DRIVING OFF A CLIFF: THE CASE AGAINST TESLA

Auburn University
The Doomsday Short Sellers
Blake Martin
Caroline Clothiaux
Peter Lund

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THESIS OVERVIEW

Thesis Overview

Tesla Motors has ridden its status as a "growth company" to appreciate its stock price more than 600% since 2012. The company, led by the charismatic visionary Elon Musk, captured the imaginations of the public and analysts as price targets climbed higher.

But underneath the attractive façade, Tesla's true financial health is much more fragile than what is portrayed. Sales targets have been badly missed, both domestically and internationally. Competitors, bolstered by the company's stunning open-sourcing of its patents, are lurking on the periphery, sharks waiting for the industry to be profitable to squeeze out Tesla. The company has been burning through cash at an astonishing rate, posting increasingly negative cash flows.

And yet, it is on this shaky base that the company is projecting wild growth, expansion, and massive capital investments. CEO Elon Musk insists that this "staggering amounts of money on CapEx" will be covered from cash flows that are currently non-existent. He is gambling his company's future on a wildly ambitious ramp up that, if it falls short, will leave the company deeply in debt and scrambling to avoid bankruptcy. The company nearly went bankrupt in 2009 over cost rollouts and delays², only to be saved by a government bailout³. It seems the company did not learn from this experience, as its latest annual report highlighted delivery lapses and deteriorating margins. This time, government handouts will be nowhere in sight.

 $^{^{1}\} http://www.thestreet.com/story/13044208/3/tesla-motors-tsla-earnings-report-q4-2014-conference-call-transcript.html$

² http://www.bloomberg.com/bw/articles/2012-09-13/elon-musk-the-21st-century-industrialist#p2

³ http://www.bloomberg.com/bw/articles/2013-05-22/tesla-pays-off-its-465-million-loser-loan

THESIS OVERVIEW

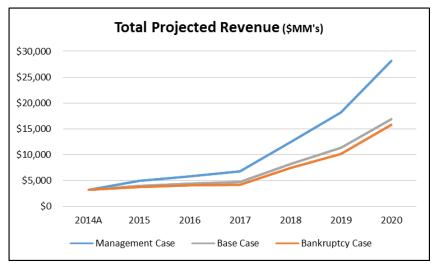
Tesla's unrealistic growth targets are inflated by overly rosy assumptions and the prideful conviction of their CEO that the company will change the world with its automobile. In this document, we will lay out reasons why the company will fall far short of its growth figures, presenting a much more realistic and stark view of the company's future than the utopian picture painted by company management and a fawning press.

Tesla models are fun to drive, high quality, and worthy of the high praise they receive. We wish the same could be said about the company.

Path to Bankruptcy

In 2014, Tesla announced truly horrendous quarterly and annual earnings, missing badly on EPS, margins, revenues, expenses, and capital expenditures. While this poor performance and the resulting \$1.2 billion cash burn seemed not to fully register with CEO Elon Musk, key analysts took note of the failure to deliver on his lofty sales projections. Adam Jonas of Morgan Stanley, a leading analyst holding a very bullish valuation of Tesla, slashed his 2020 sales estimates to less than 60% of the company's goal of 500,000⁴. Using this report, along with financial projections from Credit Suisse, we can construct a more sensible model of the company's performance.

As Tesla begins its multi-year capital expenditure expansion, the company plans to invest \$1.5⁵ billion in 2015 to expand production capabilities. Funding for this expansion will come directly from cash on hand,



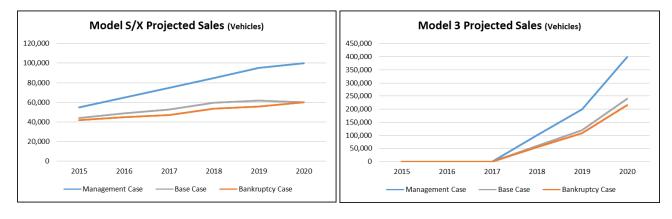
which CEO Musk has already announced would come directly from operating cash flows without dilution of shares⁶. However, even using the company's overly optimistic estimates for EBITDA, the company will not be cash-flow positive until at least 2019 under the burden of capital expenditure spending. For now, the deficit will be compensated for by using the company's cash balance.

⁴ http://money.cnn.com/2014/12/17/investing/tesla-oil-prices/index.html

⁵ http://www.businessinsider.com/tesla-capex-spending-2015-2

⁶ http://www.thestreet.com/story/13044208/1/tesla-motors-tsla-earnings-report-q4-2014-conference-call-transcript.html

This finite pot of money will quickly dwindle as projected cash inflows from operations do not materialize, and the comfy cash cushion the company has built is eroded away. By 2017, Tesla's treasury will no longer be able to support the insatiable appetite for cash of the company's capital expenditures, and will be forced to raise capital.

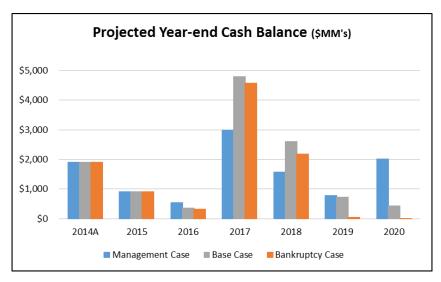


In 2014, the company issued convertible debt carrying miniscule yields, with investors attracted by the promise of a soaring stock price. With the company failing to live up to its self-imposed sky high market expectations, Tesla stock will have lost its shine as analysts begin to demand meaningful cash flows and healthier margins. Without capital gains to draw investors to another convertible bond issuance and requiring at least \$5 billion to cover upcoming debt repayment and capital expenditures, the company will be forced to turn to the bond market to raise capital.

In an unsolicited rating report in May 2014, S&P issued a B- junk rating on outstanding Tesla debt, citing "narrow product focus, concentrated production footprint, small scale relative to its larger automotive peers, limited visibility on the long-term demand for its products, and limited track record in handling execution risks." The rating agency also laid out conditions under which they would further downgrade the company's debt, highlighting projected demand falling below estimates,

operating free cash flows remaining significantly negative, and liquidity issues. S&P further stated that additional debt funding needs would also be grounds for a change in rating.

Tesla would fulfill all four criteria by 2017. This would likely trigger a downgrade by S&P to at least CCC+ or CCC, making the resulting debt issued even more expensive for the company. Using comparable issuances, with an allowance for the rising interest rate environment over the next few years, Tesla's bonds would carry a rate of 9.9%, adding an additional \$497 million in annual interest payments. Principle repayments of the \$660 million in 2018 convertible notes, followed by an additional \$920 million in 2019, would consume a considerable amount of this expensive debt. The rest would be sunk into covering the company's "staggering" capital expenditures as the company begins mass production of the Model 3 in 2018 and attempts to bring the Gigafactory to full capacity by 2020.



Fiscal year 2020 finds this once proud company in a desperate state. Laden with more than \$6 billion in debt, the company is saddled with interest expenses that cannot be paid by their perpetually negative cash flows. Betting big on capital expenditures to sustain growth that never materialized,

Tesla is now facing the prospect of repaying the \$1.3 billion 2021 convertible note principle with no cash left in its accounts. The company already has unmanageable interest payments on their junk bonds issued in 2017, and the prospect of taking on additional leverage is unlikely. Left with no other options, the Company files for Chapter 11 bankruptcy, heading to the courts to salvage what they can from the wreckage of their Icarus dreams.

The Model 3 Pipedream

Tesla has mortgaged their future on aggressive sales growth and a burgeoning market for their product. With the absurdly high target of 500,000 cars sold annually by 2020, Tesla is looking to their mass-marketed Model 3 to reach their goals. With a projected price range at \$40,000, the razor thin margins will require high volume sales to a currently unreached middle class to recoup their investment and avoid financial ruin. However, there are serious market factors that will impede their ability to achieve their goals.

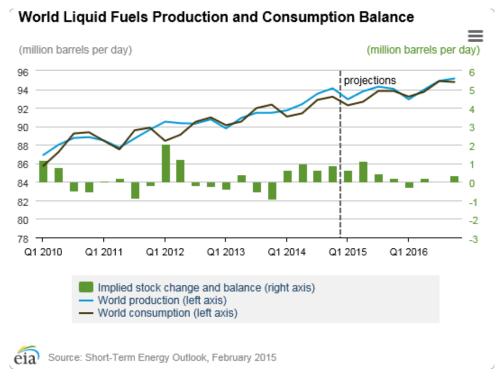
OIL

When Tesla announced their intentions to construct a \$5 billion gigafactory in their 2013 annual shareholders letter, Oil was trading at just over \$100 per barrel⁷. Over the next year, oil prices experienced a historic fall, bottoming in the mid \$40 per barrel range.

