

The Sherwin-Williams Co (NYSE:SHW)

By: Junaid Rana, Aswin Ghimire, Shreya Joshi, Nameer Jamal & Pratyush Shah Market Data as of 28-03-2022



Investment Summary

~70% market share, ~32% sustainable long-term value creation, high-quality business

Business Overview

- Sherwin-Williams is the #1 player in American paint & coat manufacturing industry; US\$30.2B larger in TEV than second largest competitor
- 2/3^{rds} of revenues are related to retail and consumer operations, and 1/3rd comes from coating-related revenues

Investment Thesis

Why Is This a Good Business?

- Generates ~0.50¢ incremental EBITDA per core business dollar investment
- Created ~2x more value on CFROI basis than competitors (~32% vs. ~16%)
- Will continue to create value due to robust value net (complementor advantage, consumer advantage, operating structure & R&D, & supplier advantage)

What Is The Market Missing?

The market is under-estimating the company's future ROIC, ROE, and Sherwin-Williams superior future M&A opportunities

We recommend a <u>BUY</u> rating on <u>Sherwin-Williams</u> with an implied upside of <u>~10%</u>



Company Overview



How Sherwin-Williams Co. Makes Money

Revenue generation segmented into 3 operations



Sherwin-Williams Co. is the <u>#1 global paint developer, manufacturer, and distributor</u>



Segment Specific Margin Breakdown

39.0%

(1.51%)

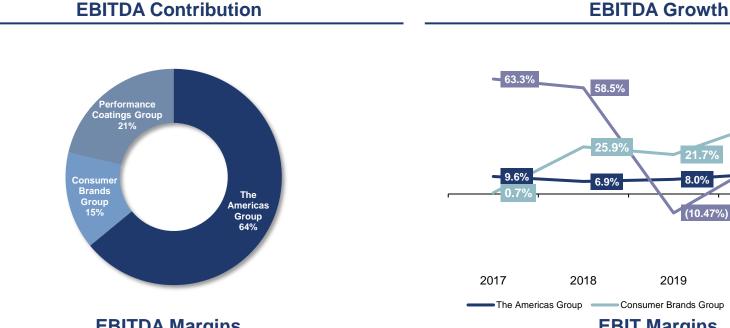
(2.34%)

(30.16%)

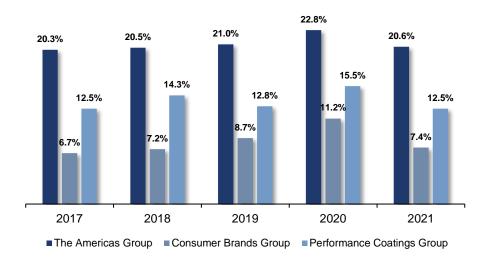
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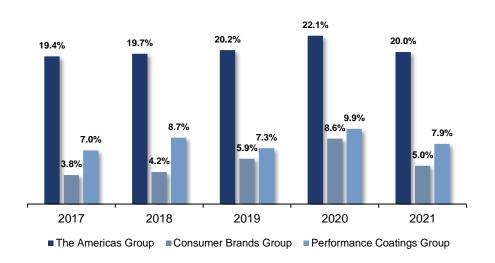
2021

The Americas Group segment contributes the most to EBITDA; Historically steady



EBITDA Margins





18.1% 11.2%

2020 Consumer Brands Group
Performance Coatings Group **EBIT Margins**

End-to-end global supply chain



Sherwin-Williams Is More Vertically Integrated Than Peer Group



Product Portfolio

Diverse and innovative product base spanning paints, coatings, and supplies





Wood Stains, Sealers & Clear Topcoats



Commercial High-Performance Coatings



Floor Coatings

Abrasives



Ladders, Scaffolds & **Climbing Equipment**



Drop Cloths & Plastic Sheeting



Paint & Coatings

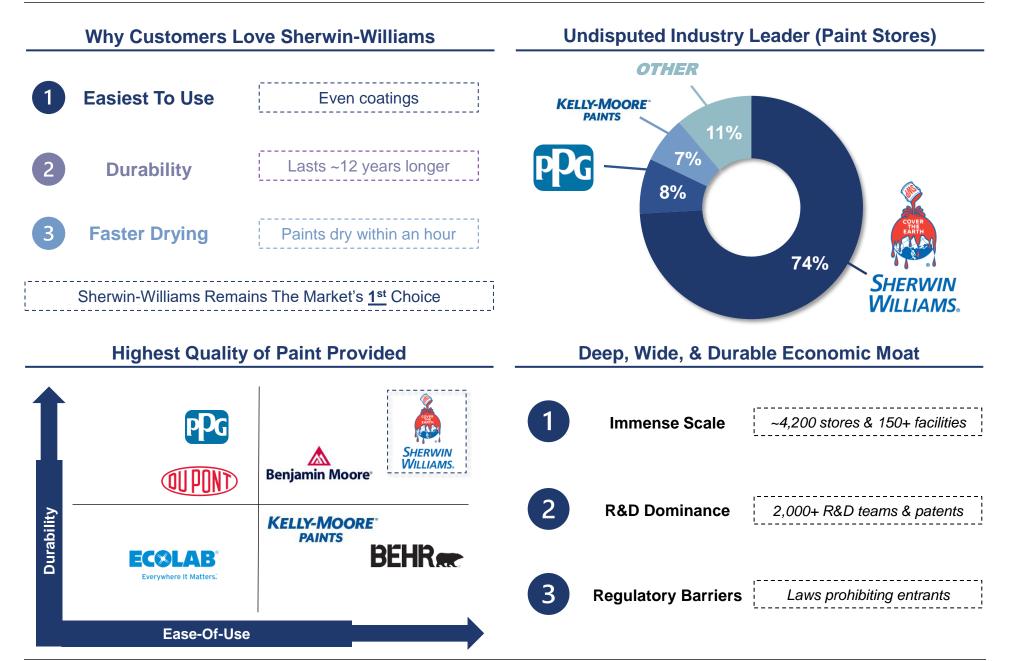


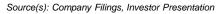
Caulks, Sealants & Caulking Tools



Industry Leading Value Proposition & Deep Moat

Sherwin-Williams is the best paint company; will continue to be the best

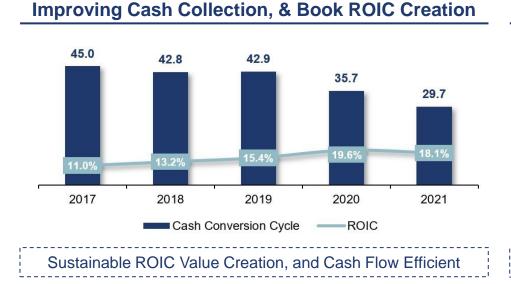




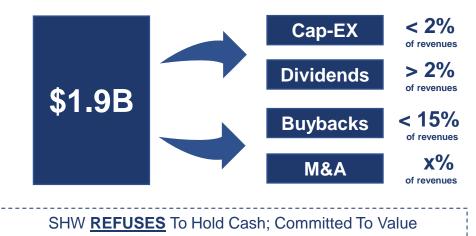


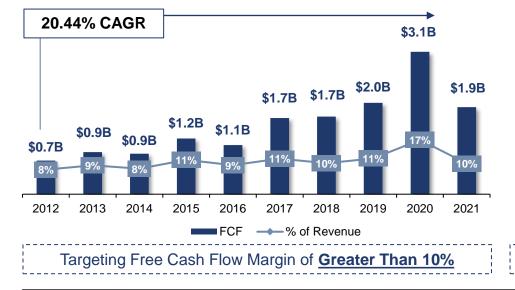
Strong, Steady, & Reliable Financial Performance

Historically strong financials improving & able to be sustained due to allocation strategy



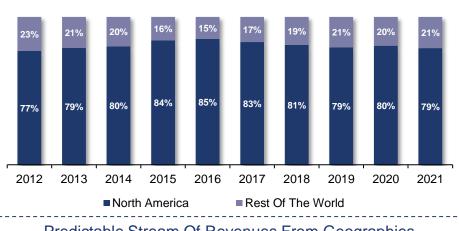
Disciplined Capital Allocation Strategy





Historical Free Cash Flow

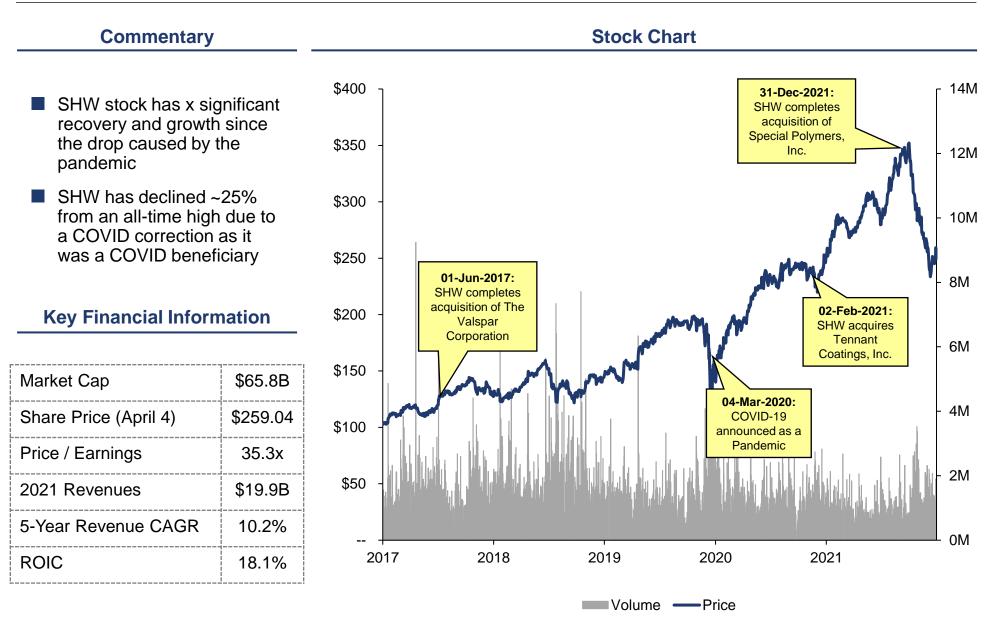
Historical Geographic Breakdown



Predictable Stream Of Revenues From Geographies

5-Year Share Price Performance

SHW has shown steady appreciation over the past 5 years, with this trend expected to continue





Industry Overview



Industry Overview

Mature industry with multiple catalysts for continued growth in 3 main segments

Industry Summary

- The paint manufacturing industry in the US is mature and had industry revenues of over \$29B in 2021 and is expected to grow annually at rate of 0.8%
- **Key Players:** The industry has a few major players that make up most of the market share
 - □ Sherwin Williams: 20.9%
 - PPG Industries: 18.3%
 - Masco: 5.9%
- Pandemic Impact: The reduction of new construction activity reduced the demand for residential, commercial and property management areas. This has since resumed and is recovering to pre-pandemic levels. DIY segments saw immense growth in demand

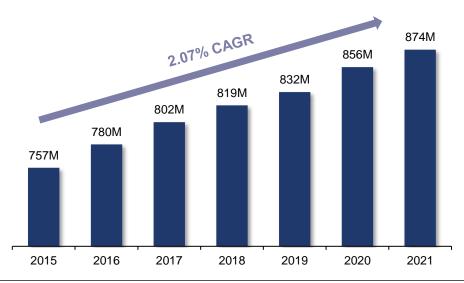
Industry Trends

- Residential: Strong starts and bullish customers for new residential projects. Exterior and interior projects are strong. Consumers are becoming increasingly more comfortable with having contracts in their homes again and long-term drivers are favourable
- Commercial Construction: Resumption of projects and new projects are gaining momentum
- Property Management: Return of activity to hotels, restaurants and other facilities is leading to increasing demand
- DIY: Unprecedented growth in this segment last year and this is returning to a more normalized demand level as was seen before the pandemic

