

## Walgreens Boots Alliance

## Some questions answered, some questions remain

Reiterate Rating: UNDERPERFORM | PO: 23.00 USD | Price: 25.01 USD

## More clarity on capital allocation; model still pressured

Walgreens provided answers to some key investor questions such as the future of the dividend and the company's thoughts around business strategy and capital allocation. We view the dividend cut and the decision to prioritize profitability over revenue growth in the US Healthcare segment as two positives. The dividend cut removes a longstanding overhang and the focus on profitability should help limit more intensive capital requirements for that business. While FY24 guidance and US Healthcare targets were reiterated, we remain cautious given limited visibility around US Healthcare segment growth and overall trajectory of core U.S. Retail pharmacy earnings. FY2Q headwinds including lower sale-lease back contributions and consumer pressure will be partially offset by a lower tax rate, but could create a more challenging ramp for 2H. Walgreens provided some comments that it would support a more transparent reimbursement model which would be thesis changing if adopted, but short-term headwinds in the core business outweigh this optionality today. We reiterate our Underperform rating but increase our PO to \$23 (from \$22) based on 7x CY24E P/E (from 6.6x) due to peer multiple expansion.

## Reducing EPS/EBIT outlook on limited visibility

We are lowering our FY24 EPS estimate from \$3.25 to \$3.19 and our FY25 EPS from \$3.51 to \$3.47. We have also updated our FY24 EBIT estimate, reducing it to \$3.4Bn vs. \$3.5Bn previously, primarily due to our reduction in the US Retail Pharmacy segment EBIT. Our FY25-FY27 EPS estimates have also been revised down primarily driven by lower revenues from US Healthcare.

## **Upcoming events and catalysts**

Near-term catalysts include the potential adoption of a new pharmacy reimbursement model, US Healthcare initiatives, US growth efforts – including script recapture, and the macro environment in the EU/UK for potential impacts to the International segment. The US Healthcare segment progress is important, both in terms of business expansion as well as the ramp in profitability. Finally, we continue to monitor capital allocation priorities including updates to the dividend, debt paydown, and cash flow dynamics.

Estimates (Aug) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	5.04	3.98	3.19	3.47	3.81
GAAPEPS	6.33	(3.57)	0.77	1.41	2.03
EPS Change (YoY)	2.6%	-21.0%	-19.8%	8.8%	9.8%
Consensus EPS (Bloomberg)			3.32	3.66	4.04
DPS	2.00	1.92	1.00	1.01	1.02
Valuation (Aug)					
P/E	5.0x	6.3x	7.8x	7.2x	6.6x
GAAP P/E	4.0x	NM	32.5x	17.7x	12.3x
Dividend Yield	8.0%	7.7%	4.0%	4.0%	4.1%
EV/EBITDA*	10.2x	12.8x	13.9x	13.1x	12.2x
Free Cash Flow Yield*	10.0%	0.7%	10.2%	11.9%	11.4%
* For full definitions of <i>iOmethod</i> 5M measures, see page 9					

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 10 to 12. Analyst Certification on page 8. Price Objective Basis/Risk on page 8.

Bof A Securities does and seeks to do business with issuers covered in its research

08 January 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	22.00	23.00
2024E EPS	3.25	3.19
2025E EPS	3.51	3.47
2026E EPS	3.77	3.81
2024E EBITDA (m)	4,641.0	4,611.2
2025E EBITDA (m)	4,915.2	4,898.3
2026E EBITDA (m)	5,199.2	5,276.7
2024E DPS	1.94	1.00

Allen Lutz. CFA Research Analyst **BofAS** +1 646 855 4380 allen.lutz@bofa.com

Hanna Lee Research Analyst BofAS +1 646 855 3682 hanna.y.lee@bofa.com

Dev Weerasuriya Research Analyst BofAS +1 646 855 5707 dev.weerasuriya@bofa.com

#### Stock Data

Price	25.01 USD
Price Objective	23.00 USD
Date Established	8-Jan-2024
Investment Opinion	B-3-7
52-Week Range	19.68 USD - 37.96 USD
Mrkt Val (mn) / Shares Out	21,568 USD / 862.4
(mn)	
Free Float	82.4%
Average Daily Value (mn)	372.35 USD
BofA Ticker / Exchange	WBA / NAS
Bloomberg / Reuters	WBA US / WBA.OQ
ROE (2024E)	9.8%
Net Dbt to Eqty (Aug-2023A)	29.2%
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