In the near future, strong U.S. production levels and potential for the U.S. to reduce export restrictions are expected to continue to weigh down oil prices. With OPEC refusing to cut production and a global slowing of demand, prices are projected to remain depressed for the foreseeable future. 2020 oil futures are hovering around \$70, as analysts predict a slow recovery in prices.

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⁷ http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=D



This sudden shift in the reality of oil prices has already been felt in the automotive world. Traditional names GM and Ford, whose sales of gas guzzlers had been lagging and hurting their bottom line, have posted strong sales numbers since the decline in oil^{8 9}.

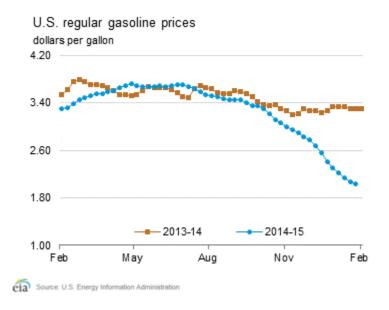
In the 2014 annual earnings call, Musk said that the impact of oil prices on demand of EV's is "not changing any of my projections". While this might be accurate for sales of the high-priced, luxury Model S, the dependence on the elevated oil prices will be much higher for the lower end Model 3. Adam Jonas, analyst at Morgan Stanley, made the point even more critical, emphasizing that Tesla's "longer-term story is far more dependent on the volume success of the Model 3 (than the Model S)" 10.

 $^{^{8} \} http://corporate.ford.com/content/dam/corporate/en/investors/investor-events/Sales\%20Calls/2015/2015-january-us-sales-press-release.pdf$

http://www.gm.com/content/gmcom/home/company/investors/sales-production.content_pages_news_us_en_2015_feb_gmsales.~content~gmcom~home~company~investors~sales-production.html

¹⁰ http://www.valuewalk.com/2014/12/tesla-sales-estimate-slashed-40/

As a result of this significant headwind, Jonas projected a 40% shortfall of the Company's 2020 goal of 500,000 vehicles.



COMPETITIVE LANDSCAPE

CEO Elon Musk made headlines in June of 2014, when he penned a letter declaring open sourcing for patents owned by Tesla¹¹. The move was hailed as a bold step forward for the electric vehicle

Tesla will not initiate patent lawsuits against anyone who, in good faith, wants to use our technology...We believe that applying the open source philosophy to our patents will strengthen rather than diminish Tesla's position in this regard."

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¹¹ http://www.teslamotors.com/blog/all-our-patent-are-belong-you

industry, leading some analysts to believe that a deluge of new EV models based on the newly released patents would flood the market.

Contrary to the reactions in the press, the automotive industry publically greeted the release of the patents with a collective shrug. During the 2015 Chicago Auto Show this February, GM's director of global battery systems, Bill Wallace, said GM has no intention of using the open-sourced patented technologies, as GM holds more "green" patents than any other auto maker¹². Ford CEO Mark Fields has said that the Company has the expertise and ability to build a Tesla-style car, noting of the S-Model "We drove it. We took it apart. We put it back together and we drove it again." ¹³

Their lack of bringing proprietary products to market could be due to a number of factors. Past model failures, conflicting priorities, and slow product development processes are some of the possible reasons for the perceived lack of response from the Big 3.

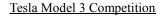
However, a more likely scenario is that the market Tesla is envisioning for long-range EV cars is much further off than the Company believes. Tesla is making massive investments in building out the infrastructure required to sustain a mass produced EV future, expanding the network of Supercharger recharging stations and investing in a massive, \$5 billion lithium-ion battery factory in a joint venture with Panasonic. These capital-intensive and expensive investments burden Tesla with large amounts of capital expenditures, a risk that their fellow car manufacturers are more than happy to allow Tesla to take on. Once a viable market is established, with the concepts and designs ready, the larger car companies can enter the competitive field and crowd out the debt-laden, cash-flow negative Tesla.

¹² http://gmauthority.com/blog/2015/02/general-motors-not-interested-in-open-tesla-patents/

¹³ http://www.thestreet.com/story/12927019/12/ford-motor-f-earnings-report-q3-2014-conference-call-transcript.html

Tesla Model S Competition









Images Courtesy of BMW, Audi, Chevy, & Nissan

Another factor to consider is the amount of time required to translate patents into a commercially sold EV. In his annual earnings conference call, Musk projected that "anyone using our (Patents)... would be about three years after we announced (June 2014)", putting the first tangible results from such a patent release would be seen in 2017.

The early aftershocks of this release are being seen in the industry. Reports indicate that the Porsche Panamera Junior, originally being designed as the Germany luxury car brand's hybrid vehicle, has dropped its gas-powered component in favor of a battery-electric system. Audi (e-tron series) and BMW (I series) have both launched projects to create competitive products, for now are satisfied to compete with hybrid vehicles. Mercedes has planned to invest a reported \$2 billion in an Ecoluxe EV platform to overwhelm Tesla.

Even more troubling, the lower-end market that the Model 3 will be introduced into is already becoming crowded. The Nissan Leaf¹⁵ and the Chevy Volt¹⁶, with current prices under \$40,000, have posted strong sales and are investing in R&D to improve their technologies. BMW's i3, selling at

¹⁴ http://gas2.org/2014/10/28/porsche-pajun-ready-to-take-on-tesla-model-s/

¹⁵ http://seekingalpha.com/article/2663705-nissan-motor-nsany-h1-2015-results-earnings-call-transcript

¹⁶ http://insideevs.com/monthly-plug-in-sales-scorecard/

\$42,000 MSRP, is capitalizing on the strong brand reputation of its manufacturer to capture market share¹⁷.

With the Company looking to target middle class electric car buyers, they will join the party in 2018 to find a fiercely competitive field. The low barriers to entry (made even lower by Tesla's patent release) will allow any of the major car manufacturers to join the market once it becomes profitable, squeezing Tesla with their size and scope.

CHINA

China has prioritized the transition to EV's, striving to have 5 million EV's on the road by 2020¹⁸. It is a crucial market to win for EV companies competing global.

Tesla has had a turbulent introduction into the Chinese market. In the country that accounts for 30% of Tesla's global sales target, the Company has badly underperformed its sales expectation of 5,000 units, shipping only 3,500 to date in a market that consisted of 80,000 EV's in 2014¹⁹.

In the 2014 annual conference call, Musk addressed Tesla's struggles in China, blaming the poor performance on the perception that Tesla's cars are difficult to charge in China, a perception perpetuated by the Company's own sales team.

These comments fail to account for the dramatic shortfall of the Company's sales goals. The Company did run into issues with poor message control from its sales team in China, a problem that may be

¹⁷ http://www.bmwblog.com/2014/05/06/bmw-group-quarterly-report-31-march-2014/

¹⁸ http://www.nytimes.com/2014/04/09/business/international/chinas-embrace-of-foreign-cars.html? r=0

¹⁹ http://www.nytimes.com/2015/02/11/business/international/tesla-seeks-a-stronger-foothold-in-china.html

exacerbated by the fact that an engineer without sales experience has been placed in charge of operations in the country. But Tesla owners have found Superchargers difficult to come by, despite the aggressive expansion of the network by the Company, and encountered a lack of accessible residential charging options.

The Company has more structural issues in its integration into the Chinese market due to its corporate strategy. China's Commerce Ministry, in an effort to protect Chinese automakers, instituted a rule allowing foreign automakers to assemble cars in China only through 50-50 joint ventures with domestic partners. Many foreign companies have adapted to this rule successfully (including Ford, GM, and Toyota), however Tesla has not engaged in a JV. This not only impacts their delivery costs, as all vehicles sold in China must be manufactured in California and shipped to China, but has a profound impact on their local government incentives. In their push to promote EV's, the Chinese government has offered subsidies equaling \$19,000 to purchasers of domestic electric cars. This incentive is not available to Tesla purchasers, as the Company is not producing cars in a JV. While this has not impacted sales of the luxury Model S, it will be a concern going forward as the Company aims to introduce the Model 3.