US Remodeling Activity



US Architectural Paint Market Demand (Gallons)





Industry Overview

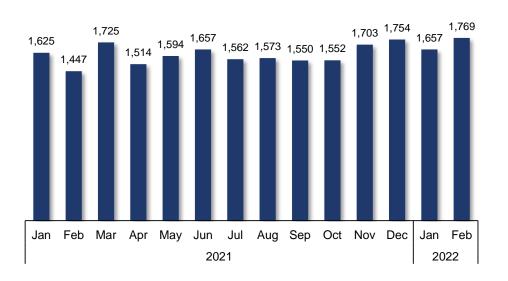
Mature industry with multiple catalysts for continued growth in 3 main segments

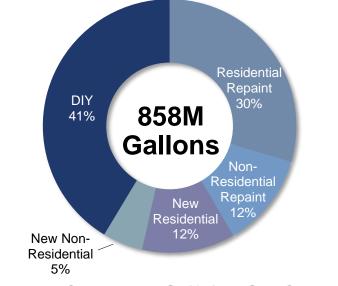
Product Segments

Product Segments:

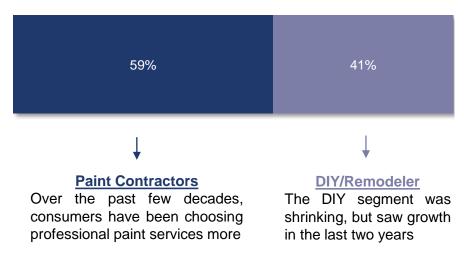
- Architectural Coatings include household paints, exterior solvent-based paints, DIY wood and furniture finishes and accounts for 46% of industry revenues
- Industrial Coatings are formulated coatings, sealants and metal pre-treatments and account for 24% of total industry
- Special-Purpose Coatings refer to industrial maintenance paints, marine paints, automobile paints, roof coatings, etc. and account for 22% of industry revenues

New Residential Housing Starts (000s)





DIY and Contractor Shift in US & Canada



US Architectural Paint Segments (2021)



Industry Comparable Table

(in the second s

Specialized chemicals manufacturers in the US

	COVER THE EARTH	9	AXALTA	pPG	RPM	ΕΛSTΜΛΝ	QUPONT
Metrics	Sherwin Williams	Celanese	Axalta	PPG	RPM	Eastman	DuPont
Market Cap	\$77.2B	\$15.5B	\$5.5B	\$30.7B	\$10.6B	\$14.3B	\$39.2B
Manufacturing Facilities	137	25	50	150	145	50	134
Number of Independent Stores	4,770	N/A*	N/A*	600	N/A*	N/A*	N/A*
Revenue CAGR (5Y)	10.96%	9.64%	1.53%	3.32%	4.87%	3.07%	(25.15%)
Inventory Turnover	6.11x	4.68x	4.86x	5.27x	4.22x	5.53x	4.11x
Gross Margin	42.8%	31.4%	32.3%	38.7%	39.3%	23.8%	35.1%

*Products are sold through third-party retailers



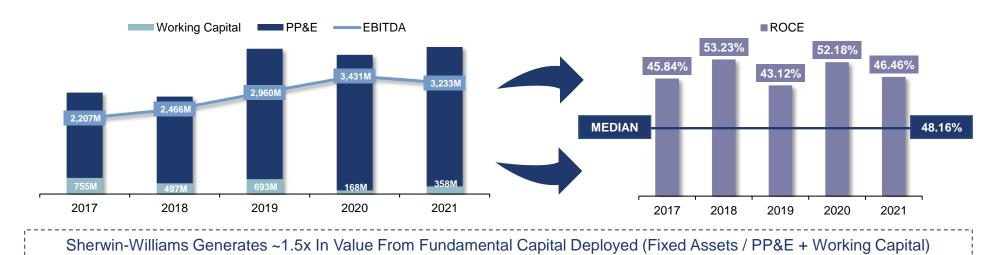
Investment Theses



Investment Thesis: Why Is This a Good Business? YOR

Consistently generated ~0.50¢ in EBITDA per working capital + fixed assets

Superior Capital Deployed (Fixed Assets / PP&E + Working Capital) Strategy In Play



Significant Pricing Power



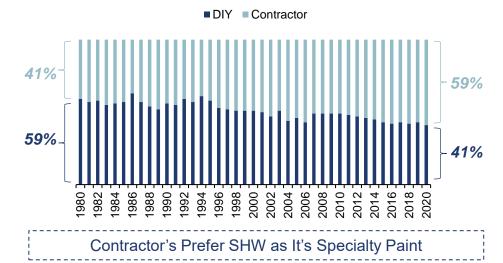
The Best Brand Equity In The Industry



Investment Thesis: Why Is This a Good Business?

SHW benefits from additional tailwinds on top of having excellent operations

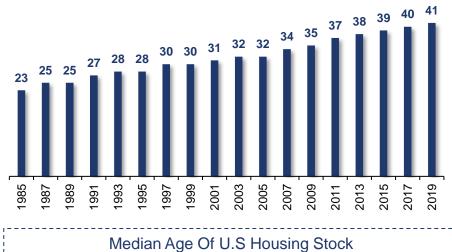
Addressing Changing Consumer Behavior



Industrial Segmentation Growth

	New residential strength driving flooring, cabinetry and furniture
2	U.S. and Eurozone Manufacturing PMI at record levels
3	Customer investments in capacity expansion
4	Oil and gas maintenance cannot be delayed indefinitely
5	Infrastructure opportunities

Renovations Continue To Drive Sales



Commercial Construction Put In Place

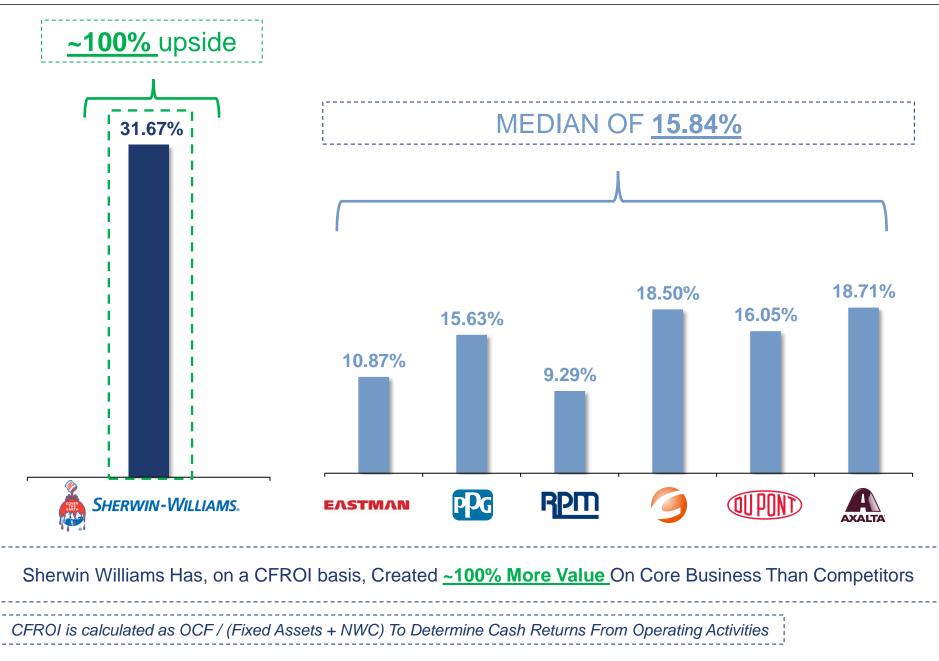


Building Construction & Maintenance Will Help Grow Sales



Investment Thesis: Why Is This a Good Business?

Sherwin-Williams has generated superior economic returns





Investment Thesis: Why Is This a Good Business?

Expected to continue to do so in the future due to a robust value net

1. Complementor Advantage

- Home Improvement stores compete against each other to secure best brand inventory
- For example, Home Depot having exclusive rights to sell Tesla solar panels scared Lowes

Lowe's to become the exclusive home improvement retailer for Sherwin-Williams' paint products

Sherwin-Williams signs deal with home builder | HBS Dealer

Retailers Need SHW; Allows For Less Commission % On Sales

3. Operation Structure Alongside R&D

Fully-Integrated, Allowing For Differentiation

+22% Gross Margin Spread Over Median Comp.

Stores Everywhere; Expected To Grow +25%

Stores To ~5,000; 90% of Pop. Lives Within 50MI Of Store

Low Cap-Ex Requirement Allows R&D

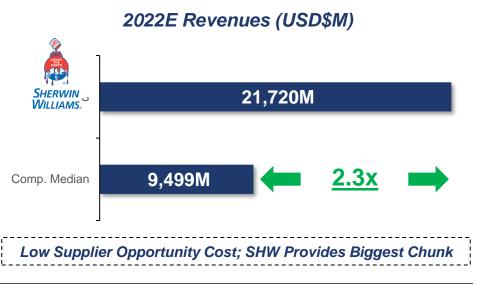
SHW Plans 1,000,000 Square-Feet New R&D Centre

Operations Expected To Become More Sustainable & Profitable

2. Customer Advantage



4. Supplier Advantage





Investment Thesis: What Is The Market Missing?

Trading at fair value, international growth underappreciation, and narrative shift

Strongest Returns In Industry

- SHW's ROIC of 18.1% is far higher than its peers' ROIC at 9.1%
- An ROE of 61.7% well above its peers' average of 20.5%
- SHW features one of the stronger balance sheets among its peers, and has focused on returning capital to shareholders
 - The company also has roughly \$2.7 billion in available liquidity. Thus, it has adequate liquidity to meet its short-term debt obligations
- The company has successfully increased its earnings growth rate to ~10–15%+ over the last five years through acquisitions, buybacks, and consistently strong execution

Superior M&A Integration Prowess

- The acquisition of Valspar has enabled Sherwin-Williams to strengthen its position globally extending Sherwin-Williams' brand portfolio and customer relationships in North America
- Non-US Growth: In addition to expanding Sherwin-Williams' global platform in Asia-Pacific and Europe, the Middle East and Africa regions
- The company realized benefits worth ≈ \$315 million from synergies in 2019
- Has identified another opportunity of nearly \$100 million, mainly related to the supply-chain optimization efforts in Europe and Asia

Reason SHW Is Down 25%+ YTD

- Negative sentiment in Q1 2022: rising rates & geopolitical risk, and SHW missed first quarter earnings estimates
- Factors contributing to negative market sentiment bounce back:
 - COVID-related labor issues and raw material prices decreasing, supply chain improvements
- Margins contracted to 15.1% from 21.8% YoY– however with strong pricing power and volumes recovery – set to rebound
- Multi-year pickup in "new construction" due to strong housing demand paired with historically low inventories – provide as a catalyst due to consistent demand for SHW products

Strong Value Creation Through M&A

	Valspar Corp
Transaction Purchase Price	\$11,257.9
Cash	11,257.9
LTM EBIT	583.3
NTM EBIT	1,869.5
NTM Revenue Growth Rate	17.0%
Purchase Multiple	19.3x
Purchase Price / NTM EBIT	6.0x



The Bear Case (What Could Go Wrong?)

