CF Industries Holdings (CF)

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Disclaimers

- I am not a registered investment advisor and I do not offer any investment advise
- No parts of this talk are suggestions to invest, not invest, buy or sell any kind of securities or other financial instruments

CF Industries Holdings - business

- Nitrogen and phosphate fertilizer products
- Nitrogen (13.0 million tons 2012):
  - Ammonia (2.8M, 1.7B$), granular urea (2.6M, 1.1B$), urea ammonium nitrate solution (6M, 1.9B$), ammonium nitrate (.8M, .2B$), urea liquor, diesel exhaust fluid, and aqua ammonia
  - 5 nitrogen fertilizer manufacturing facilities in Donaldsonville, Louisiana (the largest nitrogen fertilizer complex in North America), Port Neal, Iowa, Courtright, Ontario, Yazoo City, Mississippi and Woodward, Oklahoma;
  - 75.3% interest in Terra Nitrogen Company, L.P. (TNCLP), a publicly traded limited partnership of which we are the sole general partner and the majority limited partner and which, through its subsidiary Terra Nitrogen, Limited Partnership (TNLP), operates a nitrogen fertilizer manufacturing facility in Verdigris, Oklahoma;
  - 66% economic interest in the largest nitrogen fertilizer complex in Canada which we operate in Medicine Hat, Alberta through Canadian Fertilizers Limited (CFL), a consolidated variable interest entity (all interests to be acquired)
  - 50% interests in GrowHow UK Limited, a nitrogen products producer in the United Kingdom; Point Lisas Nitrogen Limited, an ammonia producer; and KEYTRADE AG, a fertilizer trading company

CF Industries Holdings – business (cont'd)

- Phosphate (2 million tons 2012):
  - diammonium phosphate (1.6M, .8B$) and monoammonium phosphate (.4M, .2B$)
  - one of the largest integrated ammonium phosphate fertilizer complexes in the United States in Plant City, Florida
  - the most-recently constructed phosphate rock mine and associated beneficiation plant in the United States in Hardee County, Florida;

CF Industries Holdings - Misc thoughts

- What can go wrong?
  - Competition, new facilities going up
  - Bad agri years pushing fertilizer purchases and prices down
  - Nat gas price going up

CF Industries Holdings – Misc thoughts

- Opportunities:
  - Agri needs to keep up with feeding growing population
  - Limited competition in some locations
  - Lowest price producer in some locations

Strategic considerations

- Moat (*switching costs*, *habit*, *low cost*):
  - What are the moats (is there brand moat)? Locations perhaps, no brand moat
  - What does it take to sustain the moats? N/A
  - Bargaining power of suppliers/customers? No power
- Is it a low risk business? Medium risk.
- Is there high uncertainty? Medium uncertainty.
- How capital intensive is the business? Somewhat.
- Future growth – Unknown
- Are the revenues and cash flows of the business sustainable or overstated / understated due to boom or bust conditions? Perhaps overstated due to high sales/earnings in past years
- Will it exist in 10 years? Yes
- Will it exist without product change in 10 years? Yes

Checklist

- 1. Can I in one sentence say exactly what the company does?
- 2. Operating cash flow higher than earnings per share?
- 3. Free Cash Flow per share higher than dividends paid?
- 4. Debt to equity below 35%?
- 5. Debt less than book value?
- 6. Long Term debt less than 2 times working capital?
- 7. Is the debt to EBITDA ratio less than 5?
- 8. What are the debt covenants?
- 9. When is the debt due? All at the same time?
- 10. Are pre-tax margins higher than 15%?
- 11. Free cash flow margin higher than 10%?
- 12. Does the cash belong to the company?
- 13. Current asset ratio greater than 1.5?
- 14. Quick ratio greater than 1?
- 15. Growth in Earnings Per Share?
- 16. EBIT / Assets > 20%
- 17. Management shareholding > 10%?
- 18. Altman Z score > 3?
- 19. Piotroski F-Score of more than 7?
- 20. Is there substantial dilution?
- 21. What is the Flow ratio (Good < 1.25, Bad > 3)

Management

- I don’t usually do management analysis. Included for template completeness
- No dilution
- Can I trust management?
- Management shareholding (> 10%)
- Management incentives?
- Are the salaries too high?
- Is there heavy insider buying?
- Is there heavy insider selling?
- Do I like the management? (Operators, capital allocators, integrity)
- Profitable reinvestment
- What has management done with the cash?
- Where is Free Cash Flow invested? Share buybacks, dividends, reinvested, ROE & ROCE, incremental BV

Piotroski Score

Only applicable to Graham Cos – N/A to CF

1. Net Income: Bottom line. Score 1 if last year net income is positive.
2. Operating Cash Flow: Better earnings gauge. Score 1 if last year cash flow is positive.
3. Return On Assets: Measures Profitability. Score 1 if last year ROA exceeds prior-year ROA.
4. Quality of Earnings: Warns of Accounting Tricks. Score 1 if last year operating cash flow exceeds net income.
5. Long-Term Debt vs. Assets: Is Debt decreasing? Score 1 if the ratio of long-term debt to assets is down from the year-ago value. (If LTD is zero but assets are increasing, score 1 anyway.)
6. Current Ratio: Measures increasing working capital. Score 1 if CR has increased from the prior year.
7. Shares Outstanding: A Measure of potential dilution. Score 1 if the number of shares outstanding is no greater than the year-ago figure.
8. Gross Margin: A measure of improving competitive position. Score 1 if full-year GM exceeds the prior-year GM.
9. Asset Turnover: Measures productivity. Score 1 if the percentage increase in sales exceeds the percentage increase in total assets.

- Total: / 9

Is it a good business?

- 7 year history of profits
- ROE:
  - 2010: 8 2011:431 2012: 29
- Margins
  - 2010:9 2011:25 2012:30 – not sustainable?!
- 3 year sales growth 33%, earnings growth 72% – not sustainable?!
- No dilution
- Strong balance sheet
  - Cash >> debt
- ROIC = Earnings / (Equity + Debt – Cash) = Earnings / (Assets – non-debt liabilities - Cash)
  - ~= ROE

Is it a good business? Cash flow

- Good 2012 cash flow:
  - 2012 1.8B earnings, 2.4B operating cash flow, 1.8B FCF (FCF = OCF – capital expenditures)
  - Free Cash Flow/Share higher than dividends paid

Is business cheap? - Buffettology calculations

- ROE 15%
- Earnings in 10 years = ROE*Equity*$(1+ROE)^9$ = $3.3B
- Equity in 10 years = Equity*$(1+ROE)^9$ = $22B
- Market cap = 3.3B x P/E (15) = $50B
- Rate of return = 13% after tax (calculations omitted)

- 9 year earnings growth: 49% (not sustainable). Assuming 10% earnings growth: 19% share price growth.

Is business cheap? DCF

- Discounted cash flow
  - Current earnings of 1.8B (FCF 1.8B)
  - 10% growth for 5 years, leveling after that
    - 15% discount -> $18B current valuation
  - 5% growth for 5 years, leveling after that
    - 15% discount -> $15B current valuation
  - 10% growth for 10 years, leveling after that
    - 15% discount -> $22B current valuation
- Owner's yield = earnings / (market cap + debt - cash) = earnings/EV
  - 1.8B / (12B-.5B) = 16%
- What makes up the margin of safety? Valuation
- Is there a sufficient margin of safety? Yes

Is business cheap? - Graham investment considerations

- N/A for CF – included for completeness
- 1.9 P/Book – not a net net
- Altman Z score (http://en.wikipedia.org/wiki/Altman_Z-score)