Musk seems to be waiting to see if the rule is repealed, saying that the Company's strategy on engaging in a domestic JV "depends on what the evolving landscape is in China in the long term as to whether, where, and how a JV would have to be set up." Tesla is playing a dangerous game; Chinese bureaucracy is notoriously slow moving, and every day the Company loses competitive positioning in the market to its more flexible competitors.

Management has had little by way of stability in the country. Tesla China is now on its 3rd General Manager in the last year. Just before her departure as General Manager of Tesla China, Veronica Wu complained about Tesla's in-car navigation system being inoperable and the Company's poor understanding of the Chinese luxury buyers²⁰. Tesla faces an uncertain future in the world's largest automobile marketplace. High costs of production, refusal to engage in domestic production, and perceptions of charging issues will all weigh on the Company's results in the country, and are likely to lead to more missed sales goals and disappointments.

GOVERNMENT PUSHBACK

Tesla's Model 3 will face multiple headwinds from the public sector, the most pressing and threatening to the Company's business being the introduction of anti-Tesla legislation.

Tesla's sales strategy has eschewed the traditional dealer model, by which the auto company sells its cars to dealers, who in turn sell the cars to customers. Tesla's direct-to-consumer sales model has angered state and national level automotive dealer trade associations, who have responded with aggressive lobbying demanding that the Company not be allowed to sell their cars without a local dealer. A series of lawsuits are currently pending from dealer associations against multiple states, attempting to revoke Tesla's dealers license. On the legislative side, state representatives in Ohio, New York, Virginia, North Carolina, and Missouri, are considering emulating successful laws in Texas, Arizona, and New Jersey banning the direct sale of Tesla vehicles²¹. If these laws are passed with the strength of the local Auto Dealer Association at the state level, Tesla would be forced to sell

²⁰ http://knowledge.ckgsb.edu.cn/2014/12/12/china-business-strategy/tesla-china-charging-up/

²¹ http://www.businessinsider.com/elon-musk-on-teslas-auto-dealer-model-2014-3

their products through a franchise. This would be extremely detrimental to Tesla, as Musk asserted himself in a forum after the Company was banned from sales in Texas. "In the last 90 years, when did it (a local franchise for a start-up) work?" Musk told a shareholder. "There's no good examples"²². Beyond fighting against state auto dealer associations, Tesla has to contend with an impending setback whose arrival is only accelerated with their sales growth- the end of their federal EV tax credit. Since the Company's inception, purchasers of Tesla's vehicles have been eligible for a \$7,500 tax credit. While this does not have a meaningful impact on the purchases of the Model S, with their luxury target market, a \$7,500 credit represents a 20% discount on the projected price of the \$40,000 Model 3. However, even if the Company falls well short of its sales projections, it is likely that few of the purchasers of Model 3's will see this incentive. The Federal tax credit, administered to manufacturers, begins to diminish over a 1 year period after an automaker sells 200,000 qualified EV's before expiring completely²³.

²² https://www.youtube.com/watch?v=D1axlMngNW4#t=97

²³ http://www.irs.gov/Businesses/Plug-In-Electric-Vehicle-Credit-IRC-30-and-IRC-30D

Appendix

TESLA'S NEAR DEATH EXPERIENCE: FY 2009 & AUTO BAILOUT

In 2008-2009, Tesla was in serious financial distress. Five years after its founding, the Company had just one commercial model, the Tesla Roadster. The promised Model S, as would become common with Tesla models, was behind schedule and experiencing serious delays.

In October of 2008, CEO Elon Musk announced that Tesla would cut as many as 87 staff and full-time contract workers, or 24% of the 363-person total. Two of the corporate and engineering offices were closed, and production of the Model S was delayed. With funding sources for the Company drying up, Tesla lowered its capital raise to \$25 million from the \$100 million it had originally been seeking. ²⁴

"With Tesla, we had multiple near-death experiences," Musk later said. "We came within a few days of being bankrupt. We closed the financing round at the end of 2008 in the last hour of the last day in which it was possible to do that, which was basically 6 p.m., Christmas Eve, 2008. We would have gone bankrupt a few days after Christmas."²⁵

Despite this respite, 2009 saw accelerating losses for the Company, culminating in a \$37 million loss in Q4 of 2009 alone. CEO Elon Musk invested the last of his money into the Company, essentially making himself bankrupt.

Desperate to fund their next model, and with the venture capital not as forthcoming as the Company had planned, Tesla turned to the newly created \$25 billion Federal Auto Industry Loan Guarantee

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²⁴ http://www.businessinsider.com/the-complete-tesla-story-2014-7?op=1

²⁵ http://blog.sfgate.com/energy/2014/02/28/tesla-from-the-brink-of-bankruptcy-to-auto-pilot-cars/

Program. The massive bailout of the auto-industry represented the Company's only chance to avoid bankruptcy, and Musk aggressively campaigned for a piece of the pot. His efforts paid off in June of 2009, when the Department of Energy announced they would make a loan facility available to Tesla totaling \$465 million. Using this lifeline, the Company funded their Model S and survived until their IPO.

History is repeating itself with Tesla 6 years later, as the Company finds itself in a similar situation. With cost overruns and a delay in the Model X^{26} , Tesla's future is just as uncertain as it was in 2008.

	2008-2009 Bankruptcy Scare	Today
Key Model Delayed	Model S	Model X
Cost Overruns	✓	✓
Unsustainable Cash Burn	✓	✓
Irrational Market Exuberance	✓	✓
Federal Bailout	✓	X
Survived	✓	?

²⁶ http://www.usatoday.com/story/money/cars/2014/05/08/tesla-model-x-delay/8859323/

FINANCIAL MODELS

Management Case:

Vehicles Sold	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Model S/X	650	5,100	22,477	28,713	55,000	65,000	75,000	85,000	95,000	100,000
Model 3				j	0	0	0	100,000	200,000	400,000
Total	650	5,100	22,477	28,713	55,000	65,000	75,000	185,000	295,000	500,000

Source: Bloomberg

Management Case										
(\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Revenue	204.2	413.3	2,013.5	3,198.4	4,950.0	5,850.0	6,750.0	12,450.0	18,150.0	28,200.0
Revenue Growth		102.3%	387.2%	58.8%	54.8%	18.2%	15.4%	84.4%	45.8%	55.4%
- Cost of Revenue	142.6	383.2	1,557.2	2,316.7	3,641.3	4,202.8	4,764.3	10,171.6	14,278.9	21,651.2
Gross Profit	61.6	30.1	456.3	881.7	1,308.8	1,647.3	1,985.8	2,278.5	3,871.2	6,548.8
GP Margin	30.2%	7.3%	22.7%	27.6%	26.4%	28.2%	29.4%	18.3%	21.3%	23.2%
- Operating Expenses	313.1	424.4	517.5	1,068.4	990.0	1,053.0	1,093.5	1,867.5	2,722.5	4,230.0
Operating Income	(251.5)	(394.3)	(61.3)	(186.7)	318.8	594.3	892.3	411.0	1,148.7	2,318.8
Op Inc Margin	(123.1%)	(95.4%)	(3.0%)	(5.8%)	6.4%	10.2%	13.2%	3.3%	6.3%	8.2%
Debt (\$MM's)										
2018 Convertible Notes			660.0	660.0	660.0	660.0	660.0			
2019 Convertible Notes				920.0	920.0	920.0	920.0	920.0		
2021 Convertible Notes				1380.0	1380.0	1380.0	1380.0	1380.0	1380.0	1380.0
PF 2023 Notes				į			2500.0	2500.0	2500.0	2500.0
Total Debt			660.0	2960.0	2960.0	2960.0	5460.0	4800.0	3880.0	3880.0
Interest Payments (\$MM's)										
2018 Convertible Notes			5.9	9.9	9.9	9.9	9.9	5.0		
2019 Convertible Notes				2.3	2.3	2.3	2.3	2.3	0.6	
2021 Convertible Notes				17.3	17.3	17.3	17.3	17.3	17.3	17.3
PF 2023 Notes				j			209.2	209.2	209.2	209.2
Total Interest Payment	0	0.3	5.9	29.5	29.5	29.5	238.7	233.7	227.1	226.5
Free Cash Flow (\$MM's)										
EBITDA	(234.6)	(365.5)	42.8	43.4	797.9	1,285.2	1,843.8	1,519.7	2,346.8	3,635.6
Other Income	119.5	208.3	281.0	135.8	0.0	0.0	0.0	0.0	0.0	0.0
Interest Expense	0.0	(0.3)	(5.9)	(29.5)	(29.5)	(29.5)	(238.7)	(233.7)	(227.1)	(226.5)
Taxes Paid	(0.3)	(0.1)	(0.3)	(0.1)	(37.7)	(84.9)	(117.8)	(35.6)	(184.5)	(418.7)
Change in Working Capital	33.1	(66.8)	(70.1)	(263.1)	(281.1)	1.8	46.8	(318.6)	(33.6)	97.0
Capital Expenditures	(197.9)	(239.2)	(264.2)	(969.9)	(1,454.8)	(1,527.6)	(1,603.9)	(1,684.1)	(1,768.4)	(1,856.8)
FCF	(280.2)	(463.7)	(16.7)	(1,083.3)	(1,005.2)	(354.9)	(69.9)	(752.4)	133.2	1,230.7
Increase (decrease) in borrowing	204.4	188.8	30.1	2,143.1	0.0	0.0	2,500.0	(660.0)	(920.0)	0.0
Equity Issuance	231.5	221.5	630.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net change in cash position	155.7	(53.4)	644.0	1,059.8	(1,005.2)	(354.9)	2,430.1	(1,412.4)	(786.8)	1,230.7
Beginning Cash	99.6	255.3	201.9	845.9	1,905.7	900.5	545.6	2,975.7	1,563.3	776.5
End Cash	255.3	201.9	845.9	1,905.7	900.5	545.6	2,975.7	1,563.3	776.5	2,007.2

