

# Tesla on a Crash Course Towards Bankruptcy. Has the Road to Profitability Closed down for Good? | Charley Grant

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CEO Elon Musk is a visionary, but there is a fine line between setting aggressive goals and misleading shareholders. — Charley Grant

## INTRODUCTION

**What's up everybody?** Welcome to this week's episode of Hidden Forces with me, Demetri Kofinas. Today, I speak with Charley Grant, a columnist for the Wall Street Journal, where he covers U.S. health care and industrial companies, including the electric car company Tesla, which he has been writing critically on Tesla since 2015. In his previous life, Charley was a reporter at Grant's Interest Rate Observer and is a CFA charter holder. Charley, welcome to Hidden Forces...

## WHY DO I CARE?

We did a market forces segment this summer with transportation industry analyst Hubert Horan on the state of Uber, with particular attention paid to its finances and its business model. Both Uber and Tesla are companies that merge the seemingly passé world of automobiles with the futuristic world inspired by 21<sup>st</sup> century technology (autonomous driving, battery power, ride-sharing, etc.). Their investors and those in the press who have been seen as largely supportive of both these companies believe or think that they each possess some kind of technological "secret sauce" that justifies their current valuations. In the case of Uber, the claim is that their routing system lowers costs enough to offset the losses of economies of scale generated from the taxi/limo service. In the case of Tesla, the analogous case is that traditional car manufacturers don't have the expertise or technological knowhow to compete in what has become a technology business, not a car business, where old rules mean little. They see the internal combustion engine (with its facilities, expertise and distribution networks) as burdensome liabilities, not assets.

We need to distinguish hype from reality. There are things that are specific to Tesla, and then, there are factors that are increasingly true of more, and more companies (and that may point to the end of a bull market that has now entered its 10<sup>th</sup> year). There are also some common forces that have contributed to the rise of Tesla, which we have covered on this show and which have contributed to the high valuations of other Unicorns like Uber. These are the availability of investor capital driven partly by the growing income/wealth gap (more the case for Uber than for Tesla), the momentum of cheap financing generated by the ultra-low interest rate environment of the post-2008 era (moonshots included), and the allure of technology with its grand depictions of the future (going to the moon, curing death, eliminating the need for banks, etc.).

I would like to explore a rationale for why Tesla has achieved its valuation, the state of its finance, the areas in which it leads its competitors, where it is competitive with them, and where it lags far behind. I want to explore the prospects for its investors in the face of a changing market (onslaught of competitors), rising debt service, possible continued drop in market cap, etc.

It is high time for Tesla—and Wall Street—to acknowledge reality. — Charley Grant, Oct. 7, 2017



## QUOTES:

*“CEO Elon Musk is a visionary, but there is a fine line between setting aggressive goals and misleading shareholders.” – Charley Grant*

*“Tesla doesn’t have the financial wherewithal for investors to be patient. It burned more than \$1 billion of cash in the second quarter and has nearly \$20 billion in liabilities on its balance sheet.”*

*“Tesla’s soaring stock reignited the interest of better-capitalized car rivals in electric cars. Fresh competition is coming.” – Charley Grant*

*“Tesla is either one of the great Ponzi schemes of all time, or will eventually work out for investors.” – Former General Motors Vice Chair Bob Lutz*

*“What would impress me about Tesla? Selling vehicles at a profit would be very impressive.” – Former General Motors Vice Chair Bob Lutz*

*“The carmakers will be like the cell-phone handset providers, only worse,” says Bob Lutz, former vice-chairman of GM. “Module production will be as profitable as lead-acid car batteries: lousy. A commodity. Suppliers are pretty much insulated; they really have no ‘brands’, so nothing much changes for them.” – Bob Lutz*

*“The whole system is becoming enormously complex all of a sudden,” Mr. Zipse says. He refers to the need for carmakers to incorporate new drive trains and autonomous technology, while keeping the speed of production cycle at just 60 seconds. “If you’re not able to [keep] this complex system working 100 per cent faultless, you will never do 60 second [manufacturing] cycles, and if you’re not doing 60 second cycles, you’ll never build 300,000 cars.” – Oliver Zipse, Head of Production at BMW*

*“The competitive strength of Tesla, long term, is not going to be the car. It’s going to be the factory.” – Elon Musk, CEO of Tesla*

