

PPG Industries Inc.

Multiple earnings growth drivers but trading well below coatings peers

Reiterate Rating: BUY | PO: 161.00 USD | Price: 141.39 USD

4Q results in line, 1Q guide looks conservative

PPG posted adj EPS of \$1.53, above its \$1.44-1.50 guidance, and just under our \$1.55 estimate, but with a gross profit well above our expectations, driven by positive sales growth in 4 businesses (aero, auto OEM, refinish, P&M) more than offsetting declines in 4 others (industrial, packaging, both architectural segments). Gross margin of 42.1% was the highest since 1Q21, but SG&A was also up +18% y/y, due to higher performance-based comp, \$100mn inflation, and growth initiatives. Thus, while we expect sales to improve in 2024 (see below), we expect SG&A / sales to remain higher than it was in 2023 (ex-4Q). We view PPG's EPS guide of \$1.80-1.87 for 1Q as conservative.

Several growth drivers in 2024

We have a constructive view about PPG's ability to drive revenue growth due to several factors, most notably due to the focus from new CEO Tim Knavish on cross selling between businesses (e.g. 5,200 Comex concessionaires now also sell refinish and powder coatings along with architectural) and to globalize all businesses. We also expect technology advances to drive share gains, such as the now 2000 installations of Moonwalk automated mixing machines for Refinish. PPG reported to be gaining share in pro paint in the US from the HD partnership, and also in auto OEMs, particularly in China, as PPG's coating content per EV has been increasing from technology advances. PPG's R&D platform remains focused on transferring new technologies between businesses.

Expecting LDD earnings growth in 2024

Our 2024 EPS estimate of \$8.50 remains unchanged, representing 11% EPS growth, driven by modest cost deflation (we model 2% for FY24), price improvement in Industrial, and volume improvements across most businesses, and materially in Industrial coatings as we expect auto production to come in higher for the full year and expect continued share gains. Our PO remains \$161, based on the average of our DCF-derived present value (8.3% WACC and 3.0% term. growth) and an unchanged 17.5x P/E applied to FY24E EPS. We note that PPG is currently trading at 16.6x our 2024E EPS, below all of its coatings peers and our broader Chems coverage average, but we expect PPG's EPS to grow at a rate similar to both groups (see Exhibit 2). We reiterate our Buy.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	6.05	7.67	8.50	9.30	10.01
GAAP EPS	4.34	5.35	8.05	8.85	9.56
EPS Change (YoY)	-13.6%	26.8%	10.8%	9.4%	7.6%
Consensus EPS (Bloomberg)			8.47	9.37	10.24
DPS	2.42	2.54	2.67	2.80	2.94
Valuation (Dec)					
P/E	23.4x	18.4x	16.6x	15.2x	14.1x
GAAP P/E	32.6x	26.4x	17.6x	16.0x	14.8x
Dividend Yield	1.7%	1.8%	1.9%	2.0%	2.1%
EV / EBITDA*	16.7x	13.7x	12.4x	11.5x	10.9x
Free Cash Flow Yield*	1.3%	5.5%	4.9%	5.9%	7.2%

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

21 January 2024

Equity

Key Changes

(US\$)	Previous	Current
2024E Rev (m)	18,775.4	18,813.5
2025E Rev (m)	19,368.8	19,364.8
2026E Rev (m)	19,951.3	19,894.0
2025E EPS	9.44	9.30
2026E EPS	10.21	10.01

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Stock Data

Price	141.39 USD
Price Objective	161.00 USD
Date Established	16-Jan-2024
Investment Opinion	B-1-7
52-Week Range	120.33 USD - 152.89 USD
Mkt Val (mn) / Shares Out (mn)	33,905 USD / 239.8
Free Float	99.8%
Average Daily Value (mn)	247.96 USD
BofA Ticker / Exchange	PPG / NYS
Bloomberg / Reuters	PPG US / PPG.N
ROE (2024E)	24.7%
Net Dbt to Eqty (Dec-2023A)	58.4%
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".

OEM = Orig Equipment Manufacturer

P&M = Protective & Marine

HD = Home Depot

EV = Electric Vehicle

LDD = Low Double Digit %

MSD = Mid Single Digit

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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: 21 January 2024 08:34PM EST

iQprofileSM PPG Industries Inc.

