Current	5-yr median	1 wk	5-yr median	Current	5-yr median	1 wk	5-yr median
Collaboration	5.5x	7.2x	-4.0%	-23.2%	26.0x	20.2x	-4.1%	NA
Communication	2.2x	7.7x	-1.1%	-71.1%	21.9x	27.5x	-6.3%	-20.4%
CRM	5.1x	8.6x	0.9%	-40.4%	38.3x	42.4x	-1.5%	-9.5%
Design	10.1x	9.8x	-1.4%	3.3%	37.5x	35.7x	-0.5%	5.2%
ERP & Back Office	5.2x	7.7x	0.5%	-32.6%	38.3x	42.1x	0.6%	-9.2%
HCM	6.7x	9.8x	3.3%	-31.6%	49.0x	45.1x	5.1%	8.8%
Infrastructure	8.0x	10.6x	-0.5%	-24.5%	40.9x	39.7x	-2.9%	3.1%
Security	8.2x	8.9x	-0.5%	-8.2%	33.8x	32.4x	0.4%	4.3%
Vertical	6.1x	7.9x	-0.5%	-22.1%	39.8x	39.9x	4.0%	-0.2%

Source: BofA Global Research estimates for companies under coverage, Bloomberg consensus for companies not under coverage.

Stocks included may not be under BofA software coverage. See appendix.

BofA GLOBAL RESEARCH

## Within the report:

- Historical software valuation trends (Exhibit 2 – Exhibit 6)
- Software stock performance overview (Exhibit 7)
- Software coverage comp sheet (Exhibit 8 – Exhibit 12)
- Software valuation by category (Exhibit 14 – Exhibit 15)
- See the [Appendix](#) for a mapping of software companies by category, as well as the stock performance of individual companies

Click [Server & Enterprise Software](#) for full report including important disclosures.

20 February 2024

Equity  
Americas  
Server & Enterprise Software

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HCM – human capital management  
SMB – small and medium businesses  
PCTY – Paylocity



## NVIDIA Corporation

## AI inference surge = sustained growth, EPS power now \$45

Reiterate Rating: BUY | PO: 925.00 USD | Price: 674.72 USD

## Raise estimates again on multi-faceted growth

Perhaps the most important new datapoint in NVDA's earnings call was that AI inference contributed nearly 40% of AI computing mix in FY24/CY23. AI inference is correlated with revenue bearing AI which is supposed to be more competitive, as opposed to AI training which NVDA already dominates. Second, we highlight the company's positive commentary around tight supply, low China dependence (only mid-single digit percent of data center sales versus 20%-25% prior to restrictions), new pipeline, rising sovereign demand for AI among others. Overall, we raise CY24/25 EPS by +13%/15% vs. prior to \$23.11/\$29.59. We raise our PO to \$925 (from \$800) on unchanged 31x CY25 PE. Note, as data center growth remains robust from multiple demand drivers, we raise our l-t EPS target (CY27E) to roughly \$45 from \$40 prior. Next catalyst is NVDA's GTC (3/18), where we could get incremental price and/or performance details on attractive pipeline (B100, x100, GB200, BlueField products, etc.). Reiterate Buy.

## Likes: Data center growth, AI customers, cash generation

1) Data center sales growth of +27% QoQ robust across both compute (est. ~25% QoQ) and networking (est. ~30% QoQ), with multitude of product ramps/launches in the coming 12 months (H200, B100, Spectrum-X) capable of supporting strong growth well into CY25, in our view; 2) While focus often remains on large hyperscaler spend (major US/China cloud capex tracking up 20%-25% YoY), NVDA benefits from incremental demand from Tier 2/3 web-scalers, enterprises, sovereign nations, and others; 3) NVDA mid-40s FCF margin now on par with industry leader Broadcom (w/ 40%+ of sales related to infra software), supplying ample capital to possibly accelerate buybacks or add unique AI/software assets to the company's portfolio.

