

What about TSLA grabs your attention as a value investor? What is the market missing?

Several things attract me to Tesla. Company comparisons are tedious and overdone, but the parallels with Apple several years ago are uncanny. The company is:

- Selling every car it can make
- Pricing its vehicles extraordinarily high
- Making extreme capital investments in core technology, both in research and development and the factories themselves.

The market isn't missing much – most of the issues are well understood and widely discussed. Investors need to make a judgement call on the facts available to all of us. As Tesla reaches milestones on its way to maturity the stock will appreciate even if the market has priced all the risks correctly.

We've distilled the challenge into one sentence: Will Tesla achieve Musk's five hundred thousand car sales per year target, and does it have the funding to do so?

If they do, we'd expect the stock to appreciate three to four times from where it is now in the mid term.

If the company doesn't then the growth component of the equity value will vanish.

There are real assets, brand quality and value in this company so even in a low growth scenario the risk of total capital loss is small.

Will TSLA's cash burn require a future capital raise, and if so, when?

Tesla has unmet demand for a differentiated product that it build out of steel and sell at a premium; so it makes sense to raise capital and build as many cars as possible. We'd prefer to have more capital doing this rather than less.

Whether this is good or bad will depend on the path capital markets take.. If there is a misstep and the debt and equity markets close at a time when Tesla *needs* cash then any raise will be highly dilutive.

Cash is currently sitting at \$1.4 billion after Tesla issued equity to raise \$739 million net of fees in (month?). The market response to this was positive and we'd expect Tesla to consider topping up their cash balances on an annual basis.

I'm very relaxed about this. I initiated my position when the market cap was around \$12 billion on the expectation that the answer to the challenge above was positive, so I'm very supportive of one to three percent dilutions that take the company closer to reaching its goals.

Focusing on where Tesla will be in five years time rather than its current financial ratios is an unconventional approach to the stock market. Most investors use static valuation approaches which take the past year as a starting point and calculate implied growth rates.

Companies that can turn steel and cheap land into productive factories churning out high margin products it will grow many times faster than the economy and multiply the value of its equity.

How big an impact will the Resale Value Guarantee Program have on future profitability?

The Resale Value Guarantee is concerning, mostly for what it says about Tesla. Musk is willing to promise spending in the future to assist sales today. This is fine, but it's a bad habit and has led to scandals in the past. The temptation to drive sales today by adding costs in the future should only be pushed so far.

Fortunately the resale market for Tesla vehicles has been very strong so we see this as a minor part of the story, and another indication of the value of these vehicles. It seems to have had a net positive benefit on sales, both directly and indirectly, perhaps by signalling that Tesla will stand by the quality of its cars. It is likely this has added more to Tesla's brand value than it has cost.

However, I do wonder if Musk would approach any future weakness in sales by making further promises and guarantees. This would not be good.

Can TSLA expect continued income from sales of Zero Emission Vehicle Credits?

A long investment case has to be independent of vehicle credits. I don't pretend to be an expert on US policy in these areas. Globally, the attitude towards emission reduction is very positive, and we expect this to continue. As Tesla matures this will be less important.

What about Tesla Energy? How has that part of the business been doing and what do the margins look like?

There is still something of a mystery about this side of the business. Undoubtedly Tesla has market-leading expertise, but we won't know the truth until the products are being delivered. What we do know is that the market response has been overwhelmingly positive, with \$1 billion of indicative demand almost instantly.

Again it comes back to a simple business proposition: if you can sell every product you make at a price you've set yourself there will be always capital available to you at prices beneficial to existing equity holders. Tesla is a price maker here, not a price taker. The price will not be set by a reluctant consumer in a competitive market, so we expect gross margins to be as high as the rest of the business, with the proceeds to be reinvested in further development and expansion. This is very positive for the stock and a great example of value creation.

If sales in Tesla Energy drive economies of scale for the core car business then that alone will be enough to drive margins for the firm as a whole. The true impact of Tesla Energy may well be to increase margins in the core business and/or allow Musk to offer his vehicles at a lower cost. Tesla Energy is also the perfect bridge for any excess factory capacity. There are second and third order benefits to this play in addition to whatever margin Tesla Energy can create directly.

What competitive threats do you see on the horizon for Tesla from BMW, Google, Toyota et al., and how far ahead of the competition is Tesla?

Tesla has done something that most competitors have been unable to do: Make electric cars look good. The vast majority of electric models have historically looked like bad futuristic design from the 1950s. To give an example Toyota just released a fuel cell car called the Mirai. It just doesn't look... right. This is typical of the Auto industry's approach to these technologies. Right now there's nothing as cool as a

Tesla, and that means something in the investing world. Just ask someone who was short Apple five years ago.

Tesla's focus on a small number of models has major competitive advantages. Tricks like automatic updates to core systems are far more difficult for traditional auto companies with a myriad of models and systems. This also gives something of a cost advantage to Tesla over future competitors, most of which see electric cars as a side business and something of a hedge. Every component of a Tesla has been designed with an electric car in mind. Competitors have to deal with pressures from other parts of the business to include components and styling.

Competition analysis comes back to brand and pricing: right now the pricing power of Tesla is unique. They have managed to build a luxury brand and demonstrated that they can convert that into pricing power.

Musk is right when he talks about new competitors actually benefitting Tesla. Electric cars account for such a tiny portion of sales that there is plenty of room for all to grow. Tesla will be the main beneficiary of the growing acceptance of electric vehicles and the build-out of their infrastructure. Even at five hundred thousand cars Tesla will be 2-3 per cent of the US auto market, and we expect much of these sales to come from foreign markets.

Finally there's a good chance competitors come to depend on Tesla for their market leading battery technology and their \$5 billion investment in the Gigafactory.