*“The delay in the low-priced Model 3 may finally be causing many deposit holders/shareholders to realize that Musk is the securities fraudster we’ve always known him to be, and is likely to result in hundreds of thousands of demands for deposit refunds as potential buyers flock to alternative vehicles.” – Mark Spiegel, Stanphyl Capital*

*“So in summary, Tesla is losing a massive amount of money even before it faces a huge onslaught of competition (and things will only get worse once it does), while its market cap matches that of Ford and is nearly as large as GM’s despite a \$2.5 billion annualized net loss selling a bit over 100,000 cars while Ford and GM make billions of dollars selling 6.6 million and 9 million cars respectively. Thus this cash-burning Musk vanity project is worth vastly less than its approximately \$55 billion enterprise value and—thanks to its roughly \$31 billion in debt and purchase obligations—may eventually be worth “zero.” – Mark Spiegel, Stanphyl Capital*

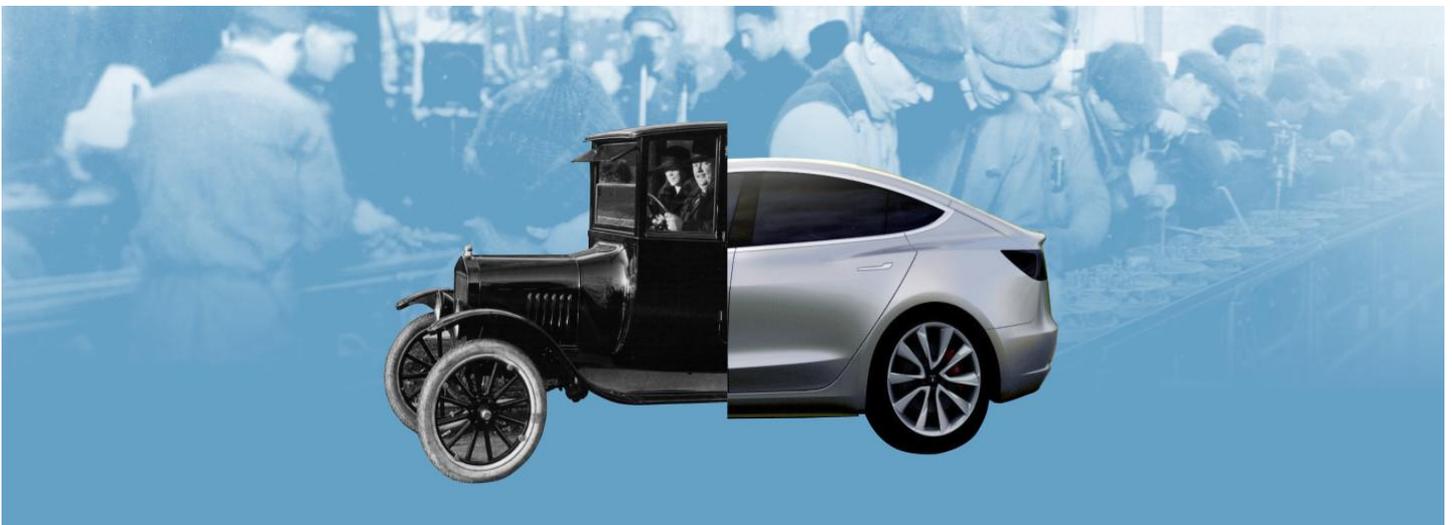
*“By the end of next year, self-driving will encompass essentially all modes of driving and be at least one-hundred to two-hundred percent safer than a person. We are talking eighteen months from now” – Elon Musk, CEO of Tesla*

## FACTS

- Tesla **burned through more than \$3.4 billion last year** in free cash, defined as operating cash flow less capital expenditures.
- **Model 3 production will be at 2,500 cars per week by the end of the first quarter**, according to Tesla.
- The company **expects to produce 5,000 Model 3 cars a week by the end of the second quarter**.
- Tesla **overtook GM last year to become the most valuable US carmaker**, despite having less than 1% of GM's volume
- **Car component parts account for more than 70% of a car**, up from 40-50% in the early 90s, according to industry experts. Their share has grown as cars have become more technologically complex, requiring niche expertise.
- Tesla issues its **largest recall ever** (123,000 vehicles) over faulty Model S steering (excessive corrosion was observed in the power steering bolts). Before this, its largest Model S recall was when 90,000 of the vehicles were affected in 2015 by a faulty seat belt. And last year, it recalled 53,000 Model S and Model X's over a parking brake fault.
- Tesla's **debt-to-equity ratio is 243% as of Dec. 30**; SolarCity's was 375.6% at time of acquisition.
- **Tesla had \$3.4 billion in cash and equivalents at the end of the year and raised an additional \$550 million from bonds** backed by lease payments in February.
- **Customer deposits, which are mostly refundable, topped \$850 million at last count.**

