

Albemarle

Near-term pricing outlook remains weak; long-term demand still strong

Reiterate Rating: NEUTRAL | PO: 141.00 USD | Price: 117.50 USD

Several accounting adjustments boost 2024 EBITDA

ALB posted a 4Q EBITDA of ~\$315mn), much lower than our \$161mn and consensus' \$222mn., although the company notes that this figure included a ~\$600mn headwind from a lower-of-cost-or-market (LCM) pre-tax charge driven by lower lithium pricing and higher spodumene values in COGS. We expect LCM to be less punitive in future quarters as pricing bottoms and the Talison JV will reset pricing on a monthly basis rather than quarterly prior. ALB also adjusted its EBITDA definition to include the pre-tax earnings of the Talison JV rather than post-tax, which we estimate provides ~\$100mn boost. We raise our 2024 EBITDA to \$1.0bn from \$800mn prior, reflecting the Talison tax add-back and a ~\$1/kg LCE increase in 2024 realized price due to estimated contract floor benefits. Our EPS estimate increases modestly to \$1.68 from \$1.60 prior, due to ramping D&A. Without clarity in the lithium price outlook, we remain Neutral.

Lithium price bottom potentially in mid-2024

LCE inventory in China at the end January remained roughly comparable to the end of December (see Exhibit 1), but there appeared to be a shift to the battery producers, and thus moving downstream from the lithium conversion plants. Albemarle views current lithium pricing as significantly below reinvestment economics, but the company is not slowing operating rates as we had expected, and rather anticipates broad-based delays in new projects to drive a price inflection. We do model a price bottom in mid-2024, but with excess inventory and slow EV production in Q1, this bottoming path could drag out.

Capacity expansions will be needed to meet EV demand

Our longer-term lithium pricing forecast assumes sub-\$15/kg LCE near-term that bottoms in 2024, but gradually rebounding to \$20/kg LCE levels in 2027/2028, and \$25/kg in mid next-decade. This price recovery is based on expected strong demand in the BEV market – our global auto colleagues project 35% global BEV penetration by 2030, up from 11% in 2023. ALB is prioritizing near-term capacity expansions, with near-term commissioning of Meishan and Kemerton 1 & 2, and slowing capex for the Richburg, SC conversion facility and the NC Technology Park investments. Our PO rises to \$141 (\$138 prior), based on an NAV valuation of \$221 (\$219 prior) averaged with a 10x multiple (trimmed from 11x prior due to EBITDA adj) of 2024E EBITDA.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	21.95	15.22	1.68	6.06	10.74
GAAP EPS	22.82	13.36	1.68	6.06	10.74
EPS Change (YoY)	950.2%	-30.7%	-89.0%	260.7%	77.2%
Consensus EPS (Bloomberg)			7.42	12.27	15.68
DPS	1.60	1.60	1.66	1.71	1.77
Valuation (Dec)					
P/E	5.4x	7.7x	69.9x	19.4x	10.9x
GAAP P/E	5.1x	8.8x	69.9x	19.4x	10.9x
Dividend Yield	1.4%	1.4%	1.4%	1.5%	1.5%
EV / EBITDA*	5.1x	6.5x	17.3x	9.6x	6.5x
Free Cash Flow Yield*	5.2%	-6.7%	-2.5%	-12.1%	-18.3%

* For full definitions of *IQmethod*SM measures, see page 6.

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Refer to important disclosures on page 7 to 9. Analyst Certification on page 5. Price Objective Basis/Risk on page 5.

