VALUATION OF ASIAN PAINTS



GROUP 20

Shreyash Mahapatra 2020B3A71167H

Arjun Khandelwal 2020B3A70848H

Kanha Toshniwal 2020B3A30759H

Siddharth Bhatt 2020B3A32157H

Karthik Ramana 2021A3PS0792H

Harsh Bokadio 2021A3PS2592H



Company Name: Asian Paints

Sector: Speciality Chemical Sector

NSE Listed Name: Asian Paints Ltd.

CEO: Mr. Amit Syngle

ABOUT THE COMPANY

Asian Paints is the largest paint company in India, 3rd largest paint company in Asia and 9th largest in the world. The company has diversified product portfolio. Asian Paints Limited headquartered in Mumbai, India and Founded in 1942.

Asian Paints operates in both the decorative and industrial segments, offering a wide range of products that cater to residential, commercial, and industrial markets. the company is doing well in overcoming bottlenecks and continues to utilize its robust business model to drive growth.

With more than 8 decades of operations in the sector, the company has crafted its own business model to lend it a distinct competitive edge as well as create a domain differentiator. For the last three years, Asian Paints' EPS grew by 15% for each year.



ABOUT THE INDUSTRY

The specialty chemicals market has been growing exponentially, and the industry in India is projected to grow at a CAGR of more than 12 per cent from 2020 to 2025. Opportunities are replete for both domestic and multinational manufacturers as there has been significant demand from end-user sectors such as food, automobile, real estate, clothing, cosmetics, among others.

The specialty chemicals market represents 22 per cent of India's overall chemicals and petrochemicals market and is valued at USD32 billion. In terms of trade, specialty chemicals account for a significant portion—more than 50 per cent of all chemical exports.

The emergence of the Indian specialty chemicals market has been driven by the country's strong process engineering capabilities, low-cost manufacturing capabilities, and abundant manpower. Further, government initiatives such as the petroleum, chemicals, and petrochemicals investment region (PCPIR) policy and production-linked incentive (PLI) schemes have strengthened the confidence of manufacturers to invest within the country.

MAJOR COMPETITORS OF ASIAN PAINTS







ABOUT COMPETITORS



Kansai Nerolac Paints Limited (formerly known as Goodlass Nerolac Paints Ltd) is the largest industrial paint and third largest decorative paint company of India based in Mumbai. It is a subsidiary of Kansai Paint of Japan. As of 2015, it has the third largest market share with 15.4% in the Indian paint industry.

It is engaged in the industrial, automotive and powder coating business.It develops and supplies paint systems used on the finishing lines of electrical components, cycle, material handling equipment, bus bodies, containers and furniture industries. Kansai Nerolac Paints has 6 paint manufacturing plants and about 6–7 contract manufacturers.



ABOUT COMPETITORS

Godrej Industries Limited is a diversified company headquartered in Mumbai, India. Established in 1897, the Godrej Group has grown to become one of India's leading conglomerates, and Godrej Industries is a key entity within the group. The company operates in various sectors, including chemicals, agriculture, and consumer products.

The Total revenue of the business stood at `4,173 Crore and recorded a growth of 36%, operating profit of the business stood at `706 Crore and recorded growth of 207% over the previous year. The business did well across its product categories.



ABOUT COMPETITORS

Pidilite Industries Limited is an Indian multinational company that operates in the adhesive, sealant, and construction chemical sectors. Founded in 1959, Pidilite has established itself as a leading player in the industry, known for its innovative and high-quality products.

The company's product portfolio includes a diverse range of adhesives, sealants, waterproofing solutions, and construction chemicals under well-known brands such as Fevicol, Fevikwik, Dr. Fixit, and M-Seal. Pidilite's flagship brand, Fevicol, is particularly renowned for its strong market presence and brand loyalty in the adhesive segment. The company has a strong distribution network that spans across India and various international markets.



PRODUCTS AND SERVICES

Asian Paints offers a diverse range of products and services in the paint and coatings industry. The company caters to both decorative and industrial segments.



Decorative Paints: has a 60% market share in decorative paints



Industrial Coatings: provides industrial coating like automotive, protective and powder coating.

