

Dow Inc

Reiterating Buy as signs of recovery strengthen; potential upside from Red Sea

Reiterate Rating: BUY | PO: 60.00 USD | Price: 54.94 USD

4Q23 results - a miss we actually like

Despite DOW's 4Q EBITDA and 1Q24 guidance trailed estimates, there were indicators of an earnings recovery, consistent with our view. The signs of troughing are becoming clearer; after last quarter's sequential volume increase, now volumes dropped by just 1% q/q despite seasonal headwinds and were actually up 2% y/y (see Ex 1). Management commentary sounded more positive vs the more challenging outlook in prior calls. DOW noted that polyethylene (PE) customer inventories appear to be tight, margins should expand for beaten down chemistries such as MDI (methylene diphenyl diisocyanate) and MEG (monoethylene glycol), and market conditions could allow a return to midcycle earnings in late-2024 or 2025. Mgmt also offered a preliminary assessment of 2024 EBITDA, seen at \$6.4-6.5bn – a figure we believe is above what many investors expected. We reiterate our Buy rating and expect a significant earnings recovery.

Estimates little changed, still modeling \$8bn+ '25 EBITDA

Our model revisions for 2024 reflect an earlier/stronger recovery in II&I (MDI/MEG margin expansion, lower energy costs, volumes), but a slower recovery in P&MC (mainly on continued margin pressure in siloxanes). Our 1Q24E EBITDA is lowered to \$1,284mn from \$1,319mn, slightly above DOW's ~\$1.25bn forecast. Our 2024E EBITDA is trimmed by ~\$35mn to \$6,541mn, while our 2025 estimate is lowered by \$25mn to \$8,185mn. We are also introducing our 2026 estimate of \$8.52bn – a figure that we believe could mark the cycle peak as PE fundamentals could soften again around 2026-27 from new capacity additions globally.

Red Sea disruptions could add to upside

While DOW has not baked in any benefit from the Red Sea disruptions in its guidance, our forecast assumes a very modest benefit in 1H. We believe that the disruptions, mainly affecting trade from the Middle East and Asia to Europe, should boost margins for European producers (as imports retreat) as well as lift export volumes from the US. We are already seeing spot pricing move higher for PE and epoxies, for example. We believe that DOW's European operations specifically could benefit from reduced imports of MDI, caustic, coating monomers, siloxanes, and PE into the region, while Dow's US business could see better demand for export PE.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	6.30	2.27	3.25	5.20	5.65
GAAP EPS	6.31	0.83	3.25	5.20	5.65
EPS Change (YoY)	-30.1%	-64.0%	43.2%	60.0%	8.7%
Consensus EPS (Bloomberg)			3.14	4.30	5.41
DPS	2.80	2.80	2.80	2.88	2.92
Valuation (Dec)					
P/E	8.7x	24.2x	16.9x	10.6x	9.7x
GAAP P/E	8.7x	66.2x	16.9x	10.6x	9.7x
Dividend Yield	5.1%	5.1%	5.1%	5.2%	5.3%
EV / EBITDA*	7.8x	13.5x	11.2x	8.9x	8.5x
Free Cash Flow Yield*	14.7%	7.3%	3.8%	6.7%	8.1%
* For full definitions of <i>IQ</i> method SM measures, see page 5.					

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Refer to important disclosures on page 6 to 8. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

Timestamp: 26 January 2024 05:55AM EST

26 January 2024

Equity

Key Changes		
(US\$)	Previous	Current
2024E Rev (m)	47,217.8	46,089.1
2025E Rev (m)	50,822.1	49,593.5
2026E Rev (m)	NA	51,138.6
2024E EPS	3.55	3.25
2025E EPS	5.30	5.20
2026E EPS	NA	5.65

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Stock Data

Price	54.94 USD
Price Objective	60.00 USD
Date Established	16-Jan-2024
Investment Opinion	B-1-7
52-Week Range	47.26 USD - 60.88 USD
Mrkt Val (mn) / Shares Out	38,535 USD / 701.4
(mn)	
Free Float	99.7%
Average Daily Value (mn)	239.96 USD
BofA Ticker / Exchange	DOW / NYS
Bloomberg / Reuters	DOW US / DOW.N
ROE (2024E)	12.4%
Net Dbt to Eqty (Dec-2023A)	63.0%
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".

