



April 2020

Tesla Credit Analysis

Alex Giroux, David Gringeri, Tristan Lalor, Ryan Landgraf, Maria Pitari



Executive Summary

Stock

Industry: Automotive, Energy Storage & Production
NASDAQ: TSLA
Market Cap: \$127B
52-week high: \$968.99
52-week low: \$176.99

Bond

Type: Senior Unsecured Callable
Moody's: Caa1
S&P: B-
Coupon: 5.3%
Yield (Wst): 6.547
Issue date: 8/18/2017
Maturity: 8/15/2025

TSLA 5.3% 2025 Note vs. TSLA Stock



Key Takeaways

- Tesla has sufficient cash reserves to withstand Coronavirus disruption
- Tesla has a technological lead in electrification that provides flexibility to scale back capital expenditure
- Debt maturing prior to 2025 will likely be refinanced or converted into equity
- Recommendation: **BUY**



Table of Contents

- I. Tesla Business Overview**
- II. Industry Overview
- III. Macroeconomic Analysis
- IV. Tesla Credit Analysis

Appendix



Tesla Business Overview

Business Overview

Key Executives



Elon Musk, Head of Product Development

- Founder of PayPal, SpaceX and Tesla Motors.
- Studied Physics and Business at the University of Pennsylvania
- Oversees development of all sedan type EV's including the new Roadster and CyberTruck



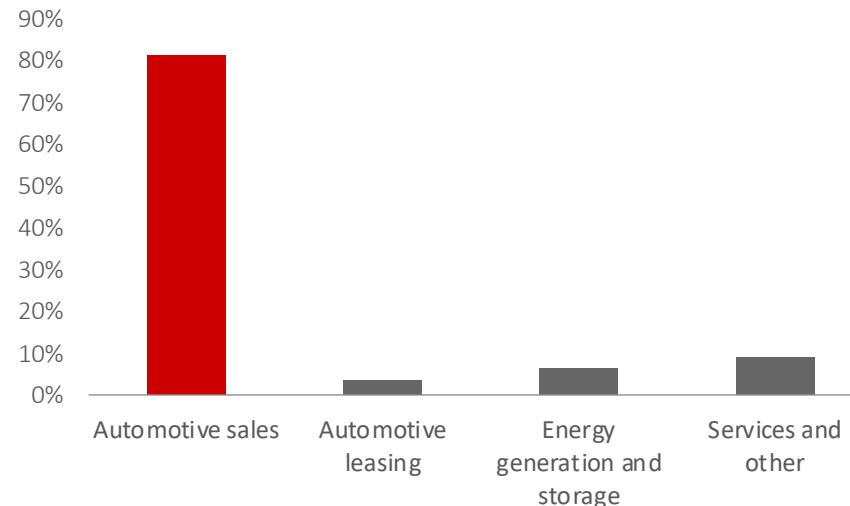
Zachary Kirkhorn, Chief Financial Officer

- Earned degree in Mechanical Engineering and Economics at the University of Pennsylvania and an MBA from the Harvard Business School
- Responsible for controlling operational financing, as well as new developments and company expansion

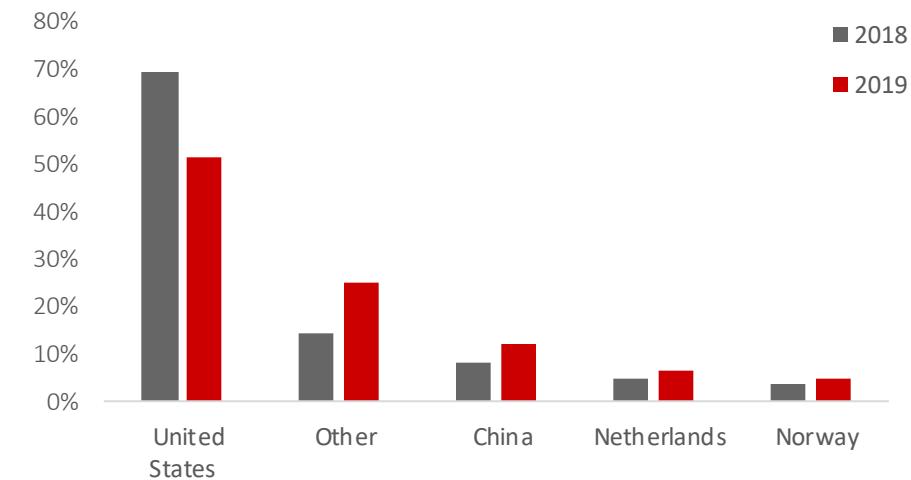
Business Description

- Founded in 2003, Tesla designs, manufactures, and markets high-performance, technologically advanced electric cars and solar energy generation and energy storage products.
- Leader in solar power and storage innovation with the Solar Roof and Solar Wall technologies
- Unlike other automakers, Tesla is also an information technology company that tracks large amounts of consumer data and is a leader in artificial intelligence and self-driving technology.

Revenue by Product



Revenue by Region





Tesla Business Overview

Historical and Projected Financial Performance

Stock

Ticker: TSLA

Price: \$686.72

Market Cap: \$127B

Beta: 1.40

52 Week High: \$176.99

52 Week Low: \$968.99

Summary Financials									
Income Statement	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Total revenues	11,759	21,461	24,578	23,387	26,855	31,141	35,889	41,559	48,165
% Growth	-	82.51%	14.52%	-4.85%	14.83%	15.96%	15.25%	15.80%	15.90%
Gross profit	2,223	4,042	4,069	3,841	4,849	6,139	7,667	9,483	11,681
% Gross margin	18.90%	18.83%	16.56%	16.42%	18.06%	19.71%	21.36%	22.82%	24.25%
Loss from operations (EBIT)	-1,632	-388	-69	216	625	1,397	2,381	3,569	5,068
% Operating margin	-13.88%	-1.81%	-0.28%	0.92%	2.33%	4.48%	6.63%	8.59%	10.52%
Net loss	-2,241	-1,063	-775	-567	-138	508	1367	2,344	3,497
Cash Flow Statement									
D&A	1,636	1,901	2,154	2,156	1,490	1,631	1,787	1,958	2,146
Capital Expenditure	-3,415	-2,101	-1,327	-1,327	-1,460	-1,606	-1,766	-1,943	-2,137
Net change in cash and cash equivalents	198	312	2,506	-140	2,127	1,534	3,378	5,856	6,106

Balance Sheet: Key Line Items FY2020 Expected

Assets		Liabilities	
Cash and cash equivalents	6,569	Accounts payable	3,630
Accounts receivable, net	1,266	Accrued liabilities and other	2,778
Inventory	3,418	Deferred revenue	1,112
		Current portion of debt and finance leases	1,707
Total current assets	11,936	Total current liabilities	10,094
Property, plant and equipment, net	10,362	Debt and finance leases, net of current portion	11,362
Operating lease vehicles, net	2,785	Other long-term liabilities	2,655
Solar energy systems, net	5,817	Total liabilities	25,289
Total assets	33,853	Total stockholders' equity	8,565



Tesla Business Overview

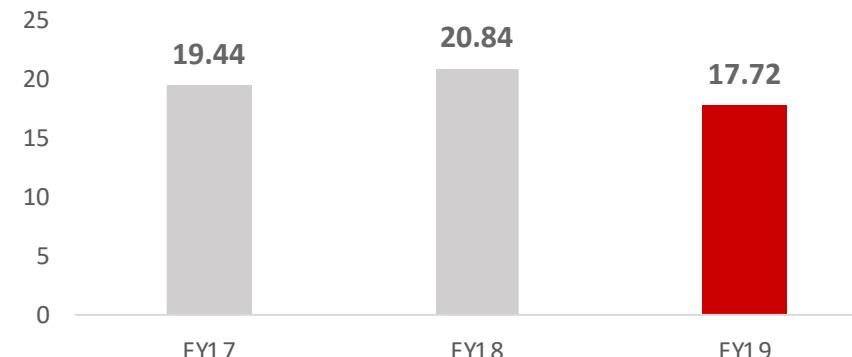
For FY2019

Shares Outstanding	181
Price per Share	418
Market Capitalization	75,717.7
Total Debt ²	13,419
Total Capital	150,130.17
% Equity	91.06%
% Debt	8.94%

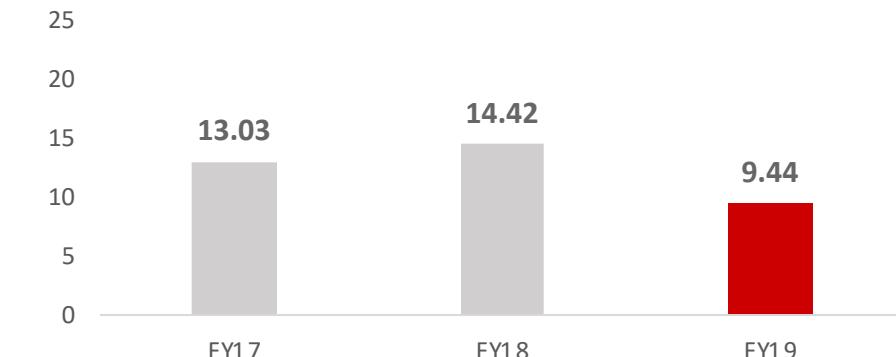
Debt Outstanding (in \$ millions)

	Unpaid Principal Balance	Long-Term Net Carrying Value as of FY2019
1.25% Convertible Senior Notes due 2021	1,380	1,304
2.375% Convertible Senior Notes due 2022	978	902
2.00% Convertible Senior Notes due 2024	1,840	1,383
5.30% Senior Notes due in 2025	1,800	1,782
Credit Agreement	1,727	1,586
0% Convertible Senior Notes due 2020	103	-
Solar Bonds and other Loans	70	53
Total recourse debt	7,898	7,010
plus: non-recourse debt	4,594	3,392
Total	12,492	10,402

Total Debt / Equity¹ Ratio



Net Debt / Equity¹ Ratio



¹Based on year-end market capitalization, ²Includes short-term and long-term portions of debt and finance leases



Table of Contents

- I. Tesla Business Overview
- II. Industry Overview**
- III. Macroeconomic Analysis
- IV. Tesla Credit Analysis

