3M Co. (MMM)

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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

3M – business

- Industrial and Transportation segment - tapes, coated and non-woven abrasives, adhesives, specialty materials, filtration products, energy control products, closure systems for personal hygiene products, acoustic systems products, and components and products that are used in the manufacture, repair, and maintenance of automotive, marine, aircraft, and specialty vehicles – 32.2%
- Health Care segment provides medical and surgical supplies, skin health and infection prevention products, inhalation and transdermal drug delivery systems, dental and orthodontic products, health information systems, and food safety products – 17.0%
- Display and Graphics offers optical film solutions for LCD electronic displays; computer screen filters; reflective sheeting for transportation safety; commercial graphics sheeting and systems; and mobile interactive solutions, including mobile display technology, visual systems products, and computer privacy filters – 14.6%
- Consumer and Office segment provides office supply products, stationery products, construction and home improvement products, home care products, protective material products, certain consumer retail personal safety products, and consumer health care products – 14.4
- Safety, Security and Protection Services segment offers personal protection products, safety and security products, cleaning and protection products for commercial establishments, track and trace solutions, and roofing granules for asphalt shingles – 12.4%
- Electro and Communications segment provides packaging and interconnection devices; fluids that are used in the manufacture of computer chips, and for cooling electronics and lubricating computer hard disk drives; high-temperature and display tapes; insulating materials, including tapes and resins; and related items – 11%

3M – business (cont’d)

- Conglomerate
  - Negative: hard to analyze, need to understand multiple product lines, less impact from single products
  - Positive: Less risk from single product line
- Historically great company

3M – Misc thoughts

- What can go wrong?
  - Diworsefication, less focus on great products
  - Chinese competition in multiple fields?
- Opportunities:
  - Continued great execution, capturing markets from worse competitors

Strategic considerations

- Moat (*switching costs, habit, low cost*):
  - What are the moats? Brand recognition. High quality.
  - What does it take to sustain the moats? Best solutions
  - Bargaining power of suppliers/customers? Not big
- Is it a low risk business? Somewhat.
- Is there high uncertainty? Medium
- How capital intensive is the business? Somewhat
- Future growth – saturation? Unknown
- Are the revenues and cash flows of the business sustainable or overstated / understated due to boom or bust conditions? Probably not

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 MMM

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?

- Over 10 year history of profits
- ROE:
  - 2009: 24.4   2010:26   2011:26.5
- Margins
  - 2009: 14   2010:15   2011: 15
- Growing earnings: 3 year sales growth 6%, earnings growth 9%
- No dilution
- Strong balance sheet
  - Debt ~= cash/short term investments
- ROIC = Earnings / (Equity + Debt – Cash) = Earnings / (Assets – non-debt liabilities - Cash)
  - ~ ROE

Is it a good business? Cash flow

- Good operating cash flow, OK’ish FCF:
    - 2011 h1 2241M earnings, 2184M operating cash flow, 1150-1650M FCF (FCF = OCF – capital expenditures)
    - Free Cash Flow/Share higher than dividends paid (780M)

Is business cheap? – Buffettology calculations

- ROE 20%
- Earnings in 10 years = ROE*Equity*$(1+ROE)^9$ = $17.4B
- Equity in 10 years = Equity*$(1+ROE)^9$ = $87B
- Market cap = 17.4B x P/E (15) = $261B
- Rate of return = 15% after tax (calculations omitted), 8% at 15% ROE

- 9 year earnings growth: 14%. Assuming 14% earnings growth: 15% share price growth. FCF only grew 8% annually.

Is business cheap? DCF

- Discounted cash flow
  - Current earnings of 4.4B
  - 10% growth for 5 years, leveling after that
    - 15% discount -> $42.78B current valuation (if you buy company at <$42.78B , you will get 15% return or higher)
  - 5% growth for 10 years, leveling after that
    - 15% discount -> $39.4B current valuation
  - 10% growth for 10 years, leveling after that
    - 15% discount -> $53.54B current valuation
- Owner’s yield = earnings / (market cap + debt - cash) = earnings/EV
  - 4.4B / (53.8B+7.6B-4.5B) = 8%

- What makes up the margin of safety? Brand/quality
- Is there a sufficient margin of safety? Maybe.

Is business cheap? – Graham investment considerations

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