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Timestamp: 16 February 2024 08:33AM EST

16 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	138.00	141.00
2024E Rev (m)	4,958.7	5,224.1
2025E Rev (m)	6,758.0	6,782.8
2026E Rev (m)	7,499.5	7,623.3
2024E EPS	1.60	1.68
2025E EPS	6.39	6.06
2026E EPS	10.24	10.74
2024E DPS	1.67	1.66

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Stock Data

Price	117.50 USD
Price Objective	141.00 USD
Date Established	16-Feb-2024
Investment Opinion	C-2-7
52-Week Range	108.39 USD - 293.01 USD
Mrkt Val (mn) / Shares Out (mn)	12,385 USD / 105.4
Free Float	106.0%
Average Daily Value (mn)	340.01 USD
BofA Ticker / Exchange	ALB / NYS
Bloomberg / Reuters	ALB US / ALB.N
ROE (2024E)	2.1%
Net Dbt to Eqty (Dec-2023A)	33.9%
ESGMeter TM	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".

iQprofileSM Albemarle

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	18.7%	0.9%	0.8%	4.7%	6.3%
Return on Equity	38.0%	20.6%	2.1%	7.3%	12.0%
Operating Margin	33.7%	2.6%	4.6%	15.2%	21.0%
Free Cash Flow	646	(824)	(307)	(1,500)	(2,269)

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	0.7x	0.7x	7.0x	1.7x	1.4x
Asset Replacement Ratio	4.2x	5.0x	2.7x	3.9x	5.0x
Tax Rate	16.1%	174.4%	65.5%	22.0%	22.0%
Net Debt-to-Equity Ratio	21.0%	33.9%	38.9%	50.5%	64.7%
Interest Cover	20.1x	2.2x	1.3x	3.6x	4.1x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	7,320	9,617	5,224	6,783	7,623
% Change	120.0%	31.4%	-45.7%	29.8%	12.4%
Gross Profit	3,075	1,186	1,039	1,870	2,484
% Change	208.1%	-61.4%	-12.4%	80.0%	32.8%
EBITDA	3,476	2,766	1,036	1,861	2,742
% Change	299.1%	-20.4%	-62.5%	79.7%	47.3%
Net Interest & Other Income	(37)	(5)	(180)	(286)	(393)
Net Income (Adjusted)	2,586	1,793	198	713	1,267
% Change	976.0%	-30.7%	-89.0%	260.5%	77.6%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	2,690	1,573	198	713	1,267
Depreciation & Amortization	301	430	620	698	817
Change in Working Capital	(1,415)	(1,515)	644	(138)	(165)
Deferred Taxation Charge	93	101	0	0	0
Other Adjustments, Net	239	736	(69)	(54)	(107)
Capital Expenditure	(1,262)	(2,149)	(1,700)	(2,720)	(4,080)
Free Cash Flow	646	-824	-307	-1,500	-2,269
% Change	NM	NM	62.7%	-388.0%	-51.2%
Share / Issue Repurchase	3	0	0	0	0
Cost of Dividends Paid	(184)	(187)	(196)	(202)	(209)
Change in Debt	868	944	500	1,700	1,700

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	1,499	890	886	1,184	706
Trade Receivables	1,377	1,722	1,315	1,357	1,525
Other Current Assets	2,311	2,605	2,411	2,462	2,555
Property, Plant & Equipment	6,963	9,495	10,575	12,597	15,861
Other Non-Current Assets	3,307	3,559	3,654	3,587	3,577
Total Assets	15,457	18,271	18,841	21,187	24,224
Short-Term Debt	2	626	626	626	626
Other Current Liabilities	2,739	2,935	2,978	2,933	3,029
Long-Term Debt	3,215	3,541	4,041	5,741	7,441
Other Non-Current Liabilities	1,310	1,504	1,488	1,622	1,756
Total Liabilities	7,266	8,606	9,133	10,922	12,852
Total Equity	8,191	9,665	9,708	10,265	11,372
Total Equity & Liabilities	15,457	18,271	18,841	21,187	24,224

* For full definitions of iQmethodSM measures, see page 6.

Company Sector

Chemicals-Specialty

Company Description

Albemarle is among the largest and among the lowest cost producers in lithium which we expect will see meaningful volume expansion due to growth in electric vehicles.

Albemarle operates two other stable global specialty chemical businesses, Specialties and Refining Catalysts, in oligopolistic market structures with 30% EBITDA margins and low growth rates.