## Risks: Gross margin moderation, competition, China

1) NVDA gross margin guide an impressive 77%, though benefits from component costs provided a 2 qtr boost, with GM expected to moderate back towards mid-70s beyond the AprQ; 2) NVDA has established early leadership in the accelerator market, but emerging competition (AMD) and custom ASIC suppliers could impact share gains, and increases headline risk; 3) NVDA has de-risked model from China restrictions, but future growth rate could be impacted if NVDA cannot return to multi-\$bn regional runrate (and also could face additional risks if shipment restrictions tighten again).

Estimates (Jan) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	3.34	12.96	23.11	29.59	36.56
GAAP EPS	1.74	11.94	21.41	27.65	34.40
EPS Change (YoY)	-24.8%	288.0%	78.3%	28.0%	23.6%
Consensus EPS (Bloomberg)			21.59	25.05	NA
DPS	0.16	0.16	0.16	0.16	0.16
Valuation (Jan)					
P/E	202.0x	52.1x	29.2x	22.8x	18.5x
GAAP P/E	387.8x	56.5x	31.5x	24.4x	19.6x
EV / EBITDA*	158.1x	43.3x	23.9x	18.8x	15.3x
Free Cash Flow Yield*	0.2%	1.6%	2.7%	3.7%	4.8%

Investment decisions should not be made prior to reading the research report, which includes the opinion key and other important information and disclosures. Click [NVIDIA Corporation](#) for full report including important disclosures.

22 February 2024

Equity

## Key Changes

(US\$)	Previous	Current
Price Obj.	800.00	925.00
2025E Rev (m)	90,457.7	103,921.1
2026E Rev (m)	111,137.6	131,283.2
2027E Rev (m)	138,161.8	159,770.2
2025E EPS	20.46	23.11
2026E EPS	25.72	29.59
2027E EPS	32.71	36.56

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## Stock Data

Price	674.72 USD
Price Objective	925.00 USD
Date Established	22-Feb-2024
Investment Opinion	C-1-7
52-Week Range	204.21 USD - 746.11 USD
Mrkt Val (mn) / Shares Out (mn)	1,678,703 USD / 2,488.0
Free Float	96.1%
Average Daily Value (mn)	34179.82 USD
BofA Ticker / Exchange	NVDA / NAS
Bloomberg / Reuters	NVDA US / NVDA.OQ
ROE (2025E)	86.6%
Net Dbt to Eqty (Jan-2024A)	5.7%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "[BofA ESGMeter Methodology](#)".

See page 5 for glossary



## Vertiv

# Multi-year AI demand tailwinds, but some questions on '24 guidance details

Reiterate Rating: BUY | PO: 72.00 USD | Price: 62.02 USD

## Solid 2024 guidance, but questions on some of the details

Despite beat-and-raise results, VRT shares declined (5.6)% on the day of results versus +0.1% for the S&P 500 index. While 2024 guidance bracketed consensus revenue and adj. EPS, investors questioned the sizable 1Q deceleration and lower than expected price/cost benefit. We reiterate our Buy given the multi-year tailwind from artificial intelligence (AI) demand. We note AI chip manufacturer Nvidia (NVDA, covered by our colleague Vivek Arya) reported 4QF24 (Jan) revenue 8% above consensus and guided for 1QF25 (Apr) revenue 10% above consensus. We maintain our above-consensus 2024 adj. EPS and \$72 price objective.

## 1Q revenue guidance reflects comps, seasonality

1Q's revenue guidance reflects a tough year ago "comp" (+35% y/y organic in 1Q23) and a return of more normal seasonality (e.g., 1Q18 and 1Q19 revenue were down ~10% q/q). As expected, 4Q orders accelerated to +23% y/y organic from +11% last quarter. We view guidance for a sequential decline in 1Q24 orders as reflective of conservatism around the sequencing/timing of large orders. We forecast 27% y/y organic orders growth in 1Q24, which represents a q/q decline and continued y/y acceleration.

## Price/cost guidance raises more questions than answers

Vertiv is no longer disclosing pricing for competitive reasons. However, 2024 guidance includes only a \$60mn benefit from price/cost versus \$360mn in 2023. Our sense is that pricing remains robust, but management is leaving room for unexpected inflationary pressures. For perspective, initial 2023 guidance was for \$100mn price/cost benefit (versus the actual \$360mn).