PBM - pharmacy benefit manager

# **iQ**profile<sup>™</sup> Walgreens Boots Alliance

(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	6.9%	4.9%	3.6%	3.8%	4.1%
Return on Equity	16.4%	11.9%	9.8%	10.6%	11.5%
Operating Margin	3.9%	2.8%	2.4%	2.4%	2.5%
Free Cash Flow	2,165	141	2,190	2,563	2,465
<i>iQ</i> method <sup>™</sup> – <b>Quality of Earnings*</b>					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	0.9x	0.7x	1.3x	1.6x	1.4>
Asset Replacement Ratio	0.9x	0.9x	0.7x	0.9x	0.9
Tax Rate	13.3%	9.1%	23.9%	25.7%	25.1%
Net Debt-to-Equity Ratio	30.3%	29.2%	23.2%	19.0%	14.9%
Interest Cover	13.0x	6.7x	8.7x	7.5x	8.2>
Income Statement Data (Aug)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	132,703	139,080	143,514	154,009	162,185
% Change	0.1%	4.8%	3.2%	7.3%	5.3%
Gross Profit	28,451	27,427	27,118	27,842	29,187
% Change	1.3%	-3.6%	-1.1%	2.7%	4.8%
EBITDA	6,268	5,008	4,611	4,898	5,277
% Change	-4.6%	-20.1%	-7.9%	6.2%	7.7%
Net Interest & Other Income	(258)	(402)	(18)	(380)	(370)
Net Income (Adjusted)	4,360	3,439	2,759	2,989	3,287
% Change	2.4%	-21.1%	-19.8%	8.4%	10.0%
Free Cash Flow Data (Aug) (US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	4,065	(3,528)	663	1,219	1,748
Depreciation & Amortization	1,990	2,257	2,263	2,340	2,384
Change in Working Capital	495	1,602	50	400	183
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	(2,651)	1,927	718	722	323
Capital Expenditure	(1,734)	(2,117)	(1,504)	(2,118)	(2,173)
Free Cash Flow	2,165	141	2,190	2,563	2,465
% Change	-40.8%	-93.5%	NM	17.0%	-3.8%
		20.0 /0			0.0 /0
Share / Issue Renurchase	(160)	(150)	(150)	(150)	(150)
Share / Issue Repurchase Cost of Dividends Paid	(160)	(150) (1.659)	(150) (864)	(150) (873)	
Share / Issue Repurchase Cost of Dividends Paid Change in Debt	(160) (1,732) 3,587	(150) (1,659) (2,703)	(150) (864) (155)	(150) (873) 146	(150) (881) 87
Cost of Dividends Paid	(1,732)	(1,659)	(864)	(873)	(881)
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug)	(1,732)	(1,659) (2,703)	(864)	(873)	(881)
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions)	(1,732) 3,587 <b>2022A</b>	(1,659) (2,703) <b>2023A</b>	(864) (155) <b>2024E</b>	(873) 146 <b>2025E</b>	(881) 87 <b>2026</b> i
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug)	(1,732) 3,587 <b>2022A</b> 2,472	(1,659) (2,703) <b>2023A</b> 739	(864) (155) <b>2024E</b> 2,327	(873) 146 <b>2025E</b> 3,664	(881) 87 <b>2026</b> 4,834
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables	(1,732) 3,587 <b>2022A</b> 2,472 5,017	(1,659) (2,703) <b>2023A</b> 739 5,381	(864) (155) <b>2024E</b> 2,327 5,592	(873) 146 <b>2025E</b> 3,664 6,043	(881) 87 <b>2026</b> 4,834 6,408