Appendix



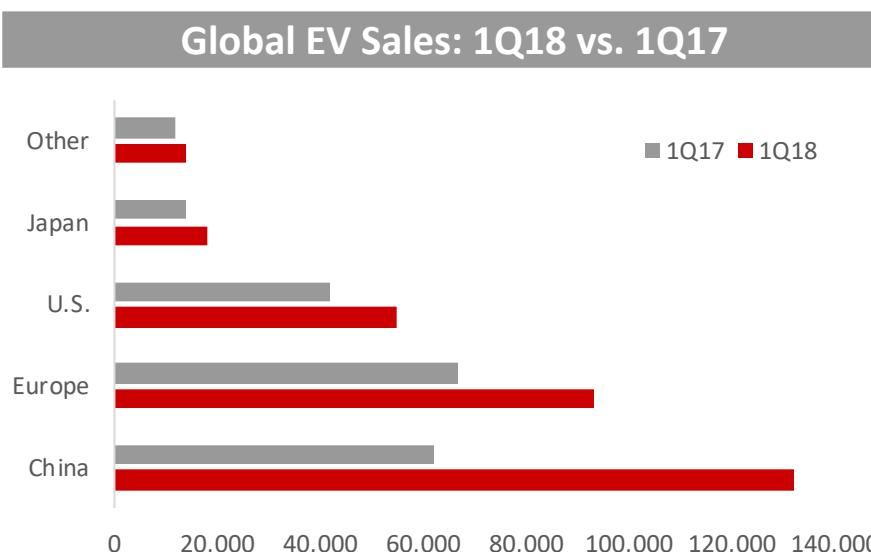
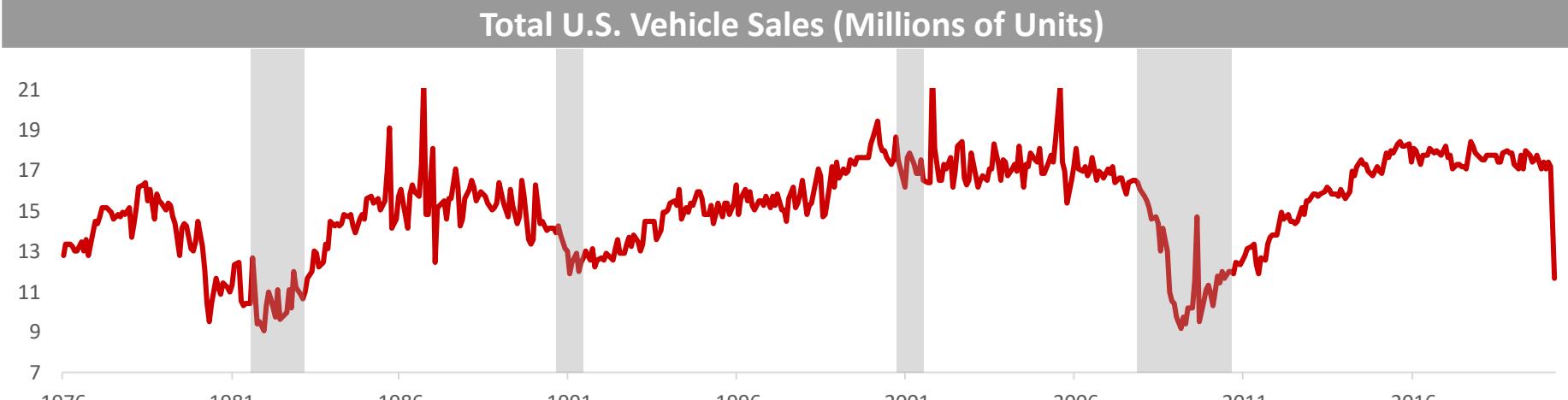
Industry Overview

Automotive Industry Overview

The automotive industry is **highly cyclical**. Current macroeconomic headwinds will negatively impact auto sales in the upcoming quarters.

Due to **regulatory pressure and shifting consumer preferences**, the industry will continue to move towards vehicle electrification.

The global EV market is estimated to grow from 3.27M units in 2019 to 26.95M units in 2030, at a **CAGR of 21.1%**.



- ### Regulation
- China will extend state subsidies and tax breaks for EV's until 2022.
 - British Columbia announced legislation for the most stringent ZEV mandate worldwide: 30% ZEV sales by 2030 and 100% by 2040.
 - Europe's 13 top auto manufacturers will face more than €14.5 billion in fines if they don't meet fleet-average CO2 emission standards.



Industry Overview

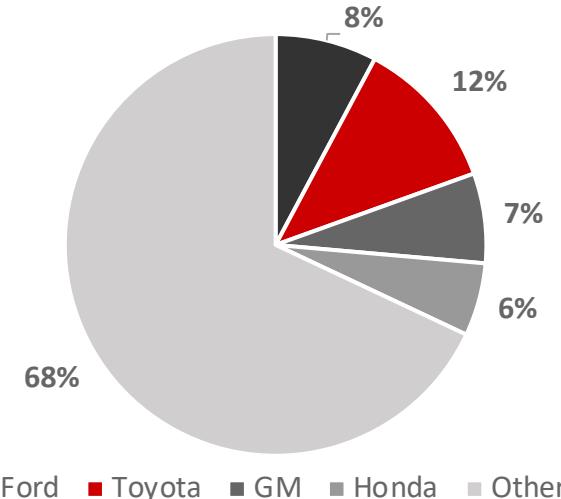
Despite lagging behind legacy automakers in total auto sales, Tesla holds over **30%** of the global EV market share.

Tesla's **intangible assets** and **battery technology** partially account for its stock performance relative to competitors.

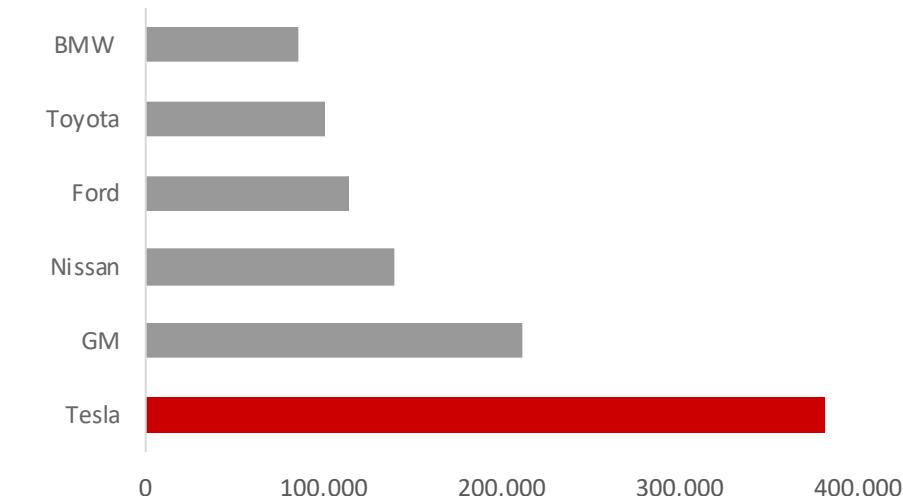
Competition in the EV market is expected to intensify going forward.

Competitive Landscape

U.S. Market Share Concentration 2019



Global 2019 EV Sales by Automaker



Historic Market Capitalization

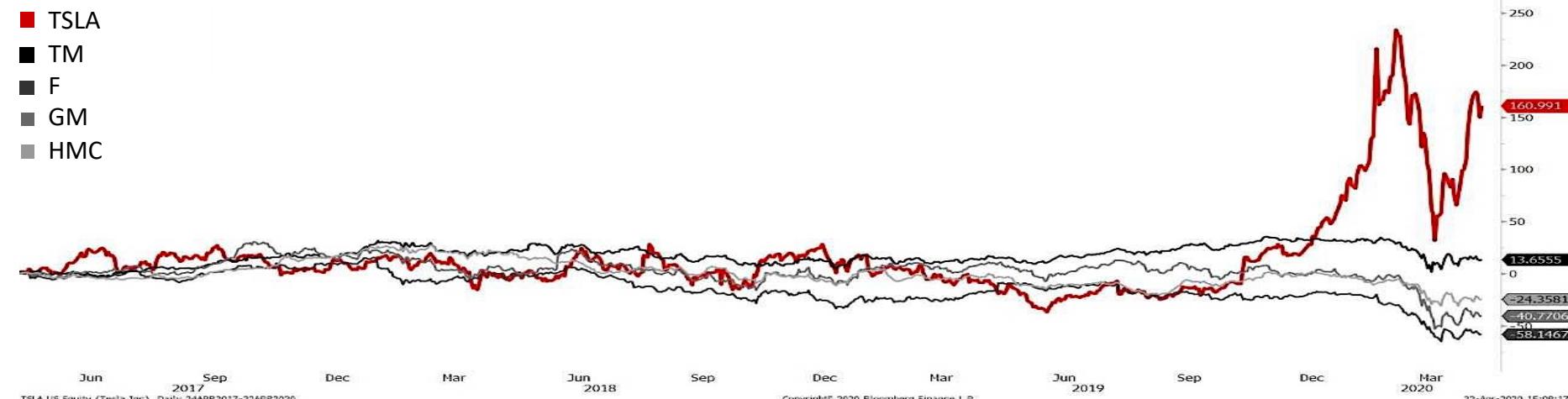




Table of Contents

- I. Tesla Business Overview
- II. Industry Overview
- III. Macroeconomic Analysis**
- IV. Tesla Credit Analysis