## Maintain our above-Street 2024 adj. EPS at \$2.34

For 2024, we continue to forecast 11% y/y organic revenue growth with ~40% incremental margins (versus guidance for 9-11% organic growth and implied ~35% incrementals at midpoint). Our 2024 adj. EPS is unchanged at \$2.34 (versus \$2.24 consensus). For 1Q24, we maintain our unchanged \$0.66 adj. EPS estimate.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	0.53	1.77	2.34	2.97	3.51
GAAP EPS	0.20	1.19	1.92	2.58	3.13
EPS Change (YoY)	-30.3%	234.0%	32.2%	26.9%	18.2%
Consensus EPS (Bloomberg)			2.24	2.70	3.31
DPS	0.01	0.02	0.10	0.14	0.18
Valuation (Dec)					
P/E	117.0x	35.0x	26.5x	20.9x	17.7x
GAAP P/E	310.1x	52.1x	32.3x	24.0x	19.8x
Dividend Yield	0%	0%	0.2%	0.2%	0.3%
EV / EBITDA*	49.6x	22.8x	17.8x	14.6x	12.8x
Free Cash Flow Yield*	-1.1%	3.2%	3.6%	4.5%	5.3%

**Investment decisions should not be made prior to reading the research report, which includes the opinion key and other important information and disclosures.** Click [Vertiv](#) for full report including important disclosures.

22 February 2024

Equity

### Key Changes

(US\$)	Previous	Current
2024E Rev (m)	7,660.3	7,635.2
2025E Rev (m)	8,563.7	8,501.9
2026E Rev (m)	9,500.7	9,425.4

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### Stock Data

Price	62.02 USD
Price Objective	72.00 USD
Date Established	13-Feb-2024
Investment Opinion	C-1-7
52-Week Range	11.95 USD - 65.56 USD
Mkt Val (mn) / Shares Out (mn)	23,657 USD / 381.4
Free Float	93.4%
Average Daily Value (mn)	411.98 USD
BofA Ticker / Exchange	VRT / NYS
Bloomberg / Reuters	VRT US / VRT.N
ROE (2024E)	40.9%
Net Dbt to Eqty (Dec-2023A)	107.2%
ESGMeter™	Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to ["BofA ESGMeter Methodology"](#).



## Option Care Health

## Takes from the call: long-term growth algorithm intact

Reiterate Rating: BUY | PO: 43.00 USD | Price: 33.36 USD

## Core beat stronger, guide conservative

With the beat and bullish call commentary, we are surprised that OPCH stock is underperforming – it could be because the stock was up 8% in February prior to today. Q4 included \$8m of procurement benefits, lower than the \$10-12m estimate, implying core results were actually much better than the headline. While gross margin was lower, it was due to Chronic growing faster, which should be well understood. The 2024 guide implies 12% growth in the core and is typically conservative. OPCH continues to expect LT growth of mid-single digits at the top line and low double-digits at the bottom line. Meanwhile, deals would be upside as OPCH has ample capacity (FCF of \$265m+, leverage 1.8x). We raise rev ests, ticking down 2024E EBITDA for the guide, noting we expect upside; we roll out 2026 est. Reiterate Buy on solid trends, capital deployment.

## Infusion suites next area to aid margins

OPCH sounded bullish on the optionality that suites bring (164 suites with 660 chairs); while adding to G&A, they accrue benefit on the gross margin line (increased nurse productivity), helping to offset the negative mix shift as Chronic therapies grow faster. The oldest suites achieved labor productivity of 20% (vs 10% prior comments). There is no need to open new suites to unlock more productivity; there is still room to drive utilization of existing suites while ramping up new suites. Suites allow OPCH to improve profitability of non-typical services such as injectables that require health professional oversight, or Acute patients who need additional service (dressing change, blood draw).

## OPCH well positioned to benefit from infusion mkt growth

Chronic therapies should grow in the low-double digits while Acute growth should be in the low-single digits. OPCH's clinical knowledge, logistics, and national platform, combined with the expanded suite footprint put the company in a strong position to work with biopharma companies launching new products. Also, home infusion is a clear cost savings for payors (especially as they look to offset higher utilization) – OPCH is seeing more from smaller payors.