Leverage (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Total Debt	0.0	0.0	660.0	2,960.0	2,960.0	2,960.0	5,460.0	4,800.0	3,880.0	3,880.0
EBITDA	(234.6)	(365.5)	42.8	43.4	797.9	1,285.2	1,843.8	1,519.7	2,346.8	3,635.6
Total Leverage (Debt/EBITDA)	0.0x	0.0x	15.4x	68.1x	3.7x	2.3x	3.0x	3.2x	1.7x	1.1x

Management Case Assumptions:

- The Management Case reflects Company guidelines provided by Tesla Motors during the 4Q14 earnings call.
- Total revenue is projected to grow at a CAGR of 33.6% from 2015 to 2019.
- Total vehicle sales reach 500,000 units by 2020, selling 100,000 Model S/X and 400,000 Model 3 vehicles. Additionally, management projects selling 55,000 Model S vehicles during 2015.
- Total operating expenses represent 20% of revenue with operating expenses decreasing to 15% of revenue by year-end 2020.
- Total capital expenditures increase steadily as the Company spends significant amounts of capital on construction of the Gigafactory and expands aggressively for Model 3 production.
 Total CAPEX is expected to average \$1.6BN from 2015 to 2020.
- Working capital assumptions are based off revenue using historical ratios.
- The Company does not raise additional funding until 2017 when it issues \$2.5BN in bonds to refinance its 2018 and 2019 convertible bonds. The newly issued bonds hold an 8.37% rate, which is equal to the average for B- rated issuances in 2015 plus 100 bps to account for increasing interest rates.
- Stock based compensation (included in Other Income) is not projected for future years due to poor visibility.

Management Case Results:

- The Company generates \$11.4BN in cumulative EBITDA from 2015 to 2020.
- The Company is free cash flow negative from 2015 to 2018, but experiences positive free cash flow in 2019 and 2020.
- The Company maintains a healthy cash balance throughout the period and begins building cash reserves more in 2019.
- The Company currently has total leverage of 68.1x but substantially de-levers from 2015 to 2020 with Total Leverage of 1.1x by December 2020.

Base Case:

Vehicles Sold	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Model S/X	650	5,100	22,477	28,713	44,000	48,750	52,500	59,500	61,750	60,000
Model 3					0	0	0	60,000	120,000	240,000
Total	650	5,100	22,477	28,713	44,000	48,750	52,500	119,500	181,750	300,000

Source: Bloomberg

Base Case										
(\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Revenue	204.2	413.3	2,013.5	3,198.4	3,960.0	4,387.5	4,725.0	8,235.0	11,317.5	16,920.0
Revenue Growth		102.3%	387.2%	58.8%	23.8%	10.8%	7.7%	74.3%	37.4%	49.5%
- Cost of Revenue	142.6	383.2	1,557.2	2,316.7	3,023.6	3,290.3	3,500.9	7,321.4	9,575.2	13,731.9
Gross Profit	61.6	30.1	456.3	881.7	936.4	1,097.2	1,224.1	913.6	1,742.3	3,188.1
GP Margin	30.2%	7.3%	22.7%	27.6%	23.6%	25.0%	25.9%	11.1%	15.4%	18.8%
- Operating Expenses	313.1	424.4	517.5	1,068.4	792.0	789.8	765.5	1,235.3	1,697.6	2,538.0
Operating Income	(251.5)	(394.3)	(61.3)	(186.7)	144.4	307.4	458.7	(321.7)	44.7	650.1
Op Inc Margin	(123.1%)	(95.4%)	(3.0%)	(5.8%)	3.6%	7.0%	9.7%	(3.9%)	0.4%	3.8%
Debt (\$MM's)										
2018 Convertible Notes			660.0	660.0	660.0	660.0	660.0			
2019 Convertible Notes				920.0	920.0	920.0	920.0	920.0		
2021 Convertible Notes				1380.0	1380.0	1380.0	1380.0	1380.0	1380.0	1380.0
PF 2023 Notes				į			5000.0	5000.0	5000.0	5000.0
Total Debt			660.0	2960.0	2960.0	2960.0	7960.0	7300.0	6380.0	6380.0
Interest Payments (\$MM's)										
2018 Convertible Notes			5.9	9.9	9.9	9.9	9.9	5.0		
2019 Convertible Notes				2.3	2.3	2.3	2.3	2.3	0.6	
2021 Convertible Notes				17.3	17.3	17.3	17.3	17.3	17.3	17.3
PF 2023 Notes				j			422.3	422.3	422.3	422.3
Total Interest Payment	0	0.3	5.9	29.5	29.5	29.5	451.7	446.8	440.1	439.5
Free Cash Flow (\$MM's)										
EBITDA	(234.6)	(365.5)	42.8	43.4	623.6	998.4	1,410.2	787.1	1,242.8	1,966.9
Other Income	119.5	208.3	281.0	135.8	0.0	0.0	0.0	0.0	0.0	0.0
Interest Expense	0.0	(0.3)	(5.9)	(29.5)	(29.5)	(29.5)	(451.7)	(446.8)	(440.1)	(439.5)
Taxes Paid	(0.3)	(0.1)	(0.3)	(0.1)	(15.1)	(41.8)	(1.4)	(0.2)	(0.2)	(42.3)
Change in Working Capital	33.1	(66.8)	(70.1)	(263.1)	(122.2)	41.1	72.4	(182.0)	19.4	84.1
Capital Expenditures	(197.9)	(239.2)	(264.2)	(969.9)	(1,454.8)	(1,527.6)	(1,603.9)	(1,684.1)	(1,768.4)	(1,856.8)
FCF	(280.2)	(463.7)	(16.7)	(1,083.3)	(998.0)	(559.4)	(574.5)	(1,526.0)	(946.5)	(287.7)
Increase (decrease) in borrowing	204.4	188.8	30.1	2,143.1	0.0	0.0	5,000.0	(660.0)	(920.0)	0.0
Equity Issuance	231.5	221.5	630.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net change in cash position	155.7	(53.4)	644.0	1,059.8	(998.0)	(559.4)	4,425.5	(2,186.0)	(1,866.5)	(287.7)
Beginning Cash	99.6	255.3	201.9	845.9	1,905.7	907.7	348.3	4,773.8	2,587.8	721.3
End Cash	255.3	201.9	845.9	1,905.7	907.7	348.3	4,773.8	2,587.8	721.3	433.6

Leverage (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Total Debt	0.0	0.0	660.0	2,960.0	2,960.0	2,960.0	7,960.0	7,300.0	6,380.0	6,380.0
EBITDA	(234.6)	(365.5)	42.8	43.4	623.6	998.4	1,410.2	787.1	1,242.8	1,966.9
Total Leverage (Debt/EBITDA)	0.0x	0.0x	15.4x	68.1x	4.7x	3.0x	5.6x	9.3x	5.1x	3.2x

Base Case Assumptions:

- The Base Case reflects Company guidelines provided by Tesla Motors during the 4Q14 earnings call; however, revenues have been guided down to align with analyst projections.
- Total revenue is projected to grow at a CAGR of 27.4% (vs. 33.6% in Mgmt Case) from 2015 to 2019.
- Total vehicle sales reach 300,000 (vs. 500,000 in Mgmt Case) units by 2020, selling 60,000 (vs. 100,000 in Mgmt Case) Model S/X and 240,000 (vs. 400,000 in Mgmt Case) Model 3 vehicles. Additionally, Model S sales total 44,000 (vs. 55,000 in Mgmt Case) in 2015.
- Total operating expenses represent 20% of revenue with operating expenses decreasing to 15% of revenue by year-end 2020 (same as Mgmt Case).
- Total capital expenditures increase steadily as the Company spends significant amounts of capital on construction of the Gigafactory and expands aggressively for Model 3 production.
 Total CAPEX is expected to average \$1.6BN from 2015 to 2020 (same as Mgmt Case).
- Working capital assumptions are based off revenue using historical ratios. (Same as Mgmt Case)
- The Company does not raise additional funding until 2017 when it issues \$5BN (vs. \$2.5BN in Mgmt Case) in bonds to refinance its 2018 and 2019 convertible bonds. The newly issued bonds hold an 8.45% rate, which is equal to the average for CCC+ rated issuances in 2015 plus 100 bps to account for increasing interest rates.
- Stock based compensation (included in Other Income) is not projected for future years due to poor visibility.

Base Case Results:

- The Company generates \$7.0BN in cumulative EBITDA from 2015 to 2020.
- The Company is free cash flow negative from 2015 to 2020 experiencing its greatest loss (\$1.5BN) in 2018.
- The Company maintains a healthy cash balance from 2015 to 2018, but cash reserves begin diminishing in 2019.
- The Company currently has total leverage of 68.1x but de-levers from 2015 to 2020 with Total Leverage of 3.2x by December 2020. The Company experiences substantially high leverage in 2018 at 9.3x.

Bankruptcy Case:

١	Vehicles Sold	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
l	Model S/X	650	5,100	22,477	28,713	42,000	45,000	47,250	53,550	55,575	60,000
l	Model 3				j	0	0	0	54,000	108,000	216,000
Ŀ	Total	650	5,100	22,477	28,713	42,000	45,000	47,250	107,550	163,575	276,000

Source: Bloomberg

Bankruptcy Case										
(\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Revenue	204.2	413.3	2,013.5	3,198.4	3,780.0	4,050.0	4,252.5	7,411.5	10,185.8	15,768.0
Revenue Growth		102.3%	387.2%	58.8%	18.2%	7.1%	5.0%	74.3%	37.4%	54.8%
- Cost of Revenue	142.6	383.2	1,557.2	2,316.7	2,911.3	3,079.8	3,206.1	6,774.6	8,803.0	12,880.9
Gross Profit	61.6	30.1	456.3	881.7	868.7	970.3	1,046.4	636.9	1,382.7	2,887.1
GP Margin	30.2%	7.3%	22.7%	27.6%	23.0%	24.0%	24.6%	8.6%	13.6%	18.3%
- Operating Expenses	313.1	424.4	517.5	1,068.4	756.0	729.0	688.9	1,111.7	1,527.9	2,365.2
Operating Income	(251.5)	(394.3)	(61.3)	(186.7)	112.7	241.3	357.5	(474.8)	(145.1)	521.9
Op Inc Margin	(123.1%)	(95.4%)	(3.0%)	(5.8%)	3.0%	6.0%	8.4%	(6.4%)	(1.4%)	3.3%
Debt (\$MM's)										
2018 Convertible Notes			660.0	660.0	660.0	660.0	660.0			
2019 Convertible Notes				920.0	920.0	920.0	920.0	920.0		
2021 Convertible Notes				1380.0	1380.0	1380.0	1380.0	1380.0	1380.0	1380.0
PF 2023 Notes				į			5000.0	5000.0	5000.0	5000.0
Total Debt			660.0	2960.0	2960.0	2960.0	7960.0	7300.0	6380.0	6380.0
Debt Payments (\$MM's)										
2018 Convertible Notes			5.9	9.9	9.9	9.9	9.9	5.0		
2019 Convertible Notes				2.3	2.3	2.3	2.3	2.3	0.6	
2021 Convertible Notes				17.3	17.3	17.3	17.3	17.3	17.3	17.3
PF 2023 Notes							496.7	496.7	496.7	496.7
Total Interest Payment	0	0.3	5.9	29.5	29.5	29.5	526.2	521.2	514.6	514.0
Free Cash Flow (\$MM's)										
EBITDA	(234.6)	(365.5)	42.8	43.4	591.9	932.2	1,309.0	634.0	1,053.0	1,838.7
Other Income	119.5	208.3	281.0	135.8	0.0	0.0	0.0	0.0	0.0	0.0
Interest Expense	0.0	(0.3)	(5.9)	(29.5)	(29.5)	(29.5)	(526.2)	(521.2)	(514.6)	(514.0)
Taxes Paid	(0.3)	(0.1)	(0.3)	(0.1)	(11.0)	(31.9)	(0.2)	(0.2)	(0.2)	(1.8)
Change in Working Capital	33.1	(66.8)	(70.1)	(263.1)	(93.3)	57.9	78.9	(163.8)	17.4	56.5
Capital Expenditures	(197.9)	(239.2)	(264.2)	(969.9)	(1,454.8)	(1,527.6)	(1,603.9)	(1,684.1)	(1,768.4)	(1,856.8)
FCF	(280.2)	(463.7)	(16.7)	(1,083.3)	(996.7)	(598.9)	(742.4)	(1,735.4)	(1,212.7)	(477.4)
Increase (decrease) in borrowing	204.42	188.8	30.1	2,143.1	0.0	0.0	5,000.0	(660.0)	(920.0)	0.0
Equity Issuance	231.47	221.5	630.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net change in cash position	155.7	(53.4)	644.0	1,059.8	(996.7)	(598.9)	4,257.6	(2,395.4)	(2,132.7)	(477.4)
Beginning Cash	99.6	255.3	201.9	845.9	1,905.7	909.0	310.2	4,567.8	2,172.4	39.7
End Cash	255.3	201.9	845.9	1,905.7	909.0	310.2	4,567.8	2,172.4	39.7	(437.6)

Leverage (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Total Debt	0.0	0.0	660.0	2,960.0	2,960.0	2,960.0	7,960.0	7,300.0	6,380.0	6,380.0
EBITDA	(234.6)	(365.5)	42.8	43.4	591.9	932.2	1,309.0	634.0	1,053.0	1,838.7
Total Leverage (Debt/EBITDA)	0.0x	0.0x	15.4x	68.1x	5.0x	3.2x	6.1x	11.5x	6.1x	3.5x

Bankruptcy Case Assumptions:

- The Bankruptcy Case reflects Company guidelines provided by Tesla Motors during the 4Q14 earnings call; however, revenues have been guided down to reflect weaker demand for Tesla vehicles.
- Total revenue is projected to grow at a CAGR of 26.9% (vs. 33.6% in Mgmt Case) from 2015 to 2019.
- Total vehicle sales reach 276,000 (vs. 500,000 in Mgmt Case) units by 2020, selling 60,000 (vs. 100,000 in Mgmt Case) Model S/X and 216,000 (vs. 400,000 in Mgmt Case) Model 3 vehicles. Additionally, Model S sales total 42,000 (vs. 55,000 in Mgmt Case) in 2015.
- Total operating expenses represent 20% of revenue with operating expenses decreasing to 15% of revenue by year-end 2020 (same as Mgmt Case).
- Total capital expenditures increase steadily as the Company spends significant amounts of capital on construction of the Gigafactory and expands aggressively for Model 3 production.
 Total CAPEX is expected to average \$1.6BN from 2015 to 2020 (same as Mgmt Case).
- Working capital assumptions are based off revenue using historical ratios. (Same as Mgmt Case)
- The Company does not raise additional funding until 2017 when it issues \$5BN (vs. \$2.5BN in Mgmt Case) in bonds to refinance its 2018 and 2019 convertible bonds. The newly issued bonds hold a 9.93% rate, which is equal to the average for CCC rated issuances in 2015 plus 100 bps to account for increasing interest rates.
- Stock based compensation (included in Other Income) is not projected for future years due to poor visibility.