Appendix



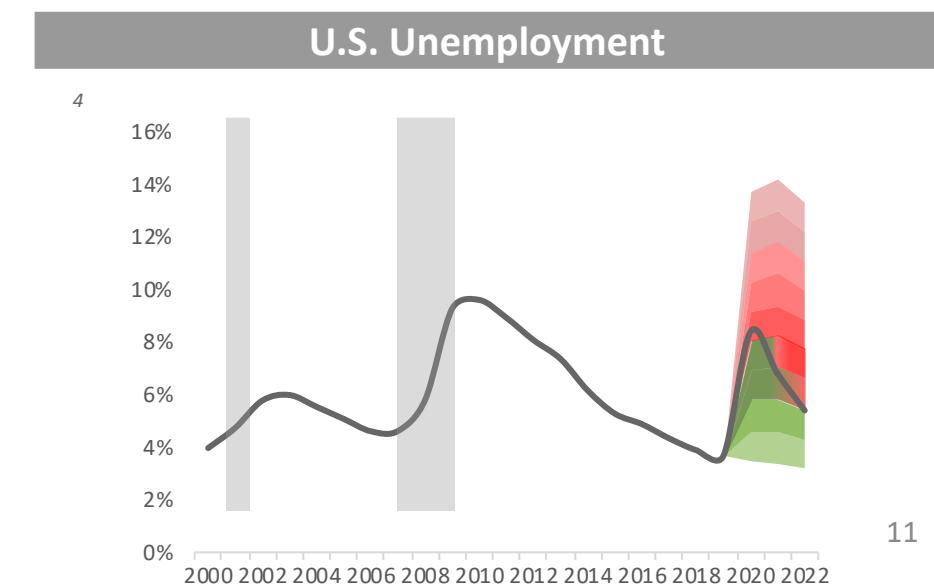
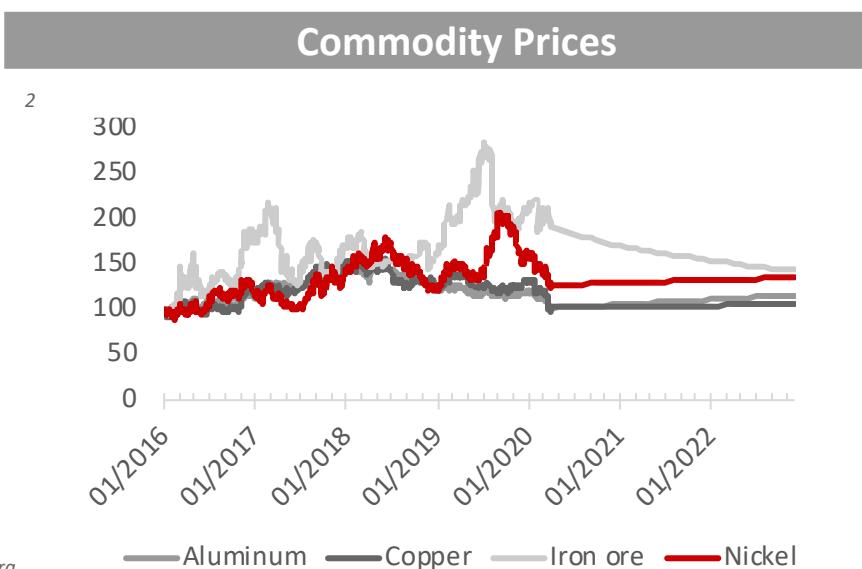
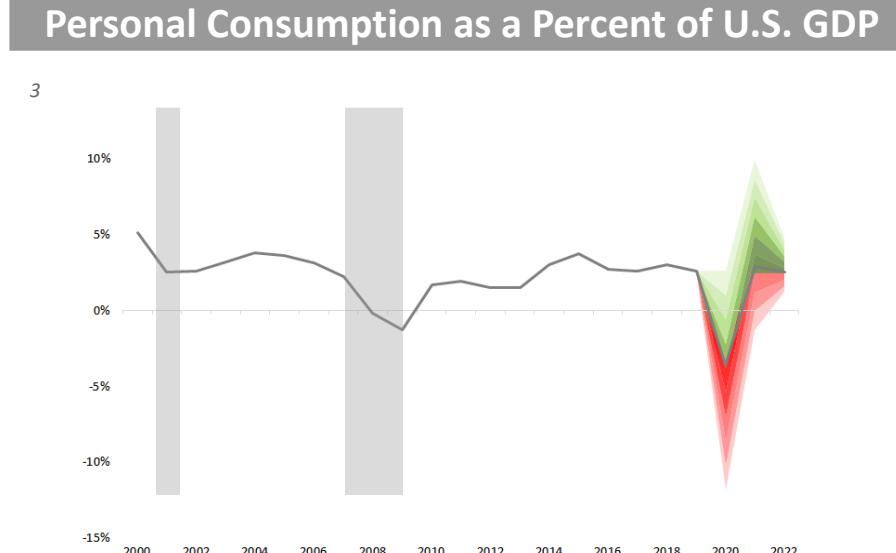
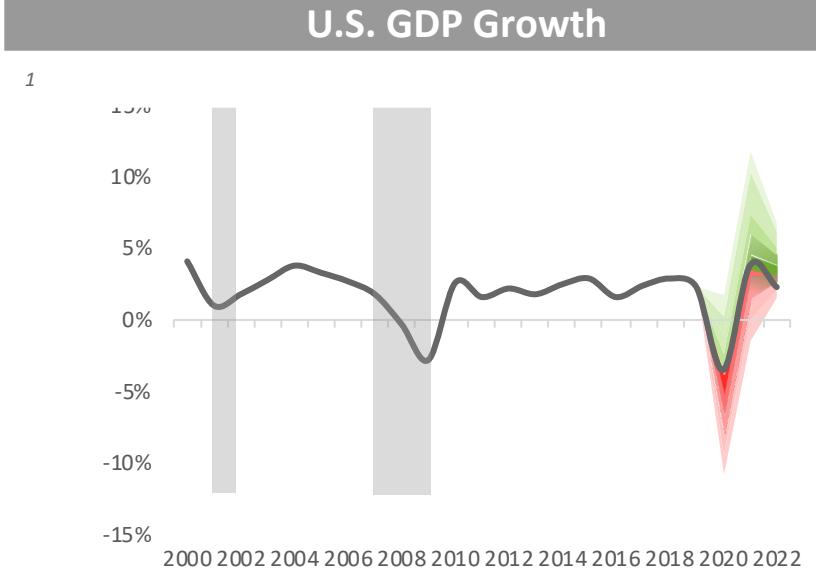
Macroeconomic Analysis

Economic Forecast

Prior to the onset of COVID-19 **GDP growth** and **personal consumption as a percent of GDP** was relatively **stable**. All estimates project **contraction well into 2021** with **recovery** and greater **upside potential by 2022**.

Auto manufactures may benefit from **depressed commodity prices**.

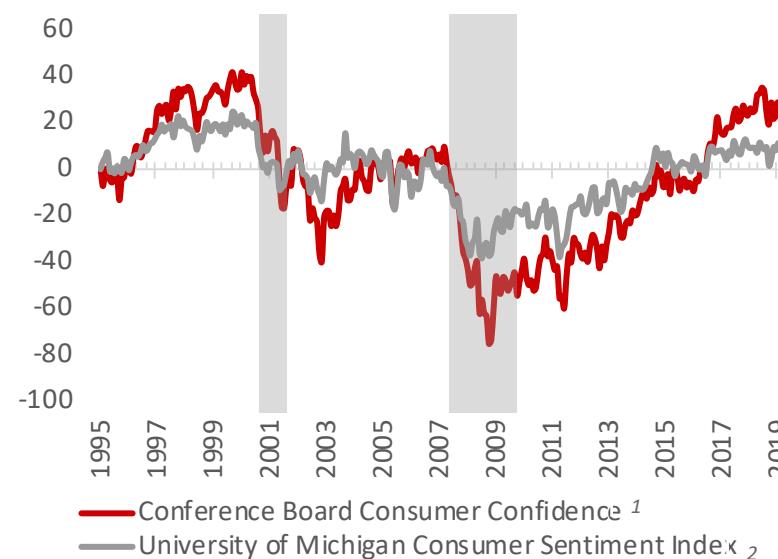
Sharp increase in **unemployment** could negatively affect **consumer demand** for at least 18 months



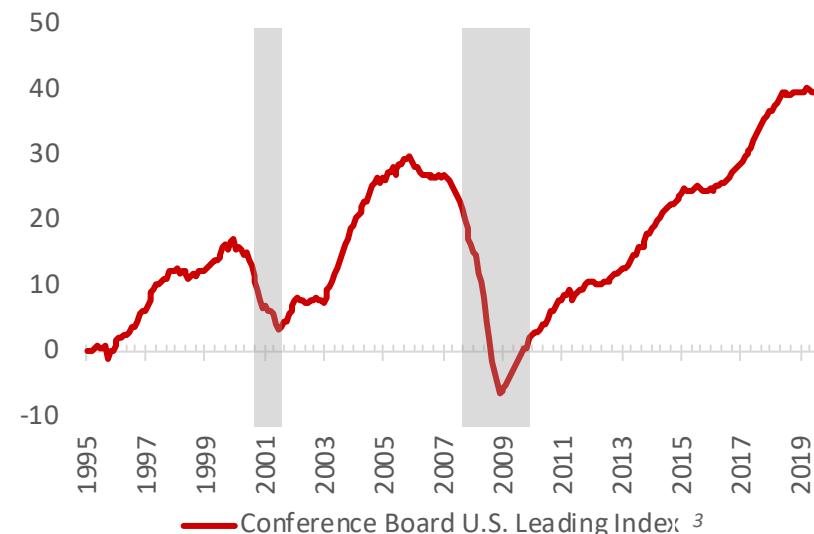


Consumer Confidence

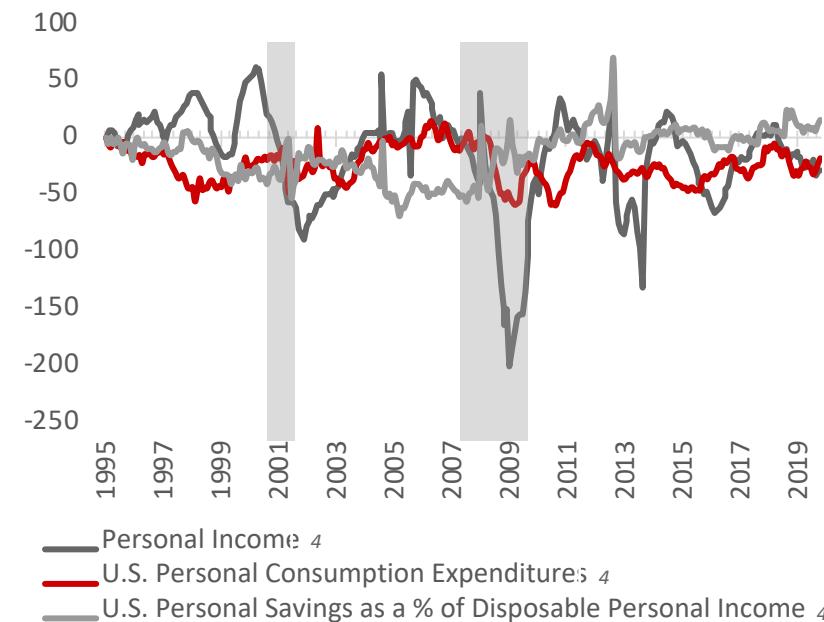
U.S. Consumer Confidence Surveys



Leading Indicators Index



Personal Income Trends





Consumer Sentiment Toward Automotive Purchases

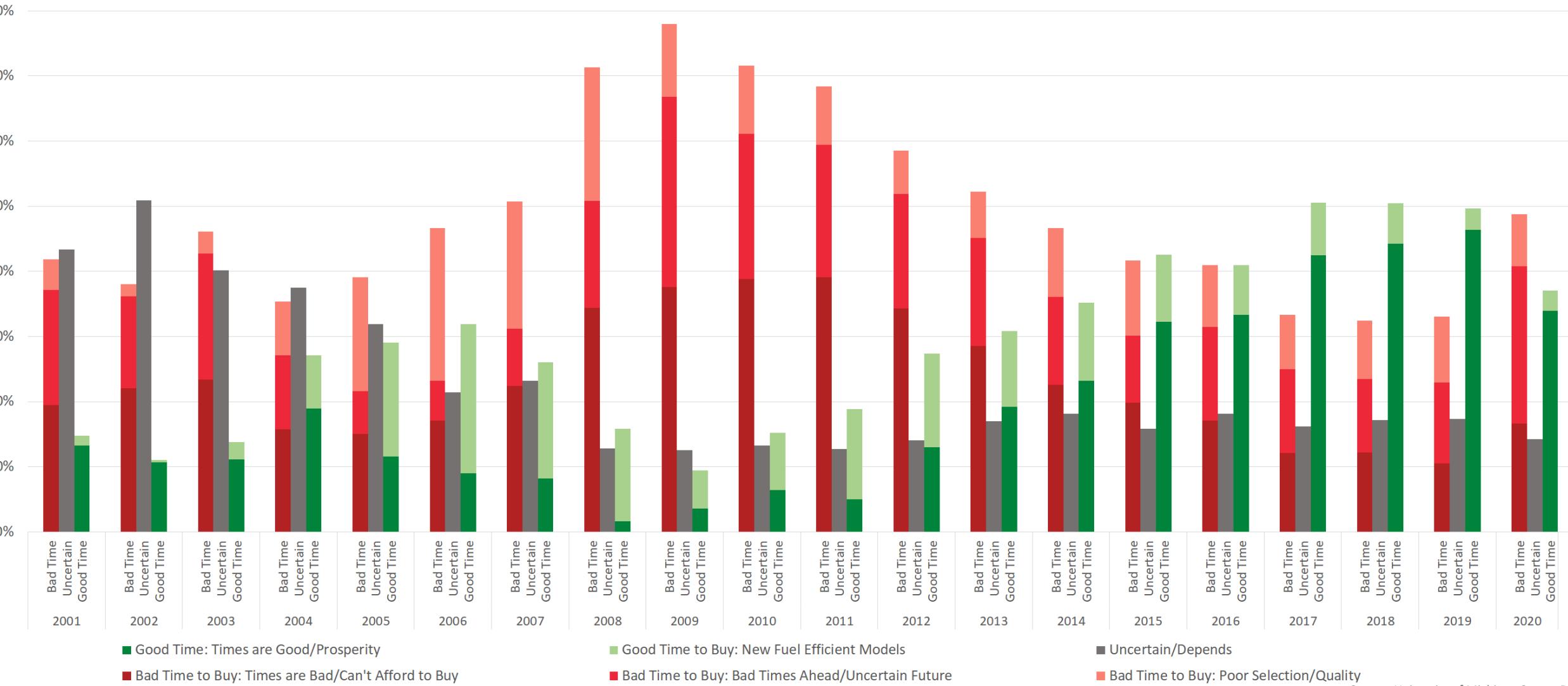




Table of Contents

- I. Tesla Business Overview
- II. Industry Overview
- III. Macroeconomic Analysis
- IV. Tesla Credit Analysis**