Investment Rationale

Albemarle's estimates have come under considerable pressure as the bank takes a more bearish stance on price given a forecasted supply overhang to lithium markets. At the forecasted level, ALB is likely to burn considerable cash in its pursuit of growth, which we suspect will weigh on valuations. However, we believe that much of this bearishness is already reflected in ALB's share price. Thus, we rate ALB Neutral.

Stock Data

Average Daily Volume 2,893,678

Quarterly Earnings Estimates

	2023	2024
Q1	10.32A	0.80E
Q2	7.33A	0.27E
Q3	2.74A	0.02E
Q4	-5.19A	0.60E

Glossary

LCE: Lithium Carbonate Equivalent

LCM: Lower-of-cost-or-market

JV: Joint Venture

EV: Electric Vehicle

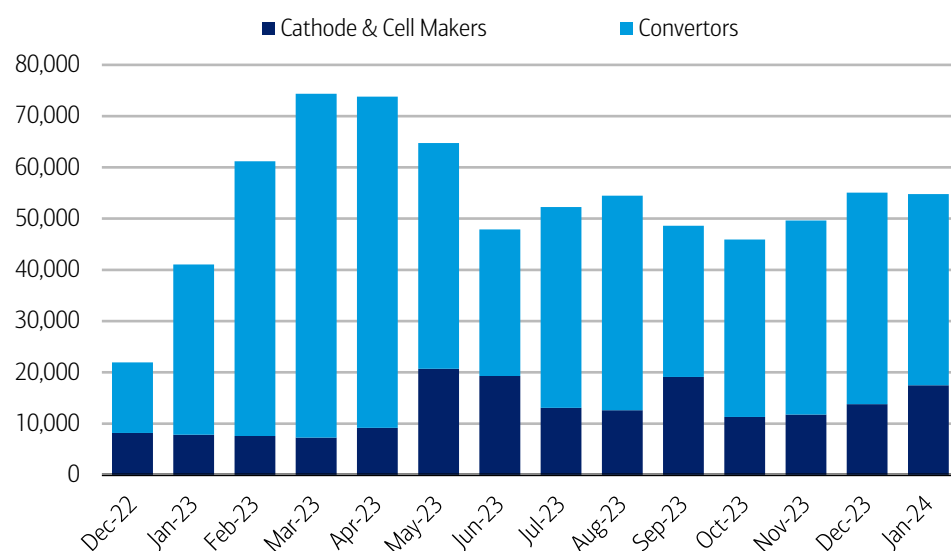
BEV: Battery Electric Vehicle

SC: South Carolina

NC: North Carolina

Exhibit 1: Total China Inventory Lithium Carbonate (mt)

January levels remained roughly comparable to December levels, but there appeared to be a shift to the battery producers



Source: SMM

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Exhibit 2: Albemarle Income Statement Summary

We are increasing our 2024 EBITDA estimate to \$1,036mn from \$791mn prior

Net Sales	2022	1Q23	2Q23	3Q23	4Q23	2023E	1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E
Energy Storage	\$4,661	\$1,944	\$1,763	\$1,697	\$1,675	\$7,079	\$499	\$541	\$606	\$991	\$2,637	\$4,073	\$4,791
Specialties	1,760	419	371	353	340	1,482	412	367	335	327	1,441	1,536	1,628
Ketjen (Catalysts)	900	218	236	261	341	1,056	244	256	283	362	1,146	1,174	1,204
Corporate & Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7,320	2,580	2,370	2,311	2,356	9,617	1,155	1,164	1,224	1,681	5,224	6,783	7,623
Adjusted EBITDA													
Energy Storage	3,032	1,406	932	407	(338)	2,407	130	141	157	258	685	1,503	2,321
Specialties	527	162	60	46	30	299	151	51	33	20	256	307	355
Ketjen (Catalysts)	29	15	43	15	31	104	27	53	27	43	150	165	180
Corporate & Other	(112)	13	(3)	(16)	(38)	(43)	(14)	(14)	(14)	(14)	(55)	(113)	(113)
Total	3,476	1,596	1,032	453	-315	2,766	294	232	203	307	1,036	1,861	2,742
Operating Income	2470	1102	140	-140	-850	252	2	19	49	168	238	1031	1604
Profit Before Tax	2433	1157	168	-158	-921	247	-43	-26	4	123	58	744	1211
Adjusted Net Income	2586	1216	864	323	-610	1793	94	32	2	70	198	713	1267