Bankruptcy Case Results:

- The Company generates \$6.4BN in cumulative EBITDA from 2015 to 2020.
- The Company is free cash flow negative from 2015 to 2020 experiencing its greatest loss (\$1.7BN) in 2018.
- The Company consistently experiences significant cash burn during the period, seeing \$2.4BN of cash burn in 2018. This ultimately results in the Company extinguishing its cash reserves by year-end 2020.
- The Company currently has total leverage of 68.1x but de-levers from 2015 to 2020 with Total Leverage of 3.5x by December 2020. However, the Company experiences substantially high leverage in 2018 at 11.5x.

Bankruptcy Case Model Details:

Depreciation Calculations

Depreciation (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Machinery, equipment and office furni	ture		32.2	68.5	121.6	197.0	294.7	353.2	409.2	461.2
Building and building improvements			2.3	5.1	8.3	12.4	17.3	20.1	22.7	25.0
Computer equipment & software			14.0	31.6	51.3	76.9	107.7	124.9	140.9	155.3
Tooling			46.1	103.7	168.5	252.7	353.8	410.4	462.9	510.3
Leasehold improvements			9.5	21.3	34.6	52.0	72.8	84.4	95.2	105.0
Total Depreciation	16.9	28.8	104.1	230.1	384.2	591.0	846.3	993.0	1130.9	1256.8

Depreciable Assets (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Machinery, equipment and office fur	niture		322.4	822.1	1459.2	2364.0	3536.5	4238.1	4910.8	5534.4
Building and building improvements			67.7	152.3	247.6	371.3	519.9	603.0	680.2	749.9
Computer equipment & software			42.1	94.7	153.8	230.7	323.0	374.7	422.7	466.0
Tooling			230.4	518.4	842.3	1263.5	1768.9	2052.0	2314.6	2551.6
Leasehold improvements			94.8	213.2	346.5	519.7	727.6	844.0	952.1	1049.5
Land			45.0	101.3	164.6	246.9	345.7	401.0	452.3	498.6
Construction in progress			76.3	171.7	279.0	418.5	585.8	679.6	766.6	845.1
SubTotal			878.6	2073.7	3493.0	5414.6	7807.4	9192.4	10499.2	11695.1
Accumulated Depreciation			(140.1)	(244.2)	(474.4)	(858.6)	(1449.6)	(2295.8)	(3288.8)	(4419.7)
Total Depreciable Assets	298.4	552.2	738.5	1829.4	3018.7	4556.0	6357.9	6896.6	7210.4	7275.3

Depreciation was calculated by using the depreciation methods given by management. Due to the Company not providing information on each asset being depreciated, each asset group was depreciated according to its respective method. In order to perform this calculation, asset projections were made for 2015 to 2020. This was done by finding the growth rate between 2013 and 2014 for total depreciable assets and applying this rate to each asset group for 2014. This growth rate was then tapered off each year until 2020. For calculating the depreciation amounts on these assets, the depreciation methods listed in the Company's 2013 10-k were used.

Amortization

Amortization of Debt Discounts (\$MM's)			2014A	2015	2016	2017	2018	2019	2020
2018 Con. Notes	Rate:	4.29%	ļ						
BV of Bond		577.2	583.8	599.0	614.7	631.2	653.4		
Discount Amount		82.8	76.2	61.0	45.3	28.8	6.6		
Interest Expense			16.5	25.0	25.7	26.4	27.1		
Amortization of Bond Discount			6.6	15.1	15.8	16.5	22.1		
2019 Con. Notes	Rate:	4.89%	Į.						
BV of Bond		731.9	759.4	794.3	830.8	869.1	909.3	919.9	
Discount Amount		188.1	160.6	125.7	89.2	50.9	10.7	0.1	
Interest Expense			29.8	37.1	38.8	40.6	42.5	11.1	
Amortization of Bond Discount			27.5	34.8	36.5	38.3	40.2	10.5	
2021 Con. Notes	Rate:	5.96%	j						
BV of Bond		1010.6	1043.5	1088.5	1136.1	1186.6	1240.0	1296.7	1356.7
Discount Amount		369.4	336.5	291.5	243.9	193.4	140.0	83.3	23.3
Interest Expense			50.2	62.2	64.9	67.7	70.7	73.9	77.3
Amortization of Bond Discount			32.9	44.9	47.6	50.5	53.5	56.7	60.0
Total Amortization			67.1	94.9	100.0	105.3	115.8	67.2	60.0

The amortization of debt discounts on Tesla's current debt was calculated using the amortization rate given by the Company in the 2013 10-k.

Vehicle Margins

Tesla Product Margin Breakdown				
	Model	S/X	Mode	el 3
	2015	2020	2018	2020
	(42000 Units)	(60000 Units)	(54000 Units)	(216000 Units)
Base Revenue	75,000	75,000	40,000	40,000
Battery	16,500	16,500	7,508	7,508
Other Powertrain	2,500	2,500	1,750	1,750
Body Components	24,400	24,400	18,000	18,000
Warranty	2,250	2,250	1,200	1,200
Freight	3,000	3,000	3,000	3,000
Contribution Cost	48,650	48,650	31,458	31,458
Variable Profit/ Unit	26,350	26,350	8,542	8,542
Variable Margin	35.1%	35.1%	21.4%	21.4%
Fixed Cost (\$MM)	553	553	1,300	1,300
Unit Assumption	125	125	400	400
Fixed per Unit	13,167	9,217	24,074	6,019
Gross Profit	13,183	17,133	(15,532)	2,523
Base Vehicle Gross Margin	17.6%	22.8%	-38.8%	6.3%
Option Revenue	15,000	15,000	8,000	8,000
Margin on Options	7,500	7,500	4,000	4,000
Total Vehicle Gross Margin	23.0%	27.4%	-24.0%	13.6%

Source: Company Figures and Credit Suisse Estimates

The above estimates were used from a bullish report generated by Credit Suisse in November, 2014.

<u>Taxes</u>

Income Taxes (\$MM's)	2011A	2012A	2013A	2014A	2015	2016	2017	2018	2019	2020
Taxes Paid	0.3	0.1	0.3	0.1	10.8	31.8	0.0	0.0	0.0	1.6
Effective Tax Rate	0.1%	0.0%	0.4%	0.0%	13.0%	15.0%	18.0%	20.0%	20.0%	20.0%
Total Taxes	0.3	0.1	0.3	0.1	11.0	31.9	0.2	0.2	0.2	1.8

The income taxes for Tesla Motors do not have a substantial impact on the Company's earnings. However, the effective tax rate gradually increases from 13% in 2015 to 20% in 2020. This increase is due to the expectation of Tesla's current Deferred Tax Assets diminishing, resulting in the Company paying a higher effective tax rate.

Working Capital

Changes in Working Capital	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Revenue	204.2	413.3	2013.5	3198.4	3780.0	4050.0	4252.5	7411.5	10185.8	15768.0
Current Assets:				į.						
Accounts Receivable	9.5	26.8	49.1	226.6	267.8	286.9	301.3	525.1	721.7	1117.1
% of Revenue	4.7%	6.5%	2.4%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
Inventory	50.1	268.5	340.4	953.7	1127.1	1207.6	1268.0	2209.9	3037.1	4701.6
% of Revenue	24.5%	65.0%	16.9%	29.8%	29.8%	29.8%	29.8%	29.8%	29.8%	29.8%
Prepaid Expenses	9.4	8.4	27.6	94.7	111.9	119.9	125.9	219.5	301.6	467.0
% of Revenue	4.6%	2.0%	1.4%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Total Current Assets	69.0	303.8	417.0	1275.0	1506.8	1614.5	1695.2	2954.5	4060.4	6285.7
% of Revenue	33.8%	73.5%	20.7%	39.9%	39.9%	39.9%	39.9%	39.9%	39.9%	39.9%
Current Liabilities:				į						
Accounts Payable	56.1	303.4	304.0	800.0	945.5	911.8	851.0	1297.9	1529.1	1973.0
% of Revenue	27.5%	73.4%	15.1%	25.0%	25.0%	22.5%	20.0%	17.5%	15.0%	12.5%
Accrued Liabilities	32.1	39.8	108.3	246.8	291.7	312.6	328.2	572.0	786.1	1216.9
% of Revenue	15.7%	9.6%	5.4%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%
Current Portion of Residual Value Comm.					0.0	0.0	0.0	0.0	0.0	0.0
% of Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred Revenue	2.3	1.9	91.9	483.9	571.9	612.8	643.4	1121.4	1541.1	2385.7
% of Revenue	1.1%	0.5%	4.6%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%
Reservation payments	91.8	138.8	163.2	257.6	304.4	326.2	342.5	596.9	820.3	1269.9
% of Revenue	44.9%	33.6%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
Total Current Liabilities	182.4	483.9	667.3	1788.3	2113.5	2163.2	2165.1	3588.2	4676.6	6845.4
% of Revenue	89.3%	117.1%	33.1%	55.9%	55.9%	53.4%	50.9%	48.4%	45.9%	43.4%
Net WC	(113.3)	(180.1)	(250.2)	(513.3)	(606.7)	(548.8)	(469.9)	(633.7)	(616.2)	(559.8)
% of Revenue	(55.5%)	(43.6%)	(12.4%)	(16.0%)	(16.0%)	(13.5%)	(11.0%)	(8.5%)	(6.0%)	(3.5%)
Change in WC		(66.8)	(70.1)	(263.1)	(93.3)	57.9	78.9	(163.8)	17.4	56.5