Appendix

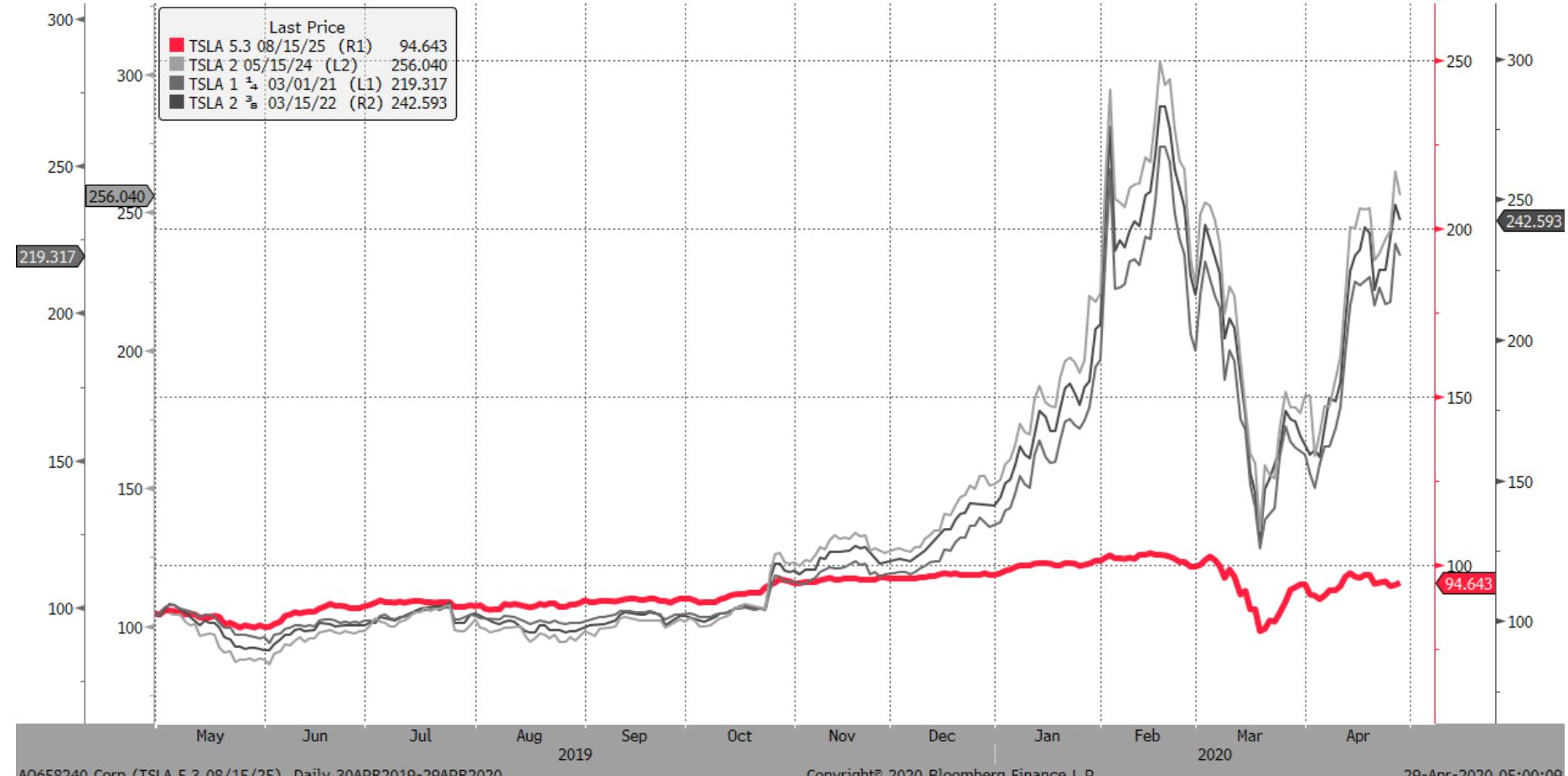


TSLA 5.3% 8/15/2025

Price: 94.287
Yield(Wst): 6.547
Issue Date: 08/18/2017
Maturity: 08/15/2025
Issue Amount: \$1,800M
Gaurantor: Tesla Energy Operations Inc.
Rating: Moody's: Caa1
 S&P: B-
Rank: Senior
Security: Unsecured
Callable: Yes
 Make Whole @50
 Until 08/15/20
 8/15/20 @ 103.975
 8/15/21 @ 102.65
 8/15/23 @ 100

Bond Summary

Outstanding Issues (Last Price)





Investment Thesis

We place a BUY recommendation on Tesla's 5.3% 2025 Note based on the following key drivers:

- (1) Sufficient cash reserves to withstand Coronavirus disruption
- (2) Technology lead in electrification provides flexibility to scale back capital expenditure
- (3) Debt maturing prior to 2025 will likely be refinanced or converted into equity

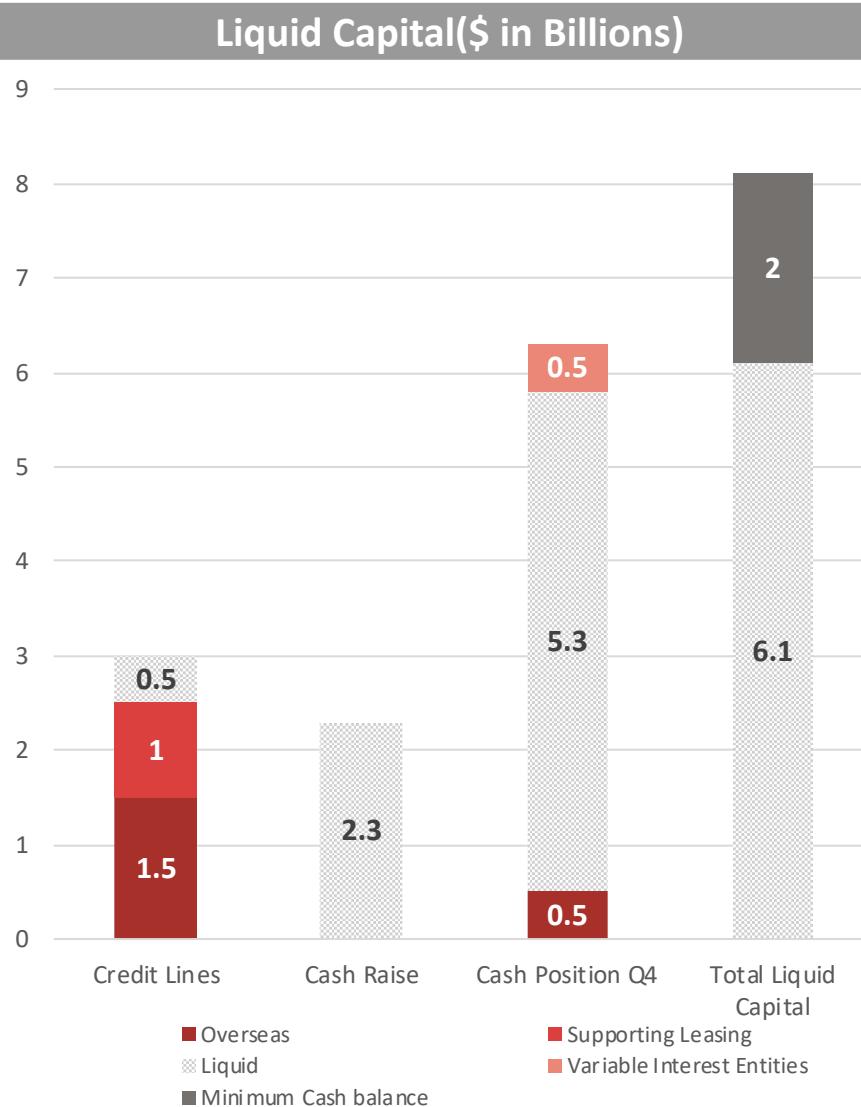


Key Driver I: Liquidity

Tesla is in a favorable cash position to forgo revenue without risking default.

We believe Coronavirus poses a low risk for Tesla bondholders, with available capital of 6.1B and operating expenses of 4.1B.

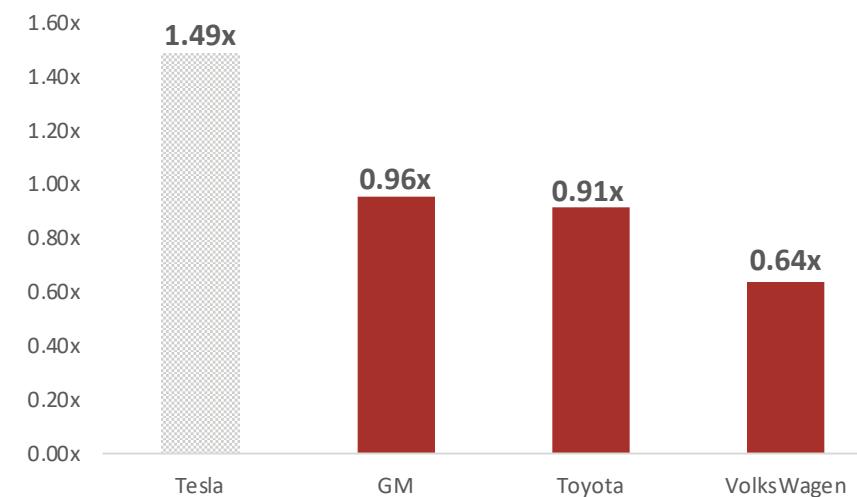
Tesla is better poised to forgo revenue than many competitors.



Key Stats

- Recent 8k quotes 3B in Credit Lines, 2.3B available from recent offering, and 6.3B in cash.
- Excluding non-liquid funds & minimum cash balance, this leaves Tesla with 6.1B in liquid capital and 4.1B minimum operating expenses.

