Complete Business Analysis of Ambuja Cements Ltd.

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Part 1 : Qualitative Analysis

Ambuja Cements is a well-known cement manufacturer with a large advertisement budget and a strong brand name. Cement and clanker are its bread and butter in both domestic and foreign markets. It is the third largest cement firm in India, with an annual plant capacity of 16 million tonnes and revenue exceeding Rs.3298 crore.

Industry Analysis

With about 8% of all cement manufactured worldwide, India is a forerunner in this Because of the government's interest in the infrastructure sector, the market size has been gradually growing and is now expected to grow even more. By 2025, demand is projected to rise to 550-600 million tonnes per year. The smart city project has increased market size and demand even further.

Porter's five forces analysis

- **Bargaining Power of Buyers: Low**

The housing sector accounts for approximately 65 percent of cement consumers. Retail consumers, on the other hand, are extremely disaggregated and often unable to exert much bargaining power. Cement is inelastic in demand.

- **Bargaining Power of Suppliers: Moderate**

Since most cement companies own their own limestone stocks, there is no need to haggle over raw materials. However, as coal links deteriorate, the company is forced to rely on alternative energy sources, causing suppliers to set prices. As a result, manufacturers have moderate to strong bargaining power.

- **Threat of Substitution: Low**

There is no replacement for cement in the construction and engineering industries. As a result, there is virtually no risk of substitution.

- **Threat of New Entry: Low**

Because of the high entry costs (approximately ₹7200 per tonne) and the scarcity of raw materials, the threat of new entry is very low (also, preowned by existing firms). Existing players have been able to lower their costs by taking advantage of economies of scale. It would be difficult for a new player to achieve the same level of success.

- **Inter-firm Rivalry: High**

The level of rivalry between firms is extremely high. Multiple companies, such as ACC, Ultratech, and others, offer similar goods at similar prices, resulting in fierce competition.

SWOT analysis

Strengths:

1. They use imported coal with a high calorific value to have the highest energy quality and lowest costs, and reuse of coal in every step saves cost.
2. Great utilisation of power and space utilization is the theme of the company
3. They have a well-known brand with a high reputation.

Weaknesses:

1. High Inter-firm rivalry.
2. Water is used as a shipping medium for cement in bulk, which raises prices.
3. They have a regionalized market, which is very restricted.

Opportunities:

1. Increased demand for cement is expected in the near future due to recent growth in the agriculture sector.
2. As a result of technological advances, newer ready-mix cement (RMC) will be needed.

Threats:

4. Government policies on coal and fuel prices have a direct effect on the business and can have unanticipated consequences, and this firm heavily relies on coal.
5. Changes in the exchange rate may have a direct impact on export and import.

Competitive Strategy Analysis

Differentiation strategy

- Ambuja Cement Ltd, other than being a cement manufacturer, has transformed itself into a building solutions provider. This makes them a complete consultancy solutions company, and more likely to be approached.
- The company sets the price according to the demand and the transportation cost in a particular region. The prices also vary with the price of the raw materials and labour cost in an area. It has strong customer base in Chhattisgarh, Gujrat and Maharashtra.
- Ambuja Cements has won various prestigious awards for its operational efficiency and social initiatives such as National Mineral Development Corporation (NMDC) Social awareness award 2016-17.

Cost leadership

- The manufacturing facilities use a low cost pet coke mixture which reduces cost.
- The Ambuja Cements is the part of the reputed Holcim group of Switzerland, giving it deep pockets and more economies of scale.
- The company uses coal as a source of energy in its production process, which helps them keep costs down.
- Ambuja has a very efficient Cash Conversion Cycle of -8.48 days. (source)

Corporate Strategy Analysis

- Diversification into providing building solutions, and emerging as a engineering consulting firm on the side.
- On a BCG matrix, a few years earlier they would be classified as a Dog, but due to these recent diversifications they have shown a switch in strategic outlook.
- They use economies of scope in proper utilization of coal, which is used in every stage of cement production.
- Furthermore, the organisation has created new employment opportunities in India, fostered leadership and employed lakhs creating a stable job environment.