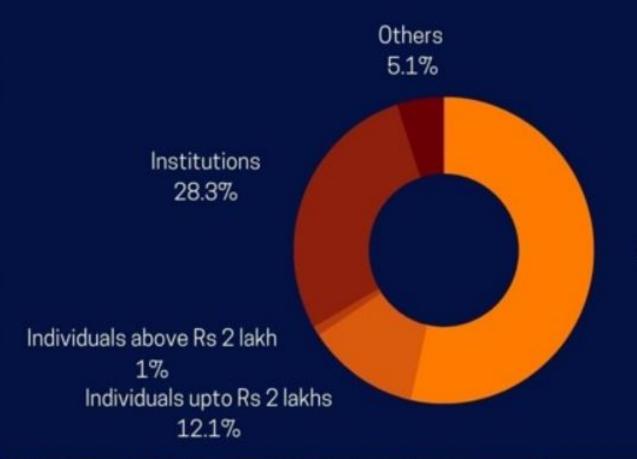


Home Painting Services: Asian paints gets 98% of its revenue from it's coating and painting business.



Innovation and Technology Services: production innovation and colour apps. Accounts to very minute margin.

Asian Paints Shareholding Pattern



Promoter and Promoter Groups 53.5%

BOARD OF DIRECTORS

Standing from Left to Right

Jigish Choksi

Additional/Non - Executive Director

Suresh Narayanan

Independent Director

Manish Choksi

Non-Executive Vice Chairman

Dr. S. Sivaram

Independent Director

M. K. Sharma

Independent Director

Sitting from Left to Right

Pallavi Shroff

Independent Director

Abhay Vakil

Non-Executive Director

Ashwin Dani

Non-Executive Chairman



BOARD OF DIRECTORS

Standing from Left to Right

Amrita Vakil

Non-Executive Director

Deepak Satwalekar

Independent Director

R. Seshasayee

Independent Director

Malav Dani

Non-Executive Director

Sitting from Left to Right

Vibha Paul Rishi Independent Director K.B.S. Anand

Managing Director & CEO



BRIEF OUTLINE OF SALES REVENUE



F. REVENUE FROM OPERATIONS		
India	25,032.30	18,448.37
Outside India	156.21	68.49
Total Revenue	25,188.51	18,516.86

SEGMENT REVENUE AND REVENUE FROM CONTRACT WITH CUSTOMERS	PAINTS	HOME IMPROVEMENT	TOTAL	PAINTS	HOME IMPROVEMENT	TOTAL
Revenue from sale of products	24,582.94	352.63	24,935.57	18,009.27	243.20	18,252.47
Revenue from sale of services	66.16	0.36	66.52	27.60	-	27.60
Other operating revenues	59.66	7.35	67.01	50.44	3.92	54.36
Add : Items not included in disaggregated revenue						
Subsidy from state government	119.41	-	119.41	182.44		182.44
Total Segment Revenue	24,828.17	360.34	25,188.51	18,269.74	247.12	18,516.86



COMMON SIZING OF BALANCE SHEET



Common sizing the balance sheet involves expressing every item in the balance sheet as a % of a base value which is the Total assets that is equivalent to Total liabilities & Shareholders equity

	2023-22	2022-21	2021-20
EQUITIES AND LIABILITIES:			
Equity share capital	0.38%	0.42%	0.48%
Other equity (reserves and surplus)	62.17%	60.31%	63.34%
Total Shareholders funds	62.54%	60.73%	63.82%
NON-CURRENT LIABILITIES:			
Long term borrowings	0.30%	0.20%	0.07%
Deferred Tax liabilities	1.31%	1.53%	2.07%
Other Long term liabilites	3.19%	2.65%	2.84%
Long term provisions	0.90%	0.96%	1.07%
Total Non-Current Liabilities	5.69%	5.34%	6.05%
CURRENT LIABILITIES			
Short-term borrowings	3.50%	3.21%	1.62%
Trade Payables	14.22%	18.31%	16.84%
Other current liabilities	12.87%	11.46%	10.65%
Short term provisions	0.29%	0.31%	0.42%
Total Current Liabilities	30.88%	33.29%	29.53%
Total Liabilities and shareholders equity	99.12%	99.36%	99.40%