ESG risk, niche painter disruption risk, & potential lower post COVID demand

Stringent Environmental Regulations

- The operations of Sherwin-Williams are subject to various stringent environmental regulations in its chemicals operations.
 - REACH is an example of the stringent environmental regulations that affect chemical producers. REACH regulates the products manufactured and marketed in Europe
 - The regulation mandates all companies to develop and submit dossiers containing datasets about their chemical products and detail their potential impact and risk on environment
 - REACH directly applies to over 30,000 different chemical substances that are produced or sold in Europe and its implementation is expected to cost European chemical industry about US\$3 billion
- The company is involved with environmental investigation and remediation activities at some of its currently and formerly owned sites and a number of third-party sites
- Stringent environmental regulations could lead to additional capital expenditure, which would reduce the company's funds available for growth initiatives
- There is also a material risk that much of the demand for paint and paint supplies has been pulled forward to the COVID-19 lockdowns, stagnating revenue growth, with a risk can result in multiple contraction as earnings stagnate as well

Innovative Companies Poses A Threat to SHW

- Disruption within the paints industry has begun, with companies such as Backdrop offering unique personalized painting services such as:
 - Premium quality paints that are Green Wise certified, low-VOC, and low odor. Eco-friendly packaging that is a compostable green cell foam and redesigned metal paint cans that are from recyclable stainless steel
- If SHW fails to adjust to these evolving consumer needs, they will suffer severe value destruction



B Business of Home
Backdrop wants to reinvent paint from scratch
Whatever the product, there's an entrepreneur looking to cut out middlemen
and disrupt it. For husband-and-wife duo Caleb and Natalie Ebel,...
1 month ago



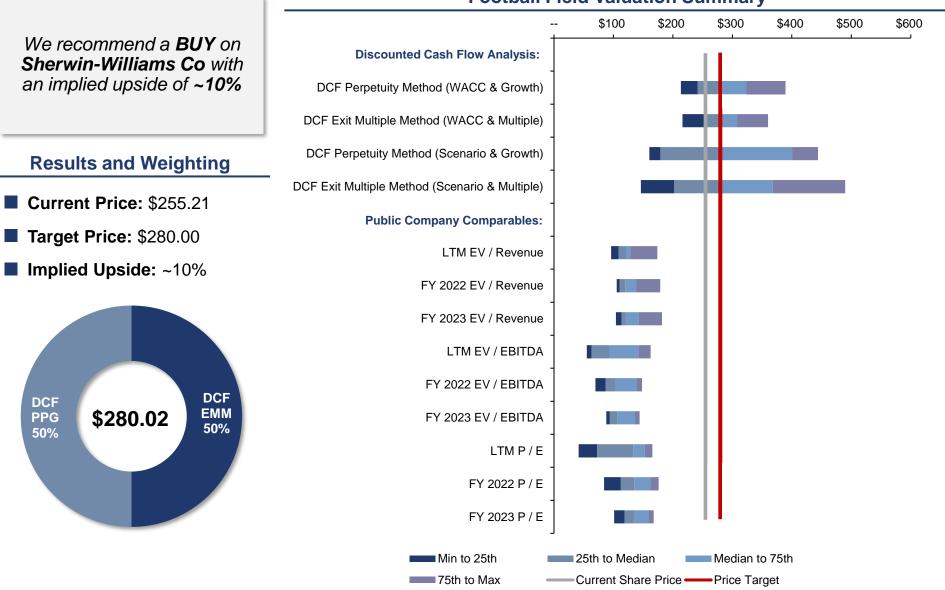


Increasing Crude Oil Prices

Valuation



Valuation Summary



Football Field Valuation Summary



Comparable Company Analysis

Specialized chemicals manufacturers in North America

	Equity	Enterprise		EV / Revenue	;		EV / EBITDA	١		P/E		Leverage
Company Name	Value (\$M)	Value (\$M)	LTM	2022E	2023E	LTM	2022E	2023E	LTM	2022E	2023E	Debt/EBITDA
Celanese Corporation	\$15,536	\$19,542	2.3x	2.3x	2.2x	8.1x	7.9x	8.1x	8.2x	9.2x	9.4x	1.7x
Axalta Coating Systems Ltd.	\$5,470	\$8,637	2.0x	1.8x	1.7x	10.5x	9.5x	8.3x	20.7x	13.3x	10.7x	4.6x
PPG Industries, Inc.	\$30,655	\$37,070	2.2x	2.0x	1.9x	15.9x	13.1x	11.2x	21.3x	17.6x	14.6x	2.9x
RPM International Inc.	\$10,582	\$13,120	2.1x	1.9x	1.8x	16.7x	13.3x	11.4x	23.3x	18.8x	15.3x	3.1x
Eastman Chemical Company	\$14,304	\$19,279	1.8x	1.9x	1.8x	8.0x	8.9x	8.5x	16.7x	11.6x	11.1x	2.1x
DuPont de Nemours, Inc.	\$39,206	\$49,069	2.9x	2.8x	2.7x	12.0x	11.1x	10.1x	6.1x	16.0x	14.1x	2.7x
Median	\$14,920	\$19,410	2.1x	2.0x	1.9x	11.2x	10.3x	9.3x	18.7x	14.7x	12.6x	2.8x
Average	\$19,292	\$24,453	2.2x	2.1x	2.0x	11.9x	10.6x	9.6x	16.1x	14.4x	12.5x	2.8x
The Sherwin-Williams Company	\$65,853	\$77,183	3.9x	3.6x	3.4x	23.9x	20.4x	17.9x	35.3x	26.8x	22.9x	3.0x

	Revenue	Growth	EBITDA	Growth	Net Incom	e Growth	E	BITDA Margiı	n	Retu	rn Metrics (L1	ſM)
Company Name	2022E	2023E	2022E	2023E	2022E	2023E	LTM	2022E	2023E	ROC	ROA	ROE
Celanese Corporation	0.8%	1.9%	1.8%	(2.3%)	(10.4%)	(2.7%)	28.3%	28.6%	27.4%	15.3%	11.2%	45.5%
Axalta Coating Systems Ltd.	9.4%	6.6%	9.9%	14.7%	55.7%	24.6%	18.7%	18.7%	20.2%	5.8%	4.4%	17.5%
PPG Industries, Inc.	9.8%	5.6%	21.8%	17.0%	21.0%	20.7%	13.9%	15.4%	17.1%	8.4%	5.4%	23.6%
RPM International Inc.	9.9%	4.8%	25.6%	16.1%	23.8%	22.9%	12.5%	14.3%	15.8%	9.2%	6.6%	26.8%
Eastman Chemical Company	(0.7%)	2.8%	(9.7%)	4.1%	43.5%	4.8%	23.0%	20.9%	21.1%	10.1%	7.4%	14.6%
DuPont de Nemours, Inc.	6.4%	4.2%	7.7%	10.1%	(62.1%)	13.5%	24.6%	24.9%	26.3%	3.6%	2.9%	5.5%
Median	7.9%	4.5%	8.8%	12.4%	22.4%	17.1%	20.8%	19.8%	20.7%	8.8%	6.0%	20.5%
Average	5.9%	4.3%	9.5%	9.9%	11.9%	14.0%	20.2%	20.5%	21.3%	8.7%	6.3%	22.2%
The Sherwin-Williams Company	8.9%	5.6%	17.1%	13.7%	31.8%	17.0%	16.2%	17.4%	18.8%	12.0%	8.1%	61.7%

Commentary

- Peers were chosen based on comparable businesses, and similar end-markets
- SHW is trading at a premium to its peers for a good reason:
 - ~3x ROE compared to peers
 - □ Faster growth for Revenues, EBITDA as well as Net Income
 - □ Higher than industry median for all return metrics (ROC and ROA)



Discounted Cash Flow Analysis

Intrinsic Valuation – Base Case

Discounted Cash Flow Analysis								Project	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Revenue	17,900.8	18,360.9	19,694.6	22,022.1	23,815.9	25,608.3	27,438.5	29,262.4	30,931.6	32,579.1	34,113.0	35,510.7	36,745.8
Cost of Goods Sold	9,864.7	9,679.1	11,401.9	12,179.2	13,171.3	13,726.0	14,604.3	15,575.1	16,362.8	17,201.7	18,011.7	18,749.7	19,401.8
Gross Profit	8,036.1	8,681.8	8,292.7	9,842.8	10,644.6	11,882.2	12,834.2	13,687.4	14,568.8	15,377.3	16,101.3	16,761.1	17,344.0
Total Other Operating Expenses	5,651.1	5,833.3	5,882.4	6,787.0	7,339.9	7,892.3	8,456.3	9,018.4	9,532.9	10,040.6	10,513.3	10,944.1	11,324.8
Operating Income	2,385.0	2,848.5	2,410.3	3,055.8	3,304.7	3,990.0	4,377.9	4,668.9	5,035.9	5,336.7	5,588.0	5,817.0	6,019.3
Income Tax	440.5	488.8	384.2	794.5	859.2	1,037.4	1,138.3	1,213.9	1,309.3	1,387.5	1,452.9	1,512.4	1,565.0
NOPAT	1,944.5	2,359.7	2,026.1	2,261.3	2,445.5	2,952.6	3,239.7	3,455.0	3,726.6	3,949.2	4,135.1	4,304.5	4,454.3
Add: Depreciation and Amortization	312.8	313.4	309.5	379.1	410.0	440.9	472.4	503.8	532.5	560.9	587.3	611.3	632.6
Less: Capital Expenditures	328.9	303.8	372.0	411.4	444.9	478.4	512.6	546.7	577.8	608.6	637.3	663.4	686.5
Add / (Less): Change in Net Working Capital	(443.1)	(632.7)	(389.7)	110.1	119.1	128.1	137.2	146.4	154.7	163.0	170.6	177.6	183.8
Unlevered Free Cash Flow	1,485.3	1,736.6	1,573.9	2,339.2	2,529.7	3,043.1	3,336.7	3,558.5	3,836.0	4,064.4	4,255.7	4,430.1	4,584.2
Discount Factor				0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow				2,250.9	2,253.9	2,510.5	2,548.8	2,516.8	2,512.1	2,464.6	2,389.4	2,303.1	2,206.7

Perpetuity Growth Me	thod	Exit Multiple Method				
Cumulative PV of UFCF	30,169.7	Cumulative PV of UFCF	30,169.7			
% of Enterprise Value	35.4%	% of Enterprise Value	34.7%			
Terminal Value		Terminal Value				
Final Year UFCF	5,729.0	Final Year EBITDA	6,634.6			
Perpetuity Growth Rate	3.0%	Exit EBITDA Multiple	17.8x			
Terminal Value	114,580.5	Terminal Value	117,763.5			
PV of Terminal Value	55,155.0	PV of Terminal Value	56,687.2			
% of Enterprise Value	64.6%	% of Enterprise Value	65.3%			
Total Enterprise Value	85,324.7	Total Enterprise Value	86,856.9			
Plus: Cash	165.7	Plus: Cash	165.7			
Less: Total Debt	(11,495.4)	Less: Total Debt	(11,495.4)			
Total Equity Value	73,995.0	Total Equity Value	75,527.2			
Diluted Shares Outstanding	267.0	Diluted Shares Outstanding	267.0			
Implied Share Price	\$277.13	Implied Share Price	\$282.87			
Current Share Price	\$255.21	Current Share Price	\$255.21			
Implied Margin of Safety	8.6%	Implied Margin of Safety	10.8%			

Commentary

- Majority of growth realized in the first 5 years due to tailwinds in all end-markets before growths start to stabilize from 2027-2031
- Growth rate into perpetuity taken as 3% as the products and services offered by SHW has an evergreen demand
- Expansion due to ability to raise prices to compensate for contracted margins in 2021
- Exit EBITDA Multiple taken as the trailing average of last 5 years
- WACC of 8% used for comparability across YUSIF potential investments