Available Cash / Operating Expenses

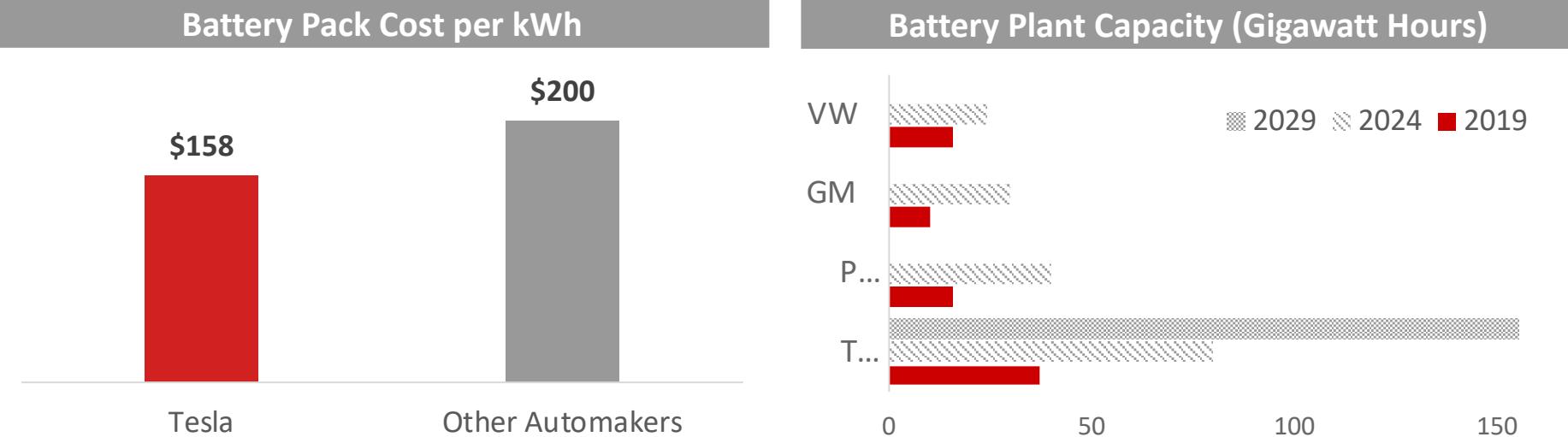




Key Driver II: Capital Expenditures

Tesla has a significant technology lead in the production of batteries.

This lead provides Tesla with more flexibility to **scale back capital expenditures** amidst Coronavirus disruption.



Competitors Play Catch-Up

- GM CEO recently claimed investing in batteries is an essential step to decrease battery costs and improve profitability of EV's.
- GM and LG Chem are spending \$2.3 billion to build a new battery plant.
- Toyota and Panasonic announced joint venture to develop prismatic battery packs.

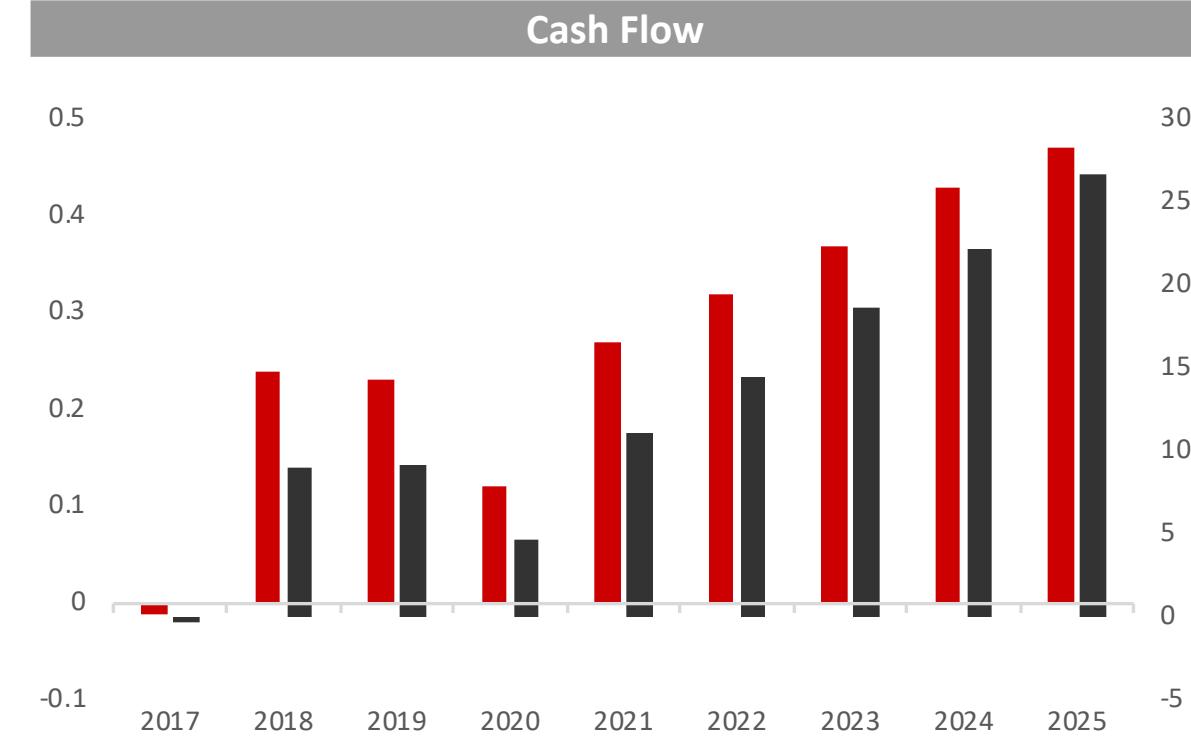
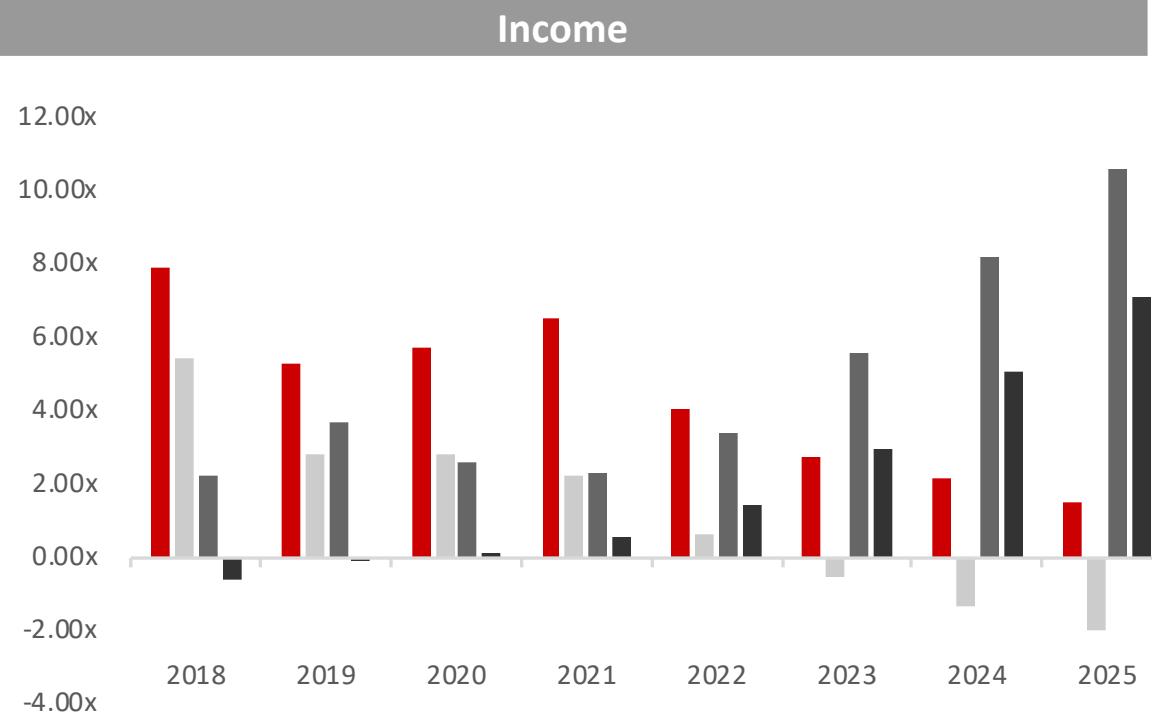
Sustained Competitive Advantage

"We believe this situation overall favors Tesla in the medium term as there would be less competition from higher quality electric vehicles and the disruption could inadvertently help sustain Tesla's premium multiple"

-Armintas Sinkevicius, Morgan Stanley Analyst



Key Driver III: Maturities and Conversions



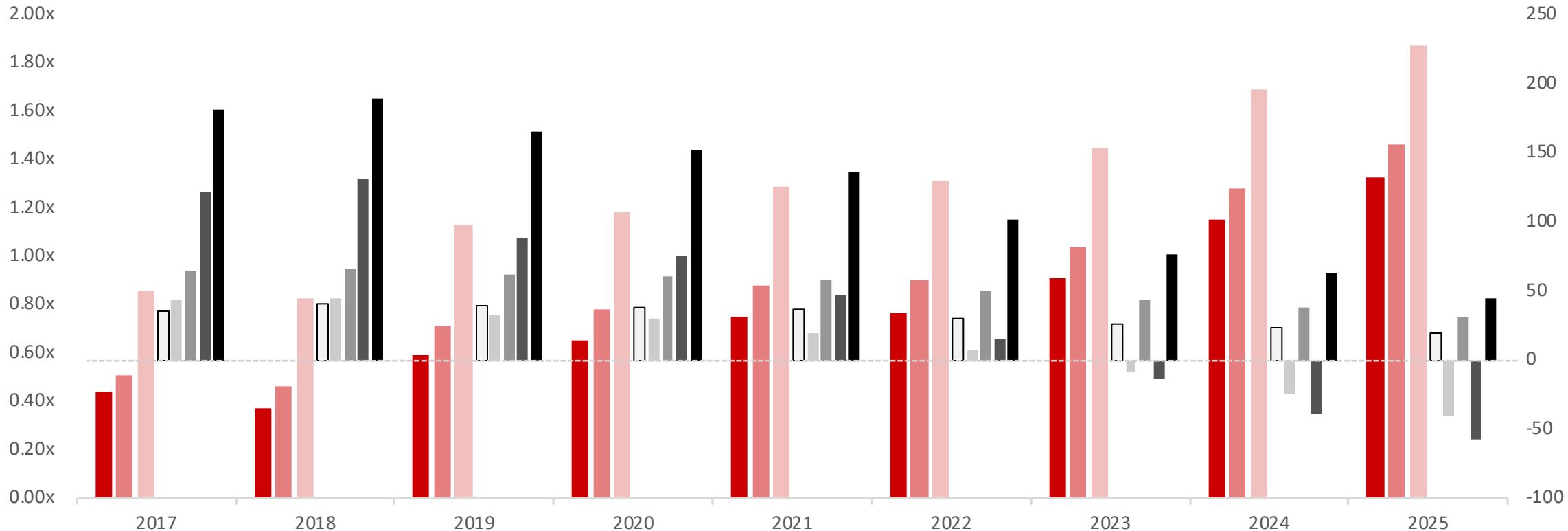
	2018	2019	2020	2021	2022	2023	2024	2025
■ Total Debt / T12M EBITDA	7.91x	5.34x	5.75x	6.53x	4.04x	2.76x	2.17x	1.53x
■ Net Debt / T12M EBITDA	5.48x	2.85x	2.86x	2.26x	0.62x	-0.51x	-1.35x	-1.99x
■ EBITDA / Interest Expense Coverage Ratio	2.28x	3.67x	2.60x	2.32x	3.43x	5.57x	8.25x	10.62x
■ EBIT / Interest Expense Coverage Ratio	-0.59x	-0.10x	0.13x	0.57x	1.45x	2.99x	5.07x	7.13x

	2017	2018	2019	2020	2021	2022	2023	2024	2025
■ CFO / Average Current Liabilities (L)	-0.01x	0.24x	0.23x	0.12x	0.27x	0.32x	0.37x	0.43x	0.47x
■ CFO / Total Liabilities (R)	-0.26x	8.96x	9.18x	4.75x	11.18x	14.53x	18.61x	22.11x	26.72x



Key Driver III: Maturities and Conversions (cont.)