ASSETS:			
NON-CURRENT ASSETS			
Net PPE (tangible assets)	20.94%	22.38%	26.52%
Intangible assets	0.73%	0.82%	1.17%
Capital Work in Progress	3.99%	1.88%	0.91%
Other Assets	0.00%	0.00%	0.00%
Total fixed assets	25.66%	25.08%	28.60%
Non-Current investments	6.12%	4.69%	7.32%
Deferred Tax assets	0.07%	0.11%	0.07%
Long term loans and advances	0.00%	0.00%	0.00%
Other non-current Assets	3.48%	3.49%	4.07%
Total Non-Current Assets	35.33%	33.37%	40.07%
CURRENT ASSETS			
Current Investments	10.55%	9.59%	16.28%
Inventories	24.29%	27.06%	18.93%
Trade Receivables	18.13%	17.02%	12.97%
Cash and Cash Equivalents	3.30%	3.80%	3.04%
Short term loans and Advancements	0.00%	0.00%	0.00%
Other Current Assets	8.40%	9.16%	8.71%
Total Current Assets	64.67%	66.63%	59.93%
Total Assets	100.00%	100.00%	100.00%

COMMON SIZING OF INCOME STATEMENT

	2023-22	2022-21	2021-20
Total Revenue	100.00%	100.00%	100.00%
Cost of Materials Consumed	42.97%	47.75%	39.59%
Gross Profit	57.03%	52.25%	60.41%
Operating Expenses:			
+ Selling & Marketing	3.35%	3.26%	3.65%
+ Research & Development	0.00%	0.00%	0.00%
+ Depreciation & Amortization	2.49%	2.82%	3.68%
+ Prov For Doubtful Accts	0.19%	0.20%	0.16%
+ Other Operating Expense	34.68%	31.28%	33.55%
EBITDA	18.81%	17.52%	23.06%
Depreciation and Amortization	2.49%	2.82%	3.68%
Earnings before Interest and Tax (EBIT)	16.32%	14.70%	19.39%
Interest expenses (finance costs)	0.07%	0.08%	0.11%
Total Expenses	83.75%	85.38%	80.73%
Earnings before Taxes and exceptional cases	16.25%	14.62%	19.27%
Exceptional items (revenue)	0.00%	0.00%	0.00%
Exceptional items (cost)	0.00%	0.00%	0.00%
Earnings before Tax	16.25%	14.62%	19.27%
Tax Expenses:			
Current Tax	4.39%	4.02%	5.21%
Deferred Tax Credit	-0.05%	-0.21%	-0.11%
Deferred Tax Credit (+ve)	0.05%	0.21%	0.11%
Profit for the year	11.91%	10.82%	14.17%





Common sizing the income statement involves expressing every item in the income statement as a % of a base value which is the Total Revenue

HORIZONTAL ANALYSIS OF INCOME STATEMENT

18.77% 6.88% 29.64% 22.22% 5.10% 11.03%	62.35% 16.43% 20.18% - 3.17%	
29.64% 22.22% 5.10%	16.43% 20.18% - 3.17%	
22.22%	20.18% - 3.17%	
5.10%	3.17%	
5.10%	3.17%	
11.03%		
	72.18%	
31.72%	25.50%	
27.52%	2.27%	
5.10%	3.17%	
31.81%	2.10%	
-1.17%	-1.56%	
16.51%	42.37%	
32.00%	2.13%	
-		
32.00%	2.13%	
29.75%	3.80%	
-71.88%	154.30%	
30.80%	2.72%	
	27.52% 5.10% 31.81% -1.17% 16.51% 32.00% 32.00% -71.88%	27.52% 2.27% 5.10% 3.17% 31.81% 2.10% -1.17% -1.56% 16.51% 42.37% 32.00% 2.13%



Horizontal analysis, also known as trend analysis, is a financial analysis method that compares financial statement data over a certain period of time

