

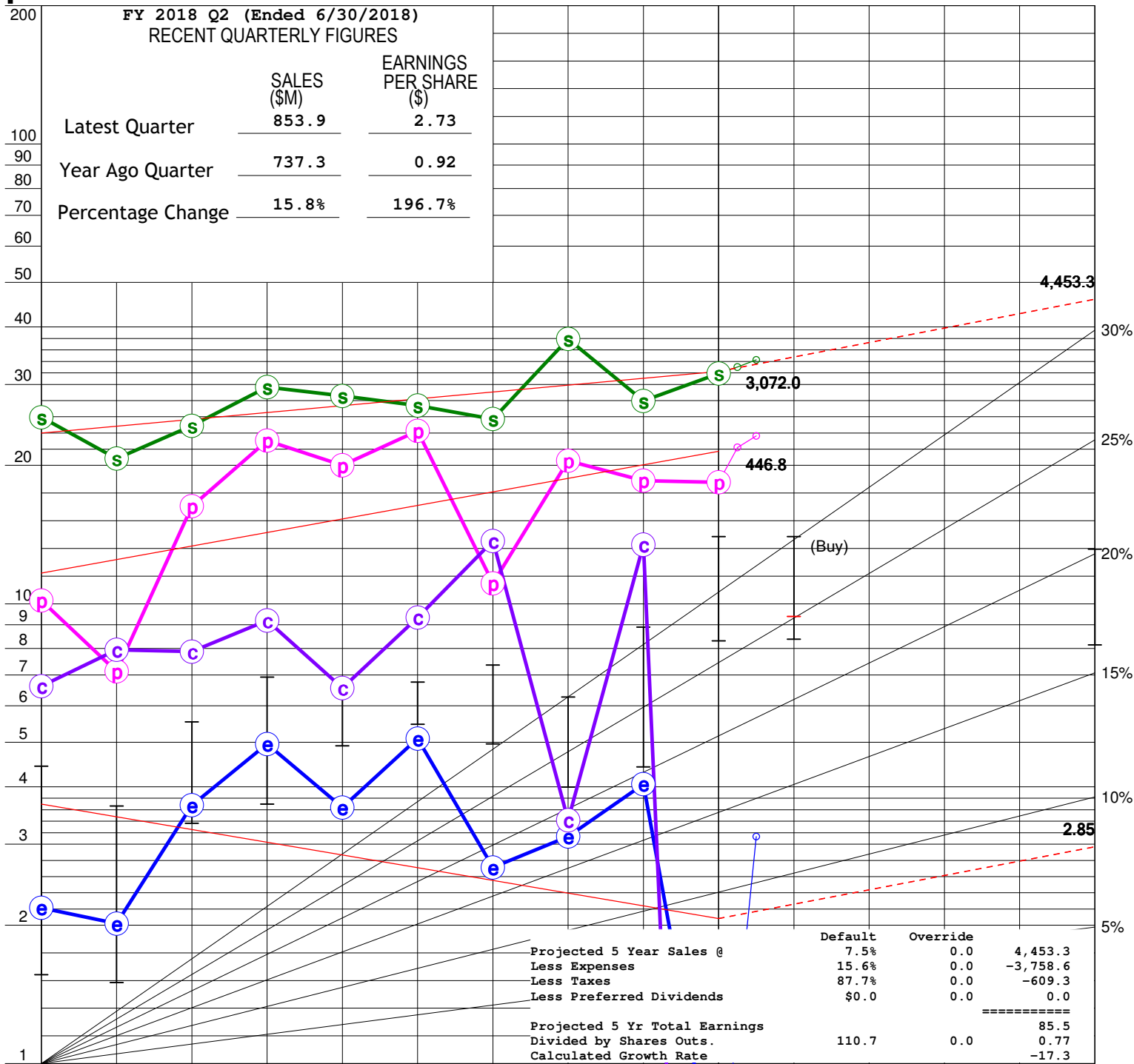


Stock Study

Company	Albemarle	Price Date	10/09/18
Study by	pwoodring	Data Date	10/09/18
Sector	Basic Materials	Last Judgment	10/10/18
Industry	Specialty Chemicals	Data Source	BI
Preferred(\$M)	0.0	Reference	Morningstar
Diluted(M Shares)	110.7	% Insiders	6.1
Total Debt(\$M)	1,615.4	% Institutions	97.9
% Tot Debt to Tot Cap	30.4	Quality	