Part 2: ROE Decomposition

Traditional Approach:

Profit Margin[1]
All units are in INR cr.
Net Income = 2365.44 (source)
Revenue = 24516.17 (source)
So Profit margin = Net Income/Revenue = **0.09648 = 9.65%**

Asset Turnover Ratio (AT)
Revenue = 24516.17
Average assets = (39720.70 (total assets in 2020) + 40182.34 (total assets in 2019)) / 2
= 39951.52 (source)
So Asset Turnover Ratio = Revenue/Average Assets = **0.614**

Financial Leverage or Equity Multiplier (EM)
We can see that the financial leverage for Ambuja Cements is greater than 1, which means the company is able to produce revenues that are greater in value than the company's overall assets
Average assets = 39951.52
Average Stockholder Equity = 22757.60 (source)
So EM= Average Assets/ Average Equity = **1.755**

DuPont Analysis
= Net Profit Margin*AT*EM
= 0.09648*0.614*1.755 = 0.10396 = **10.396%**

Return on Equity
Net Income = 2365.44
Shareholder Equity = 22757.60
So ROE = Net Income/Shareholder's Equity = **0.103940 = 10.394% (approximately equal to DuPont Analysis)**

Return on equity is income available to the equity after deducting all expenses. It tells us how efficiently the management is handling the money invested by the shareholders.

Alternative Approach:

Financials for year 2020-21

(All Data here has been taken from the consolidated balance sheet for Ambuja Cements Ltd):

[1] (TSR)

Net Income= 2365.44
Interest expense = 58.70 (source)
Interest Income = 500.43
Effective Tax Rate = 22.165%
Net Interese Expense After Tax = (58.70-500.43)*(1-0.22165) = -343.821
NOPAT = 2365.44 - 343.821 = 2021.619
Current Assets = 4430.81
Cash = 8935.63
Current Liabilities = 4543.53
Current Debt = 43.60
Non-Current Debt = 0

Total Long-term Assets = 21050.57
Non-Interest bearing Long-term Liability = 980.20
Operating Working Capital = 3476.87
Net Long Term Assets = 21050.57 – 980.20 = 20070.37
Net Assets = 3476.87+20070.37= 23547.24
Net Debt = 43.60 (source)
Net Capital = 20141.85+20315.86 = 40457.71
Sales = 245160.00

(Click here to open the excel for calculations)

Operating ROA	(NOPAT/Net Assets)	0.085853756
Effective Interest Rate after tax	NetInterest Expense After Tax/ Net Debt	-7.885802752
Spread	Operating ROA - Effective Interest after Tax	7.971656508
Net Financial Leverage	Net Debt/Equity	0.002146107
ROE = Operating ROA + Spread*Net Financial Leverage		0.10296178 or **10.296%**

Performance Analysis

1**. ROE**

Ambuja Cements's ROE in this method is around **10.296%**(almost same as traditional method ROE of 10.394%) and its cost of equity is **6.1561%** (as calculated in part 3). Given a positive difference of around 4% between return on equity and cost of equity, this indicates that Ambuja Cements Ltd. pays less for its capital than what it generates in return, which is a sign of capital efficiency. Also indicated in the company's CFO/PAT ratio which stands at 1.98, implying good cash flow management.[2] (source).

2**. Operating ROA**

(NOPAT/Net Assets) = 2021.619/23547.24 = **8.58%**
This ROA of Ambuja Cements is 8.58%. Higher values of ROA are more desirable.

[2] (Ticker)

3. **Net Financial Leverage**
Net Financial Leverage(Net Debt/Equity) of Ambuja is **0.21%** which means the firm has not taken many debts but yet it has moderately high ROE indicating its ability to grow profits without any burden of debt.

Part 3: Valuation of the company using DCF technique

Please note : All units are in Cr (INR)

Risk Free Rate: Govt. 10 year bond yield - Country default Spread India has Baa3 rating according to Stand and Poor's which gives a default spread of 1.95% (source) Govt. 10 year bond yield: 6.241% (source) Therefore, the risk free rate is 6.241-1.95 = **4.291%**

Beta Calculation:
Levered beta was estimated by using the regression of historical data for 5 years: Beta of the stock = Covariance(R_{amb} , R_m)/ Variance of market returns = 1.261427165/3.560907529= **0.35**
(Click here to open the excel for calculations)
(These values have been calculated using the daily historical data[3] (source) for Ambuja Cements and (source) of adjusted close values from 11 Nov 2015 to 12 Mar 2021)
Since Ambuja Cements is not a diversified company, and its only product is Cement, I have used the historical beta calculation to get Beta: **0.35** (source)

Calculating Tax Rate: Profit before tax = 3991.59 Current tax expense = 884.75 Tax Rate= 884.75/ 3991.59*100 = **22.165%**

Risk Premium:
I will be using the Historic Stock market returns to calculate the risk premium. As the beta is 0.35 the correlation between the market and the firm is not very strong so I'll be using the Arithmetic average to obtain the unbiased estimate.