PROJECTIONS OF INCOME STATEMENT

Certain Important Ratios		2022-23	2021-22	2020-21		Averages
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Sales Growth Rate		18.77%	34.61%			26.69%
Gross Profit Margin		57.03%	52.25%	60.41%		56.56%
Operating Expenses/Sales Revenue		38.22%	34.73%	37.35%		36.77%
DA/Net PPE		16.02%	16.04%			16.03%
Interest/other long term liabilities prior period		1.95%	1.97%			1.96%
Income tax		27.01%	27.48%	27.03%		27.17%
Income Statement projections	2028-27	2027-26	2026-25	2025-24	2024-23	2023-22
Total Revenue	1123514	886809.5	699974.4	552502	436100	344221
Cost of Materials Consumed	488022	385204.7	304048.9	239991	189429	147910
Gross Profit	635492	501604.8	395925.5	312511	246670	196312
All Operating Expenses	413060	326035.7	257345.8	203128	160332	140138
Depriciation and Amortization	26379.2	20821.6	16434.86	12972.3	8583.89	8580.2
Interest Expense	14.9166	14.91661	14.91661	14.9166	14.9166	236.5
Exceptional cases	0	0	0	0	0	0
Earnings before Tax	196037	154732.5	122130	96396.2	77739.5	47357
Tax expense	53269.5	42045.68	33186.54	26193.9	21124.3	12617.6
Net income	142768	112686.8	88943.42	70202.3	56615.2	34739





Projecting the income statement involves multiplying averages of growth rates obtained by horizontal analysis to previous year's items for the consecutive year to project income statement items for future years

PROJECTIONS OF BALANCE SHEET





Projecting the Balance sheet involves using averages of historical efficiency ratios and projected income statement items to project future balance sheet items

		2023-22	2022-21	2021-20		Averages
Trade receivable turnover ratio		7.423455986	7.486069783	8.273825307		7.7277837
Inventory turnover ratio		2.38155005	2.249137816	2.244010951		2.2915663
Accounts Payable turnover ratio		4.06854466	3.323223591	2.522878487		3.3048822
Cash ratio		0.106867715	0.114163405	0.103065209		0.1080321
Working Capital Turnover ratio		3.984396758	3.822789903	3.529063687		3.7787501
Net PPE turnover ratio		6.428549818	5.693649181	4.045521251		5.3892401
Projections	2028-27	2027-26	2026-25	2025-24	2024-23	2023-22
In Millions of INR						
Net PPE	208474	164551.8602	129883.6898	102519.4906	80920.4	53545.7
Working Capital	297324	234683.2824	185239.6602	146212.9358	115408	86392.3
Change in Working Capital	62641	49443.62224	39026.72439	30804.48292	29016.2	10578.9
Other Long term Liabilities	776.417	776.4166108	776.4166108	776.4166108	776.417	761.5

FCFE PROJECTIONS

Free Cash Flow to Equity								
Particulars	2028-27	2027-26	2026-25	2025-24	2024-23	2023-22	2022-21	2021-20
Net Income	142767.7772	112686.8	88943.42	70202.33	56615.22	41001.8	31347.1	30518.1
Depreciation	26379.23824	20821.6	16434.86	12972.32	8583.888	8580.2	8163.6	7912.7
Change in Working Capital	62640.96766	49443.62	39026.72	30804.48	29016.15	10578.9	14806	
CAPEX	70300.93409	55489.77	43799.05	34571.37	35958.63	11223.8	5846.6	
Long Term Borrowings	776.4166108	776.4166	776.4166	776.4166	776.4166	761.5	445.4	145.3
FCFE	36981.53027	29351.46	23328.92	18575.22	1000.739	28540.8	19303.5	



We apply the FCFE formula to the projected income and balance sheet items which gives us the following projections for FCFE.



Cash from Operations





FCFF PROJECTIONS

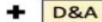
Free Cash Flow to Firm								
Particulars	2028-27	2027-26	2026-25	2025-24	2024-23	2023-22	2022-21	2021-20
Net Income	142767.7772	112686.8	88943.42	70202.33	56615.22	41002	31347	30518
Depreciation	26379.23824	20821.6	16434.86	12972.32	8583.888	8580.2	8163.6	7912.7
Interest Expense(1-T)	19211.17192	15163.72	11968.99	9447.335	6251.377	172.2355	174.2747	177.0421
Change in Working Capital	62640.96766	49443.62	39026.72	30804.48	29016.15	10578.9	14806	
CAPEX	70300.93409	55489.77	43799.05	34571.37	35958.63	11224	5847	
FCFF	55416.28558	43738.76	34521.49	27246.13	6475.699	27951.54	19032.37	