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	8.7%	11.0%	11.9%	12.6%	13.0%
Return on Equity	22.3%	25.7%	24.7%	23.7%	22.7%
Operating Margin	10.3%	12.8%	14.1%	14.9%	15.5%
Free Cash Flow	445	1,862	1,651	2,014	2,425

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	0.7x	1.3x	1.1x	1.1x	1.2x
Asset Replacement Ratio	1.3x	1.4x	1.5x	1.1x	1.1x
Tax Rate	21.8%	21.9%	23.8%	23.8%	23.8%
Net Debt-to-Equity Ratio	85.2%	58.4%	46.6%	36.1%	23.8%
Interest Cover	16.1x	21.8x	29.4x	26.0x	30.7x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	17,652	18,246	18,814	19,365	19,894
% Change	5.1%	3.4%	3.1%	2.9%	2.7%
Gross Profit	6,652	7,539	8,018	8,406	8,726
% Change	-0.1%	13.3%	6.4%	4.8%	3.8%
EBITDA	2,378	2,893	3,201	3,449	3,633
% Change	-6.3%	21.7%	10.7%	7.7%	5.3%
Net Interest & Other Income	(113)	(107)	(90)	(111)	(100)
Net Income (Adjusted)	1,435	1,820	2,010	2,177	2,321
% Change	-14.2%	26.8%	10.5%	8.3%	6.6%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	1,310	1,701	1,903	2,071	2,217
Depreciation & Amortization	554	558	558	558	558
Change in Working Capital	(556)	405	(406)	(386)	(121)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	(345)	(253)	196	196	196
Capital Expenditure	(518)	(549)	(600)	(425)	(425)
Free Cash Flow	445	1,862	1,651	2,014	2,425
% Change	-62.6%	318.5%	-11.4%	22.0%	20.4%
Share / Issue Repurchase	(190)	(100)	(200)	(400)	(400)
Cost of Dividends Paid	(570)	(598)	(631)	(655)	(682)
Change in Debt	351	(740)	(500)	(500)	(500)

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	1,099	1,514	1,434	1,493	1,937
Trade Receivables	3,303	3,279	3,561	3,765	3,868
Other Current Assets	2,771	2,638	2,616	2,794	2,838
Property, Plant & Equipment	3,328	3,471	4,080	4,514	4,948
Other Non-Current Assets	10,243	10,542	10,237	9,936	9,637
Total Assets	20,744	21,444	21,929	22,502	23,228
Short-Term Debt	313	306	306	306	306
Other Current Liabilities	4,408	4,748	4,660	4,718	4,808
Long-Term Debt	6,503	5,748	5,248	4,748	4,248
Other Non-Current Liabilities	2,811	2,870	2,870	2,870	2,870
Total Liabilities	14,035	13,672	13,084	12,642	12,232
Total Equity	6,709	7,772	8,844	9,860	10,995
Total Equity & Liabilities	20,744	21,444	21,929	22,502	23,228

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

Company Sector

Chemicals-Major

Company Description

PPG Industries is a global supplier of industrial and performance coatings with 2022 sales of \$17.7 billion. PPG has about 150 production facilities worldwide, including subsidiaries, joint ventures and equity affiliates, and employs more than 40,000 people.

Investment Rationale

PPG is a consistent cash flow generator and an industry leader in an attractive specialty chemical space. We see strong growth opportunities through acquisitions and we expect near-term earnings strength from a strong industrial recovery and improvement in their Performance segment as auto refinish and aerospace volumes improve. Valuation remains attractive given this outsized growth trajectory and we expect near term raw material inflation to be offset by currency tailwinds.

Stock Data

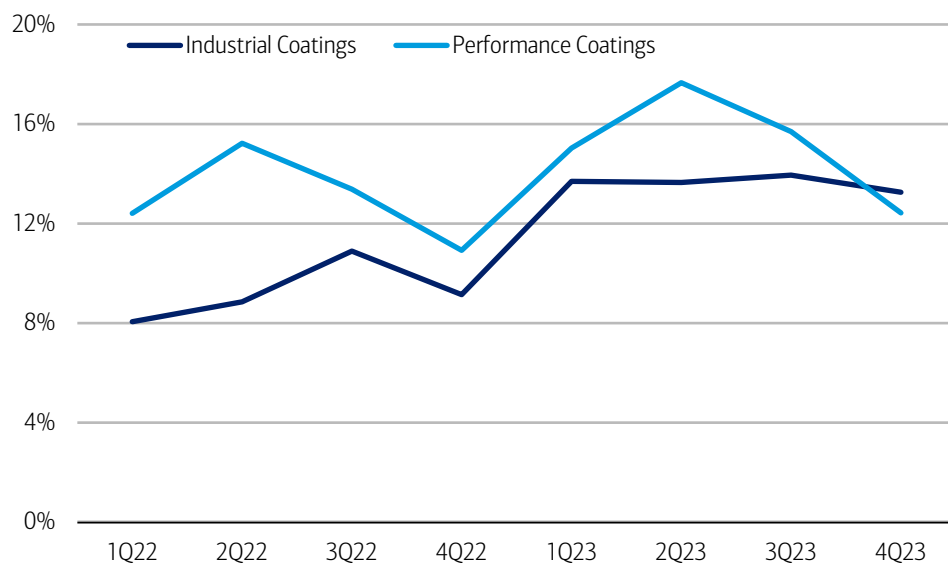
Average Daily Volume 1,753,750

Quarterly Earnings Estimates

	2023	2024
Q1	1.82A	1.90E
Q2	2.25A	2.52E
Q3	2.07A	2.26E
Q4	1.53A	1.82E

Exhibit 1: Operating Margin by Segment

PPG has increased its operating margin in both segments y/y



Source: Company materials, BofA Global Research

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Exhibit 2: P/E and EPS Growth Analysis