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383	(864) (155) <b>2024E</b> 2,327 5,592 9,802	(873) 146 <b>2025E</b> 3,664 6,043 10,646	(881) 87 <b>2026</b> 4,834 6,408 11,258
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809	(873) 146 <b>2025E</b> 3,664 6,043 10,646 12,707	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927	(873) 146 <b>2025E</b> 3,664 6,043 10,646 12,707 67,081	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b>	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b>	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b>	2025E 3,664 6,043 10,646 12,707 67,081 100,142	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796 <b>101,934</b>
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b> 0	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b>	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b> 0	(873) 146 2025E 3,664 6,043 10,646 12,707 67,081 100,142 0	2026 4,834 6,408 11,258 13,638 65,796
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b> 0 21,524	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b> 0 23,618	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b> 0 24,298	2025E 3,664 6,043 10,646 12,707 67,081 100,142 0 25,993	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796 <b>101,934</b> ( 27,153
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b> 0 21,524 11,674	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b> 0 23,618 9,062	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b> 0 24,298 8,907	(873) 146 2025E 3,664 6,043 10,646 12,707 67,081 100,142 0 25,993 9,053	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796 <b>101,934</b> (27,153 9,140
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b> 0 21,524 11,674 26,518	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b> 0 23,618 9,062 35,460	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b> 0 24,298 8,907 35,879	(873) 146 2025E 3,664 6,043 10,646 12,707 67,081 100,142 0 25,993 9,053 36,685	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796 <b>101,934</b> (27,153 9,140 36,654
Cost of Dividends Paid Change in Debt  Balance Sheet Data (Aug) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	(1,732) 3,587 <b>2022A</b> 2,472 5,017 9,412 11,729 61,494 <b>90,124</b> 0 21,524 11,674	(1,659) (2,703) <b>2023A</b> 739 5,381 9,383 11,587 69,538 <b>96,628</b> 0 23,618 9,062	(864) (155) <b>2024E</b> 2,327 5,592 9,802 11,809 67,927 <b>97,457</b> 0 24,298 8,907	(873) 146 2025E 3,664 6,043 10,646 12,707 67,081 100,142 0 25,993 9,053	(881) 87 <b>2026</b> 4,834 6,408 11,258 13,638 65,796 <b>101,934</b> (27,153 9,140