## CONCERNS

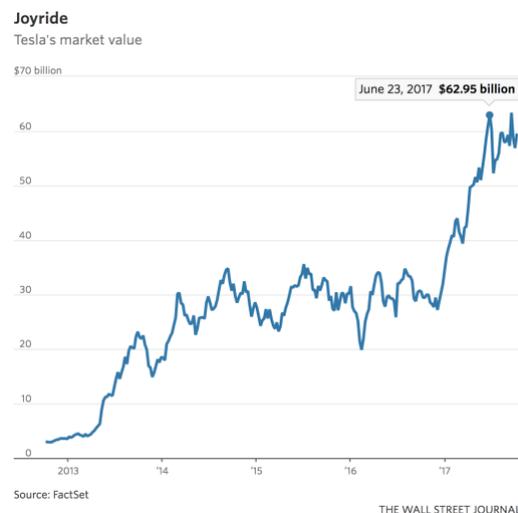
1. Cash Supply Problem — How long can the company go before running out of cash?
2. Production Concerns — How serious are concerns that Tesla will be unable to meet its production deadlines; that it has underestimated the difficulty of creating the infrastructure and expertise required to compete in the mass car market?
3. Personnel Issues — How significant is the flight of top executives from the company in the last few years? What does it say about potential deception of shareholders? Are we seeing insider selling? (Treasurer and VP of finance, chief accounting officer, global president of sales and service)
4. Worker Safety Issues — There have been reports of dangerous working conditions at the manufacturing facility.
5. Car Safety Issues — Recent accidents have raised concern about the safety of Tesla's autonomous pilot.
6. Technology Lead — How much of a lead does Tesla really have if it doesn't even have any patents on its autonomous driving?



## QUESTIONS

1. **Timeline** — You have been writing (and tweeting) about the company for some time now. It feels like Tesla has always operated with some degree of controversy surrounding it. The company had its IPO on June 29<sup>th</sup>, 2010, four months after selling its first car, the Tesla Roadster. It's been in operation since the summer of 2003. Can you give us some background on the company and the timeline of events that are relevant to understanding where we find ourselves at today? Can you give us a sense of the texture of the ups and downs?
2. **What the Frack** — The trajectory of gas prices heading into the financial crisis (oil peaking at over \$140 per barrel) along with the awakening of public concerns over global warming (Al Gore's documentary, An Inconvenient Truth) fueled a narrative that legacy internal combustion engine car manufacturers, with their gas guzzling SUV's, were living in the past. It turned out that the legacy manufacturers have been able to use their legacy infrastructure and fleets to offset startup costs of electric. Electric car investing has functioned as an "option." Rather than betting the farm, the major manufacturers can hedge their bets. Where does the oil and gas story fit into the larger picture for Tesla? Would things have been different for the company if we were at \$100 per barrel? \*\*\*The Engine. Asset or Liability?
3. **Dark Turn** — I've heard Jim Chanos refer to the solar city acquisition Jim Chanos calls that the first real "dark turn" and has been keeping a spreadsheet of executives that have left the company in the last two years that he says is now a full two pages long. He says the executive departures are reminiscent of Enron, and he would not be surprised if Musk leaves Tesla in a few years for SpaceX. Apparently, his family has been selling stock, and Chanos thinks that he will end up selling shares in Tesla as well. You covered this story in detail at the WSJ. What is the significance of the Solar City acquisition? What did it signal for you? Is it indicative of how Musk has always operated, or has he taken more liberties that have compromised him as the CEO of a public company in the last few years?
4. **Financials** — I want to get into the financials of this company, and it seems that the big story is with the debt. Tesla has elected to finance itself largely through debt issuance, though they have benefited from a soaring equity valuation and pre-orders:

- a. **Revenues/Expenses** — What is the state of Tesla's finances? Let's start with the company's gross profit margins. What does it cost to produce their current lineup of cars? (Model S, Model X, Model 3, and Roadster). How many (of each) cars are they selling per month/per quarter and how much are they generating in revenue from those sales?
- b. **Debt** — What percentage of Tesla's gross profits go towards servicing its debt? What impact is this going to have on the company's prospects for profitability? How has this affected its ability to issue debt in the past, and how will it affect it going forward? Are there other ways the company is looking to raise capital?
- c. **Subsidies** — What role to government subsidies play? What percentage of Tesla's sales are estimated to have been the result of government subsidies? What role have subsidies played for people who are reserving a model 3? When are the subsidies ending and what impact is this expected to have?
- d. **Downgrades** — Moody's has downgraded the stock. What about the other credit rating agencies? How has Tesla fared relative to other companies in missing estimates? How have investors reacted to Tesla's announcements and missed targets relative to other companies?



e. **Ready Financing** — Sovereign funds and other wealthy sources of capital have been ready to step in and buy shares of companies in private markets. Although Tesla is a public company, how much has it benefited from this larger availability of capital that has been sloshing around the world post 2008, with the reflation trade? \*\*\*Wealth/Income Gap

5. **Production Hell** — What goes into creating these cars? What's up with the Gigafactory and their "partnership" with Panasonic? Where does the Tesla Semi-Truck fit into all of this? Is this a viable project? What are the details?

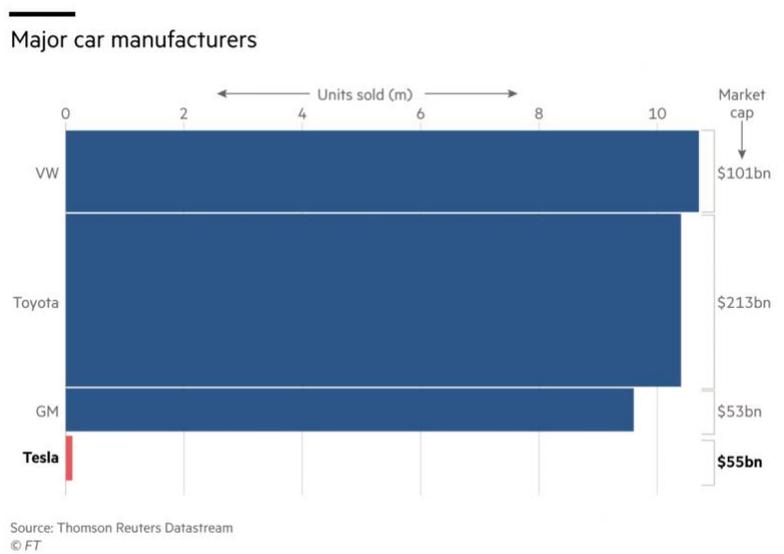
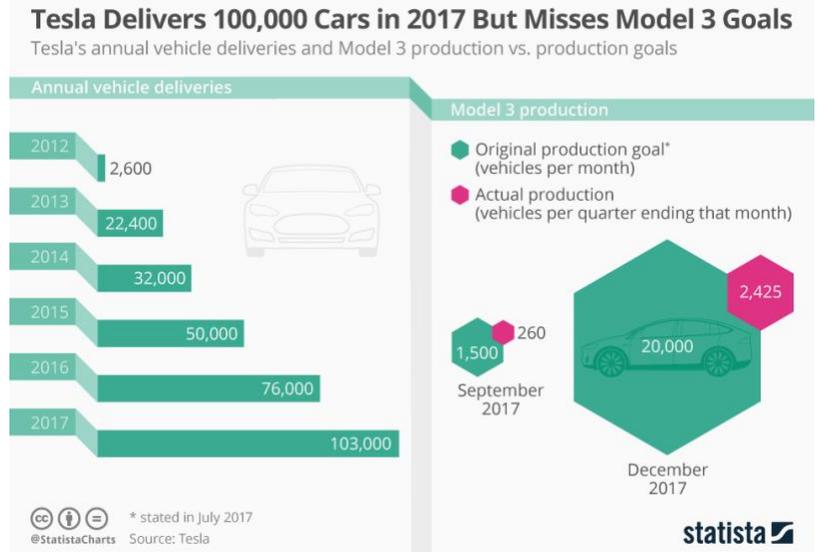
6. **Safety Issues** — What is the safety history of Tesla? There have been some prominent crashes, one quite recently. One of the previous crashes involved the autopilot. What do we know about their crash history? How do these cars perform in tests? They seem to really get brutalized. What is the state of the NTSB's current investigation into the most recent crash and is this cause for concern at the company?