PPG trades below its coatings peers despite 2024E EPS Growth close to the coatings average and above the coverage group average

Ticker	P / 2024E EPS	2024E EPS Growth (y/y)
ADM	11.3x	-17%
ALB	29.2x	-81%
APD	19.8x	14%
AXTA	18.0x	14%
BG	8.3x	-13%
CE	11.9x	36%
CF	11.3x	-19%
CTVA	14.7x	18%
DD	19.1x	11%
DOW	14.9x	59%
ECL	32.5x	18%
EMN	10.7x	28%
ESI	16.4x	10%
FMC	13.2x	9%
GPPE	36.7x	NM
HUN	16.1x	146%
IFF	18.9x	22%
LIN	25.7x	12%
LYB	10.1x	10%
MOS	10.4x	-14%
NTR	11.4x	-4%
OLN	15.7x	-15%
PPG	16.6x	11%
RPM	21.7x	16%
SGML	32.7x	NM
SHW	27.0x	9%
WLK	21.0x	-22%
Avg	18.3x	10%

Source: BofA Global Research estimates

Note: GPPE 2024 EPS Growth is not measurable due to 2023 EPS being negative, and SGML 2024 EPS Growth is not measurable due to 1H23 being non-operational and thus EPS being negative

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Exhibit 3: PPG Income Statement Summary

Values in \$millions, except for per share values

Net Sales:	2022	1Q23	2Q23	3Q23	4Q23	2023	1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E
Industrial Coatings	\$6,958	\$1,752	\$1,831	\$1,764	\$1,735	\$7,082	\$1,750	\$1,870	\$1,822	\$1,829	\$7,269	\$7,532	\$7,765
Performance and Applied Coatings	10,694	2,628	3,041	2,880	2,615	11,164	2,718	3,102	2,974	2,750	11,544	11,833	12,129
Total - Coatings	17,652	4,380	4,872	4,644	4,350	18,246	4,468	4,971	4,796	4,579	18,814	19,365	19,894
Glass	0	0	0	0	0	0	0	0	0	0	0	0	0
Consolidated Net Sales	17,652	4,380	4,872	4,644	4,350	18,246	4,468	4,971	4,796	4,579	18,814	19,365	19,894
Change	5.1%	1.7%	3.9%	3.9%	3.9%	3.4%	2.0%	2.0%	3.3%	5.3%	3.1%	2.9%	2.7%
EBITDA	2,378	701	835	752	605	2,893	733	929	839	701	3,201	3,449	3,633
EBITDA Margin	13.5%	16.0%	17.1%	16.2%	13.9%	15.9%	16.4%	18.7%	17.5%	15.3%	17.0%	17.8%	18.3%
Operating Income:	643	240	250	246	230	966	234	282	277	264	1,057	1,174	1,263
Industrial Coatings	643	240	250	246	230	966	234	282	277	264	1,057	1,174	1,263
Performance and Applied Coatings	1,399	395	537	452	325	1,709	450	587	502	377	1,916	2,057	2,161
Total - Coatings	2,042	635	787	698	555	2,675	684	869	779	641	2,973	3,231	3,424
Glass	0	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated, Corporate & Other	(218)	(67)	(85)	(88)	(100)	(340)	(90)	(80)	(80)	(80)	(330)	(340)	(349)
Operating Income	1,824	568	702	610	455	2,335	594	789	699	561	2,643	2,891	3,075
Change	-7.7%	39.6%	28.3%	23.2%	21.3%	28.0%	4.5%	12.4%	14.7%	23.3%	13.2%	9.4%	6.4%
Net Interest Expense	113	34	35	25	13	107	15	25	25	25	90	111	100
Pretax Income	1,711	534	667	585	442	2,228	579	764	674	536	2,553	2,780	2,975
Income Taxes	373	124	156	112	96	488	145	183	155	123	607	660	707
Tax Rate	21.8%	23.2%	23.4%	19.1%	21.7%	21.9%	25.0%	24.0%	23.0%	23.0%	23.8%	23.8%	23.8%
Minority Interest	28	9	7	10	13	39	11	11	11	11	44	48	51
Net Income from continuing operations	1,310	401	504	463	333	1,701	423	570	508	402	1,903	2,071	2,217
Nonrecurring Items	(282)	(137)	(14)	(37)	(243)	(431)	0	0	0	0	0	0	0
Reported Net Income	1,028	264	490	426	90	1,270	423	570	508	402	1,903	2,071	2,217
Fully Diluted Earnings Per Share	\$6.05	\$1.82	\$2.25	\$2.07	\$1.53	\$7.67	\$1.90	\$2.52	\$2.26	\$1.82	\$8.50	\$9.30	\$10.01
Change	-13.6%	32.4%	24.6%	24.4%	25.8%	26.7%	4.3%	12.0%	9.3%	18.6%	10.8%	9.4%	7.7%
Diluted Shares Outstanding (Million)	237.3	236.9	237.3	237.5	237.3	237.3	236.9	236.6	236.3	236.0	236.5	234.0	231.9
Segment Sales Growth:													
Industrial Coatings	8%	1%	4%	0%	2%	2%	0%	2%	3%	5%	3%	4%	3%
Performance and Applied Coatings	3%	2%	4%	6%	5%	4%	3%	2%	3%	5%	3%	3%	3%
Consolidated Net Sales	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Operating Margins													
Industrial Coatings	9.2%	13.7%	13.7%	13.9%	13.3%	13.6%	13.4%	15.1%	15.2%	14.4%	14.5%	15.6%	16.3%
Performance and Applied Coatings	13.1%	15.0%	17.7%	15.7%	12.4%	15.3%	16.6%	18.9%	16.9%	13.7%	16.6%	17.4%	17.8%
Total - Coatings	11.6%	14.5%	16.2%	15.0%	12.8%	14.7%	15.3%	17.5%	16.3%	14.0%	15.8%	16.7%	17.2%
Unallocated, Corporate & Other	-1.2%	-1.5%	-1.7%	-1.9%	-2.3%	-1.9%	-2.0%	-1.6%	-1.7%	-1.7%	-1.8%	-1.8%	-1.8%
Operating Income	10.3%	13.0%	14.4%	13.1%	10.5%	12.8%	13.3%	15.9%	14.6%	12.3%	14.1%	14.9%	15.5%