Discounted Cash Flow Sensitivity Analysis

Implied share price sensitivity

Base Case Sensitivities

		Per	petuity Growt	h Rate					Ex	it EBITDA Mult	iple	
	2.6%	2.8%	3.0%	3.2%	3.4%			13.8x	15.8x	17.8x	19.8x	21.8x
ຍ 7.0%	\$332.36	\$344.57	\$358.00	\$372.85	\$389.34	ate	7.0%	\$255.59	\$281.72	\$307.86	\$333.99	\$360.12
7.0%	\$293.49	\$302.86	\$313.07	\$324.23	\$336.47	2	7.5%	\$245.08	\$270.08	\$295.08	\$320.08	\$345.08
8.0%	\$261.83	\$269.19	\$277.13	\$285.74	\$295.10	nut	8.0%	\$235.03	\$258.95	\$282.87	\$306.80	\$330.72
8.5%	\$235.56	\$241.44	\$247.75	\$254.53	\$261.84	Discount	8.5%	\$225.42	\$248.32	\$271.21	\$294.11	\$317.00
5 <u>9.0%</u>	\$213.41	\$218.18	\$223.27	\$228.71	\$234.54	ā	9.0%	\$216.24	\$238.15	\$260.07	\$281.99	\$303.90
		Per	petuity Growt	h Rate		_			Ex	it EBITDA Mult	iple	
	2.6%	2.8%	3.0%	3.2%	3.4%			13.8x	15.8x	17.8x	19.8x	21.8x
7.0% 7.5%	30.2%	35.0%	40.3%	46.1%	52.6%	Rate	7.0%	0.1%	10.4%	20.6%	30.9%	41.1%
7.5%	15.0%	18.7%	22.7%	27.0%	31.8%		7.5%	(4.0%)	5.8%	15.6%	25.4%	35.2%
8.0%	2.6%	5.5%	8.6%	12.0%	15.6%	un	8.0%	(7.9%)	1.5%	10.8%	20.2%	29.6%
8.5%	(7.7%)	(5.4%)	(2.9%)	(0.3%)	2.6%	Discount	8.5%	(11.7%)	(2.7%)	6.3%	15.2%	24.2%
5 <u>9.0%</u>	(16.4%)	(14.5%)	(12.5%)	(10.4%)	(8.1%)	ē	9.0%	(15.3%)	(6.7%)	1.9%	10.5%	19.1%

Scenario Based Sensitivities

			Perpetuity Growth Rate									
<u>0</u>		2.6%	2.8%	3.0%	3.2%	3.4%						
ari	Bull Case	\$394.87	\$405.76	\$417.52	\$430.26	\$444.11						
cer	Base Case	\$261.83	\$269.19	\$277.13	\$285.74	\$295.10						
S	Bear Case	\$160.53	\$165.28	\$170.41	\$175.97	\$182.01						

	Perpetuity Growth Rate										
io		2.6%	2.8%	3.0%	3.2%	3.4%					
ıarı	Bull Case	54.7%	59.0%	63.6%	68.6%	74.0%					
cer	Base Case	2.6%	5.5%	8.6%	12.0%	15.6%					
S	Bear Case	(37.1%)	(35.2%)	(33.2%)	(31.0%)	(28.7%)					

			Ex	it EBITDA Mult	iple	
0		13.8x	15.8x	17.8x	19.8x	21.8x
nari	Bull Case	\$350.70	\$385.45	\$420.21	\$454.97	\$489.73
Scenario	Base Case	\$235.03	\$258.95	\$282.87	\$306.80	\$330.72
S	Bear Case	\$146.15	\$162.03	\$177.91	\$193.79	\$209.67

			Exi	t EBITDA Multij	ple	
0		13.8x	15.8x	17.8x	19.8x	21.8x
enario	Bull Case	37.4%	51.0%	64.7%	78.3%	91.9%
0	Base Case	(7.9%)	1.5%	10.8%	20.2%	29.6%
S	Bear Case	(42.7%)	(36.5%)	(30.3%)	(24.1%)	(17.8%)



Conclusion: Wonderful Business At A Fair Price

Sherwin-Williams will continue to deliver & compound superior economic returns

Why Is This a Good Business?

- Generates <u>~0.50¢ Incremental EBITDA p</u>er core business dollar investment
- Created ~<u>DOUBLE</u> the value than peers (~32% vs. ~16%)
- Will continue to <u>Create Value</u> due to <u>Robust Value Net</u> (Complementor Advantage, Consumer Advantage, Operating Structure & R&D, & Supplier Advantage)

What Is The Market Missing?

- SHW's ROIC of <u>18.1</u>% is far higher than its peers' ROIC at <u>9.1</u>%; Market underestimates ROIC going forward given COVID pullforward, however SHW will continue to generate high ROIC
- An ROE of <u>61.7</u>% well above its peers' average of <u>20.5</u>%
- Sherwin-Williams superior future M&A capabilities, as shown with the successful acquisition of Valspar

Key Value Net Creation Drivers

Retailers <u>NEED</u> Sherwin-Williams

Consumers <u>NEED</u> Sherwin-Williams

Suppliers <u>NEED</u> Sherwin-Williams

Summary of Investment Considerations

- The Sherwin-Williams company is the largest (30.1B larger than 2nd largest company) with a ~20% industry market share
- Competitive advantage of having a better specialized paint product for consumers forces retailers to do their best to get cans of SHW into their store, and given product durability and quality verses the industry, consumers love it, and will be willing to pay more for the product. Sherwin-Williams also has significant supplier power as they are the largest in the industry, allowing them to negotiate favorable terms given massive supplier opportunity cost
- Competitive advantages allows Sherwin-Williams to earn <u>**1.5x</u> in incremental EBITDA** on their fixed assets + working capital commitments</u>
- Competitive advantages permit sustained creation of superior economic returns, as seen with a <u>CFROI of ~32%;</u> ~2x larger than peer group

We Recommend A Buy Rating On The Sherwin-Williams Corporation

Appendix



- Management Profiles
- Leader Across All Segments
- Historical Industry EBITDA Multiples
- Brand Portfolio
- North America Store Presence
- US GDP Growth & SHW Revenue Growth
- Margin Analysis
- R&D Superiority
- Capital Allocation Criteria

- M&A Activity
- Shareholder Value
- Key Ownership Breakdown
- Environmental Footprint Implementation
- Porter's 5 Forces
- Industry Profit Pool Analysis
- Operating Ratio Comparison
- ROE Analysis Breakdown
- DCF Analysis & Assumptions

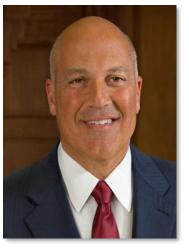


Management Profiles

Reputable corporate leadership with storied careers in the industry

Chairman, President & CEO

John G. Morkis



- Mr. Morikis began his career in 1984 as a Sherwin-Williams Management Trainee and is the first member of this program to become CEO.
- He became Chairman of the Board in January 2017 and President and Chief Executive Officer (CEO) in January 2016.
- During his more than 30 years at the Company, Mr. Morikis has held positions of increasing responsibility including President and General Manager of the Paint Stores Group and President and Chief Operating Officer

Senior Vice President – Finance and CFO

Allen J. Mistysyn



- Mr. Allen J. Mistysyn, has been the Chief Financial Officer of The Sherwin-Williams Company since January 1, 2017, and has been its Senior Vice President of Finance since October 2016.
- Over his 30-year career span, Allen has held a variety of operational and corporate finance leadership positions.
- Mr. Mistysyn served in various roles in our Paint Stores Group and Product Finishes Division.

President & Chief Operating Officer

Heidi G. Petz



- Ms. Heidi G. Petz has been the President and Chief Operating Officer of The Sherwin-Williams Company since March 1, 2022
- She is responsible for all Sherwin-Williams operating segments, which includes The Americas Group, the Performance Coatings Group and the Consumer Brands Group, as well as the Global Supply Chain organization, Procurement and the Enterprise Selling function.

Senior VP – Investor Relations & Corporate Comm.

James R. Jaye

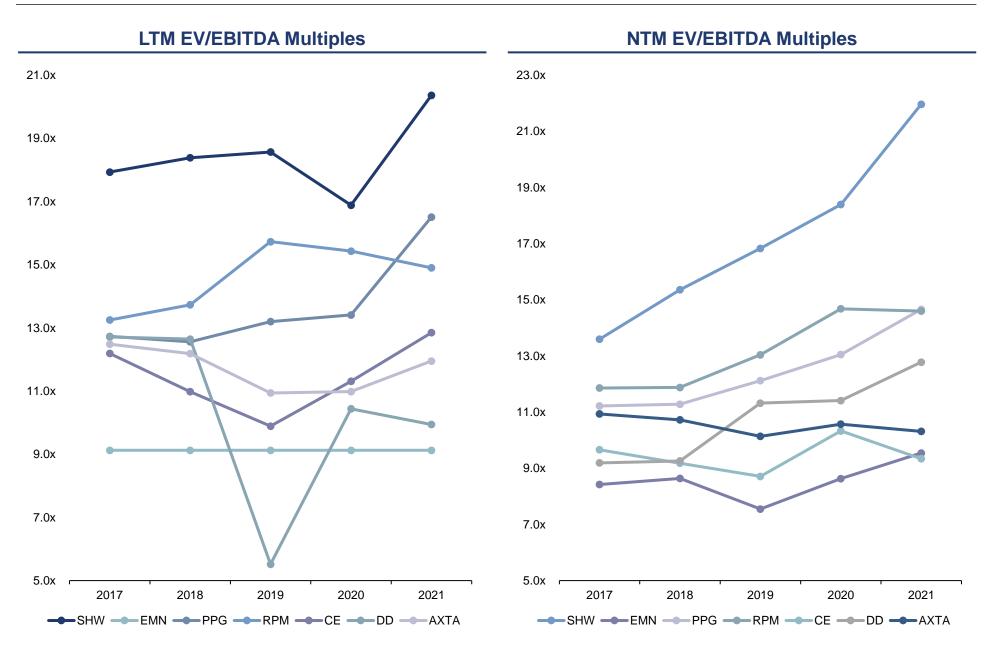


- Mr. James R. Jaye, also known as Jim, is Senior Vice President of Investor Relations & Corporate Communications at SHW since June 2019
- In this role, he is responsible for leading the Company's strategic communications function and ensuring engagement across multiple stakeholder groups.
- Prior to joining Sherwin Williams in 2017, Mr. Jaye was Senior Director of Corporate Communications and Investor Relations for Nordson Corporation



Historical Industry EBTIDA Multiples

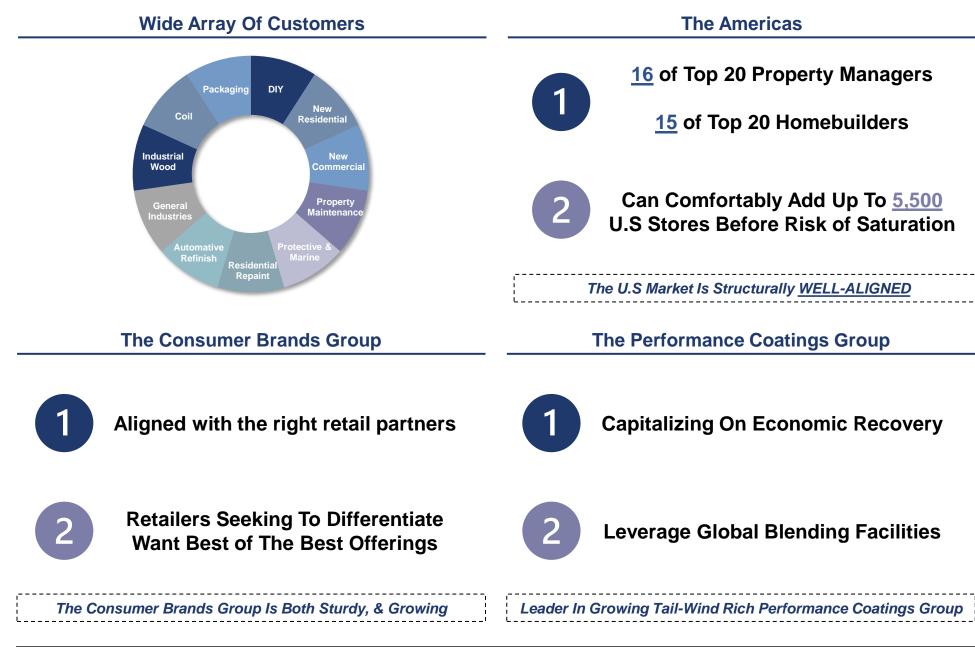
SHW has consistently traded above peers on a LTM & NTM EV/EBITDA basis