## **Company Sector**

Healthcare Technology & Distribution

#### **Company Description**

Walgreens, following the completion of the Rite Aid stores acquisition, is the largest global pharmacy, with nearly 10,000 stores in the US alone. The company also operates an international pharmacy business primarily composed of the Boots pharmacies in the United Kingdom. Walgreens is headquartered in Deerfield, Illinois.

#### **Investment Rationale**

Our Underperform rating is predicated on an uncertain intermediate profit growth stream given market headwinds, notably reimbursement pressures, ongoing profit headwinds within the international retail business, and competitive dynamics. With core profit dollar growth slowing and limited visibility into how Walgreens Health will offset that (not to mention investments in the venture), we think the limited visibility creates challenges for near-term stock performance.

#### Stock Data

Average Daily Volume 14,888,205

## **Quarterly Earnings Estimates**

	2023	2024
Q1	1.16A	0.66A
Q2	1.16A	0.85E
Q3	1.00A	0.92E
Q4	0.67A	0.76E

\* For full definitions of *IQ*method <sup>SM</sup> measures, see page 9.

## FY1Q'24 call takeaways

- Opening remarks
  - Strong international performance
  - o Maintaining FY24 EPS guidance despite difficult backdrop
  - o Impacts from weaker respiratory and Medicare redetermination impact
  - Own brands up 90bps in quarter
- Savings:
- o On pace for \$1Bn in cost savings for FY24
- On track for \$600MM reduction in Capex y/y and \$500MM in working capital reduction y/y
- Reducing dividend by 48%
- VillageMD exited 27 of 60 markets plans for exits
- o Buyout for Boots pension planned
- Pharmacy strategy:
  - Virtual pharmacy
  - Working with Deans of pharmacy schools to make WBA preferred employer in the space
  - Signed 25 contracts
  - Shields sales up 27% in 1Q, meaningful existing client growth and new contract ads
  - More initiatives on specialty pharmacy to be laid out
  - Entering pay for performance contracts (adherence)
  - Willing to work with pharmacy benefit managers (PBMs) and payors on pharmacy reimbursement options to deliver transparency
- Results:
  - US healthcare pro-forma sales increased 12%. Adjusted EPS of \$0.66 declined 44% on a constant currency basis
  - Adjusted operating income declined 37.2% year-on-year, mainly driven by lower retail sales volume and margin
  - International growth in U.S Healthcare segment supported adj. EPS
- U.S Retail Pharmacy
  - Sales up 6.4% brand inflation and contribution from pharmacy services
  - Retail business down 6.1%



- o Retail sales volume/margin impacted adjusted operating income (AOI)
- U.S Pharmacy:
  - Up 13.1%
  - Ongoing Medicaid redetermination and weaker flu/COVID impacted sales – activity down ~13% q/q
  - Gross profit down margin impacted by reimbursement pressure
- Retail
  - Weaker respiratory season (160bps impact)
  - Thanksgiving closure 60bps headwind
  - Expect more headwinds in consumer/retail
- International
  - o Total sales up 4.4%, Boots UK up 6.3%
  - Boots UK driving strong retail growth
  - o Boots UK Retail market share up for 11th consecutive quarter
- U.S Healthcare
  - Shields and CareCentrix EBITDA growth
- Cash Flow
  - FCF in-line with expectations. Operating cash flow impacted by inventory build up and redetermination timing
  - On track to reduce Capex by \$600MM y/y and working capital improvement of \$500MM y/y
- Guidance
  - Tailwinds
    - Expect pharmacy services to delivery ahead of plans
    - Improved tax 15-17% vs. 19-20% prior
  - Headwinds
    - Expect pull back in consumer retail decline low single digit (LSD) vs. flat prior
    - Sale-leaseback impact to be \$125MM lower vs. prior outlook
    - Lower overall Rx volume growth
  - Segment adj. EBITDA in U.S Healthcare to be breakeven driven by VillageMD cost improvements

- o 2Q'24
  - Lapping adj. EPS of \$1.16 y/y comp will be impacted by:
    - Lower contribution from sale-lease back
    - Higher shrink on retail
    - Expect headwinds to be offset by lower tax rate
- o 2H'24:
  - Expect actions to lower cost base to ramp over year
  - U.S Heatlhcare segment profitability to scale over the yearrealignment of costs over the year
  - Tax rate elevated in 1Q, favorability through rest of the year

### Q&A

- How can WBA support transparency and value?
  - o Can play a significant role in contracts/relationships and
  - Retail pharmacy value is going to be driven by transparency, cost plus models etc.
  - Not giving guidance on margins for drugs most of the innovation/reimbursement in pharmacy is likely to evolve where margin is based on services provide by pharmacy
- What is WBA core business vs. what is ancillary?
  - 60 days in, have a lot of work to do- still working on getting balance sheet together
  - Stores are important central to strategy. Rightsizing footprint is on the table
  - o Going to be a major community-based pharmacy footprint
  - View WBA as a fundamental health utility, not just a pharmacy
  - CareCentrix and Shield great to drive value to payers. Have synergy with each other
  - o Investments in VillageMD to be actively managed
  - Do they provide sustainable returns to payors, health systems, and other partners – that is the lens to look through
  - PBM basis is terrific for health services business, but pharmacy is fantastic
- VillageMD investments and primary care opportunity?
  - o On a good path to drive profitability. Like it as an investment