## Biosimilars help gross margins

While biosimilars are typically a headwind to revenues, the competition drives gross margins higher and de-risks supply chain. Given OPCH's scale and the direct relationship with drug makers, the company is responsive when payors want to manage drug formularies. The guide assumes puts and takes on therapies coming in and out. Biosimilar to Tysabri (we est 2% of revenues) is expected in 2024, Stelara in 2025 (see our [deep dive report](#)).

Estimates(Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	0.83	1.48	1.12	1.26	1.42
EPS Change (YoY)	7.8%	78.3%	-24.3%	12.5%	12.7%
Consensus EPS (Bloomberg)	0.82	1.24	1.17	1.35	1.66
Valuation (Dec)					
P/E	40.2x	22.5x	29.8x	26.5x	23.5x
EV / EBITDA*	18.7x	15.5x	15.1x	13.7x	12.5x
Free Cash Flow Yield*	3.9%	5.6%	4.5%	4.9%	5.3%

Investment decisions should not be made prior to reading the research report, which includes the opinion key and other important information and disclosures. Click [Option Care Health](#) for full report including important disclosures.

22 February 2024

Equity

## Key Changes

(US\$)	Previous	Current
2024E Rev (m)	4,587.2	4,699.5
2025E Rev (m)	4,908.3	5,051.9
2026E Rev (m)	NA	5,430.8
2024E EPS	1.24	1.12
2025E EPS	1.41	1.26
2026E EPS	NA	1.42

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## Stock Data

Price	33.36 USD
Price Objective	43.00 USD
Date Established	5-Sep-2023
Investment Opinion	C-1-9
52-Week Range	24.23 USD - 35.74 USD
Mrkt Val (mn) / Shares Out (mn)	5,930 USD / 177.7
Free Float	99.1%
Average Daily Value (mn)	38.80 USD
BofA Ticker / Exchange	OPCH / NAS
Bloomberg / Reuters	OPCH US / OPCH.OQ
ROE (2024E)	12.9%
Net Dbt to Eqty (Dec-2023A)	57.9%
ESGMeter™	Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "[BofA ESGMeter Methodology](#)".

## Price objective basis & risk

### Capital One Financial (COF)

Our \$146 PO is based on a 10.5x PE multiple to our 2024 EPS forecast. A 10.5x PE multiple is in the middle of the historical range (7-12x) which we think is appropriate given the more optimistic macro outlook and strong loan growth, partially offset by rising credit costs.

Downside risks are: slower than expected revolving credit growth, faltering economic recovery and rising loan losses, which could drive earnings below our estimates, and result in valuation compression. Cybersecurity and regulations are also risks.

### Chesapeake Energy (CHK)

Our price objective of \$115/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.2%, which is based on the BofA Strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are: E&P companies, in general, are subject to commodity price volatility, commensurate slowdowns in development drilling, and potential investor apathy. Company-specific downside risks to our price objective are: (1) Potential M&A as the company does consider potential acquisitions, (2) potential regional bottleneck, and (3) a production mix heavily weighted towards natural gas, making it more susceptible if commodity prices were to decline.

Upside risks to our PO 1) higher potential long-term gas and 2) the debottlenecking of US gas as LNG infrastructure is built along the Gulf Coast.

### Chevron Corp. (CVX)

Our price objective of \$196/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.7%, which is based on the BofA Strategy team's assumed risk premium and a five-year monthly beta.

The risks to our price objective are: (1) commodity price volatility, (2) operational execution particularly on new projects, and (3) inability to capture the price environment due to cost pressures (opex, capex and taxation), unseen integration issues with the recently announced acquisition. Upside risks to our price objective are higher oil prices and lower cap ex spending.

### Discover Financial (DFS)

We calculate a \$118 PO based on an 10.5x PE multiple to our 2024 EPS forecast. A 10.5x multiple is in the middle of DFS's recent historical range (7-12x) and reflects the more optimistic macro outlook, resilient consumer balance sheets, and strong business fundamentals.

Downside risks to our price objective are: if the economy falls into a recession, credit costs could rise rapidly and compress margins more than our current forecast. Deteriorating economic conditions would likely hurt sentiment and drive DFS's valuation lower.

### ExxonMobil Corp. (XOM)

Our price objective of \$140/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.4%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.



The risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its growth targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation). Upside risks to our price objective are higher oil & gas prices.

#### **NVIDIA Corporation (NVDA)**

Our \$925 PO is based on 31x CY25E PE ex cash, within NVDA's historical 26x-69x forward year PE range, justified given stronger growth opportunities ahead as gaming cycle troughs and data center demand potentially faces strong, long-term demand dynamics.

Downside risks to our price objective are: 1) weakness in consumer driven gaming market, 2) Competition with major public firms, internal cloud projects and other private companies in accelerated computing markets, 3) Larger than expected impact from restrictions on compute shipments to China, or additional restrictions placed on activity in the region, 4) Lumpy and unpredictable sales in new enterprise, data center, and autos markets, 5) Potential for decelerating capital returns.

#### **Occidental Petroleum Corp. (OXY)**

Our price objective of \$80/sh assumes \$75 Brent and \$70 WTI long-term. We assume long-term HH natural gas of \$4.00. We apply a long-term (post-tax) weighted average cost of capital (WACC) of 7.9%, which is based on the BofA strategy team's assumed risk premium and a five-year monthly beta.

Downside risks to our price objective are (1) the oil and gas price and margin environment, (2) significant delays to the new upstream projects critical to its production targets, and (3) inability to capture the price environment due to cost pressures (opex, capex, and taxation).

Upside risks to our price objective are higher oil & gas prices.

#### **Option Care Health (OPCH)**

Our price objective of \$43 is based on 19.1x our 2024E Adj EBITDA estimate. This multiple is at a premium to the current average multiple for its Home Care peers given the limited Medicare rate risks, lower leverage, and stronger FCF profile. The multiple is at a slight premium to OPCH's/Legacy BIOS's five-year average of 18.8x given the lower leverage and deal optionality.

Risks are worse-than-expected labor and other cost pressures, customer/ competitor concentration, drug pricing pressure, deal integration risks.

#### **Vertiv (VRT)**

We base our \$72 price objective on an 16x EV/EBITDA of our 2025 estimates. Our target multiple is in line with the 16x peer average on 2024E. We argue an in line multiple is warranted given above-peers earnings growth offset by below-peer margins.

Downside risks to our price objective are 1) declines in company-owned data centers, 2) inability to execute on cost savings plans, 3) pricing deterioration due to competition, and 4) disruptions due to supply chain or manufacturing execution.

## **Analyst Certification**

We, Andrew Obin, Doug Leggate, Joanna Gajuk, Kalei Akamine, Mihir Bhatia and Vivek Arya, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

**US - Multi-Industrials/Engineering and Construction Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	APi Group	APG	APG US	Andrew Obin
	AspenTech	AZPN	AZPN US	Andrew Obin
	Atmus Filtration	ATMU	ATMU US	Andrew Obin
	Dover Corp	DOV	DOV US	Andrew Obin
	Eaton Corp PLC	ETN	ETN US	Andrew Obin
	Emerson Electric Co	EMR	EMR US	Andrew Obin
	Flowserve	FLS	FLS US	Andrew Obin
	General Electric Company	GE	GE US	Andrew Obin
	Honeywell International Inc.	HON	HON US	Andrew Obin
	ITT Inc.	ITT	ITT US	Andrew Obin
	Montrose Environmental Group, Inc.	MEG	MEG US	Andrew Obin
	Parker Hannifin Corporation	PH	PH US	Andrew Obin
	PTC Inc.	PTC	PTC US	Andrew Obin
	Rush	RUSHA	RUSHA US	Andrew Obin
	Vertiv	VRT	VRT US	Andrew Obin
	Vontier	VNT	VNT US	Andrew Obin
<b>NEUTRAL</b>				
	3M Company	MMM	MMM US	Andrew Obin
	AMETEK Inc	AME	AME US	Andrew Obin
	Fortive Corporation	FTV	FTV US	Andrew Obin
	Johnson Controls International PLC	JCI	JCI US	Andrew Obin
	Pentair plc	PNR	PNR US	Andrew Obin
	Rockwell	ROK	ROK US	Andrew Obin
	Trane Technologies PLC	TT	TT US	Andrew Obin
<b>UNDERPERFORM</b>				
	Allegion	ALLE	ALLE US	Andrew Obin
	Carrier Global Corp.	CARR	CARR US	Andrew Obin
	Core & Main	CNM	CNM US	Andrew Obin
	Illinois Tool Works	ITW	ITW US	Andrew Obin
	John Bean Technologies	JBT	JBT US	Andrew Obin
	Keysight	KEYS	KEYS US	David Ridley-Lane, CFA

