ATLANTIS PRESS

Advances in Economics, Business and Management Research, volume 76

4th International Conference on Financial Innovation and Economic Development (ICFIED 2019)

The Acquisition of SolarCity by Tesla：A Good Step or Not?

Zeyu Guo[1,a]

[1]Durham University, Elvet Hill Rd, Durham DH1 3LN, United Kingdom

[a]chunchenxiao@cas-harbour.org

Keywords: Free Cash Flow, Liquidity, Market Value, Future Prospect

Abstract. It has been a controversy whether the acquisition of SolarCity would be really beneficial for Tesla in terms of both profitability and long-term strategies. In this article, the author will analyze the acquisition from the aspects of both business strategies and financial performances. Financial indicators such as free cash flow and liquidity will be used in order to measure the financial health and performance of two companies before and after acquisition. Thus we could draw the comparison and figure out the change that might be brought to Tesla in the future.

1. Introduction of the Acquisition

Tesla was founded in 2003 with the intention to prove that electric vehicles would be faster and safer in term of driving than the cars using petrol. The first car, model S, was produced in 2008 which was regarded as a car far beyond the expectation of people at that time. As the vision for Tesla is to create the transition of people's choice towards transportation and even more universal application by utilizing renewable energy, Elon Musk has planned significantly to achieve vertical integration. This acquisition of SolarCity has shown his ambition to expand the product range and integrate mass production in battery with a wide application of solar energy under the single brand. This proposal has been supported by more than 80 percent of its shareholders (carr, 2017).

According to Elon Musk's expectation, Tesla could expand its product range through applying sustainable energy to a wider range which will not only facilitate the transportation but also change the daily energy consumption for the households and manufacturing industries by installing Power wall and power paper. It has been said that internally the combination of the two companies could help Tesla to boost the efficiency of production while lowering the cost, help SolarCity get a more effective marketing method by locating target customers more accurately. Furthermore, the reduction in total operation cost can also be achieved by shared management when more information can flow more freely and efficiently under the same managerial system of one single corporate.

One argument focused on whether this acquisition would rather be personal since Musk at that time was the main shareholder of both two companies. The acquisition could consolidate his influence over other shareholders of Tesla even though he wouldn't be allowed to make the vote during the meeting. The other concern was raised because of the liability SolarCity had. It was shown that in 2015, long-term debt and interest payable took 25% of its revenue (Jim Collins, 2018). And all the businesses SolarCity operated, required large amount of funds to maintain and conduct the innovations. While all the projects they run involved lots of uncertainties and risks, due to the fact that the outcome of the innovation couldn't be ascertained to be delivered and commercialized, this factor could eventually weaken the confidence of investors. Except for two mean concerns above, there was a doubt regarding how funds be allocated into these two companies. What's more, its return from the investments seemed quite ambiguous and hard to be justified within a short period of time.

2. The Facts after the Acquisition

2.1 The Stock Shareholder

The proposal of acquisition is to fully obtain SolarCity's outstanding common stock in exchange of the common stock of Tesla by the ratio of ratio of 0.122x to 0.131x at stock value of $26.50 to $28.50 per share. Consequently, it shows that more than 85% of Tesla shares voted for the acquisition. The deal took about $2 billion which also covered about $3 billion in debt as part of the deal (Brian, 2016).

This acquisition brought a variety of stances. It was argued that the acquisition could diverse the risk of investment from concentrating on one single market but trying to enter the other market of solar energy with fewer competitions. On one hand, the philosophy of using sustainable source of energy to preserve the environment attracted consumers and investors. On the other hand, in reality, the projects that Tesla is conducting are cash-demanding with high uncertainties, which caused doubts among most investors and shareholders.

2.2 Current Financial Performance

As the acquisition was made in 2016, so the figures released from 2017 and 2018 will be used in order to reveal the change regarding its financial health, profitability and cash flow. It can be seen that by the acquisition, the sale of Tesla has gone up 68%. This is reasonable since the product range has been expanded. But its gross margin decreased from 23% to 19% because the cost of production increased by 76.6% (Nasdaq, 2017). This should be originated from SolarCity since it was responsible for concerns regarding the cost and efficiency of producing and installing the products. It seems that as an innovative-technology company, R&D took a big part of operating expenses. It would be reasonable that the expenses for development and research increased by more than half since both companies required innovation in order to keep competitive advantages. Another operating expense also went up by more than 70%. Although Tesla attempted to increase the efficiency in administration and deduct the cost, it still takes time for Tesla to adopt a business model to manage the extended business. The doubled negative figure in operating profit implies that the type of business which Tesla is trying to do with innovation, takes time to be capitalized and needs to find out a way to sustain the business from operation. We could see the comparison of the financial performance through the two tables below.