Leader Across <u>ALL</u> 3 Segments

Top choice for consumers





Brand Portfolio

Industry-leading portfolio of brands

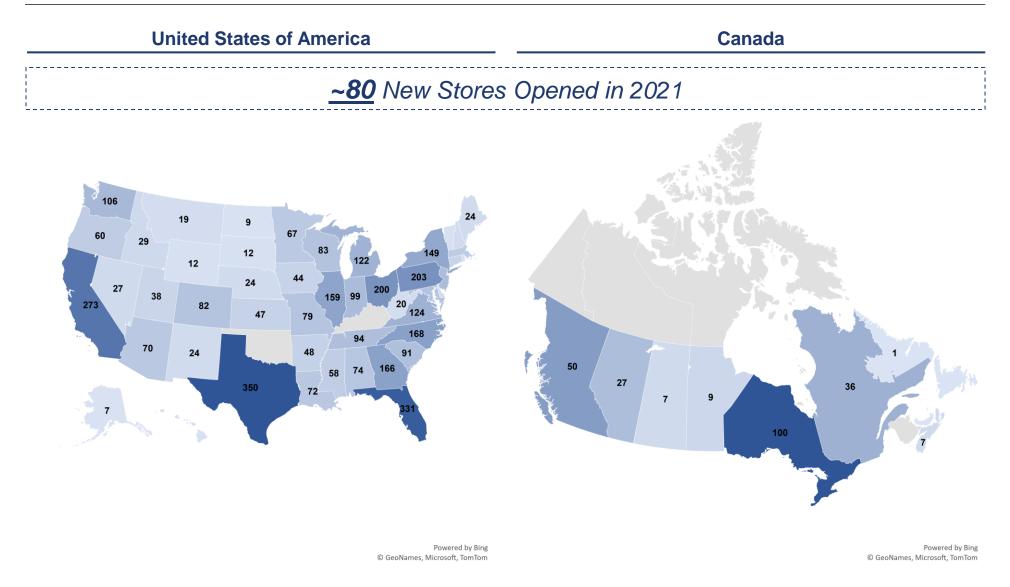
YORK UNIVERSITY STUDENT **INVESTMENT FUND**





North America Store Presence

Very recognized brand name across North America

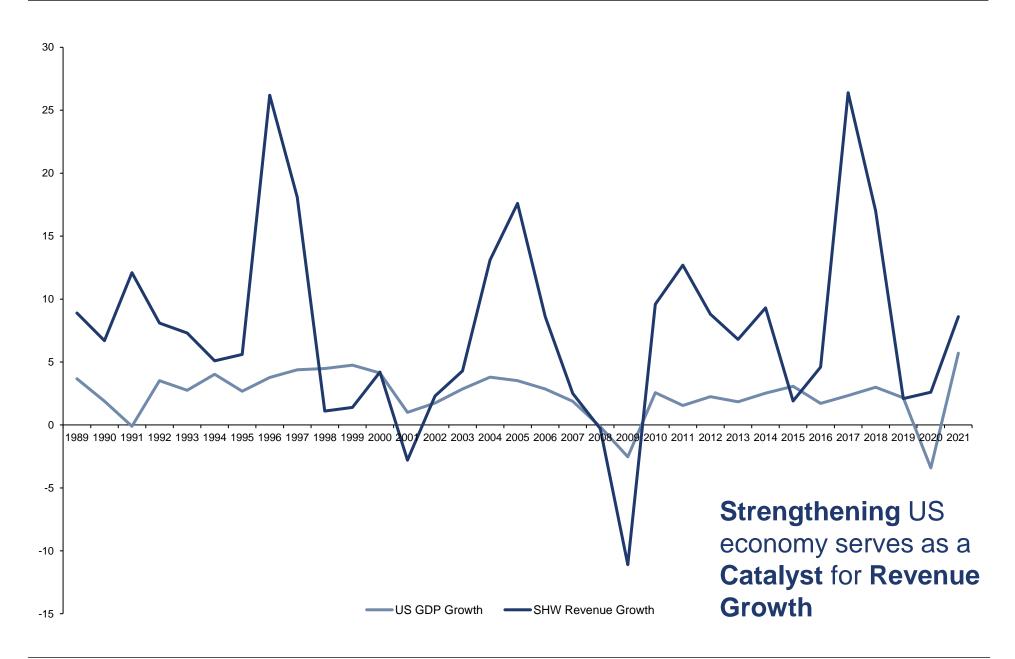


Over 4,500 Stores Across North America!



US GDP Growth & SHW Revenue Growth

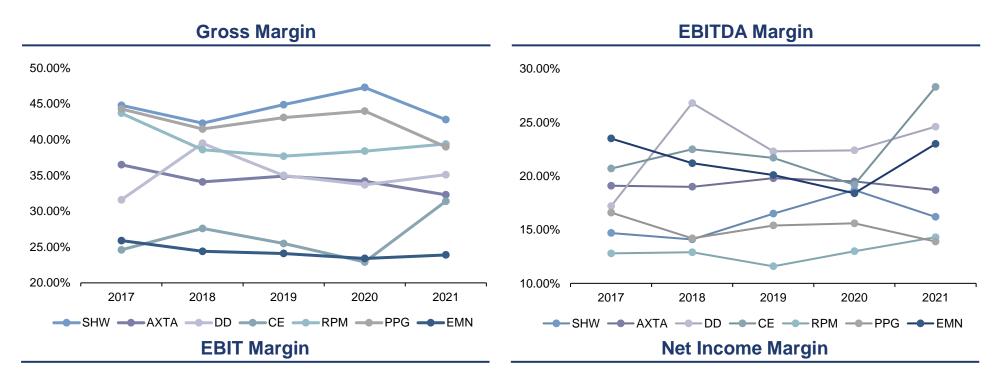
Strong correlation with US GDP since inception in 1988

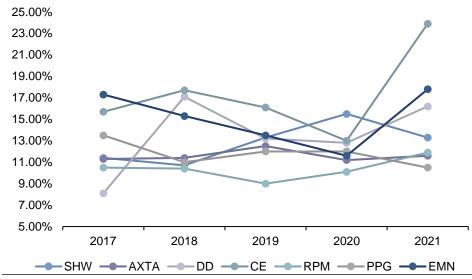


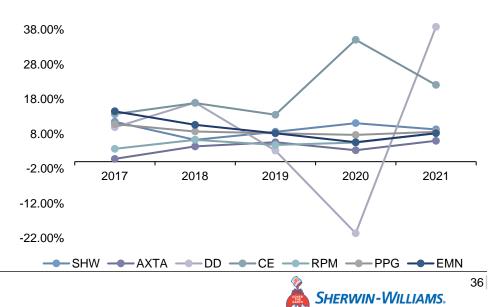


Margin Analysis

SHW has a superior margin than industry medians



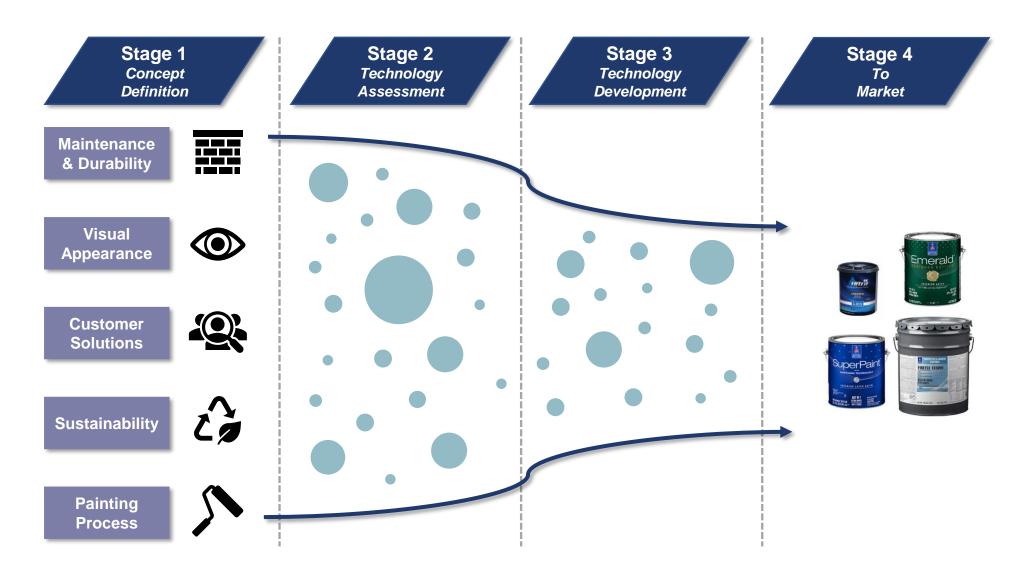




Source(s): Company Filings

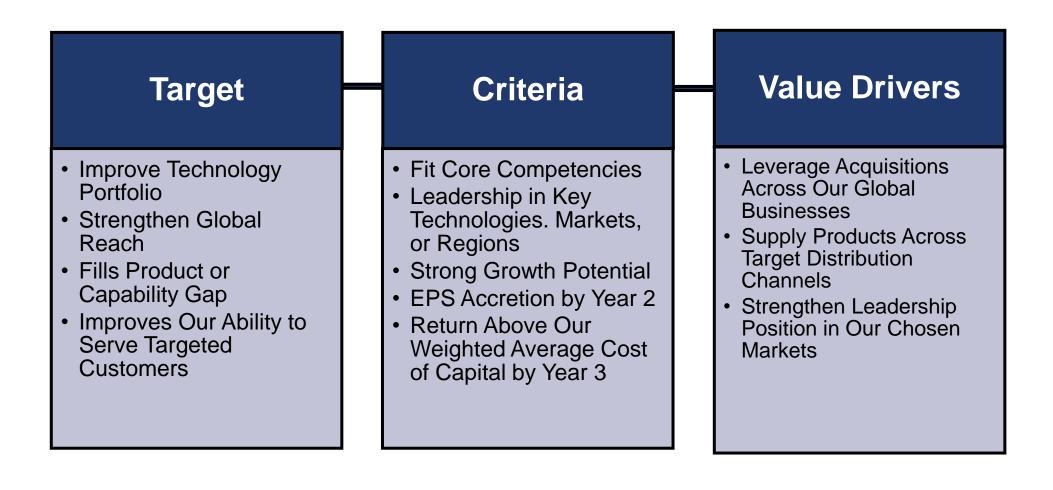
R&D Superiority

A disciplined R&D approach yields the greatest success



Market Differentiating Innovation





M&A Activity

Strategic acquisitions to increase product offerings & expand internationally

Special Polymers, Inc.

Tennant Coatings, Inc.

Description: Tennant Coatings designs and manufactures

Rationale: With the acquisition of Tennant Coatings, SHW

is able to expand its coatings segment and take advantage

of Tennant's expertise in manufacturing resin/coatings for

commercial concrete floor coating systems

commercial and industrial consumers.