Year	Stock Market Return (NIFTY)
2015	-4.10%
2016	3.00%
2017	28.60%
2018	3.20%
2019	12.00%
2020	15.00%

[3] (Yahoo)

Average	9.62%

The Risk premium from this approach comes out to be 9.62%-4.291% = **5.329%**

Cost of equity :
Using the Capital Asset Pricing Model : Cost of equity = 4.291 + 0.35*5.329 = **6.1561%**

Cost of debt :
Interest Coverage Ratio of Ambuja (as per the annual report) = 29.36 (source) The associated rating is A+ and the default spread is 0.7% Cost of debt = (4.291 + 0.7)*(1-0.22165) = **3.884 %**

Cost of Capital :
Total Debt/Equity ratio = 0% or 0.0[4] (source) The Debt to equity ratio has been zero for the firm since the last 6-7 years.
Cost of capital = (D/E*Cost of Debt)+(1-D/E)*Cost of Equity= 0.0*3.884 + (1-0)*6.156 = **6.156%**

ROCE:
EBIT(1-tax)= 5293.59*(1-0.22165) = 4120.26 (source)
Total assets = 39720.70
ROCE = 4120.26/(39720.70)*100 = **10.37%**

Net income = 2365.44
Cash= 8935.63 (source)
Capex = 1733.65 (source)
Change in non-cash working capital = 191.51+746.61-880.90 = 57.22 (source)
Depreciation = 1161.24 (from annual report)
Total Equity= 22757.60

(Click here to open the excel for calculations)

Equity Reinvestment Rate	(Net capex + Change in working capital –(New debt issues – Repayments))/(Net Income-after tax income from cash and marketable securities)	(1733.65-1161.24+57.22)/4120.26 =	0.152813172	**15.28%**
Noncash ROE	(Net income – after tax income from cash and marketable securities)/ (Book value of equitycash and marketable securities)	(2365.44-57.22)/(22757.60-8935.63)	0.1669964556	**16.69%**
Expected	Equity reinvestment rate *	15.28*0.1669	2.550232	**2.55%**

4 ("Moneycontrol")

growth in FCFE	Noncash ROE			

Since the leverage in the D/E ratio which is 0 has been stable over the years, we use a constant growth FCFE approach for valuation in stable period:

The single stage FCFE approach for Ambuja Cement Ltd is valid because of the following reasons:
● The firm is in steady state with company growth rate less than the industry growth rate of **3.83%**[5] (source), v/s that of Ambuja Cements being **2.55%**.
● The beta of the stock is close to one or less than one. Beta in case of Ambuja Cement Ltd is 0.35.
● The leverage is stable. The Debt to equity ratio has been zero for the firm since the last 6-7 years.

Firm Valuation:

Value of equity in operating assets: (Net Income-after tax income from cash and marketable securities) (1+growth rate) (1-reinvestment rate)/(cost of equity-growth rate)
= (2365.44-57.22)*(1+0.0255)(1-0.1528)/(0.061561-0.0255) = 55611.04366

Value of Equity: Value of equity in operating assets + Cash
= 55611.04366 +8935.63= 64546.67366

EPS for Ambuja= 10.55 (Annual Report 2019)

So Shares used for EPS calculation = 2365.44/11.91 = 224.21
Fair Share Price: 64546.67366/224.21 = **₹287.88**

Therefore, the fair value for Ambuja Cement Limited is **₹287.88** per share
Current Market Price per share for Ambuja Cement Ltd. = **₹302.90**

Therefore, the firm is undervalued and the right decision would be to buy the share. The reason for undervaluation of the company can be the COVID-19 crisis which has significantly lowered the stock prices however the company business hasn't seen a similar decline. The firm is in its stable period and would be a great fundamental investment.

A similar valuation done by "Simply wall street[6]" shows the company to be **overvalued** with fair price as ₹284.15 with a margin of 20% giving the fair price a range from ₹261 to ₹328 which matches our analysis of fair value of **₹287.88**.
Here's a link of the screenshot from the website (screenshot)

[5] ("Cision")

[6] ("Simply wall street")

References

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