II&I: Industrial Intermediates & Infrastructure

PM&C: Performance Materials & Coatings

iQprofile[™]Dow Inc

Return on Capital Employed 9.8% 4.8% 6.1% 8.1% 19.2% 19.2% 17.4% 19.2%	iQmethod [™] – Bus Performance*					
Return on Equity 23.5% 8.2% 12.4% 19.2% 10.3% 11.1% 6.5% 8.1% 10.3% 17.1% 6.5% 8.1% 10.3% 17.1% 6.5% 8.1% 10.3% 17.1% 6.5% 8.1% 10.3% 17.1% 6.5% 8.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.1% 10.3% 17.2% 10.3% 10.	(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Operating Margin 11.196 6.596 8.196 10.396 1	Return on Capital Employed	9.8%	4.8%	6.1%	8.1%	8.4%
Free Cash Flow Free Cash Flow S,663 2,808 1,480 2,575 Qmethod	Return on Equity	23.5%			19.2%	19.5%
Qmethod Quality of Earnings* Queen Quality of Earnings* Queen Quality of Earnings* Queen Quality of Earnings* Queen	Operating Margin	11.1%	6.5%	8.1%	10.3%	10.49
CLEST CLES	Free Cash Flow	5,663	2,808	1,480	2,575	3,110
Cash Realization Ratio 1.6x 3.2x 2.0x 1.6x Asset Replacement Ratio 0.8x 1.0x 1.3x 1.3x Tax Rate 24.7% 24.7% 26.0% 26.0% 2 Net Debt-to-Equity Ratio 52.6% 63.0% 69.9% 68.0% 6 Income Statement Data (Dec) (IUSS Millions) 2022A 2023A 2024E 2025E 2 Sales 56,902 44,622 46,089 49,593 5 Sales 56,902 44,622 46,089 49,593 5 Gross Profit 91,69 56,42 6,514 7,949 9 % Change -19,7% -38,5% 15,5% 22,0% 8 BBITDA 93,48 5,589 6,507 8,185 9 6,507 8,185 9 6,507 8,185 9 6,507 8,185 9 6,507 8,185 9 6,507 8,185 9 6,507 8,185 9 6,507	i Q method [™] – Quality of Earnings*					
Asset Replacement Ratio	(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Tax Rate	Cash Realization Ratio	1.6x	3.2x	2.0x	1.6x	1.6
Net Debt-to-Equity Ratio 52.6% 63.0% 69.9% 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 69.5% 3.9x 5.0x 7.1x 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 7.1x 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 68.0% 7.1x 68.0% 68.0% 68.0% 7.1x 68.0% 68.0% 68.0% 7.1x 68.0% 68.0% 7.1x 68.0% 68.0% 7.1x 68.0% 68.0% 7.1x 68.0% 69.0%	Asset Replacement Ratio	0.8x	1.0x	1.3x	1.3x	1.3
Interest Cover 9.5x 3.9x 5.0x 7.1x	Tax Rate	24.7%	24.7%	26.0%	26.0%	26.09
Common C	Net Debt-to-Equity Ratio	52.6%	63.0%	69.9%	68.0%	63.19
Sales 56,902 44,622 46,089 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 49,593 59,604 6,0689 6,007 6,0689 6,067 6,0689 6,078 6,0789 6,078 6,078 6,078 6,078 6,0789 6,078	Interest Cover	9.5x	3.9x	5.0x	7.1x	7.4
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Net Income (Adjusted)	EBITDA	9,348	5,389	6,507	8,185	8,520
Net Income (Adjusted) 4,572 1,603 2,290 3,604 3 9 6 6 4 9 5 7.4 6 6 9 6 6 9 6 6 9 6 6	% Change	-24.4%	-42.4%	20.7%	25.8%	4.19
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						13,64
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Total Equity & Liabilities 60,603 57,967 58,491 59,554 60					•	20,880 60,798