Working capital was found using percentages of revenue from 2014. Ratios from 2014 were used instead of historic averages due to the fast pace at which Tesla has been growing, and numbers from earlier years do not accurately reflect the nature of the company today.

Bond Rates – Used to calculate projected bond issuance

Credit Rating:	B-			Credit Rating:	CCC+
Count: 83	Average Rating: 25th percentiile		7.37%	Count: 61	Average Rati
			6.13%		25th percen
	75th perce		8.38%		75th percen
Issuer Name	Ticker	Cpn	Issue Date	Issuer Name	Ticker (
Acadia Healthcare Co Inc	ACHC	5.125	9/19/2014	24 Hour Holdings III LLC	HOUFIT
Acadia Healthcare Co Inc Acadia Healthcare Co Inc	ACHC ACHC	6.125 5.625	5/20/2014 2/11/2015	Acosta Inc Aegis Merger Sub Inc	ACOSTA PRESID
Advanced Micro Devices Inc	AMD	7.023		AK Steel Corp	AKS
Advanced Micro Devices Inc	AMD	6.75		American Energy-Permian Basin LLC / AEPB Finance Corp	
Advanced Micro Devices Inc	AMD	7		American Energy-Permian Basin LLC / AEPB Finance Corp	
Advanced Micro Devices Inc	AMD	6.75	2/26/2014	American Energy-Permian Basin LLC / AEPB Finance Corp	
Albertsons Holdings LLC/Saturn Acquisition Merger Sub In	ıSWY	7.75	10/23/2014	Atlas Energy Holdings Operating Co LLC / Atlas Resource F	i ARP
AMC Entertainment Inc	AMC	5.875	5/9/2014	Atrium Windows & Doors Inc	ATWIDR
Amsurg Corp	AMSG	5.625		AV Homes Inc	AVHI
Aruba Investments Inc	ARUINV	8.75	2/2/2015	Caesars Growth Properties Holdings LLC / Caesars Growth	
Aston Escrow Corp	TSIACQ BERY	9.5 5.5		Carlson Travel Holdings Inc CEC Entertainment Inc	CARTRH CEC
Berry Plastics Corp Blue Racer Midstream LLC / Blue Racer Finance Corp	BLURAC		11/13/2014	CEC Entertainment Inc	CEC
Bonanza Creek Energy Inc	BCEI	5.75	7/18/2014	Cogent Communications Finance Inc	CCOI
Brundage-Bone Concrete Pumping Inc	BRUNBO	10.375	8/18/2014	Crimson Merger Sub Inc	ORTCLI
Century Communities Inc	CEMMZ	6.875	5/5/2014	Eco Services Operations LLC/Eco Finance Corp	ECSERV
Cenveo Corp	CVO	6		Energy XXI Gulf Coast Inc	EXXI
Cequel Communications Holdings I LLC / Cequel Capital Co	CEQUEL	5.125	9/9/2014	Energy XXI Gulf Coast Inc	EXXI
CHS/Community Health Systems Inc	CYH	6.875	10/28/2014	EXCO Resources Inc	XCO
Citgo Holding Inc	CITHOL	10.75	2/12/2015	First Data Corp	FDC
Conn's Inc	CONN	7.25	7/1/2014	First Data Corp	FDC
Consolidated Communications Inc	CNSL	6.5		Gastar Exploration Inc	GST
Cott Beverages Inc	BCBCN		12/12/2014	Gates Global LLC / Gates Global Co	GATGLO
Cott Beverages Inc	BCBCN	5.375	6/24/2014	Gates Global LLC / Gates Global Co	GATGLO
Covenant Surgical Partners Inc	COVSUR	8.75	7/16/2014	Global Cash Access Inc	GCA
CrownRock LP / CrownRock Finance Inc	CRROCK	7.75	2/6/2015	Harbinger Group Inc	HRG
DFC Finance Corp Diamondback Energy Inc	DLLR FANG	10.5	6/13/2014 10/20/2014	Headwaters Inc Hearthside Group Holdings LLC/Hearthside Finance Co	HW HEFOSO
DriveTime Automotive Group Inc / DT Acceptance Corp	DRVTIM	7.625	6/3/2014	Hillman Group Inc/The	HILCOS
Endeavor Energy Resources LP / EER Finance Inc	ENDENR	7		iHeartCommunications Inc	IHRT
Enova International Inc	ENVA	9.75	5/30/2014	Infor Software Parent LLC / Infor Software Parent Inc	LWSN
Envision Healthcare Corp	EMS	5.125	6/18/2014	Interactive Data Corp	IDC
Florida East Coast Holdings Corp	FECRC	6.75	4/23/2014	ION Geophysical Corp	10
Great Lakes Dredge & Dock Corp	GLDD		11/24/2014	Kratos Defense & Security Solutions Inc	KTOS
Greektown Holdings LLC/Greektown Mothership Corp	GRKT	8.875	3/14/2014	Memorial Production Partners LP / Memorial Production	FMEMP
Guitar Center Inc	GTRC	6.5	4/2/2014	Memorial Resource Development Corp	MRD
Gulfport Energy Corp	GPOR	7.75	8/18/2014	MHGE Parent LLC / MHGE Parent Finance Inc	MCGHLL
Harbinger Group Inc	HRG	7.75	9/11/2014	Michael Baker Holdings LLC / Micahel Baker Finance Corp	
Hardwoods Acquisition Inc	HARDWD	7.5	7/18/2014	Michaels Stores Inc	MIK
HC2 Holdings Inc	HCHC		11/20/2014	Mohegan Tribal Gaming Authority	TRIBAL
Hercules Offshore Inc	HERO	6.75	3/26/2014	Momentive Performance Materials Inc	MOMENT
Interface Security Systems Holdings Inc / Interface Securit	JACPRO	9.25	8/27/2014	MPH Acquisition Holdings LLC Ply Gem Industries Inc	MLTPLN PGEM
Jac Holding Corp Jones Energy Holdings LLC / Jones Energy Finance Corp	JONE	11.5 6.75	9/26/2014 4/1/2014	Polymer Group Inc	POLGA
Kindred Healthcare Inc	KND	6.375		RCN Telecom Services LLC / RCN Capital Corp	RCNTEL
Kindred Healthcare Inc	KND		12/18/2014	Rex Energy Corp	REXX
Kindred Healthcare Inc	KND		12/18/2014	Rice Energy Inc	RICE
Kosmos Energy Ltd	KOS	7.875	8/1/2014	Scientific Games International Inc	SGMS
Lee Enterprises Inc/IA	LEE	9.5		Signode Industrial Group Lux SA/Signode Industrial Group	SIGINT
Legacy Reserves LP / Legacy Reserves Finance Corp	LGCY	6.625	3/17/2014	Simmons Foods Inc	SIMFOO
Level 3 Financing Inc	LVLT	3.82615	11/4/2014	Sungard Availability Services Capital Inc	SUNASC
LMI Aerospace Inc	LMIA	7.375	6/19/2014	Tenet Healthcare Corp	THC
MDC Partners Inc	MDZACN	6.75	4/2/2014	Tenet Healthcare Corp	THC
Men's Wearhouse Inc/The	MW	7		TransDigm Inc	TDG
Modular Space Corp	MODSPA	10.25		TransDigm Inc	TDG
Momentive Performance Materials Inc	MOMENT		10/24/2014	TransDigm Inc	TDG
PaperWorks Industries Inc	PAPWRK		8/12/2014		TPLM
Radian Group Inc	RDN	5.5	5/13/2014	Warren Resources Inc	WRES
Realogy Group LLC / Realogy Co-Issuer Corp	RLGY		11/21/2014	Wave Holdco LLC / Wave Holdco Corp Zayo Group LLC / Zayo Capital Inc	WAVHOL
Realogy Group LLC / Realogy Co-Issuer Corp	RLGY	4.5	4/7/2014	zayo Group EEC / Zayo Capital IIIC	ZAYOGR
Regal Entertainment Group RSP Permian Inc	RGC RSPP	5.75	3/11/2014		
Sanchez Energy Corp	SN	6.625 7.75	9/26/2014 7/18/2014		
Sanchez Energy Corp	SN	6.125	6/27/2014		
Sanchez Energy Corp	SN	6.125	9/12/2014		
SBA Communications Corp	SBAC	4.875	7/1/2014		
Scientific Games International Inc	SGMS		11/21/2014		
Seventy Seven Energy Inc	SSE		12/18/2014		
SGH Escrow Corp	SGGH	10	1/8/2015		
SiTV LLC / SiTV Finance Inc	NUVOTV	10.375	7/1/2014		
Summit Midstream Holdings LLC / Summit Midstream Fina		5.5	7/15/2014		
Summit Midstream Holdings LLC / Summit Midstream Fina		7.5	4/7/2014		
SUPERVALU Inc	SVU		11/14/2014		
US Shale Solutions Inc	SHALES	12.5	8/19/2014		
Walter Energy Inc	WLT	9.5	7/14/2014		
Walter Investment Management Corp	WAC		11/25/2014		
WCI Communities Inc	WCIC	6.875	6/11/2014		
Western Refining Logistics LP / WNRL Finance Corp Westmoreland Coal Co	WNRL WLB	7.5 8.75	2/11/2015 12/16/2014		