**US - Large Cap Oils Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	APA Corporation	APA	APA US	Doug Leggate
	Canadian Natural Resources	YCNQ	CNQ CN	Doug Leggate
	Canadian Natural Resources	CNQ	CNQ US	Doug Leggate
	Chesapeake Energy	CHK	CHK US	Doug Leggate
	Chevron Corp.	CVX	CVX US	Doug Leggate
	ConocoPhillips	COP	COP US	Doug Leggate
	Coterra Energy Inc	CTRA	CTRA US	Doug Leggate
	EQT Corporation	EQT	EQT US	John H. Abbott
	ExxonMobil Corp.	XOM	XOM US	Doug Leggate
	Granite Ridge Resources, Inc	GRNT	GRNT US	John H. Abbott
	Imperial Oil	IMO	IMO US	Doug Leggate
	Imperial Oil	YIMO	IMO CN	Doug Leggate
	Kimbell Royalty Partners	KRP	KRP US	John H. Abbott
	Occidental Petroleum Corp.	OXY	OXY US	Doug Leggate
	Ovintiv Inc	YOVV	OVV CN	Doug Leggate
	Ovintiv Inc	OVV	OVV US	Doug Leggate
	Range Resources Corp	RRC	RRC US	Doug Leggate
	Suncor	YSU	SU CN	Doug Leggate
	Suncor	SU	SU US	Doug Leggate
<b>NEUTRAL</b>				
	California Resources Corporation	CRC	CRC US	Kalei Akamine
	CNX Resources	CNX	CNX US	John H. Abbott
	Delek US Holdings, Inc.	DK	DK US	Doug Leggate
	Devon Energy Corp.	DVN	DVN US	Doug Leggate





## US - Large Cap Oils Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Diamondback Energy Inc.	FANG	FANG US	Doug Leggate
	EOG Resources	EOG	EOG US	Doug Leggate
	Gulfport Energy Corporation	GPOR	GPOR US	Doug Leggate
	HF Sinclair Corporation	DINO	DINO US	Doug Leggate
	Marathon Petroleum Company	MPC	MPC US	Doug Leggate
	PBF Energy	PBF	PBF US	Doug Leggate
	Permian Resources Corporation	PR	PR US	Doug Leggate
	Phillips 66	PSX	PSX US	Doug Leggate
	Valero Energy Corp.	VLO	VLO US	Doug Leggate
<b>UNDERPERFORM</b>				
	Chord Energy Corporation	CHRD	CHRD US	John H. Abbott
	Crescent Energy Company	CRGY	CRGY US	John H. Abbott
	Marathon Oil Corp.	MRO	MRO US	Doug Leggate
	National Fuel Gas Company	NFG	NFG US	John H. Abbott
	Northern Oil and Gas	NOG	NOG US	John H. Abbott
	Vital Energy Inc	VTLE	VTLE US	John H. Abbott
<b>RSTR</b>				
	Pioneer Natural Resources	PXD	PXD US	Doug Leggate