Table 1. Income statement value in 000

Period ending	12/31/2017	Change in %	12/31/2016
Revenue	$11,758,751	+68	$7,000,132
Cost	$9,536,264	+76.6	$5,400,875
Gross profit	$2,222,487	+39	$1,599,257
Gross Margin	19%		23%
Operating expense			
Research and Development	$1,378,073	+65.2	$834,408
Sale, General and Adimin	$2,476,500	+72.9	$1,432,189
Operating income	($1,632,084)	-144.6	($667,340)
Operating margin	14%		10%

Table 2. Cash Flow Value in 000

Period ending	12/31/2017	12/31/2016
Net income	($1,961,400)	($674,914)
depreciation	$1,727,040	$1,041,789
Net income adjustment	$949,487	$301,289
Changing in operating activity		
Account receivable	($40,0880)	($265,918)
Change in inventory	($178,850)	($672,867)
Other operating activity	($1,594,657)	($1,432,189
Liability	$1,316,992)	$1,980,954
Operating margin	($60,654)	($123,829)

2.3 Current Operation Status

It seems that Elon Musk's plan to make a more efficient operation system doesn't run very well. Although Tesla has already moved the company name of SolarCity and changed its brand name from Tesla Motors to Tesla Inc., the two sections, the vehicle and energy sections, operate almost separately even two years after the acquisition. When we check the website, the previous SolarCity business was under the "Energy" part on the navigation bar, and the business is still focusing on solar panels, solar roof and the so called Powerwall, with no crucial innovations to actually connect the energy business with the vehicle part.

3. Discussion and Analysis

3.1 Business Expansion

It is true that the acquisition does give the chance for Tesla to expand its product range by being able to enter the market of applicable storage of sustainable energy. The technology will not only apply in the future car model but also provide the alternative source of energy for household and industrial consumption.The idea of the self-powered house has been achieved by Powerwall. The advantage for installing Powerwall is that the cost of power consumption can be reduced, and the additional energy stored can be sold.(Tesla.com, 2017) In order to attract the consumer, the price must be lower than the price paid for the original consumption of electricity. But there is a hard time to lower the cost of production. This becomes the main cause of a low gross margin. It has been stated that there can be an annual saving of 150 million through cross-selling (duggan, 2016). But in accordance with the figure for the most recent figure, there is a more significant growth in the cost of production than the increase in its revenue for the recent two years after acquisition. Therefore, the benefit of acquiring SolarCity remains unjustified yet. And operating profit with a bigger negative figure will cause even the harder moments to pay back the debt while its free cash is supported by the liability and external financing. This could be the main concern that the acquisition actually leads to a heavier financial burden with an unforeseen future return. Meanwhile, both businesses require big funds to continue the production and innovation to be competitive. The sustainable energy has been regarded as an opportunity since Tesla took the advantage as a first mover to entered the car-manufacturing market. But more and more traditional car producers flow in the market to share the cake. There are more threats for Tesla to face, but less time to prepare. The most recent evidence has shown that, in order to sustain the operation of the business, Tesla started managing the costs of operation and reducing the expanses on R&D, which could effectively decrease the cost. However, it has been advised that the cut in conducting the research would be a loss to the advantage that Tesla has. The ability to keep innovating is what differentiates Tesla from its competitors. The cut in innovation might also diverge them from the original vision about the future it has been attached to.

3.2 Market Competition

Strategically, by the acquisition, Tesla could obtain more competitive advantage on a stronger technology-basis in order to compete with the traditional car-maker such as Ford and Audi which also have big ambitions to integrate advanced technology with vehicles to create better and smarter driving experiences for the consumers. At the same time, it would be an opportunity for them to enter a new market without creating a totally new business which could be helpful to diverse the risk upon multiple markets.

3.3 Stock Price

When the announcement about the acquisition was made, the stock price of Tesla dropped while the stock SolarCity raised by 13%. But the share price dropped for both of companies when SolarCity accepted the 2.6 $ billion acquisition offer which counted as half of its value one year ago. Due to the bigger risk, the Tesla will be having a lower credit valued and harder to raised money from external sources of financing. Even the positive cash flow and one billion of additional revenue have been promised, still, it has not yet been delivered in reality. Additionally, in order to guarantee sufficient cash flow to fund the project, Tesla will not offer free power charging for new consumers, but will still provide free power charging for previous consumers who were promised with the lifetime service at early stage (Boylan, 2018). Now, Tesla intends to generate more cash. So, they increase the price of the certain existing models and generate cash flow through the subscription of new models. It could be helpful since all the projects and productions that two companies recently operating require cash. But it has also been argued that the cash generated will be burned out soon by funding two companies at the same time .