Balance Sheet

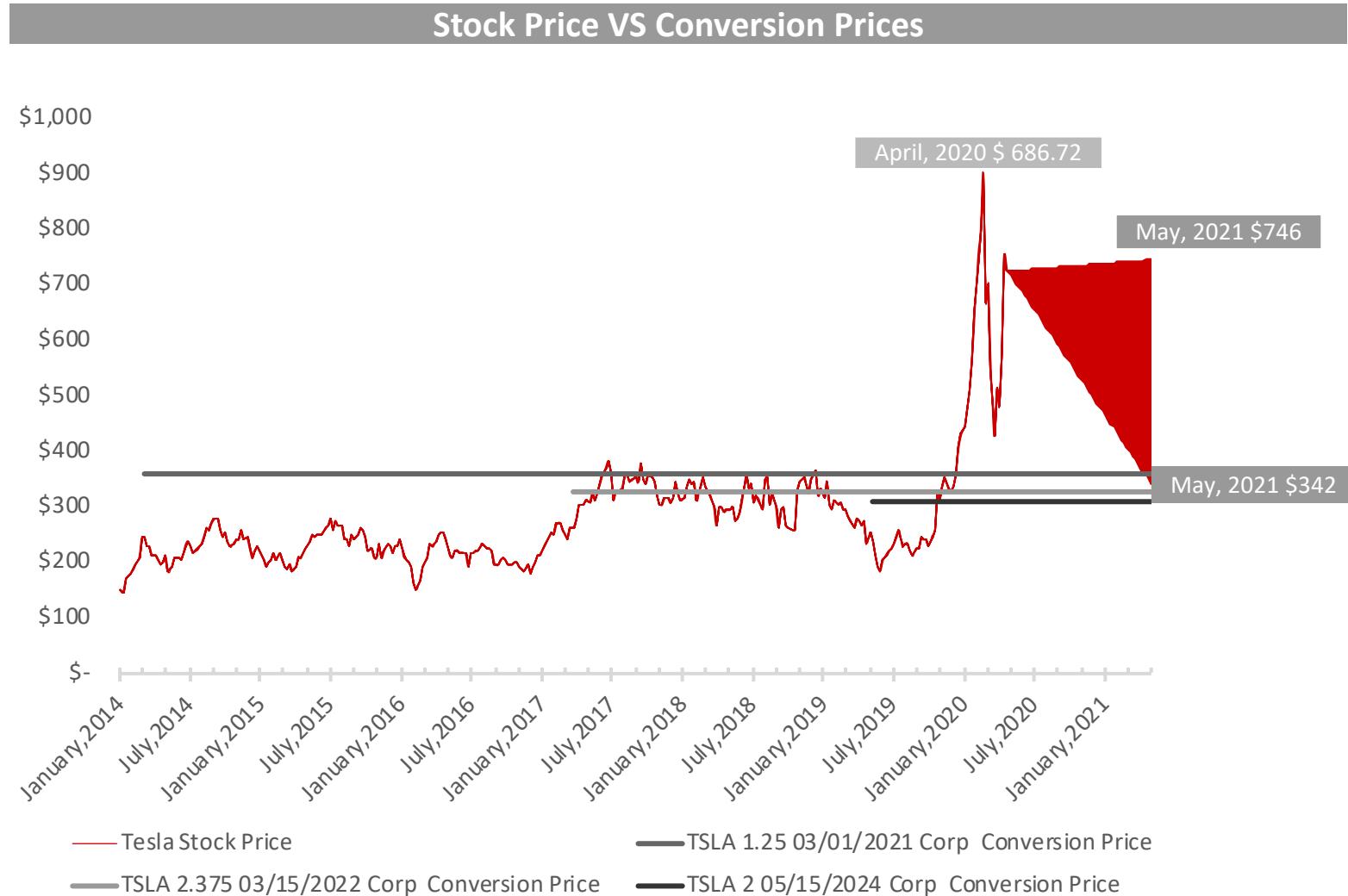


	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cash Ratio Acid Test (L)	0.44x	0.37x	0.59x	0.65x	0.75x	0.77x	0.91x	1.15x	1.33x
Quick Ratio (L)	0.51x	0.46x	0.71x	0.78x	0.88x	0.90x	1.04x	1.28x	1.46x
Current Ratio (L)	0.86x	0.83x	1.13x	1.18x	1.29x	1.31x	1.45x	1.69x	1.87x
Total Debt / Total Assets (R)	35.65x	40.26x	39.11x	38.60x	36.17x	30.78x	26.46x	24.01x	19.49x
Net Debt / Capital (R)	43.21x	45.32x	33.22x	30.05x	19.93x	7.74x	-7.97x	-23.89x	-40.09x
Total Debt / Book Value Capital (R)	64.46x	65.47x	62.33x	60.41x	57.59x	50.46x	43.46x	38.55x	30.91x
Net Debt / Equity (R)	121.57x	131.25x	88.18x	75.89x	47.00x	15.62x	-14.09x	-38.88x	-58.02x
Total Debt / Book Value Equity (R)	181.37x	189.64x	165.46x	152.59x	135.82x	101.84x	76.87x	62.74x	44.73x



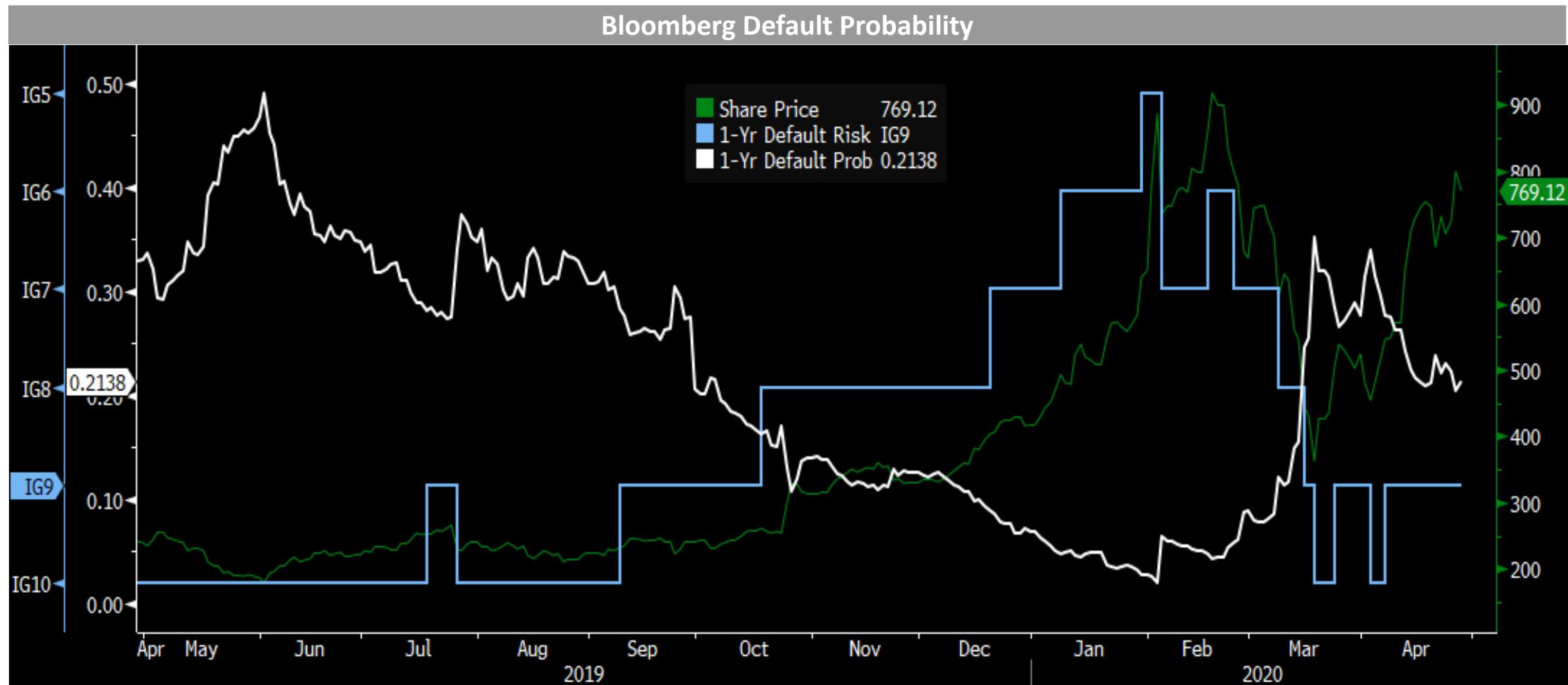
Key Driver III: Maturities and Conversions (cont.)

	Conversion Price	Conversion Ratio
TSLA 1.25 03/01/2021	\$ 359.87	2.7788
TSLA 2.375 03/15/2022	\$ 327.50	3.0534
TSLA 2.00 05/15/2024	\$ 309.83	3.2276