We apply the FCFF formula to the projected income and balance sheet items which gives us the following projections for FCFF



Net Profit



♣ Interest Expense

Increase in WC

CAPEX

BETA CALCULATIONS

Levering and Unlevering of Beta			
Competitive Firms			
Particulars	Nerolac	Godrej	Pidilite
Beta from Regression	0.830875	0.851475	0.71077
Total equity	4,607	1,716	7,108
Total non current Liabilities	217	2,990	599
D/E ratio	0.047133	1.741836	0.084231
E/V ratio	0.954988	0.364719	0.922312
Beta Unlevered	0.803301	0.375343	0.66969
Average unlevered Beta 0.6	516111322		



The beta of a company measures how the company's equity market value changes with changes in the overall market. It is used in the capital asset pricing model (CAPM) to estimate the return of an asset.

Capital Asset Pricing Model (CAPM)

Cost of Equity
$$(k_e) = r_f + \beta (r_m - r_f)$$

COST OF EQUITY CALCULATION

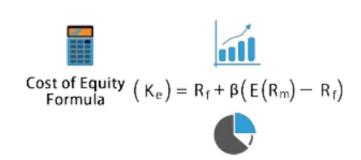
ASIAN PAINTS	
Risk free rate (Rf)	7.27%
Corporate Tax	27.17%
Beta from Regression	0.634165825
Total equity	159922.3
Total Liabilities	14561.8

Relevering beta	for Asian Paints	using D/E ratio
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D/E of Asian Paints	0.091055469
Beta equity for Asian Paints	0.656967415

Calculating cost of Equity Capital

Cost of equity capital	8.4065536278803100%
Rm-Rf	1.73%
Rf	7.27%
Rm	9.00%





The cost of equity is the return that a company requires to decide if an investment meets capital return requirements.

COST OF DEBT

Cost of Debt Calculations	
Interest Coverage ratio	237.5192389
Spread	0.75%
Risk Free rate	7.27%
Cost of Debt	8.02%

Cost of Debt

Cost of debt =
$$\frac{\text{Interest expense}}{\text{Total debt}} \times \left(1 - \frac{\text{tax}}{\text{rate}}\right)$$

>	≤ to	Rating is	Spread is
-100000	0.199999	D2/D	20.00%
0.2	0.649999	C2/C	17.50%
0.65	0.799999	Ca2/CC	15.78%
0.8	1.249999	Caa/CCC	11.57%
1.25	1.499999	B3/B-	7.37%
1.5	1.749999	B2/B	5.26%
1.75	1.999999	B1/B+	4.55%
2	2.2499999	Ba2/BB	3.13%
2.25	2.49999	Ba1/BB+	2.42%
2.5	2.999999	Baa2/BBB	2.00%
3	4.249999	A3/A-	1.62%
4.25	5.499999	A2/A	1.42%
5.5	6.499999	A1/A+	1.23%
6.5	8.499999	Aa2/AA	0.85%
8.50	100000	Aaa/AAA	0.69%



We add the credit spread which is based on the interest coverage ratio which gives asian paints a AAA credit rating, which gives us a credit spread of 0.75% over the risk free rate of 7.27%. Hence we get the Cost of Debt as 8.02%

WACC CALCULATION

Market Value of Equity	
Share Price November 2023	3129
Share Outstanding	95,89,65,792
Market Value of Equity	300018.8395
Market value of Debt	
Book Value of Debt (other long term Liabilities)	14561.8
Maturity	5
Interest Expense	28
Cost of debt	8.02%
Market Value of debt	9691.954884
WACC	
Enterprise Value	309710.7944
D/V	0.047017412
E/V	0.968706435
Tax Rate	27.17%
Cost of Capital	8.42%





We find the weighted average cost of capital for the company which considers the financing structure of the company to arrive at the cost of capital which is 8.42%

Weighted average cost of capital formula

$$WACC = \left(\frac{E}{V} \times Re\right) + \left(\frac{D}{V} \times Rd \times \left(1 - Tc\right)\right)$$

- E = market value of the firm's equity
- D = market value of the firm's debt
- corporate tax rate
- Re = cost of equity
- Rd = cost of debt
- V = E + D

INSIDER

ROA, ROE, Retention Ratio & Payout Ratio

Return On Assets(ROA) measures a company's ability to generate profit from its assets. It is calculated by dividing net income by average total assets.