WLH

WMG

8.75 12/16/2014

1/27/2015 8/7/2014

Issue Date 7.75 9/26/201 10.25

7.625 7.375

6.7521 9.25

11.25

10.625

8.625

5.75 10 12/19/2014 7.75 4/14/2014 7.25 7/8/2014 6.5 5/13/2014 6.375 6/30/2014 1/23/201

7.125

5.875 8.125 5/9/2014 7 10/16/2014 7/17/2014

5.875

5.875

6.25 6.625 6.375

7.875 8.75

5.5

8.5

2/2/2015

9/16/2014 7/31/201 7/31/2014

7/31/2014 4/29/2014 4/17/201 8.5 6/30/2014 9.375 4/17/2014 7.5 7/3/2014 12/2/2014 2/19/201 5.625 4/9/2014 6.625 5/16/2014 8.5 10/24/2014 7.5 5/23/2014 6.875 5/27/2014 4/16/201

3/11/2014

3/11/2014

5/19/2014 6/26/201 6/26/2014

> 4/8/2014 5/2/2014

7/10/201 7/17/2014

4/8/2014

6/16/2014 3/11/2014 4.69 10/24/2014 6.625 3/31/2014 6.5 9/5/2014 6.875 6/11/2014 8.5 9/18/2014 7/17/2014 1/14/2015 6/4/2014

4/29/2014 10/1/2014

3/31/2014 3/10/2014 9/29/2014

10/6/2014 10/6/2014 6/4/2014 6.75 7/18/2014 9 8/11/2014 8.25 6/25/2014 1/23/2015

Westmoreland Coal Co

William Lyon Homes Inc

William Lyon Homes Inc WMG Acquisition Corp

Bond Rates continued

Credit Rating:	CCC		
Count: 23	Average Ra	ting:	8.93%
	25th perce	ntiile	8.19%
	75th perce	ntile	9.69%
Issuer Name	Ticker	Cpn	Issue Date
American Energy - Woodford LLC/AEW Finance Corp	AMWOOD	9	9/16/2014
Beazer Homes USA Inc	BZH	5.75	7/24/2014
Beazer Homes USA Inc	BZH	7.5	2/25/2014
Boxer Parent Co Inc	BMC	9	4/15/2014
BWAY Holding Co	BWY	9.125	8/14/2014
Cenveo Corp	CVO	8.5	6/26/2014
Diamond Foods Inc	DMND	7	2/19/2014
First Data Corp	FDC	11.75	3/11/2014
Guitar Center Inc	GTRC	9.625	4/2/2014
Halcon Resources Corp	HKUS	9.25	5/22/2014
Hub Holdings LLC / Hub Holdings Finance Inc	HBGCN	8.125	7/8/2014
Infinity Acquisition LLC / Infinity Acquisition Finance Corp	INFACQ	7.25	8/1/2014
inVentiv Health Inc	VTIV	10	8/15/2014
iPayment Inc	IPMT	9.5	12/29/2014
K Hovnanian Enterprises Inc	HOV	8	11/5/2014
Lonestar Resources America Inc	LNRAU	8.75	4/4/2014
Nine West Holdings Inc	JNY	8.25	4/23/2014
Noranda Aluminum Acquisition Corp	NOR	11	3/3/2014
PC Nextco Holdings LLC / PC Nextco Finance Inc	PRTY	8.75	9/8/2014
Samson Investment Co	SAIVST	9.75	8/19/2014
TIBCO Software Inc	TIBX	11.375	12/5/2014
Wise Metals Intermediate Holdings LLC/Wise Holdings Fin	WISMET	9.75	4/16/2014
York Risk Services Holding Corp	YORKRI	8.5	10/1/2014

Credit Rating:	CCC-		
Count: 14	Average	Rating:	10.06%
	25th per	centiile	8.63%
	75th per	centile	11.00%
Issuer Name	Ticker	Cpn	Issue Date
Affinion Group Holdings Inc	AFFINI	13.75	12/12/2013
Affinion Investments LLC	AFFINI	13.5	12/12/2013
American Eagle Energy Corp	AMZG	11	8/27/2014
Caesars Entertainment Resort Properties LLC / Caesars Ent	t CERPLC	11	10/11/2013
Florida East Coast Holdings Corp	FECRC	9.75	4/23/2014
JC Penney Corp Inc	JCP	8.125	9/15/2014
JCH Parent Inc	JKCOOP	10.5	6/10/2014
Ocwen Financial Corp	OCN	6.625	5/12/2014
Quicksilver Resources Inc	KWKA	7	6/21/2013
rue21 inc	RUE	9	10/10/2013
Ryerson Inc / Joseph T Ryerson & Son Inc	RYI	11.25	9/9/2013
Walter Energy Inc	WLT	9.875	11/13/2013
Walter Energy Inc	WLT	8.5	11/13/2013
Walter Energy Inc	WLT	11	3/27/2014

BRENT OIL FUTURES- CME²⁷

Month	Options	Charts	Last	Change	Prior Settle	Open	High	Low
JAN 2020	OPT	•	-	-	68.90	-	-	-
FEB 2020	OPT	il.	-	-	68.97	-	-	-
MAR 2020	OPT	•	-	-	69.05	-	-	-
APR 2020	OPT	1	-	-	69.14	-	-	-
MAY 2020	OPT		-	-	69.25	-	-	-
JUN 2020	OPT	2	-	-	69.37	-	-	-
JUL 2020	OPT		,	-	69.42	1	-	-
AUG 2020	OPT	al	-	-	69.49	1	-	-
SEP 2020	OPT		-	-	69.59	-	-	-
OCT 2020	OPT	al	-	-	69.70	ı	-	-
NOV 2020	OPT		-	-	69.81	1	-	-
DEC 2020	ОРТ	2	-	-	69.94	-	-	-
JUN 2021	OPT	•	-	-	70.24	-	-	-
DEC 2021	ОРТ	4	-	-	70.54	-	-	-

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 $^{^{27}\} http://www.cmegroup.com/trading/energy/crude-oil/light-sweet-crude.html$

CONTACT INFORMATION

BLAKE MARTIN SENIOR PETER LUND SENIOR CAROLINE CLOTHIAUX JUNIOR

Email: pgl0001@auburn.edu

Email: ckc0014@auburn.edu

INSTITUTION INFORMATION

Auburn University 405 West Magnolia Ave. Auburn, AL 36849 334-844-4835 Harbert.auburn.edu

Email: bam0024@auburn.edu