- Future growth outside of VillageMD not focused on primary care assets in portfolio of investments
- Color on specialty and opportunities in the space?
  - Shields is able to manage specialty pharmacy for health systems
  - Walgreens specialty assets inside that mix central fix, gene/cell therapy (pharma has noted interested in working with WBA). Focused on payor market
  - Shields is a key enabler for pharmacy strategy
  - Not growing just with payors, growing beyond Blue's plans with other payors. Shield provides more adherence – paid for performance.
     Working with large/small health systems. Lot of runway to grow with underlying specialty drug market to grow
- Not looking to invest in care delivery assets could you expect more partnerships though?
  - VillageMD provides a good sandbox to test new services
  - Can be a partner of choice for other providers where VillageMD has less depth
- Have we hit the floor on unit pricing?
  - Floor just kept getting lower. For PBMs not much left for squeezing retailers.
  - More effective to win on providing value
  - 95% along the way of contracting with PBM's
  - Can drive a transition to a more value-based model
  - Two very large PBMs announcing programs for transparency is likely due to marketplace pull there
  - WBA can play effectively in that space
  - Have negotiated on core dispensing at one rate and negotiating services as additional reimbursements
- How long would it take to implement a transparency model?
  - PBM selling cycles are not short
  - Material potential change within a year or two
  - New sales for small groups you could see a fairly quick uptake
  - But cautious previous transparency models didn't pick up that fast
  - Plan designs that the market have largely evolved to are creating this underlying demand to give patients the pass-through or the cost plus experience so that they don't have an odd surprise when they go to the



- pharmacy counter of paying more for the drug than actually they would if they were a cash payer
- o Can convert to cost plus model over-night so willing to do that
- New brands coming out don't work for pharmacy or High-Deductible Health Plan members
- On guidance expect market growth in pharmacy to be lower? Any color on it?
   Given history isn't it beneficial to own a PBM?
  - Prescription market growth outlook in October was to grow in-line with market
  - Market is growing at a lower pace (weaker respiratory and impact of Medicaid redeterminations)
  - Expect market growth to slow down 50bps
  - Owing PBM is not the best path been independent allows ability to work across chain
  - Buying a second tier PBM does not make sense vs. working with PBMs
- Lily announced Lily direct impact to 3<sup>rd</sup> party fulfillment services and ability to work with WBA?
  - Can work with almost any reimbursement model to work with payors, pharma, and health systems
  - Transparency for consumers and lowers drug costs for consumers is good so willing to deliver against those.
  - Definitely an opportunity
- Pay for performance contracts? Where are the contracts focused?
  - Had a conversation last week with the CEO of a very-very large payer who wanted to sit teams down to actually look at 2025 and how to work together particularly on Medicare Advantage
  - o Most pay for performance contracts in Medicare part D space
  - Medicaid space- seeing contracts come through. Expect this to move to the commercial space
- Market share opportunities in cost plus models?
  - Competing on unit price is a straight-forward opportunity hard to differentiate on this
  - Models discussed and pulled into market will allow differentiation on services

When using Walgreens brands – responses can be improved. Shows ability for WBA to differentiate vs. market in gaining access to patients



## Price objective basis & risk

### Walgreens Boots Alliance (WBA)

Our \$23 price objective is based on about 7x our CY24E EPS. This multiple is below its five-year average on an absolute basis of around 11x. The discount to the five-year average reflects our view that Walgreens' core retail pharmacy business is under long-term structural pressure and must diversify into stable business lines to improve the growth outlook.

Upside risks are better-than-expected generic savings from new partnerships in healthcare and other areas that support long-term growth, contributions from additional new partnerships and strategic investments for Walgreens Health (including Summit Health), and faster recovery in overall script trends.

Downside risks to our PO are ongoing pricing and reimbursement pressure, higher prescription attrition from Part D relationships, uncertainty on front end and pharmacy sales during the Covid outbreak, ongoing growth and profitability pressure within the Retail International business, incremental spending tied to building out the Walgreens Health platform (including investments in Summit Health), the risk of a disruptive force entering the supply-chain market, a slowdown in 340B, various opioid trials that could include financial penalties, and lack of available/appealing attractive capital deployment opportunities.