Return on Equity(ROE) measures a company's profitability in relation to shareholders' equity. It indicates how well a company is utilizing equity to generate returns.



Retention Ratio

[ri-'ten(t)-shən 'rā-shē-,ō]

The proportion of earnings retained by a business rather than paid out to shareholders.



Dividend Payout Ratio

['di-və-,dend 'pā-,aut 'rā-shē-,ō]

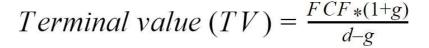
The ratio of the total amount of dividends paid out to shareholders relative to the net income of the company.

ROA & ROE

Ratios Required	2023-22	2022-21	2021-20
Net Income	41001.8	31347	30518.1
Total Assets	255695.2	227416	200670
Total shareholders equity	159922.3	138116	128063
Dividends paid	16113.7074	14150.1	3784.24
Payout Ratio	0.393	0.4514	0.124
Retention ratio	0.607	0.5486	0.876
ROA	0.160354203	0.13784	0.15208
ROE	0.256385757	0.22696	0.23831

We calculate our ROA and ROE. The calculated ROA = 0.16 and ROE=0.256. Retention ratio is 0.607 and Payout ratio is 0.393.

TERMINAL VALUE USING FCFF





It is observed that the calculated growth rate (10.16%) is greater than the Cost of Capital (8.42%). This means that we can't use the growing perpetuity condition since g > r, i.e firm cash flow will grow to infinity and cannot be discounted to get terminal value.

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ROA	15.01%
Reinvestment rate	67.72%
g	10.16%
Cost of Capital	8.42%
FCFF in 2028	55416.28558
Terminal value at end of 2028	-3496253.04
Terminal value at end of 2023	-2333962.85

8	2024	2025	2026	2027	2028	PV of Terminal Value
FCFF	6475.69899	27246.1	34521.5	43738.76435	55416.28558	-2333962.85
NPV	-2209072.145					

TERMINAL VALUE USING FCFE





We calculate the terminal with both FCFF and FCFE We observe that growth rate is greater than cost of capital So, the value is negative.

ROE	24.06%
Reinvestment rate	67.72%
g	16.290138208800700%
Cost of Capital	8.42%
FCFE in 2024	36981.53027
VALUE 10-21-17-2-2-1	
Terminal value in 2028	-546311.6401
Terminal value at end of 2023	-364696.4501

	2024	2025	2026	2027	2028	PV of Terminal Value
FCFE	1000.739	18575.2	23328.9	29351.46363	36981.53027	-364696.4501
NPV	-283734.1622					

RELATIVE VALUATION





Relative valuation using the Price-to-Earnings (P/E) ratio involves comparing the P/E ratio of a specific company to that of its industry peers or comparable companies.



The P/E ratio is a widely used financial metric that represents the price investors are willing to pay for each dollar of earnings generated by a company.

	Nerolac	GodrejIndustries	Pidilite	
Outstanding shares (as of March 2023)	80,89,04,110	33,66,81,818	47,09,01,438	
Share price (as of March 2023) in rupees	273.93	440.12	2386.52	
Market Capitalization (Billion) in rupees	221.5831029	148.1804017	1123.8157	
Net income (billion) in rupees	4.87	2.33	12.53	
P/E	45.52765623	63.73350612	89.69	
Industry P/E ratio	66.317054			

RELATIVE VALUATION CONT.

	AsianPaints
Outstanding shares (as of March 2023)	78,61,44,853
Share price (as of March 2023) in rupees	2,853.42
Market Capitalization (Billion) in rupees	2243.20145
Net income (billion) in rupees	34.739
P/E	64.573
Valuation of Asian Paints using relati	ve valuation
Industry P/E	66.31705
Net income (billion) in rupees for HUL	34.739
Predicted MV of Equity	2303.788
Offer price for 1 share (in rupees)	2930.488



Using relative valuation we can see that the P/E value of asian paints is lower than the industry average. So, it has underpriced shares.



The current price Rs. 2853.42 while using relative valuation we conclude that the price should be at Rs. 2930.49.