February 2021

December 2021



- Description: SHW acquired Specialty Polymers, a paint and coatings manufacturer with over 500 products
- Rationale: The acquisition of Specialty Polymers allows SHW to add to their existing internal resin manufacturing capabilities. In addition to its significant capacity, there is an opportunity to add millions of pounds of additional capacity in the near term with minimal investment

Valspar Corporation

June 2017



- Description: Valspar is a manufacturer of paint and coatings, providing interior/exterior paint, stain & sealant products
- **Rationale:** This transaction helped accelerate Sherwin-Williams growth strategy by expanding its global platform in Asia-Pacific and EMEA while adding new capabilities to SHW's packaging and coil segments

SHW's M&A Outlook

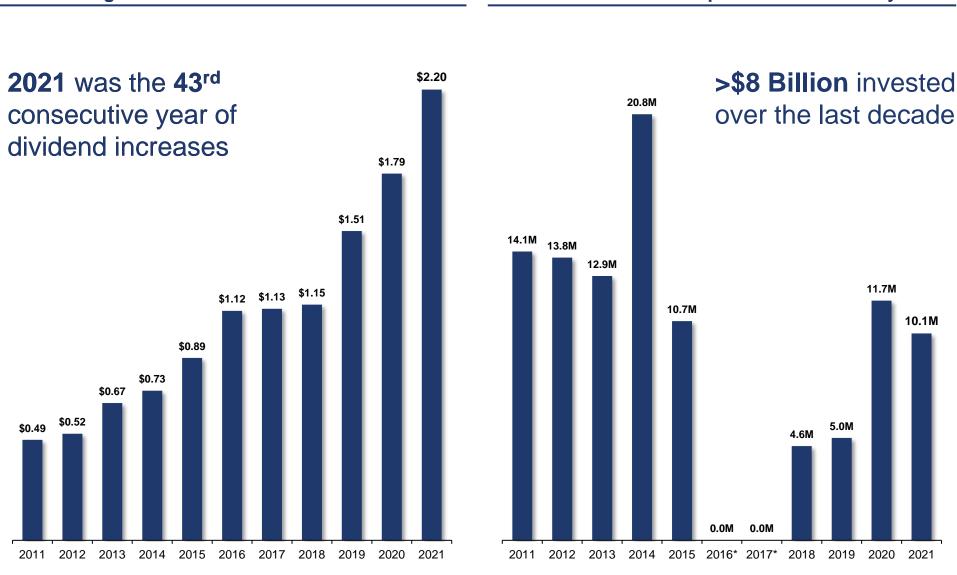
- Strategic M&A To Further Product Offerings: Through acquisitions, SHW expands its existing product offerings and strengthens its presence in existing product segments
- Global Expansion: SHW's M&A efforts have allowed it to expand into and strengthen its presence in markets outside North America, namely Europe, EMEA and Asia-Pacific.
- Quickly Able to Integrate M&A Products: SHW quickly integrates acquisitions and realizes benefits (In 2019, realized \$315M in benefits)



Shareholder Value

Strong Dividend Growth Over The Years

Strong commitment to shareholders through dividend hikes and share repurchases



*No market purchases in 2016 and 2017 – focused on debt reduction following Valspar acquisition

Numbers of Shares Repurchased Over the years

Key Ownership Breakdown

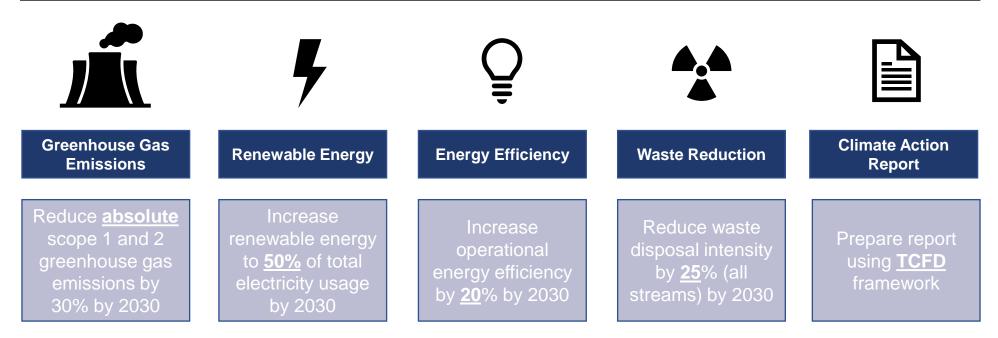
Institutional owners have the largest ownership share of SHW

	Ownership S	Summary	
Туре	% of Total Shares Outstanding	Shares Owned	Market Value (USD in mm)
Institutions	79.50%	206,009,574	52,575.7
Individuals/Insiders	0.31%	802,489	204.8
ESOP	16.44%	42,594,489	10,870.5
State Owned Shares	0.04%	105,497	26.9
Public and Other	3.71%	9,608,706	2,452.2
Total	100.00%	259,120,755	66,130.2
	Top 10 Instituio	nal Holders	
Institutional Stockholder	% of Total Shares Outstanding	Shares Owned	Market value (USD in mm)
The Vanguard Group, Inc.	7.48%	19,605,412	5,158.8
BlackRock Fund Advisors	4.34%	11,371,893	2,992.3
SSgA Funds Management, Inc.	4.21%	11,031,115	2,902.6
Fidelity Management & Research	3.70%	9,697,961	2,551.8
T. Rowe Price Associates, Inc.	2.56%	6,723,606	1,769.2
Capital Research & Management	1.86%	4,884,144	1,285.2
Janus Henderson Investors US	1.66%	4,359,994	1,147.2
Fiera Capital Corp.	1.60%	4,192,681	1,103.2
Geode Capital Management	1.43%	3,750,426	986.8
Capital Research & Management	1.29%	3,375,591	888.2
Total	30.13%	78,992,823	20,785.4
	Top 10 Mutual F	und Holders	
Mutual fund	% of Total Shares Outstanding	Shares Owned	Market value (USD in mm)
Vanguard Total Stock Market Index	2.59%	6,787,860	1,786.1
Vanguard 500 Index Fund	2.00%	5,233,160	1,377.0
SPDR S&P 500 ETF Trust	0.98%	2,566,317	675.3
MFS Value Fund	0.94%	2,473,602	650.9
Fidelity 500 Index Fund	0.94%	2,470,288	650.0
MFS Growth Fund	0.90%	2,351,483	618.7
American Funds New Perspective	0.90%	2,349,775	618.3
Fidelity Contrafund	0.81%	2,129,377	560.3
iShares Core S&P 500 ETF	0.79%	2,059,489	541.9
Vanguard Growth Index Fund	0.72%	1,876,755	493.8
Total	11.57%	30,298,106	7,972.3



Environmental Footprint Implementation

U.S regulations will not permit industry players to grow without compliance with ESG



Deep Portfolio of Sustainable Products

Ultra 9K® E	EcoSelect®	ProMar® 400	Krylon Quik-Tap™	AquaGuard ®	valPure® V70	POWDURA ® ECO	Harmony®	ProMar® 200 HP	SuperDeck ®
Waterborne Basecoat System	Zero VOC Interior Latex	Zero VOC Primer	Reusable Spray Device	Coating Solutions Zinc- Free & Water- Based	Non-BPA Epoxy	Powder Coatings Made from Recycled Plastic	Zero VOC Interior Acrylic Latex	Zero VOC Interior Latex	Waterborne Exterior Solid Color Deck Stain
9X Ugolo Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Harrison Har	EcoSelect	ProMar 2000 Prate and the second		Experience With the same of the With the same of the With the same of the With the same of the			Harmony Harmony Maranet utter Maranet	ProMar 200 E	SuperDeck Prove the second



Porter's 5 Forces

Industry competitive forces

Threat of New Entrants

- The product differentiation is weak within the industry
 - □ Firms in the industry sell standardized products rather than a differentiated product.
- The capital requirements within the industry are high
 - Making it difficult for new entrants to set up businesses as high expenditures need to be incurred
- The access to distribution networks is easy for new entrants
 - Allowing them to easily set up their distribution channels, and come into the business

Bargaining Power of Suppliers

Bargaining Power of Suppliers

- Immensely high number of suppliers compared to the buyers
 - As there are a lot of suppliers that provide specialty chemicals, the suppliers have less control over prices, which makes the bargaining power of suppliers a weak force

The products in this industry lack differentiation

The similarity in the products makes the bargaining power of suppliers a weaker force within the industry

Threat of New Entrants

Bargaining Power of Buyers

The buyers in the industry are highly price sensitive

Consumers' price sensitivity, high market knowledge and purchasing standardized products in large volumes makes the bargaining power of buyers a stronger force within the industry

Various choices of firms to buy from

The number of suppliers in the industry is high, which results in buyers having more control over prices. Which makes the bargaining power of buyers a stronger force within the industry.

Competitive Rivalry

Substitution

Threat of

Bargaining Power of Buyers

Threat of Substitution

High threat of substitute because of the highly competitive environment

- Substitute product offers the same or even superior quality and performance as offered by Sherwin-Williams Company's product.
- A cheaper substitute product/service is available from another industry
- The psychological switching costs of moving from industry to substitute products are low.



Industry Profit Pool Analysis

Steady industry providing steady value creation, appreciation & profit pools

Market Share Stability Analysis

Company Name (Market Share)	2017	2022	5-Year Change
Sherwin-Williams Company	67.8%	70.2%	2.4%
PPG Industries Inc.	10.8%	8.0%	(2.80%)
Kelly-Moore Paints	2.4%	6.7%	4.3%
Other	19.0%	15.1%	(3.90%)
Total	100.0%	100.0%	
Average Absolute Change			0.00%

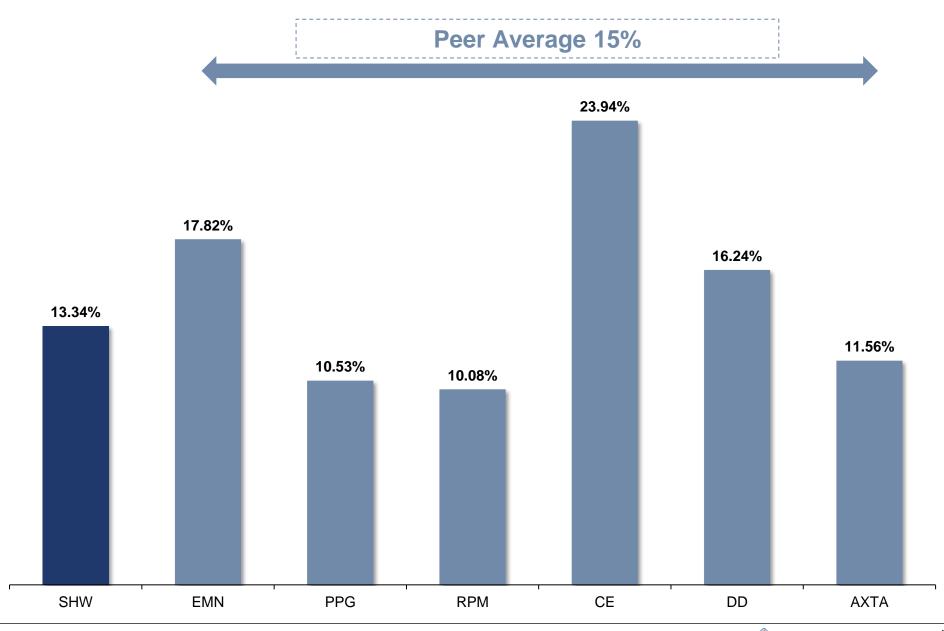
Stable Industries Are More <u>Conducive</u> To Sustainable Value Creation



CFROI – Hurdle Rate (8%) To Determine Value % Of Profit Pool

Operating Ratio Comparisons

SHW has lower than industry operating ratio showing its ability to keep costs low