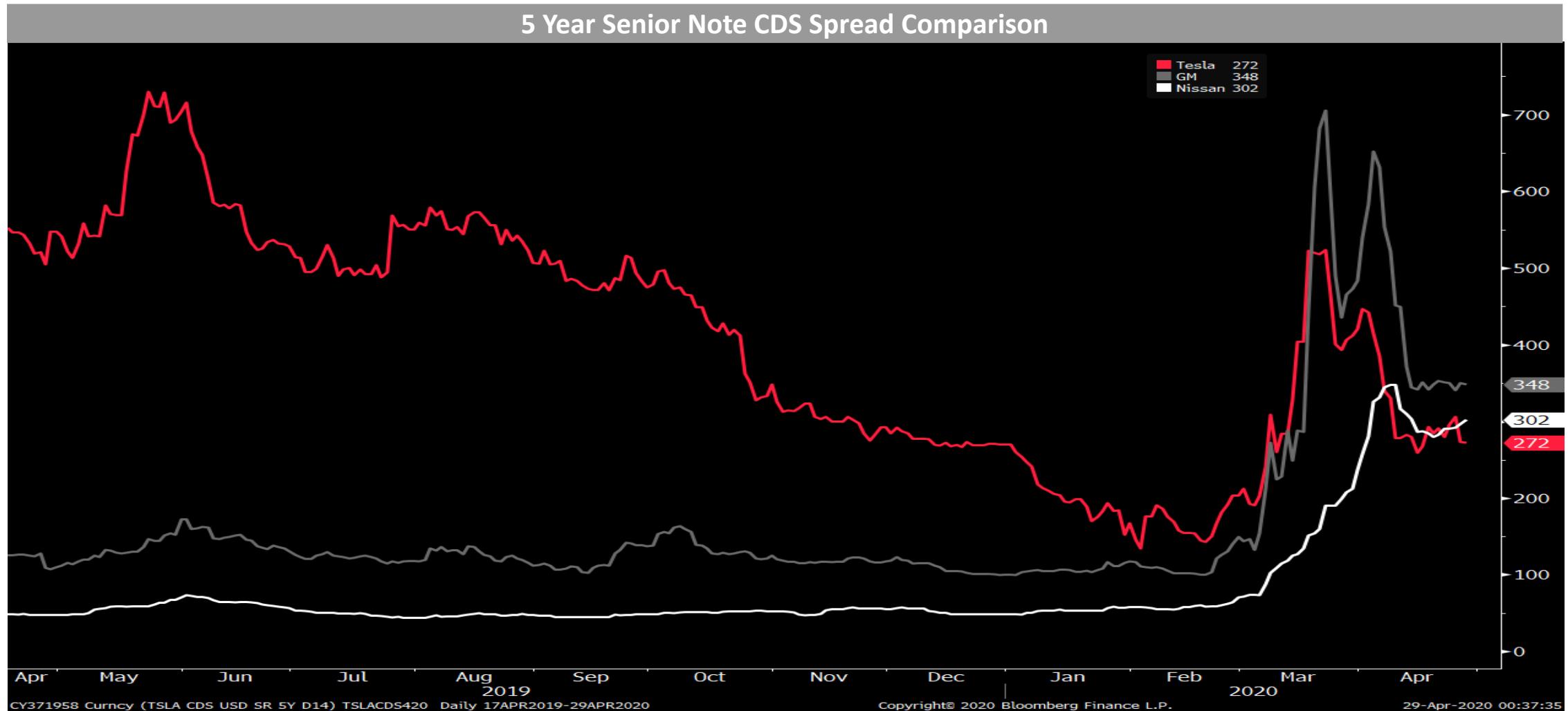


Default Risk Analysis





Default Risk Analysis

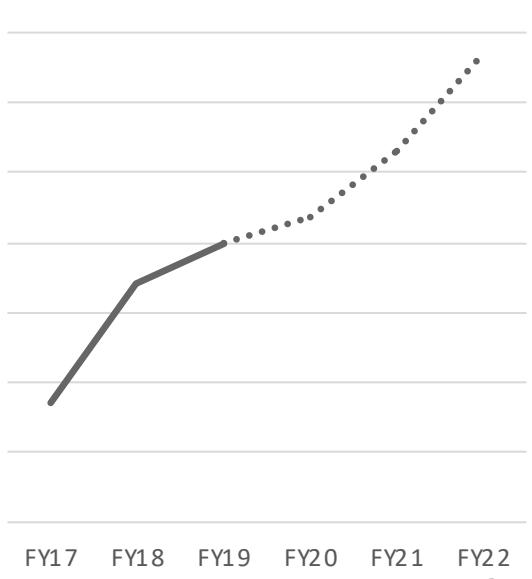
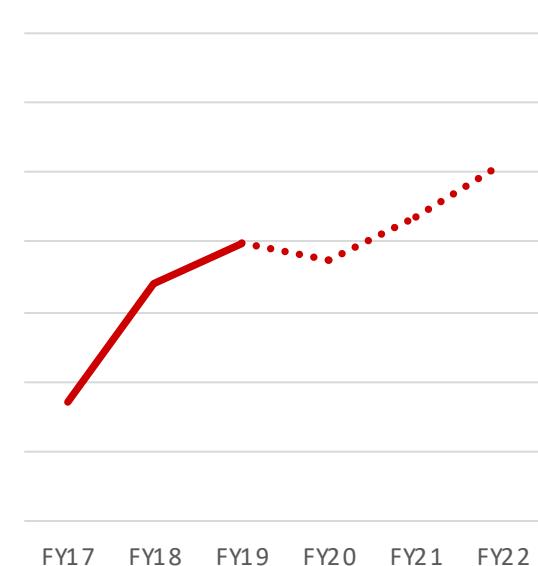
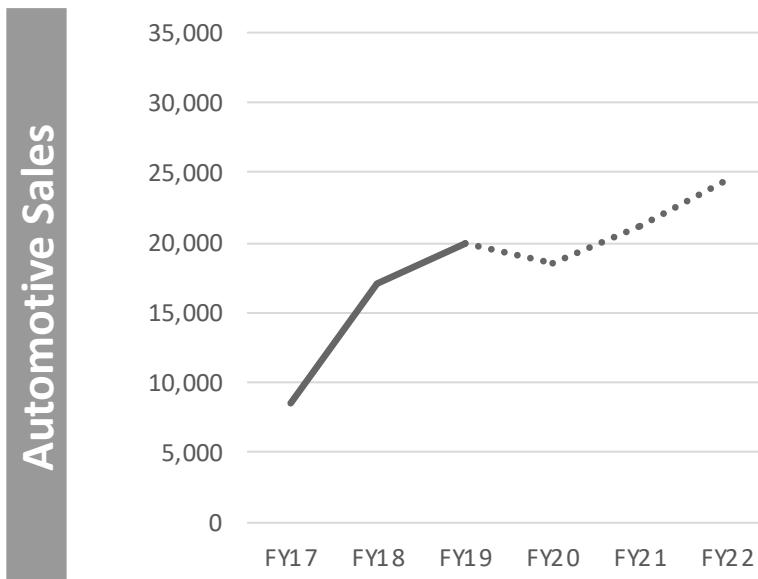




Recovery Analysis

(\$ in Millions)

	Bear	Base	Bull
Enterprise Value	68,479	79,839	141,180
Current Liabilities	10,667	10,667	10,667
Long Term Debt	11,634	11,634	11,634
Recovered Enterprise Value	46,178	53,538	118,879
% Recovered	67.43%	70.59%	84.20%





Analysis of Key Covenants

Limitation on Liens	Change of Control	Ratings Trigger	Cross Default	Limitation on Sale and Lease-back	Limitation on Subsidiary Debt
<ul style="list-style-type: none"> Company or Domestic Restricted Subsidiaries will not incur any Lien on Principal Property unless Notes are equally and ratably secured. Subject to Permitted Liens 	<ul style="list-style-type: none"> In the event of a "Change of Control Triggering Event" the notes will be redeemed at 101% of par 	<ul style="list-style-type: none"> In combination with a Change of Control Triggering Event, a decline in Ratings during a specified Ratings Decline Period will trigger an Offer to Purchase 	<ul style="list-style-type: none"> Company may be in default should any of the notes of the Company or its "Significant Subsidiaries" default on at least \$500M in principal 	<ul style="list-style-type: none"> Company or Domestic Restricted Subsidiaries may not enter any sale/lease-back transactions with respect to Principal Property. Some exceptions apply. 	<ul style="list-style-type: none"> Company will not permit any Domestic Restricted Subsidiaries (excluding Guarantor) from incurring indebtedness without also guaranteeing the Note



Covenant Comparables

Bond	Moody's Rating	Yield (To Worst)	Maturity	Rank	Negative Pledge	Change of Control	Cross Default	Ratings Trigger	Limitation on Sale-Leaseback	Limitation on Subsidiary Debt
Tesla Inc. 5.3	Caa1	6.547	8/15/2025	Sr. Unsecured	Yes	Yes	Yes	Yes	Yes	Yes
Ford 4.271	Ba2	6.83	1/9/2027	Sr. Unsecured	Yes	No	No	No	No	No
Meritor 6 1/4	B1	6.73	2/15/2024	Sr. Unsecured	Yes	Yes	No	No	Yes	No
Cooper Tire & Rubber 7 5/8	B1	7.02	3/15/2027	Sr. Unsecured	Yes	No	Yes	No	Yes	No



Risks

Liquidity Risk

Inability to Cover Expenses

If COVID-19 prevents Tesla from generating revenue for more than 1.5 years, this could impair their ability to cover expenses.

Movement of Capital to Non-liquid Accounts

If Tesla decides to move currently liquid capital to non-liquid accounts such as foreign markets, leasing contracts, or contracts with suppliers, this could limit their ability to cover expenses without generating additional revenue.

Liability Claims

If Tesla is not able to defend or insure against liability claims, its financial condition and liquidity could be threatened.

Capital Expenditure Risks

Lose Advantage in Core Tech

If Tesla reduces CapEx while their competitors are increasing it, it is possible that they will lose their strategic advantage in core EV technologies.

Consumer Preferences

If customers don't value the advantages of Tesla's tech, they may not have leeway to cut CapEx and instead be forced to make strategic investments in the areas that competitors lead.

Debt Repayment Risks

Capital Markets

Tesla's ability to refinance debt is dependent on the state of capital markets and their financial position at the time. If their stock price drops below the conversion price, Tesla won't be able to fulfill their debt obligations with equity.

Accelerated Repayment

Changes in business and economic conditions could cause Tesla to obtain additional debt financing that break their covenants. This could result in default and permit holders to accelerate obligations to repay debt at a time that Tesla does not have sufficient funds to repay it.



Conclusion

Key Driver I

Sufficient cash reserves to withstand Coronavirus disruption

Key Driver II

Technology lead in electrification provides flexibility to scale back capital expenditure

Key Driver III

Debt maturing prior to 2025 will likely be refinanced or converted into equity

Recommendation

We place a BUY recommendation on Tesla's 5.3% 2025 Note.



Table of Contents

- I. Tesla Business Overview
- II. Industry Overview
- III. Macroeconomic Analysis
- IV. Tesla Credit Analysis