Exhibit 2: Albemarle Income Statement Summary

We are increasing our 2024 EBITDA estimate to \$1,036mn from \$791mn prior

Net Sales	2022	1Q23	2Q23	3Q23	4Q23	2023E	1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E
Diluted - Adjusted EPS	\$21.95	\$10.32	\$7.33	\$2.74	-\$5.19	\$15.22	\$0.80	\$0.27	\$0.02	\$0.60	\$1.68	\$6.06	\$10.74
Net Sales Growth													
Energy Storage	336.7%	319.2%	119.7%	20.0%	-15.4%	51.9%	-74.3%	-69.3%	-64.3%	-40.8%	-62.7%	54.4%	17.6%
Specialties	23.5%	-6.1%	-20.5%	-20.2%	-16.1%	-15.8%	-1.6%	-1.3%	-4.9%	-3.8%	-2.8%	6.6%	6.0%
Ketjen (Catalysts)	18.2%	0.0%	12.1%	10.6%	45.0%	17.4%	12.1%	8.6%	8.6%	6.1%	8.5%	2.5%	2.5%
Total	120.0%	128.8%	60.2%	10.5%	-10.1%	31.4%	-55.2%	-50.9%	-47.0%	-28.7%	-45.7%	29.8%	12.4%
Adjusted EBITDA Margin													
Energy Storage	65.1%	72.3%	52.9%	24.0%	-20.2%	34.0%	26.0%	26.0%	26.0%	26.0%	26.0%	36.9%	48.4%
Specialties	30.0%	38.7%	16.2%	13.1%	8.8%	20.1%	36.7%	14.0%	9.9%	6.1%	17.8%	20.0%	21.8%
Ketjen (Catalysts)	3.2%	6.7%	18.2%	5.8%	9.2%	9.8%	11.0%	20.8%	9.4%	12.0%	13.1%	14.0%	15.0%
Total	47.5%	61.8%	43.6%	19.6%	-13.4%	28.8%	25.5%	19.9%	16.6%	18.3%	19.8%	27.4%	36.0%

Source: Company financials, BofA Global Research estimates

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Price objective basis & risk

Albemarle (ALB)

Our \$141 PO is based on the average of two methodologies, a comprehensive NAV model and a multiple against our 2024E EBITDA. The NAV model generates a value of \$221/share. For our NAV, we use WACC of 9.20% and terminal growth rate of 2%. The EBITDA methodology uses an 10x multiple against our 2024E EBITDA forecast which drives a price of \$60/share. This 10x is a premium for commodity companies, but reflects the trough nature of the 2024 earnings profile, and implies a more normal, 5.5x our 2025 EBITDA estimate.

Upside risks to our price objective are higher than anticipated selling prices in Lithium, new capacity announcements at ALB, stronger than expected ramp-ups in production and increasing signs of electric vehicle demand.

Downside risks to our price objective are slower than expected demand growth for consumer electronics and electric vehicles, new supply additions at peers, a potential bidding war for acquisition targets, and price pressure in the lithium and bromine businesses.