## US - Facilities, Hospitals and Managed Healthcare Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Acadia Healthcare	ACHC	ACHC US	Kevin Fischbeck, CFA
	Addus HomeCare	ADUS	ADUS US	Joanna Gajuk
	Agilon Health	AGL	AGL US	Adam Ron
	Apollo Medical	AMEH	AMEH US	Adam Ron
	BrightSpring Health Services	BTSG	BTSG US	Joanna Gajuk
	Chemed Corporation	CHE	CHE US	Joanna Gajuk
	Elevance Health Inc	ELV	ELV US	Kevin Fischbeck, CFA
	Encompass Health	EHC	EHC US	Kevin Fischbeck, CFA
	HCA	HCA	HCA US	Kevin Fischbeck, CFA
	Humana Inc	HUM	HUM US	Kevin Fischbeck, CFA
	Option Care Health	OPCH	OPCH US	Joanna Gajuk
	Oscar Health	OSCR	OSCR US	Adam Ron
	Select Medical Corp.	SEM	SEM US	Kevin Fischbeck, CFA
	Service Corp.	SCI	SCI US	Joanna Gajuk
	Surgery Partners, Inc	SGRY	SGRY US	Kevin Fischbeck, CFA
	Tenet Healthcare	THC	THC US	Kevin Fischbeck, CFA
	The Cigna Group	CI	CI US	Kevin Fischbeck, CFA
	UnitedHealth Group	UNH	UNH US	Kevin Fischbeck, CFA
	Universal Health Services	UHS	UHS US	Kevin Fischbeck, CFA
	US Physical Therapy	USPH	USPH US	Joanna Gajuk
<b>NEUTRAL</b>				
	Alignment Healthcare	ALHC	ALHC US	Adam Ron
	AMN Healthcare	AMN	AMN US	Kevin Fischbeck, CFA
	Brookdale	BKD	BKD US	Joanna Gajuk
	Centene Corporation	CNC	CNC US	Kevin Fischbeck, CFA
	Molina Healthcare, Inc.	MOH	MOH US	Kevin Fischbeck, CFA
	Privia Health	PRVA	PRVA US	Adam Ron
<b>UNDERPERFORM</b>				
	AdaptHealth Corp.	AHCO	AHCO US	Joanna Gajuk
	Agility Health Inc	AGTI	AGTI US	Kevin Fischbeck, CFA
	Cross Country Healthcare	CCRN	CCRN US	Kevin Fischbeck, CFA
	DaVita Inc	DVA	DVA US	Kevin Fischbeck, CFA
	Enhabit Home Health & Hospice	EHAB	EHAB US	Joanna Gajuk
	Pediatrix Medical Group, Inc.	MD	MD US	Kevin Fischbeck, CFA

**US - Semiconductors and Semiconductor Capital Equipment Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Advanced Micro Devices, Inc	AMD	AMD US	Vivek Arya
	Analog Devices Inc.	ADI	ADI US	Vivek Arya
	Applied Materials, Inc.	AMAT	AMAT US	Vivek Arya
	Arm Holdings	ARM	ARM US	Vivek Arya
	Broadcom Inc	AVGO	AVGO US	Vivek Arya
	Cadence	CDNS	CDNS US	Vivek Arya
	Camtek	CAMT	CAMT US	Vivek Arya
	KLA Corporation	KLAC	KLAC US	Vivek Arya
	Lam Research Corp.	LRCX	LRCX US	Vivek Arya
	M/A-Com	MTSI	MTSI US	Vivek Arya
	Marvell Technology Group Ltd.	MRVL	MRVL US	Vivek Arya
	Microchip	MCHP	MCHP US	Vivek Arya
	Micron Technology, Inc	MU	MU US	Vivek Arya
	Nova	NVMI	NVMI US	Vivek Arya
	NVIDIA Corporation	NVDA	NVDA US	Vivek Arya
	NXP Semiconductors NV	NXPI	NXPI US	Vivek Arya
	onsemi	ON	ON US	Vivek Arya
	Synopsys	SNPS	SNPS US	Vivek Arya
<b>NEUTRAL</b>				
	Advanced Energy Industries	AEIS	AEIS US	Duksan Jang
	Allegro MicroSystems	ALGM	ALGM US	Blake Friedman
	Axcelis Technologies	ACLS	ACLS US	Duksan Jang
	Coherent Corp	COHR	COHR US	Vivek Arya
	GlobalFoundries	GFS	GFS US	Vivek Arya
	Intel	INTC	INTC US	Vivek Arya
	Lattice Semiconductor	LSCC	LSCC US	Blake Friedman
	Texas Instruments Inc.	TXN	TXN US	Vivek Arya
<b>UNDERPERFORM</b>				
	Ambarella	AMBA	AMBA US	Vivek Arya
	Credo Technology	CRDO	CRDO US	Vivek Arya
	Lumentum Holdings	LITE	LITE US	Vivek Arya
	Qorvo Inc.	QRVO	QRVO US	Vivek Arya
	Skyworks Solutions, Inc.	SWKS	SWKS US	Vivek Arya
	Teradyne	TER	TER US	Vivek Arya
	Wolfspeed Inc	WOLF	WOLF US	Vivek Arya