Company Sector

Chemicals-Major

Company Description

Dow is a leading materials science company with \$46bn in sales in 2023 and was formed as a result of the merger of Dow and DuPont in 2017 and subsequent spin in 2019. The company is organized into three principal divisions of Performance Materials & Coatings (20% of EBITDA), Industrial Intermediates & Infrastructure (10%), and Packaging & Specialty Plastics (70%).

Investment Rationale

We rate Dow shares at Buy, based on (1) our petrochemical sentiment indicator moving into positive territory in late-2023 (historically linked to stock outperformance), (2) our view that petrochemical margins and volumes have largely troughed in 2H23, and (3) our projection of a 50% EBITDA growth by 2025 (over 2023) as the supply/demand balance of many chemical chains improves and destocking reverses.

Stock Data	
Average Daily Volume	4,367,670

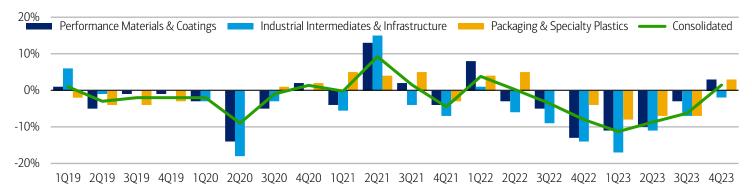
		-
Quarterly	Larnings	Estimates

	2023	2024
Q1	0.59A	0.45E
Q2	0.76A	0.77E
Q3	0.49A	1.04E
Q4	0.43A	1.00E



Exhibit 1: DOW y/y volume change

Most businesses saw sequential improvements in 3Q, and we expect volumes to turn positive on a y/y basis in Q4



Source: Company reports, BofA Global Research

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Exhibit 2: Dow Income Statement Summary