## **Analyst Certification**

I, Allen Lutz, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

#### US - Healthcare Technology & Distribution Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Accolade	ACCD	ACCD US	Allen Lutz, CFA
	American Well Corp	AMWL	AMWL US	Allen Lutz, CFA
	Cencora Inc	COR	CORUS	Allen Lutz, CFA
	CVS Health	CVS	CVS US	Allen Lutz, CFA
	Definitive Healthcare Corp	DH	DH US	Allen Lutz, CFA
	dentalcorp	YDNTL	DNTL CN	Allen Lutz, CFA
	Envista	NVST	NVST US	Allen Lutz, CFA
	HealthEquity Inc	HQY	HQY US	Allen Lutz, CFA
	Hims & Hers	HIMS	HIMS US	Allen Lutz, CFA
	McKesson	MCK	MCK US	Allen Lutz, CFA
	Omnicell Inc.	OMCL	OMCL US	Allen Lutz, CFA
	Patterson Companies	PDCO	PDCO US	Allen Lutz, CFA
	Progyny	PGNY	PGNY US	Allen Lutz, CFA
	R1 RCM	RCM	RCM US	Allen Lutz, CFA
NEUTRAL				
	Cardinal Health	CAH	CAHUS	Allen Lutz, CFA
	Dentsply Sirona, Inc.	XRAY	XRAY US	Allen Lutz, CFA
	Doximity Inc	DOCS	DOCS US	Allen Lutz, CFA
	Teladoc Health	TDOC	TDOC US	Allen Lutz, CFA
UNDERPERFORM				
	GoodRx	GDRX	GDRX US	Allen Lutz, CFA
	Henry Schein	HSIC	HSIC US	Allen Lutz, CFA
	Owens & Minor	OMI	OMIUS	Allen Lutz, CFA
	Premier, Inc.	PINC	PINC US	Allen Lutz, CFA
	Walgreens Boots Alliance	WBA	WBA US	Allen Lutz, CFA



## **US - Healthcare Technology & Distribution Coverage Cluster**

Investment rating Company BofA Ticker Bloomberg symbol Analyst

## **Q**method <sup>su</sup> Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) $\times$ (1 – Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
•	Other LT Liabilities	
FV / FBITDA	Enterprise Value	Basic FBIT + Depreciation + Amortization

\*\*Monthod Shis the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

\*\*Modatabase\*\* is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

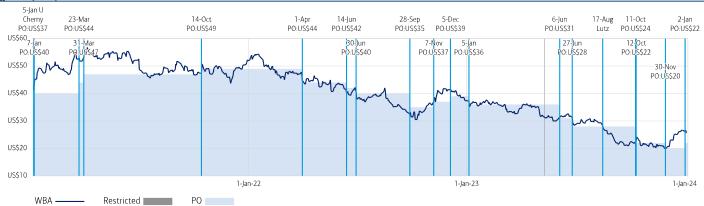
*IQ*profile<sup>SM</sup>, *IQ*method <sup>SM</sup> are service marks of Bank of America Corporation. *IQ*database<sup>®</sup> is a registered service mark of Bank of America Corporation.



## **Disclosures**

## **Important Disclosures**

#### Walgreens (WBA) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	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: Global Group (as of 31 Dec 2023)

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

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

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

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
D	> 100/	< 700/

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Walgreens.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Walgreens Boots Alli.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Walgreens Boots Alli.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Walgreens Boots Alli.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Walgreens Boots Alli.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Walgreens Boots Alli.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Walgreens.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Walgreens Boots Alli.



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

## **Other Important Disclosures**

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

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

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

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

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

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

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

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

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

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Instruments and Exchange Act in Japan, or its permitted (Instruments). Instruments and Exchange Act in Japan, or its permitted (Instruments) and its Instruments and Exchange Act in Japan, or its permitted (Instruments). Instruments and Exchange Act in Japan Act Instruments and Exchange Act in Japan Act Instruments and Exchange Act In

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

### General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including,



among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

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

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

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

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

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

#### BofA ESGMeter Methodology:

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

#### Copyright and General Information:

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 inform

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

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

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

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

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

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

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

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