1 Growth Analysis

NYS: ALB



- | | | | | |
|-----------------------------------|-------|--|--------|--|
| (1) Historical Sales Growth | 3.5 % | (3) Historical Earnings Per Share Growth | -6.2 % | www.iclub.com |
| (2) Estimated Future Sales Growth | 7.5 % | (4) Estimated Future Earnings Per Share Growth | 7.4 % | |
| (5) Sales Growth R ² | 0.41 | (6) Earnings Per Share Growth R ² | 0.08 | |

2 QUALITY ANALYSIS

Company **Albemarle** (ALB)

10/09/18

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	5 YEAR AVG.	TREND UP / DOWN
A % Pre-tax Profit on Sales	10.0	8.6	16.8	19.2	17.7	22.1	11.0	13.6	16.8	14.5	15.6	DOWN
B % ROE (Beginning Yr)	16.7	16.7	26.6	30.9	19.4	23.8	14.0	16.1	13.9	1.7	13.9	DOWN
C % LT Debt to Equity	84.1	64.0	59.8	45.8	37.0	68.2	150.5	101.6	63.9	35.7	84.0	DOWN

3 PRICE, PRICE/EARNINGS RATIO and DIVIDEND ANALYSIS

CURRENT PRICE (P/E) 97.28 (32.4) 52-WEEK HIGH (P/E) 144.99 (48.3) 52-WEEK LOW (P/E) 86.75 (28.9)

Fiscal Year	High Price	Low Price	EPS	High P/E	Low P/E	Dividend	% Payout	% High Yield
1 2013	70.0	56.6	4.90	14.3	11.6	0.960	19.6	1.7
2 2014	76.3	51.4	2.57	29.7	20.0	1.100	42.8	2.1
3 2015	65.0	41.4	3.00	21.7	13.8	1.160	38.7	2.8
4 2016	92.2	45.8	3.90	23.6	11.7	1.220	31.3	2.7
5 2017	145.0	86.1	0.49	295.9	175.7	1.280	261.2	1.5
6 AVERAGE		56.3		77.0	46.6		78.7	
AVERAGE P/E RATIO	61.8		PROJECTED P/E RATIO	30.2		TTM EPS		3.00
CURRENT P/E RATIO	32.4		PEG RATIO	4.1		FTM EPS		3.22
RELATIVE VALUE	52.5%		PROJ. RELATIVE VALUE	48.8% 79.5%		AVG TTM + FTM EPS		3.11

4 EVALUATING REWARD and RISK over the next 5 years

A FUTURE HIGH PRICE ANALYSIS -- NEXT 5 YEARS

Selected High P/E ~~77.0~~ 47.8 X Estimated High Earnings/Share 2.85 = Forecast High Price \$ 136.2

B FUTURE LOW PRICE ANALYSIS -- NEXT 5 YEARS

(a) Sel. Low P/E ~~46.6~~ 28.1 X Estimated Low Earnings/Share ~~0.49~~ 3.00 = \$ 84.3

(b) Average 5-Year Low Price = 56.3

(c) Recent Severe Low Price = 45.8

(d) Price Dividend Will Support = Present Divd. + High Yield = 1.34 + 0.028 = 47.8

Selected Estimated Low Price = \$ 84.3

C PRICE RANGES

Forecast High Price 136.2 - Estimated Low Price 84.3 = Range 51.9 25% of Range = 13.0

BUY (Lower 25% of Range) = 84.3 to 97.3

MAYBE (Middle 50% of Range) = 97.3 to 123.2

SELL (Upper 25% of Range) = 123.2 to 136.2

Current Price 97.28 is in the Buy Range

D REWARD/RISK ANALYSIS (Potential Gain vs. Risk of Loss)

(Forecast High Price 136.2 - Current Price 97.28) ÷ (Current Price 97.28 - Estimated Low Price 84.3) = 3.0 To 1

5 TOTAL RETURN ANALYSIS

A CURRENT YIELD

Present Full Year's Dividend \$ 1.340 ÷ Current Price of Stock \$ 97.28 = 1.4 % Present Yield or % Returned on Purchase Price

B AVERAGE YIELD - USING FORECAST HIGH P/E

Avg. % Payout 78.7 ÷ Forecast High P/E 47.8 = Avg. Yield 1.6

AVERAGE YIELD - USING FORECAST AVERAGE P/E

Avg. % Payout 78.7 ÷ Forecast Avg P/E 38.0 = Avg. Yield 2.1

C % COMPOUND ANNUAL TOTAL RETURN - USING FORECAST HIGH P/E

Average Yield 1.6 % + Annual Appreciation 7.0 % = Compound Annual Total Return 8.6 %

D % PROJECTED AVERAGE RETURN - USING FORECAST AVERAGE P/E

Average Yield 2.1 % + Annual Appreciation 2.1 % = Projected Average Total Return 4.2 %