Looking forward, it's possible to picture a mature industry with Tesla as the premium brand and a range of competitors below it, unable to charge *quite* as much due to their lower brand value. Much like in smartphones right now, the leader who can charge the highest prices will capture the vast majority of industry prices, irrespective of the intensity of competition at lower price points.

It's hard to picture any of the companies you mentioned matching Tesla's penchant for dramatic capital investment either, so it's likely Tesla's batteries become both the highest quality and lowest cost, leading to their adoption by other companies. Competitors are also unlikely to design their cars from the bottom up, simply as there will be cost temptations to use existing firm components.

When is the Gigafactory scheduled to go live?

The timing is uncertain and Tesla is fond of overpromising when it comes to scheduling (which is fine). Some time in 2016 the factory should start producing batteries. Musk is very aggressive with timing estimates so don't be surprised if it's a little late.

Any thoughts on the Model X? The initial model is even more expensive than the Model S; will they be releasing a cheaper Model X, and if so, when?

Personally I wouldn't use it as an SUV as there are no racks for surfboards, but this is designed more for families than surf bums and apparently the sales response has been excellent, especially given its outstanding safety characteristics. I can see the hospital grade air filtration resonating in the major cities of China. rewrite

High pricing is here to stay until sales volumes increase substantially – certainly not before the Gigafactory is operational. I'd expect delays on the Model 3 as well.

What about super-CEO Elon Musk dividing his time between TSLA, Solarcity, and SpaceX?

Musk is a business and tech celebrity. His value is in building hype for the products and being the final arbiter of quality and workmanship. As long as he can maintain his eye for detail, quality, and intelligent staff, all of his companies could perform well, as they have been for many years now.

I find Musk's almost weekly prognostications somewhat tedious, but Tesla is a beneficiary of this kind of self-publicity, so I'm all for it.

If Tesla hit major financial issues at the same time as one of his other companies then his unfocussed attention would become an issue. Given the success of Tesla so far, I'm willing to bet there are plenty of capable people in leadership positions who could take up the slack.

I'm more concerned about scenarios where Elon is *not* CEO!

1. From a valuation standpoint, what's a fair EV / Sales multiple to give to a company like TSLA?

I think most would agree that Tesla is some mix of luxury and auto company. Car valuations are low as it's an extraordinarily competitive industry. Tesla is carving out its own segment and deserves a much higher valuation. This isn't just speculation on my part – its EBITDA margins are substantially higher and it charges a small fortune for every car.

Trends often start in California, progress throughout the US, move to Western Europe then push out to the rest of the world and the enormous consumer markets of Asia. Luxury tech status symbols in San Francisco tend to become luxury status symbols in Shanghai years later (I'm talking about real luxury goods, not hipster trends).

The intervening moments are often long which gives investors years to purchase the stock and capture the uplift. It's hard to remember now but there were years where it was apparent that Apple was selling every iPhone it could make but had not quite taken the brand global.

At the time Apple's valuation was sky-high, but the share price was lower. Now the valuation is low but the share price has appreciated many multiples. This kind of situation needs careful common-sense thought. The correct play was to look through Apple's high valuation, see where it was going to be in the future, and estimate the enormous appreciation in equity value that would result in the global roll-out of its products – which were high priced and sold as fast as they could be made.

The laws of finance still apply, but you need a dynamic approach. In other words I'd recommend *roughly* valuing the company as it might be in several years time, decide how likely that is, determine if the company is funded to reach there, and then compare that to the existing price. A price of \$200-250 will probably look like a steal in 2020, but you will be lost in the detail if you're working in compound growth rates, which are impossible to forecast accurately.

While on the topic of valuation there's clearly a short US tech story playing out - not necessarily due to fundamental issues (I expect tech sector revenues to keep increasing) but because valuations have reached absurd levels. This has already started with revaluations of even the better 'unicorns'.

In this scenario Tesla stock will be shaky, but there is real widget-making value here to provide a floor. Those looking for short opportunities should focus on companies with less substance behind them. There's a lot of fun to be had on the short side right now but you can do better than Tesla.

My guess is as good as any but I'd expect a mature version of Tesla to end up at an EV / Sales of ~2x, which on a 20% EBITDA margin would imply an EV / EBITDA of 10. If revenues hit \$50 billion this would be equivalent to their 500,000 cars at \$100,000 average price. This is very back of envelope but given we're talking years ahead precision will not be rewarded and will only obfuscate. In reality you would estimate a lower purchase price and add in the revenue from Tesla Energy.

Now we can return to our original question over whether this is achievable, if the growth is funded and how that compares to the current price.

Even the most ardent backwards-looking value disciple should agree that if Tesla achieves their sales targets the stock will be several times higher than it is now, even allowing for substantial multiple compression to market averages.

What key metrics should investors be paying attention to as your thesis matures?

I'm not really worrying about production delays, but I do worry about sales and pricing, and also whether Tesla miscalculated future expenses caused by promises made to sell cars now and in the past.

If the market for expensive electric cars turns out to be fundamentally limited then the upside vanishes. As an Australian I have to trust the US legal system and statements made by Tesla in their shareholder letters as to the strength of the demand for their cars. Anecdotally there's no reason to doubt the attractiveness of the firm's products.

If overseas sales start to pick up substantially in places like Asia you can be assured that Musk is on track. He proved ruthless in changing course in China when his initial approach failed and I'd expect him to get this right eventually. These vehicles are just perfect for the smoggy cities of Asia.

I'll start worrying if I can order a Tesla and pick it up the next day and I'm offered a discount. You'll know my thesis has matured correctly if the Tesla market cap approaches \$100 billion in the next four years, and you'll also know by then if I have been too flippant about dilutive equity raises!