**US - Payments, Processors, Specialty Finance and IT services Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Accenture Plc	ACN	ACN US	Jason Kupferberg
	American Express Company	AXP	AXP US	Mihir Bhatia
	Block Inc	SQ	SQ US	Jason Kupferberg
	Capital One Financial	COF	COF US	Mihir Bhatia
	Discover Financial	DFS	DFS US	Mihir Bhatia
	Enact Holdings	ACT	ACT US	Mihir Bhatia
	Essent Group	ESNT	ESNT US	Mihir Bhatia
	Fidelity National Information Services	FIS	FIS US	Jason Kupferberg
	Fiserv Inc	FI	FI US	Jason Kupferberg
	FleetCor Technologies Inc.	FLT	FLT US	Mihir Bhatia
	Flywire	FLYW	FLYW US	Jason Kupferberg
	Global Payments Inc	GPN	GPN US	Jason Kupferberg
	Jack Henry & Associates	JKHY	JKHY US	Jason Kupferberg
	Marqeta	MQ	MQ US	Cassie Chan
	Mastercard Inc	MA	MA US	Jason Kupferberg
	MGIC Investment Corp.	MTG	MTG US	Mihir Bhatia
	NMI Holdings	NMIH	NMIH US	Mihir Bhatia
	Nuvei	NVEI	NVEI US	Jason Kupferberg
	Nuvei	YNVEI	NVEI CN	Jason Kupferberg
	OneMain Holdings, Inc.	OMF	OMF US	Mihir Bhatia

**US - Payments, Processors, Specialty Finance and IT services Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Shift4 Payments, Inc	FOUR	FOUR US	Jason Kupferberg
	Telus International	TIXT	TIXT US	Cassie Chan
	Telus International	YTIXT	TIXT CN	Cassie Chan
	Visa Inc.	V	V US	Jason Kupferberg
	WEX Inc.	WEX	WEX US	Mihir Bhatia

**NEUTRAL**

	ADP	ADP	ADP US	Jason Kupferberg
	Affirm Holdings	AFRM	AFRM US	Jason Kupferberg
	Bread Financial Holdings Inc	BFH	BFH US	Mihir Bhatia
	DLocal	DLO	DLO US	Jason Kupferberg
	Globant SA	GLOB	GLOB US	Jason Kupferberg
	PayPal Holdings Inc	PYPL	PYPL US	Jason Kupferberg
	SoFi Technologies Inc	SOFI	SOFI US	Mihir Bhatia
	Synchrony Financial	SYF	SYF US	Mihir Bhatia
	Thoughtworks	TWKS	TWKS US	Jason Kupferberg
	Toast	TOST	TOST US	Jason Kupferberg
	TTEC Holdings	TTEC	TTEC US	Cassie Chan

**UNDERPERFORM**

	CGI Inc.	GIB	GIB US	Jason Kupferberg
	CGI Inc.	YGIBA	GIB/A CN	Jason Kupferberg
	Cognizant Technology Solutions	CTSH	CTSH US	Jason Kupferberg
	Coinbase	COIN	COIN US	Jason Kupferberg
	DXC Technology	DXC	DXC US	Jason Kupferberg
	EPAM Systems	EPAM	EPAM US	Jason Kupferberg
	Paychex	PAYX	PAYX US	Jason Kupferberg
	Radian Group Inc	RDN	RDN US	Mihir Bhatia
	Rocket Companies, Inc.	RKT	RKT US	Mihir Bhatia
	TaskUs	TASK	TASK US	Cassie Chan
	Western Union	WU	WU US	Jason Kupferberg

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

**Equity Investment Rating Distribution: Health Care Group (as of 31 Dec 2023)**

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	45	50.56%	Buy	25	55.56%
Hold	26	29.21%	Hold	13	50.00%
Sell	18	20.22%	Sell	7	38.89%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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

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

<sup>R2</sup> 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.

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