Analyst Certification

I, Steve Byrne, 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 - Chemicals Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Air Products	APD	APD US	Steve Byrne, CFA
	Axalta Coating Systems	AXTA	AXTA US	Steve Byrne, CFA
	Bunge Limited	BG	BG US	Salvator Tiano, CFA
	CF Industries	CF	CF US	Steve Byrne, CFA
	Dow Inc	DOW	DOW US	Steve Byrne, CFA
	Eastman Chemical Co	EMN	EMN US	Salvator Tiano, CFA
	Element Solutions Inc.	ESI	ESI US	Steve Byrne, CFA
	Green Plains	GPPE	GPPE US	Salvator Tiano, CFA
	Huntsman Corp	HUN	HUN US	Salvator Tiano, CFA
	Linde	LIN	LIN US	Steve Byrne, CFA
	Linde	LINGY	LIN GY	Steve Byrne, CFA
	Nutrien	NTR	NTR US	Steve Byrne, CFA
	Olin Corp	OLN	OLN US	Steve Byrne, CFA
	PPG Industries Inc.	PPG	PPG US	Steve Byrne, CFA
	Sigma Lithium	SGML	SGML US	Steve Byrne, CFA
	The Mosaic Company	MOS	MOS US	Steve Byrne, CFA
NEUTRAL				
	Albemarle	ALB	ALB US	Steve Byrne, CFA
	Archer-Daniels-Midland Company	ADM	ADM US	Salvator Tiano, CFA
	Corteva	CTVA	CTVA US	Steve Byrne, CFA
	Ecolab Inc	ECL	ECL US	Steve Byrne, CFA
	International Flavors & Fragrances	IFF	IFF US	Salvator Tiano, CFA
	LyondellBasell Industries	LYB	LYB US	Steve Byrne, CFA
	Origin Materials	ORGN	ORGN US	Steve Byrne, CFA
UNDERPERFORM				
	Celanese Corporation	CE	CE US	Salvator Tiano, CFA
	DuPont	DD	DD US	Steve Byrne, CFA
	FMC Corporation	FMC	FMC US	Steve Byrne, CFA
	RPM International Inc	RPM	RPM US	Steve Byrne, CFA



US - Chemicals Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Sherwin-Williams Company	SHW	SHW US	Steve Byrne, CFA
	Westlake Chemical Partners, LP	WLKP	WLKP US	Steve Byrne, CFA
	Westlake Corp	WLK	WLK US	Steve Byrne, CFA

iQ^{method} SM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

EV / EBITDA

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

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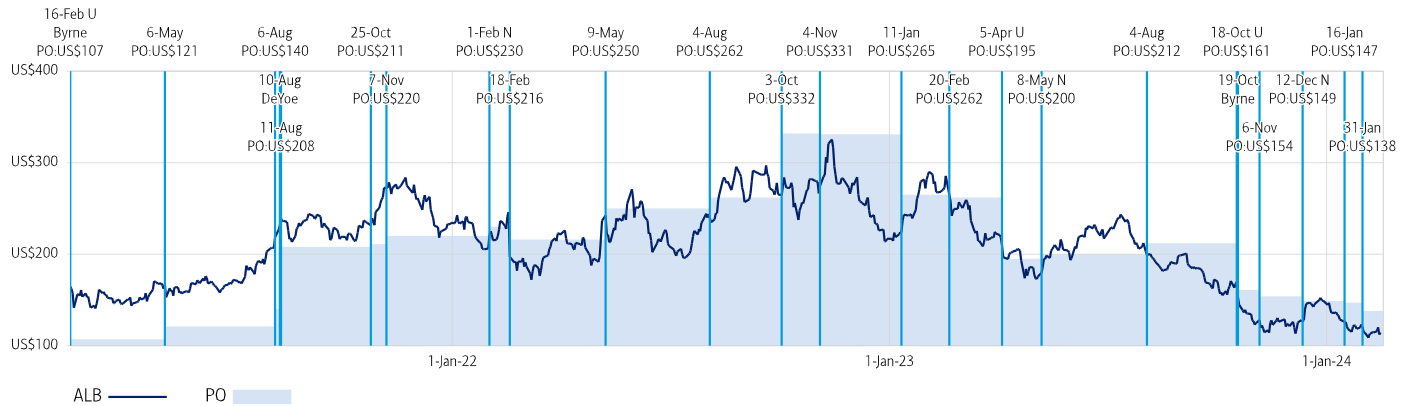
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Disclosures

Important Disclosures

Albemarle (ALB) 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: Chemicals Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	66	47.83%	Buy	33	50.00%
Hold	33	23.91%	Hold	16	48.48%
Sell	39	28.26%	Sell	20	51.28%

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

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

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

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

^{R2} 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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