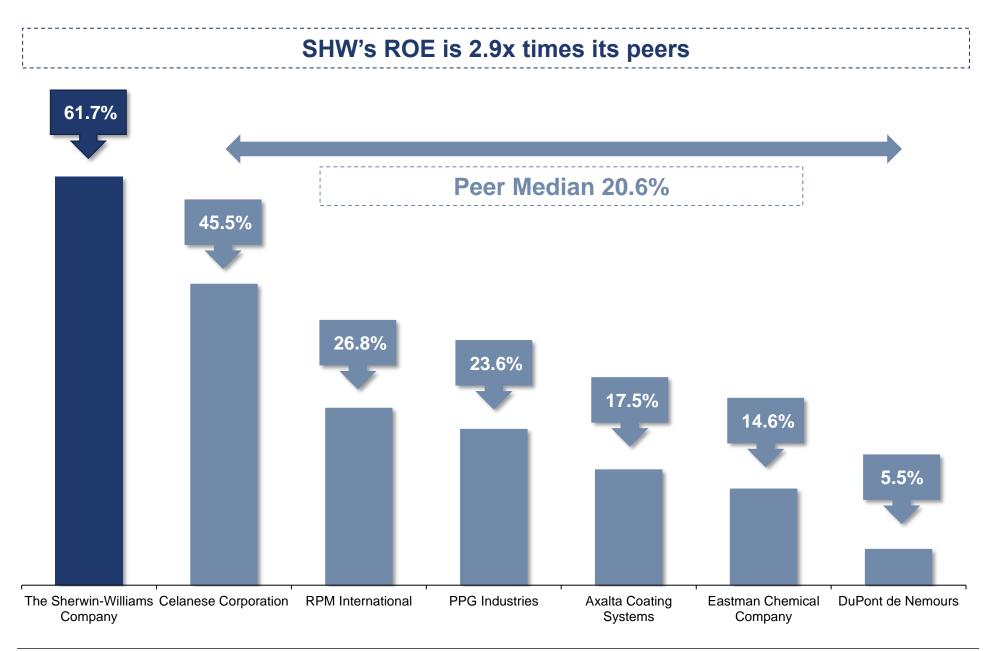


Source(s): Company Filings, CapIQ



ROE Analysis Breakdown

Sherwin-Williams' management is far more efficient in using its assets





Base Case

Discounted Cash Flow Analysis								Project	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue:													
The Americas Group	10,171.9	10,383.2	11,217.0	12,450.9	13,446.9	14,455.5	15,467.3	16,472.7	17,461.1	18,421.4	19,342.5	20,116.2	20,820.3
Consumer Brands Group	6,283.8	6,741.8	7,133.4	7,775.4	8,436.3	9,111.2	9,794.6	10,480.2	11,004.2	11,499.4	11,959.4	12,377.9	12,749.3
Performance Coatings Group	5,165.4	5,058.7	5,903.5	6,434.8	6,949.6	7,436.1	7,956.6	8,473.8	8,982.2	9,521.1	9,997.2	10,497.1	10,916.9
Administrative	(3,720.3)	(3,822.8)	(4,559.3)	(4,639.0)	(5,016.9)	(5,394.5)	(5,780.0)	(6,164.2)	(6,515.9)	(6,862.9)	(7,186.0)	(7,480.5)	(7,740.6)
Total Revenue	17,900.8	18,360.9	19,694.6	22,022.1	23,815.9	25,608.3	27,438.5	29,262.4	30,931.6	32,579.1	34,113.0	35,510.7	36,745.8
% Growth	2.1%	2.6%	7.3%	11.8%	8.1%	7.5%	7.1%	6.6%	5.7%	5.3%	4.7%	4.1%	3.5%
Cost of Goods Sold	9,864.7	9,679.1	11,401.9	12,179.2	13,171.3	13,726.0	14,604.3	15,575.1	16,362.8	17,201.7	18,011.7	18,749.7	19,401.8
Gross Profit	8,036.1	8,681.8	8,292.7	9,842.8	10,644.6	11,882.2	12,834.2	13,687.4	14,568.8	15,377.3	16,101.3	16,761.1	17,344.0
Gross Profit Margin	44.9%	47.3%	42.1%	44.7%	44.7%	46.4%	46.8%	46.8%	47.1%	47.2%	47.2%	47.2%	47.2%
Operating Expenses:													
Selling, General & Admin	5,315.3	5,482.8	5,576.9	6,406.0	6,927.8	7,449.2	7,981.6	8,512.2	8,997.7	9,477.0	9,923.2	10,329.7	10,689.0
Amortization	312.8	313.4	309.5	361.0	390.4	419.8	449.8	479.7	507.0	534.0	559.2	582.1	602.3
Other Operating Expense/(Income)	23.0	37.1	-4.0	20.0	21.6	23.3	24.9	26.6	28.1	29.6	31.0	32.3	33.4
Total Other Operating Expenses	5,651.1	5,833.3	5,882.4	6,787.0	7,339.9	7,892.3	8,456.3	9,018.4	9,532.9	10,040.6	10,513.3	10,944.1	11,324.8
Operating Income	2,385.0	2,848.5	2,410.3	3,055.8	3,304.7	3,990.0	4,377.9	4,668.9	5,035.9	5,336.7	5,588.0	5,817.0	6,019.3
EBIT Margin		15.5%	12.2%	13.9%	13.9%	15.6%	16.0%	16.0%	16.3%	16.4%	16.4%	16.4%	16.4%
Income Tax	440.5	488.8	384.2	794.5	859.2	1,037.4	1,138.3	1,213.9	1,309.3	1,387.5	1,452.9	1,512.4	1,565.0
NOPAT	1,944.5	2,359.7	2,026.1	2,261.3	2,445.5	2,952.6	3,239.7	3,455.0	3,726.6	3,949.2	4,135.1	4,304.5	4,454.3
Add: Depreciation and Amortization	312.8	313.4	309.5	379.1	410.0	440.9	472.4	503.8	532.5	560.9	587.3	611.3	632.6
Less: Capital Expenditures	328.9	303.8	372.0	411.4	444.9	478.4	512.6	546.7	577.8	608.6	637.3	663.4	686.5
Add / (Less): Change in Net Working Capital	(443.1)	(632.7)	(389.7)	110.1	119.1	128.1	137.2	146.4	154.7	163.0	170.6	177.6	183.8
Unlevered Free Cash Flow	1,485.3	1,736.6	1,573.9	2,339.2	2,529.7	3,043.1	3,336.7	3,558.5	3,836.0	4,064.4	4,255.7	4,430.1	4,584.2
% Growth				48.6%	8.1%	20.3%	9.6%	6.6%	7.8%	6.0%	4.7%	4.1%	3.5%
Discount Period				0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50
Discount Rate				8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Discount Factor				0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow				2,250.9	2,253.9	2,510.5	2,548.8	2,516.8	2,512.1	2,464.6	2,389.4	2,303.1	2,206.7



Base Case Assumptions

Assumptions								Projec	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
The Americas Group Growth	5.7%	2.1%	8.0%	11.0%	8.0%	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	4.0%	3.5%
Consumer Brands Group Growth	1.4%	7.3%	5.8%	9.0%	8.5%	8.0%	7.5%	7.0%	5.0%	4.5%	4.0%	3.5%	3.0%
Performance Coatings Group Growth	(0.5%)	(2.1%)	16.7%	9.0%	8.0%	7.0%	7.0%	6.5%	6.0%	6.0%	5.0%	5.0%	4.0%
Administrative % of Total Revenue	(17.2%)	(17.2%)	(18.8%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)	(17.4%)
COGS % of Total Revenue	55.1%	52.7%	57.9%	55.3%	55.3%	53.6%	53.2%	53.2%	52.9%	52.8%	52.8%	52.8%	52.8%
Selling, General & Admin % of Total Revenue	29.7%	29.9%	28.3%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%
Amortization % of Total Revenue	1.7%	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Other Operating Expense / (Income) % of Total Revenue	0.1%	0.2%	(0.0%)	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Tax Rate	18.5%	17.2%	15.9%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
D&A % of Total Revenue	1.7%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
CapEx % of Total Revenue	1.8%	1.7%	1.9%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Accounts Receivable % of Revenue	11.7%	11.6%	12.3%	11.3%	10.9%	10.4%	10.1%	9.8%	9.6%	9.4%	9.3%	9.3%	9.3%
Inventory % of COGS	19.2%	18.6%	16.9%	16.4%	15.7%	15.6%	15.1%	14.7%	14.5%	14.3%	14.1%	14.0%	14.0%
Other Current Assets % of Revenues	2.7%	2.3%	2.8%	2.6%	2.5%	2.4%	2.3%	2.2%	2.2%	2.1%	2.1%	2.1%	2.1%
Accounts Payable % of COGS	19.0%	21.9%	21.1%	20.4%	19.5%	19.4%	18.9%	18.3%	18.1%	17.8%	17.6%	17.5%	17.5%
Accrued Expense % of SG&A	26.5%	25.2%	11.6%	21.3%	20.4%	19.6%	19.0%	18.4%	1 8.0%	17.7%	17.5%	17.4%	17.4%
Other Current Liabilities % of Revenues	0.8%	1.3%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%

Discounted Cash Flow Analysis

Intrinsic Valuation – Bull Case

Discounted Cash Flow Analysis								Project	ions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Revenue	17,900.8	18,360.9	19,694.6	22,965.7	25,295.7	27,705.3	30,239.5	32,854.5	35,385.6	37,978.0	40,525.7	42,996.7	45,352.1
Cost of Goods Sold	9,864.7	9,679.1	11,401.9	12,471.4	13,736.8	14,573.0	15,792.7	17,158.4	18,365.1	19,672.6	20,992.3	22,272.3	23,492.4
Gross Profit	8,036.1	8,681.8	8,292.7	10,494.2	11,559.0	13,132.3	14,446.8	15,696.1	17,020.5	18,305.4	19,533.4	20,724.4	21,859.7
Total Other Operating Expenses	5,651.1	5,833.3	5,882.4	6,388.9	7,037.1	7,707.4	8,412.4	9,139.8	9,844.0	10,565.2	11,273.9	11,961.3	12,616.6
Operating Income	2,385.0	2,848.5	2,410.3	4,105.4	4,521.9	5,424.9	6,034.4	6,556.2	7,176.5	7,740.2	8,259.5	8,763.1	9,243.1
Income Tax	440.5	488.8	384.2	1,067.4	1,175.7	1,410.5	1,568.9	1,704.6	1,865.9	2,012.5	2,147.5	2,278.4	2,403.2
NOPAT	1,944.5	2,359.7	2,026.1	3,038.0	3,346.2	4,014.5	4,465.5	4,851.6	5,310.6	5,727.8	6,112.0	6,484.7	6,839.9
Add: Depreciation and Amortization	312.8	313.4	309.5	395.4	435.5	477.0	520.6	565.6	609.2	653.8	697.7	740.2	780.8
Less: Capital Expenditures	328.9	303.8	372.0	429.0	472.6	517.6	564.9	613.8	661.0	709.5	757.1	803.2	847.2
Add / (Less): Change in Net Working Capital	(443.1)	(632.7)	(389.7)	114.9	126.5	138.6	151.2	164.3	177.0	190.0	202.7	215.1	226.8
Unlevered Free Cash Flow	1,485.3	1,736.6	1,573.9	3,119.2	3,435.7	4,112.4	4,572.4	4,967.8	5,435.7	5,862.1	6,255.3	6,636.7	7,000.3
Discount Factor				0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48×
PV of Unlevered Free Cash Flow				3,001.4	3,061.1	3,392.6	3,492.7	3,513.6	3,559.8	3,554.6	3,512.1	3,450.3	3,369.7