7. **Technical Problems** — What are some of the technical problems facing Tesla's Model 3? I've heard about problems with the sound system (volume spikes suddenly despite no one touching the screen) as well as the problems with the battery seeming to drain even though the car is parked. What is the speculation about the cause of these failures and what are proposed solutions? How has Tesla handled problems compared to the manufacturers? A recent article on Seeking Alpha, theorizes that every Model 3 made requires a hardware retrofit/redesign for its touchscreen mount, potentially either costing the company a significant amount of money and overwhelming its service centers, or mandating either a production halt until that part is redesigned, tested (If Tesla even bothers to test it) and put into production.

8. **Legal Problems** — What is Tesla's legal situation? I understand that it is being increasingly besieged by a wide variety of lawsuits, for labor discrimination, union-busting, autopilot fraud, sudden acceleration, lemon law violations, investor fraud.

9. **It's a Start-up After all** — One of the main bull arguments I've heard from investors is that "it's a startup with startup costs" and that its normal to see these types of massive cash expenditure for a company in its position that is trying to get to a place where it can compete on a global stage.

The question is, what are the existing OEM's going to do about it? Are they just waiting like sitting ducks, or have they been trying to get ahead of the EV tsunami that Tesla has helped fuel? Also, what's harder, creating an electric car, or all the other expertise and work that goes into creating the infrastructure and knowhow needed to become a global car manufacturer? \*\*\* Where has Tesla's market cap ranked relative to the major manufactures at its height?



## 10. The Bull Case

- a. **The Market** — Are changing consumer preferences for ride sharing as opposed to owning a car, acting as a bigger headwind for the old manufacturers? \*\*\* P/E advantage of suppliers over manufactures an equal headwind for both Tesla and legacy manufacturers?
  - b. **The Legacy** — How much of a burden is the legacy of the OEM's on their ability to innovate? As HSBC analyst Horst Schneider wrote in September, the big carmakers "may lack any advantage" over new competitors because they are not involved in battery cell production.
  - c. **The Technology** — Autonomous driving has gotten a lot of coverage in the mainstream press over recent years, as Uber, Google, Tesla, etc., have been testing on open roads. There has been a expectations by investors and the public that Tesla would have some kind of proprietary technology in this space, but it appears that they do not even have a single patent on any autonomous driving technology. Besides being located in Silicon Valley, what technological expertise or competitive advantage in tech does Tesla bring to the car market?
  - d. **The Analysts** — What do analyst need to see in order to be happy? What do analysts expect the adoption curve for electric cars to look like? What is it comparable to? How does it compare to mobile devices.
11. **Looking for a Buyer?** — Might the play here be a purchase by apple of tesla out of bankruptcy, which would give it a head start on integrating its software and hardware?
  12. **Cult of Elon** — Elon Musk is literally "taking moonshots." At the recent SXSW interview he did on stage with Jonathan Nolan, Musk answered questions in his flight jacket related to "existential species risks" like artificial intelligence, asteroid impacts, cataclysmic climate change, etc. On paper, this would seem ridiculous, but if you consider that part of what Tesla's investors are doing is what Robert De Niro's character Ace Rothstein in Casino called "selling people dreams for cash." How important is Musk as an icon for this bull market? How much is he responsible for the success and the price of Tesla? (Reminds me of Walt Disney or PT Barnum in a way. He's a showman – a bigger showman than Steve Jobs was).
  13. **Ponzi** — Although Tesla does not function like a traditional Ponzi scheme, there is a similarity, in that every time one project gets in trouble, Elon seems to manifest another, half-baked idea to garner attention away from the problems and towards continued funding for the company. Is Tesla a Ponzi scheme as Bob Lutz, the former Vice Chair for GM, has said?
  14. **Conflicts of Interest** — Elon has stated publicly that his goal from the beginning was to get *someone* to create an electric car. By this metric, he has already succeeded. Shouldn't his messianic goals scare investors?