Source: Company data, BofA Global Research estimates

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Price objective basis & risk

PPG Industries Inc. (PPG)

Our \$161 price objective is based on an average of a 3-stage DCF analysis (WACC of 8.3% and terminal growth rate of 3.0%) and a P/E multiple of 17.5x as applied to our 2024 EPS estimate.

Upside risks to our PO are an inflection in price momentum, an acceleration in global auto production, increase in miles driven and collision rates aiding PPG's refinish business, a pickup in broader industrial activity and strength in the US housing end-market.

Downside risks to our PO are a stronger USD, a downturn in US/global auto production, a slowdown in the US housing market and/or market share losses in the US architectural channel and a downturn in industrial activity.

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



iQmethodSM 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

iQmethodSM 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.

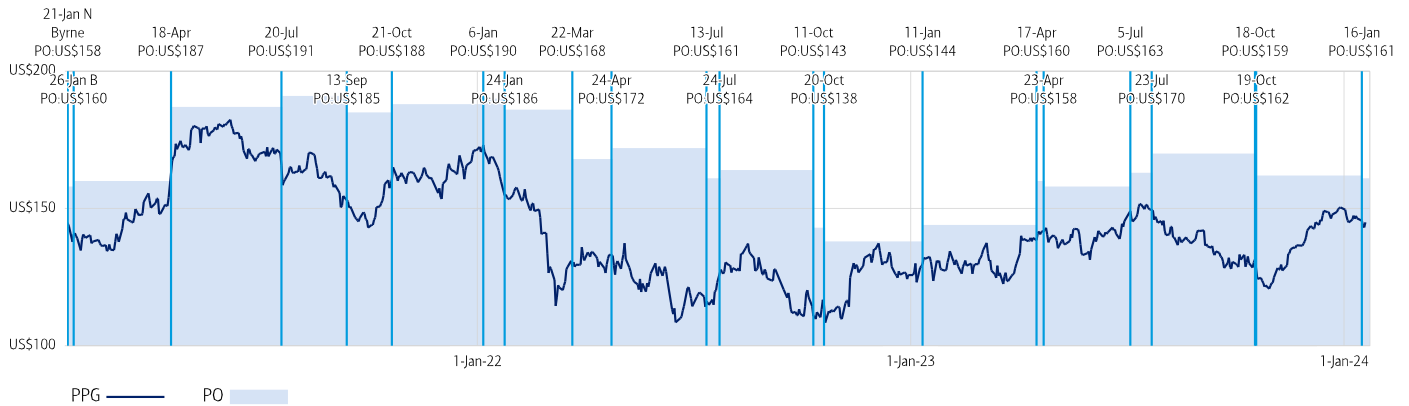
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Disclosures

Important Disclosures

PPG Industries Inc. (PPG) 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.

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 ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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