We still expect strong earnings growth in 2024

Net Sales	2021	2022	1023	2023	3023	4023	2023	1024E	2Q24E	3Q24E	4Q24E	2024E	2025E
Performance Materials & Coatings	\$9,672	\$10,764	\$2,276	\$2,197	\$2,130	\$1,894	\$8,497	\$2,035	\$2,338	\$2,386	\$2,083	\$8,842	\$9,638
Industrial Intermediates & Infrastructure	16,851	16.606	3.378	3.177	3.035	2,948	12,538	2.987	3.439	3.369	3,257	13,052	14,252
Packaging & Specialty Plastics	28,128	29,260	6,114	5,940	5,454	5,641	23,149	5.711	5,944	5,962	6,138	23,755	25,228
Corporate	317	272	83	106	111	138	438	75	105	110	150	440	475
Consolidated Total	54,968	56,902	11,851	11,420	10,730	10,621	44,622	10,808	11,826	11,827	11,628	46,089	49,593
Adjusted EBIT													
Performance Materials & Coatings	866	1,328	35	66	179	-61	219	51	122	161	109	443	748
Industrial Intermediates & Infrastructure	2,282	1,418	123	-35	21	15	124	47	123	211	220	602	1,236
Packaging & Specialty Plastics	6,638	4,110	642	918	476	664	2,700	566	721	838	842	2,967	3,711
Corporate	-260	-266	-92	-64	-50	-59	-265	-70	-70	-68	-67	-275	-280
Consolidated Total	9,526	6,590	708	885	626	559	2,778	594	896	1,142	1,104	3,737	5,415
Depreciation & Amortization	2,842	2,758	648	649	657	657	2,611	690	695	695	690	2,770	2,770
Adjusted EBITDA	12,368	9,348	1,356	1,534	1,283 1,483	1,216	5,389	1,284	1,591	1,837	1,794	6,507	8,185
Profit Before Tax	7,877	5,833	647	836	485	412	2,380	485	776	991	954	3,207	4,580
Adjusted Net Income	6,750	4,572	415	537	345	306	1,603	320	539	730	701	2,290	3,604
Diluted - Adjusted EPS	\$9.01	\$6.30	\$0.59	\$0.75	\$0.49	\$0.43	\$2.27	\$0.45	\$0.77	\$1.04	\$1.00	\$3.25	\$5.20
Net Sales Growth													
Performance Materials & Coatings	22%	11%	-25%	-27%	-20%	-8%	-21%	-11%	6%	12%	10%	4%	9%
Industrial Intermediates & Infrastructure	40%	-1%	-25%	-27%	-25%	-19%	-24%	-12%	8%	11%	10%	4%	9%
Packaging & Specialty Plastics	54%	4%	-20%	-28%	-26%	-7%	-21%	-7%	0%	9%	9%	3%	6%
Consolidated Total	43%	4%	-22%	-28%	-25%	-11%	-22%	-9%	4%	10%	9%	3%	8%
Adjusted EBIT Margin (Ex-Equity Earnings)													
Performance Materials & Coatings	9%	12%	1%	3%	8%	-4%	2%	2%	5%	7%	5%	5%	8%
Industrial Intermediates & Infrastructure	11%	9%	6%	2%	3%	2%	3%	3%	5%	7%	8%	6%	8%
Packaging & Specialty Plastics	22%	13%	10%	15%	8%	11%	11%	10%	12%	13%	13%	12%	14%
Consolidated Total	16%	11%	6%	8%	6%	5%	6%	6%	8%	9%	9%	8%	10%

Source: Company Reports and BofA Global Research Estimates

BofA GLOBAL RESEARCH

Price objective basis & risk

Dow Inc (DOW)

Our PO of \$60 is based on a 8.5x 2024E EV/EBITDA multiple. The multiple is a premium to the 7x average forward EBITDA multiple realized by DOW and its closest peer over the last five years, reflecting our view of a strong earnings recovery ahead.

Upside risks to our price objective are improvement in the plastics outlook, new product growth, additional productivity gains, higher oil prices, and a weaker USD.

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				
	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	GPRE	GPRE 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				
	Air Products	APD	APD US	Steve Byrne, CFA
	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
	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
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IQmethod[™] 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 Operating Margin	Net Income Operating Profit	Shareholders' Equity Sales
Earnings Growth Free Cash Flow	Expected 5 Year CAGR From Latest Actual Cash Flow From Operations — Total Capex	N/A N/A
Quality of Earnings Cash Realization Ratio Asset Replacement Ratio Tax Rate Net Debt-To-Equity Ratio Interest Cover	Numerator Cash Flow From Operations Capex Tax Charge Net Debt = Total Debt — Cash & Equivalents EBIT	Denominator Net Income Depreciation Pre-Tax Income Total Equity Interest Expense
Valuation Toolkit Price / Earnings Ratio Price / Book Value Dividend Yield Free Cash Flow Yield Enterprise Value / Sales	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	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

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

Methods is 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.

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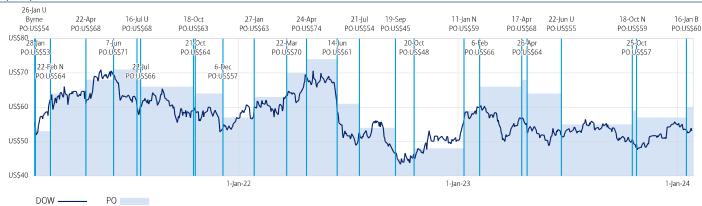
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Important Disclosures

Dow (DOW) Price Chart



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

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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%
nderperform	N/A	≥ 20%

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