Perpetuity Growth M	ethod	Exit Multiple Meth	od			0.		A		
Cumulative PV of UFCF	41,160.3	Cumulative PV of UFCF	41,160.3	_		50	nsitivity	Analys	IS	
% of Enterprise Value	33.5%	% of Enterprise Value	33.3%							
Terminal Value		Terminal Value		_			Perp	petuity Growth	n Rate	
Final Year UFCF	8,480.8	Final Year EBITDA	9,640.0			2.6%	2.8%	3.0%	3.2%	3.4%
Perpetuity Growth Rate	3.0%	Exit EBITDA Multiple	17.8x	ate	7.0%	95.5%	102.6%	110.3%	119.0%	128.5%
Terminal Value	169,615.6	Terminal Value	171,110.5	r R	7.5%	73.0%	78.4%	84.4%	90.8%	97.9%
PV of Terminal Value	81.647.0	PV of Terminal Value	82,366.6	our	8.0%	54.7%	59.0%	63.6%	68.6%	74.0%
% of Enterprise Value	66.5%	% of Enterprise Value	66.7%	Disc	8.5%	39.6%	43.0%	46.6%	50.6%	54.8%
Total Enterprise Value	122,807.3	Total Enterprise Value	123,526.9		9.0%	26.8%	29.6%	32.5%	35.7%	39.0%
Plus: Cash	165.7	Plus: Cash	165.7				Ex	it EBITDA Mu	tiple	
Less: Total Debt	(11,495.4)	Less: Total Debt	(11,495.4)			13.8x	15.8x	17.8x	19.8x	21.8x
Total Equity Value	111,477.6	Total Equity Value	112,197.2	ate	7.0%	49.0%	63.9%	78.8%	93.7%	108.5%
Diluted Shares Outstanding	267.0	Diluted Shares Outstanding	267.0	nt R	7.5%	43.1%	57.3%	71.6%	85.8%	100.0%
Implied Share Price	\$417.52	Implied Share Price	\$420.21	coun	8.0%	37.4%	51.0%	64.7%	78.3%	91.9%
	·	•		Ū.	8.5%	32.0%	45.0%	58.1%	71.1%	84.1%
Current Share Price	\$255.21	Current Share Price	\$255.21	ā	9.0%	26.8%	39.3%	51.8%	64.2%	76.7%
Implied Margin of Safety	63.6%	Implied Margin of Safety	64.7%							

Discounted Cash Flow Analysis Assumptions

Bull Case Assumptions

Assumptions								Projec	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
The Americas Group Growth	5.7%	2.1%	8.0%	13.0%	10.0%	9.5%	9.0%	8.5%	8.0%	7.5%	7.0%	6.0%	5.5%
Consumer Brands Group Growth	1.4%	7.3%	5.8%	11.0%	10.5%	10.0%	9.5%	9.0%	7.0%	6.5%	6.0%	5.5%	5.0%
Performance Coatings Group Growth	(0.5%)	(2.1%)	16.7%	11.0%	10.0%	9.0%	9.0%	8.5%	8.0%	8.0%	7.0%	7.0%	6.0%
Administrative % of Total Revenue	(17.2%)	(17.2%)	(18.8%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)	(15.4%)
COGS % of Total Revenue	55.1%	52.7%	57.9%	54.3%	54.3%	52.6%	52.2%	52.2%	51.9%	51.8%	51.8%	51.8%	51.8%
Selling, General & Admin % of Total Revenue	29.7%	29.9%	28.3%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%	28.1%
Amortization % of Total Revenue	1.7%	1.7%	1.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Other Operating Expense / (Income) % of Total Revenue	0.1%	0.2%	(0.0%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)	(0.9%)
Tax Rate	18.5%	17.2%	15.9%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0 %
D&A % of Total Revenue	1.7%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
CapEx % of Total Revenue	1.8%	1.7%	1.9%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Accounts Receivable % of Revenue	11.7%	11.6%	12.3%	10.9%	10.2%	9.7%	9.2%	8.7%	8.4%	8.1%	7.8%	7.6%	7.5%
Inventory % of COGS	19.2%	18.6%	16.9%	16.0%	15.0%	14.7%	14.0%	13.3%	1 2.9%	12.5%	12.1%	11.8%	11.6%
Other Current Assets % of Revenues	2.7%	2.3%	2.8%	2.5%	2.3%	2.2%	2.1%	2.0%	1.9%	1.8%	1.8%	1.7%	1.7%
Accounts Payable % of COGS	19.0%	21.9%	21.1%	19.9%	18.7%	18.3%	17.5%	16.6%	16.1%	15.5%	15.1%	14.7%	14.4%
Accrued Expense % of SG&A	26.5%	25.2%	11.6%	21.2%	19.9%	18.8%	17.8%	17.0%	16.3%	15.7%	15.3%	14.9%	14.6%
Other Current Liabilities % of Revenues	0.8%	1.3%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%



Discounted Cash Flow Analysis

Intrinsic Valuation – Bear Case

Discounted Cash Flow Analysis								Project	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Revenue	17,900.8	18,360.9	19,694.6	21,097.9	22,394.5	23,632.0	24,848.3	26,003.1	26,966.3	27,863.2	28,617.9	29,218.1	29,650.0
Cost of Goods Sold	9,864.7	9,679.1	11,401.9	11,879.1	12,609.2	12,903.1	13,474.1	14,100.3	14,534.8	14,990.4	15,396.4	15,719.3	15,951.7
Gross Profit	8,036.1	8,681.8	8,292.7	9,218.8	9,785.3	10,728.9	11,374.2	11,902.8	12,431.5	12,872.8	13,221.5	13,498.8	13,698.3
Total Other Operating Expenses	5,651.1	5,833.3	5,882.4	7,135.1	7,573.6	7,992.1	8,403.5	8,794.0	9,119.8	9,423.1	9,678.3	9,881.3	10,027.4
Operating Income	2,385.0	2,848.5	2,410.3	2,083.7	2,211.7	2,736.8	2,970.7	3,108.8	3,311.7	3,449.7	3,543.1	3,617.4	3,670.9
Income Tax	440.5	488.8	384.2	541.8	575.0	711.6	772.4	808.3	861.0	896.9	921.2	940.5	954.4
NOPAT	1,944.5	2,359.7	2,026.1	1,541.9	1,636.7	2,025.2	2,198.3	2,300.5	2,450.6	2,552.8	2,621.9	2,676.9	2,716.5
Add: Depreciation and Amortization	312.8	313.4	309.5	363.2	385.5	406.8	427.8	447.7	464.2	479.7	492.7	503.0	510.4
Less: Capital Expenditures	328.9	303.8	372.0	394.1	418.4	441.5	464.2	485.8	503.8	520.5	534.6	545.8	553.9
Add / (Less): Change in Net Working Capital	(443.1)	(632.7)	(389.7)	105.5	112.0	118.2	124.3	130.1	134.9	139.4	143.1	146.1	148.3
Unlevered Free Cash Flow	1,485.3	1,736.6	1,573.9	1,616.5	1,715.9	2,108.8	2,286.2	2,392.4	2,546.0	2,651.3	2,723.1	2,780.2	2,821.3
Discount Factor				0.96x	0.89x	0.82x	0.76x	0.71x	0.65x	0.61x	0.56x	0.52x	0.48x
PV of Unlevered Free Cash Flow				1,555.5	1,528.8	1,739.7	1,746.3	1,692.1	1,667.4	1,607.7	1,528.9	1,445.4	1,358.1

Perpetuity Growth Me	ethod	Exit Multiple Methe	od			So	ocitivity	Analysi	c	
Cumulative PV of UFCF	21,199.7	Cumulative PV of UFCF	21,199.7			Je	ISILIVILY	Allalysi	3	
% of Enterprise Value	37.3%	% of Enterprise Value	36.0%				_		_	
Terminal Value		Terminal Value		Г		0.00/	· · ·	etuity Growth		0.49/
Final Year UFCF	3,700.9	Final Year EBITDA	4,404.4		7.00/	2.6%	2.8%	3.0%	3.2%	3.4%
Perpetuity Growth Rate	3.0%	Exit EBITDA Multiple	17.8x	Rate	7.0%	(19.2%)	(16.1%)	(12.7%)	(8.9%)	(4.7%)
Terminal Value	74,018.0	Terminal Value	78,177.4		7.5%	(29.0%)	(26.7%)	(24.1%)	(21.3%)	(18.2%)
	,		,	no	8.0%	(37.1%)	(35.2%)	(33.2%)	(31.0%)	(28.7%)
PV of Terminal Value	35,629.6	PV of Terminal Value	37,631.8	Discount	8.5%	(43.8%)	(42.3%)	(40.7%)	(39.0%)	(37.1%)
% of Enterprise Value	62.7%	% of Enterprise Value	64.0%	ā	9.0%	(49.4%)	(48.2%)	(46.9%)	(45.6%)	(44.1%)
Total Enterprise Value	56,829.3	Total Enterprise Value	58,831.5							
Plus: Cash	165.7	Plus: Cash	. 165.7	-			Exi	it EBITDA Mult	tiple	
Less: Total Debt	(11,495.4)	Less: Total Debt	(11,495.4)			13.8x	15.8x	17.8x	19.8x	21.8x
Total Equity Value	45,499.6	Total Equity Value	47,501.8	Rate	7.0%	(37.3%)	(30.5%)	(23.7%)	(17.0%)	(10.2%)
	,		-		7.5%	(40.1%)	(33.6%)	(27.1%)	(20.6%)	(14.1%)
Diluted Shares Outstanding	267.0	Diluted Shares Outstanding	267.0	n	8.0%	(42.7%)	(36.5%)	(30.3%)	(24.1%)	(17.8%)
Implied Share Price	\$170.41	Implied Share Price	\$177.91	scount	8.5%	(45.3%)	(39.3%)	(33.3%)	(27.4%)	(21.4%)
Current Share Price	\$255.21	Current Share Price	\$255.21	ä	9.0%	(47.7%)	(42.0%)	(36.3%)	(30.6%)	(24.9%)
Implied Margin of Safety	(33.2%)	Implied Margin of Safety	(30.3%)							





Discounted Cash Flow Analysis Assumptions

Bear Case Assumptions

Assumptions								Projec	tions				
(In \$ Millions)	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
The Americas Group Growth	5.7%	2.1%	8.0%	9.0%	6.0%	5.5%	5.0%	4.5%	4.0%	3.5%	3.0%	2.0%	1.5%
Consumer Brands Group Growth	1.4%	7.3%	5.8%	7.0%	6.5%	6.0%	5.5%	5.0%	3.0%	2.5%	2.0%	1.5%	1.0%
Performance Coatings Group Growth	(0.5%)	(2.1%)	16.7%	7.0%	6.0%	5.0%	5.0%	4.5%	4.0%	4.0%	3.0%	3.0%	2.0%
Administrative % of Total Revenue	(17.2%)	(17.2%)	(18.8%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)	(19.4%)
COGS % of Total Revenue	55.1%	52.7%	57.9%	56.3%	56.3%	54.6%	54.2%	54.2%	53.9%	53.8%	53.8%	53.8%	53.8%
Selling, General & Admin % of Total Revenue	29.7%	29.9%	28.3%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%
Amortization % of Total Revenue	1.7%	1.7%	1.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%	2.6%
Other Operating Expense / (Income) % of Total Revenue	0.1%	0.2%	(0.0%)	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
Tax Rate	18.5%	17.2%	15.9%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0 %
D&A % of Total Revenue	1.7%	1.7%	1.6%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
CapEx % of Total Revenue	1.8%	1.7%	1.9%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Accounts Receivable % of Revenue	11.7%	11.6%	12.3%	11.8%	11.5%	11.3%	11.1%	11.0%	11.0%	11.0%	11.1%	11.3%	11.5%
Inventory % of COGS	19.2%	18.6%	16.9%	16.8%	16.4%	16.6%	16.4%	16.2%	16.3%	16.4%	16.5%	16.7%	17.0%
Other Current Assets % of Revenues	2.7%	2.3%	2.8%	2.7%	2.6%	2.6%	2.5%	2.5%	2.5%	2.5%	2.5%	2.6%	2.6%
Accounts Payable % of COGS	19.0%	21.9%	21.1%	20.9%	20.4%	20.6%	20.5%	20.2%	20.3%	20.4%	20.6%	20.8%	21.2%
Accrued Expense % of SG&A	26.5%	25.2%	11.6%	21.5%	21.0%	20.6%	20.3%	20.0%	20.0%	20.0%	20.2%	20.5%	20.9%
Other Current Liabilities % of Revenues	0.8%	1.3%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%