3.4 Capacity of Manufacture

Another major concern was based on the past performance of Tesla: whether they are able to deliver the product on time? Although Tesla's first model of car had been delayed for more than two years as promised, Tesla still focuses on producing new model of cars. which result in a significant amount of pre-orders. So the doubt focused on the capacity and productivity to deliver the solar roof on time when Elon Musk still strives to strike the market by having a spectacular aesthetic feature with the product. And the inappropriate statement that the company goes to be private and a fund has been secured, caused a drop of stock price to $420 per share which led to the removal of Musk from the managerial position although still staying on board. The avoidance of issuing new shares has also limited the capability for Tesla to raise fund(Rapier, 2018).

4. Conclusion

It could be said that acquiring SolarCity can be supportive to Tesla for a goal of achieving vertical integration functionally and expanding markets by offering wider application of solar energy. Although its great ambition is to save the planet, there is still a long way for Tesla to go. Regarding the profitability and short-term return from investment, it is quite risky since both companies are cash-burning. Also, the doubt about how the two companies are actually operated and how the funds are allocated may puzzle investors. So it is very necessary to re-evaluate and re-clarify both long-term and short-term orientation for the sake of survival and development of the company. At this stage, it would be safer to keep two companies operated independently, and at the same time seek the way to generate the cash and do more innovation to connect the technology of the two companies. Overall, the acquisition of SolarCity by Tesla is a good step in a long run although still facing some problems at present.

References

[1] carr, a. (2017). The Real Story Behind Elon Musk's $2.6 Billion Acquisition Of SolarCity And What It Means For Tesla's Future–Not To Mention The Planet's. [online] Fast Company. Available at:https://www.fastcompany.com/40422076/the-real-story-behind-elon-musks-2-6-billion-acquisition-of-solarcity-and-what-it-means-for-Teslas-future-not-to-mention-the-planets [Accessed 27 Dec. 2018].

[2] Jim Collins, J. (2018). Tesla's Constant Turmoil Can't Hide The Fact That SolarCity Is Dying. [online] Forbes.com. Available at: https://www.forbes.com/sites/jimcollins/2018/06/22/Teslas-constant-turmoil-cant-hide-the-fact-that-solarcity-is-dying/#99085aa48ec0 [Accessed 27 Dec. 2018].

[3] Tesla.com. (2017). Tesla Powerwall. [online] Available at: https://www.Tesla.com/en_GB/powerwall [Accessed 27 Dec. 2018].

[4] Brian degon. (2016). Tesla's Risky SolarCity Acquisition Wins Shareholder Approval. [online] Investor's business daily. Available at: https://www.investors.com/news/technology/Teslas-risky-acquisition-of-solarcity-gets-shareholder-approval/ [Accessed 27 Dec. 2018].

[5] Nasdaq. (2017). TELSA Company financial. [online] Available at:

https://www.nasdaq.com/symbol/tsla/financials [Accessed 28 Dec. 2018].
[6] Lienert, P. (2016). SolarCity accepts Tesla's $2.6 billion offer; both shares fall. [online] U.S. Available at: https://www.reuters.com/article/us-solarcity-m-a-Tesla-idUSKCN10C26O [Accessed 28 Dec. 2018].
[7] Boylan, C. and (2018). Free Unlimited Lifetime Supercharging Now Available For Tesla Model 3 (With A Catch) | CleanTechnica. [online] CleanTechnica. Available at: https://cleantechnica.com/2018/08/12/free-unlimited-lifetime-supercharging-now-available-for-Tesla-model-3-with-a-catch/ [Accessed 28 Dec. 2018].
[8] Rapier, G. (2018). Yahoo is now part of Oath. [online] Finance.yahoo.com. Available at: https://finance.yahoo.com/news/Tesla-surges-elon-musk-offers-140900391.html [Accessed 28 Dec. 2018].
[9] duggan, w. (2016). (SCTY), Tesla Motors, Inc. (NASDAQ:TSLA) - SolarCity Acquisition Could Add Cross-Sell Opportunities For Tesla. [online] Benzinga. Available at: https://www.benzinga.com/analyst-ratings/analyst-color/16/06/8140645/solarcity-acquisition-could-add-cross-sell-opportunities [Accessed 28 Dec. 2018].