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Tesla and General Motors Analysis Write up

**Company Background Tesla**

Tesla is an automotive company with a niche in Electric Vehicles. Their product line up is much narrower than most other auto companies. In my view, this is an advantage as they put much more attention to detail in their individual products. Another competitive advantage is in innovation; the company is very young with its founder at the helm, Elon Musk, who is dedicated to his vision for the company. Tesla is a world leader in battery technology and production, with some of the largest scale battery production facilities in the world. Even their competition in electric vehicles is looking to buy their batteries. Tesla is also leading the way in self driving cars, with their autopilot system already being implemented on the roads. A disadvantage for Tesla is scale. Their production is much smaller than anyone else making marginal cost high, combined with cost of acquiring new plants to increase production, they have had consecutive negative net incomes.

**Company Background General Motors**

General Motors is one of America’s legacy auto manufacturers. They have a broad product line, with niche products in different markets. This is an advantage in that they have lots of choices to choose from, that can target specific customer requirements in different parts of the world. Another competitive advantage of GM is their economies of scale. They literally sell 21 times the number of cars annually as Tesla (7.7Million vs 360,000). This keeps marginal production costs down compared to its smaller counterpart. In the electric vehicle market, GM is uncompetitive, with most of their products considered compliance vehicles (EPA required emissions of the broader company). Further, one of the biggest threats to GM is lack of competitiveness with poor product offerings. They are following the pack, not leading it.

**Forecasts**

From forecasting analysis, Tesla is projected to continue to operate with negative net income for the foreseeable future, however, free cash flow from operations, which have been volatile, will be positive. This implies the core of the business is becoming profitable, however, growing costs will continue to bring down net income. This is why to project firm value, I used a two stage growth model to account for high near term growth. To balance the balance sheet, adding to the cash position would make sense, Tesla always seems to be short on cash.

For GM, the company is projected to continue to produce positive net income and free cash flow. They are well into their long-term growth phase, which is why I only used the constant growth model to value them. A large portion of their Net Income is spent on dividends. To balance their balance sheet, which is off by a wide margin, adding to the cash account would make sense.

**Lending Decision**

If I had to lend to either of these firms, and at the same interest rate, I would lend to General Motors, hands down. They are a mature firm producing consistent profits and free cash flow. While the debt to equity in the company is quite high and somewhat concerning, low interest rates and a surplus of money in the financial system from monetary stimulus makes GM a safe bet as a lender. Tesla on the other hand is volatile and needs cash. Any downturn in the business could cause new money to stop being lent, and the company would go under. The risk to the lender, compared to the compensation, is not there. I would require a much higher return to lend to Tesla than GM.

**Management**

The management in Tesla has been much better than GM in my view. Tesla, despite being a smaller start up just 10 years ago, has competitive advantages in technology from self-driving cars and battery technology. GM has been around for a century and is no longer a leader in innovation. Sales have not consistently grown, despite a very strong economy. Very few of their products come to mind as class leading.

**Investment Decision**

Based on my assessment here, General Motors is the better Investment today. While I believe that Tesla is better run, the costs of rapid growth are high, driving down profitability for the foreseeable future. GM, however, while has little more growth potential, seems to be very underpriced. Based on my estimation of value of both firms, Tesla is worth negative equity, while GM’s stock price seems to be far below its true value, even given a slow constant growth rate of 3%.