Appendix



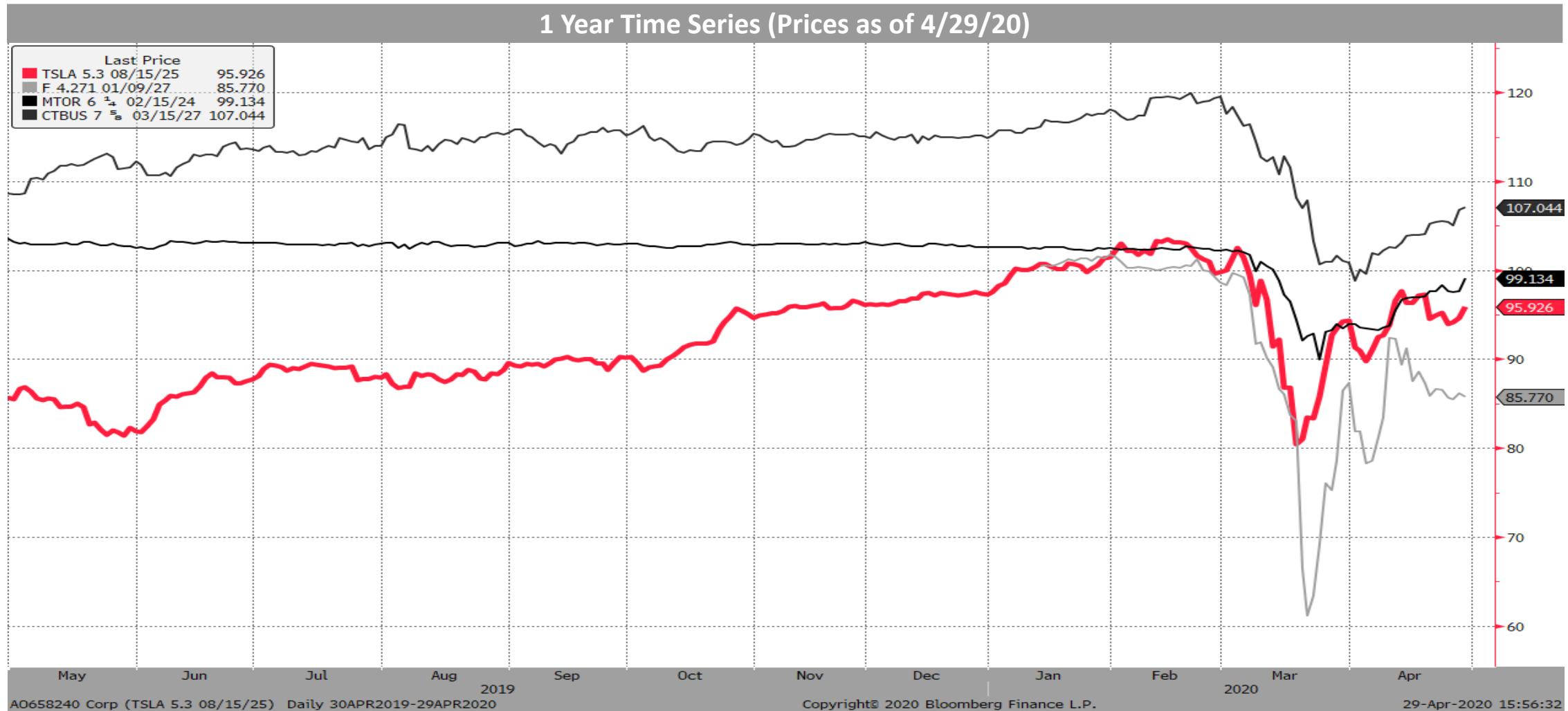
Appendix

Discounted Cash Flow Valuation

	2020E	2021E	2022E	2023E	2024E	2025E
Revenue	23,387	26,855	31,141	35,889	41,559	48,165
Y-o-Y % change	-	14.83%	15.96%	15.25%	15.80%	15.90%
Operating Income (EBIT)	216	625	1,397	2,381	3,569	5,068
less: Taxes	0	0	152	408	700	1,045
plus: Depreciation & amortization	2,156	2,580	2,820	3,092	3,399	3,737
Gross Cash Flow	2,372	3,204	4,065	5,065	6,269	7,760
Y-o-Y % change	-	35.08%	26.84%	24.60%	23.78%	23.79%
Capital expenditures	-1,327	-1,460	-1,606	-1,766	-1,943	-2,137
plus: change in working capital	-1,161	802	747	842	1,006	1,179
Total Investment	-2,488	-658	-858	-924	-936	-958
Free Cash Flow to Firm	-116	2,546	3,206	4,140	5,332	6,802
Terminal Value at Year 6						101,157
Discount Period	1	2	3	4	5	6
Discount Factor	0.92	0.84	0.78	0.71	0.65	0.60
Present Value of Cash Flows	-106.31	2,148.77	2,485.38	2,948.22	3,488.18	4,087.52
Valuation		Assumptions		WACC Calculation		
Present value of cash flows	15,051.75	WACC	8.86%	Risk free rate (10 yr bond)		0.65%
plus: PV of terminal value	60,787.72	Terminal growth rate	2.00%	Beta		1.40
Total enterprise value	75,839.48	Share Count	181	Equity Risk premium		6.16%
plus: Cash & cash equivalents	6,642.89			Cost of debt		6.50%
minus: Debt	13,060.68			Tax		23%
Equity value	69,421.68			Cost of equity (CAPM)		9.27%
				After tax cost of debt		5.01%
				Capital Structure		137,949.49
				Equity		124,530
				Debt		13,419



Comparable Bond Prices





Appendix

Income Statement

Tesla Inc.	Historical Results				Forecast				
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Income Statement (in millions, except per share data)		Actual			Assumed				
Revenues									
Automotive sales	\$8,535	\$17,632	\$19,952	18,533	21,180	24,491	28,008	32,108	36,694
% Growth	-	106.58%	13.16%	-7.11%	14.28%	15.63%	14.36%	14.64%	14.28%
Automotive leasing	1,107	883	869	912	903	894	885	876	868
Total automotive revenues	9,642	18,515	20,821	19,446	22,084	25,385	28,894	32,985	37,562
Energy generation and storage	1,116	1,555	1,531	1,608	1,688	1,793	1,934	2,122	2,381
Services and other	1,001	1,391	2,226	2,449	2,693	2,963	3,259	3,585	3,943
Total revenues	11,759	21,461	24,578	23,502	26,465	30,141	34,086	38,692	43,887
% Growth	-	82.51%	14.52%	-4.38%	12.61%	13.89%	13.09%	13.51%	13.42%
Cost of revenues									
Automotive sales	6,725	13,666	15,939	14,806	16,550	18,708	20,905	23,483	26,286
Automotive leasing	708	488	459	482	468	463	459	454	450
Total automotive cost of revenues	7,433	14,174	16,398	15,288	17,018	19,171	21,363	23,937	26,736
Energy generation and storage	874	1,365	1,341	1,408	1,470	1,553	1,665	1,817	2,026
Services and other	1,229	1,880	2,770	3,047	3324.7654	3627.61388	3957.784402	4317.71289	4710.049231
Total cost of revenues	9,536	17,419	20,509	19,743	21,812	24,352	26,986	30,071	33,472
Gross profit	2,223	4,042	4,069	3,759	4,653	5,790	7,101	8,621	10,414
% Gross margin	18.90%	18.83%	16.56%	16.00%	17.58%	19.21%	20.83%	22.28%	23.73%
Operating expenses									
Research and development	1,378	1,460	1,343	1,175	1,446	1,647	1,863	2,114	2,398
Selling, general and administrative	2,477	2,835	2,646	2,468	2,717	2,944	3,158	3,392	3,628
Restructuring and other	0	135	149	0	0	0	0	0	0
Total operating expenses	3,855	4,430	4,138	3,643	4,163	4,590	5,021	5,506	6,026
Loss from operations (EBIT)	-1,632	-388	-69	116	490	1,199	2,080	3,115	4,389
% Operating margin	-13.88%	-1.81%	-0.28%	0.50%	1.85%	3.98%	6.10%	8.05%	10.00%
Interest income	19	24	44	44	44	44	44	44	44
Interest expense	-471	-663	-685	-873	-852	-826	-694	-615	-615
Other income (expense), net	-125	22	45	45	45	45	45	45	45
Loss before income taxes	-2,209	-1,005	-665	-667	-274	462	1,474	2,589	3,862
Provision for income taxes	32	58	110	0	0	106	339	595	888
Net loss	-2,241	-1,063	-775	-667	-274	356	1,135	1,994	2,974
Net income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries									
	-279	-87	87						
Net loss attributable to common stockholders	-\$1,962	-\$976	-\$862	-\$667	-\$274	\$356	\$1,135	\$1,994	\$2,974
T12 EBITDA	3.92	1,512.98	2,511.00	2,273	1,979	2,830	3,867	5,073	6,535
Additional Information		Actual			Assumed				
Income Statement Drivers		Actual			Assumed				
Tax rate	1.45%	5.77%	16.54%	23.00%	23.00%	23.00%	23.00%	23.00%	23.00%
Cost of goods sold									
Automotive sales (% of automotive sales)	78.79%	77.62%	79.89%	79.89%	78.14%	76.39%	74.64%	73.14%	71.64%
Automotive leasing (% of automotive leasing revenue)	63.96%	55.27%	52.82%	52.82%	51.82%	51.82%	51.82%	51.82%	51.82%
Energy generation and storage (% of energy generation and storage revenue)	78.32%	87.78%	87.59%	87.59%	87.09%	86.59%	86.09%	85.59%	85.09%
Services and other (% of services and other revenue)	122.78%	135.15%	124.44%	124.44%	123.44%	122.44%	121.44%	120.44%	119.44%
Operating expenses									
Research and development (% of revenue)	11.72%	6.80%	5.46%	5.00%	5.46%	5.46%	5.46%	5.46%	5.46%
Selling, general and administrative (% of revenue)	21.06%	13.21%	10.77%	10.50%	10.27%	9.77%	9.27%	8.77%	8.27%



Appendix

Balance Sheet



Appendix

Statement of Cash Flows

Tesla Inc.	Historical Results				Forecast				
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Statement of Cash Flow (in millions, except per share data)		Actual				Assumed			
Cash Flows from Operating Activities									
Net loss	-\$2,241	-\$1,063	\$775	-\$667	-\$274	\$356	\$1,135	\$1,994	\$2,974
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:									
Depreciation, amortization and impairment	1,636	1,901	2,154	2,156	1,490	1,631	1,787	1,958	2,146
Stock-based compensation	467	749	898	859	967	1101	1245	1414	1603
Amortization of debt discounts and issuance costs	91	159	188	0	0	0	0	0	0
Inventory and purchase commitments write-downs	132	85	193	0	0	0	0	0	0
Loss on disposals of fixed assets	106	162	146	0	0	0	0	0	0
Foreign currency transaction (gains) loss	52	-2	-48	0	0	0	0	0	0
Loss related to SolarCity acquisition	58	0	0	0	0	0	0	0	0
Non-cash interest and other operating activities	135	49	186	0	0	0	0	0	0
Operating cash flow related to repayment of discounted convertible notes	0	0	-188	0	0	0	0	0	0
Total non-cash adjustments	2,677	3,103	3,529	3015	2457	2732	3032	3372	3750
Changes in operating assets and liabilities, net of effect of business combinations:									
Accounts receivable	-25	-497	-367	58	-159.6	-198.0	-212.5	-248.1	-279.8
Inventory	-179	-1,023	-429	133	-358.5	-439.7	-456.2	-534.4	-589.0
Operating lease vehicles	-1,523	-215	-764	-845	375	343	385	448	518
Prepaid expenses and other current assets	-72	-82	-288	31	-86.0	-106.6	-114.4	-133.6	-150.7
Other non-current assets	-15	-207	115	35	-97	-121	-130	-151	-171
Accounts payable and accrued liabilities	388	1,723	682	-268	731	901	951	1,112	1,239
Deferred revenue	469	406	801	-104	286	354	380	444	501
Customer deposits	170	-96	-58	-61	-56	-51	-47	-43	-39
Resale value guarantee	209	-111	-150	-127	114	0	0	0	0
Other long-term liabilities	81	160	109	0	0	0	0	0	0
Change in net working capital	-497	58	-349	-1,148	747.5	682.1	756.1	893.0	1028.5
Net cash provided by (used in) operating activities	-61	2,098	2,405	1,200	2,931	3,771	4,924	6,258	7,752
Cash Flows from Investing Activities									
Purchases of property and equipment excluding finance leases, net of sales (CapEx)	-3,415	-2,101	-1,327	-1,327	-1,460	-1,606	-1,766	-1,943	-2,137
Purchases of solar energy systems	-666	-218	-105	0	244	244	244	244	244
Purchase of intangible assets	0	0	-5	0	47	47	47	47	47
Receipt of government grants	0	0	46	0	0	0	0	0	0
Business combinations, net of cash acquired	-115	-18	-45	0	0	0	0	0	0
Net cash used in investing activities	-4,196	-2,337	-1,436	-1,327	-1,168	-1,314	-1,475	-1,652	-1,846
Cash Flows from Financing Activities									
Proceeds from issuances of common stock in public offerings, net of underwriting discounts	400	-	848	0	0	0	0	0	0
Issuance/Repayment of convertible and other debt and finance leases	3,142	929	1,508	-350	-138	-1,483	-775	341	.995
Repayments of borrowings issued to related parties	-165	-100	0	0	0	0	0	0	0
Collateralized lease repayments	511	-559	-389	0	0	0	0	0	0
Proceeds from exercises of stock options and other stock issuances	259	296	263	263	263	263	263	263	263
Principal payments on finance leases	-103	-181	-321	0	0	0	0	0	0
Common stock and debt issuance costs	-63	-15	-37	0	0	0	0	0	0
Purchase of convertible note hedges	-204	0	-476	0	0	0	0	0	0
Proceeds from settlement of convertible note hedges	287	0	0	0	0	0	0	0	0
Proceeds from issuance of warrants	53	0	174	0	0	0	0	0	0
Payments for settlements of warrants	-230	0	0	0	0	0	0	0	0
Proceeds from investments by noncontrolling interests in subsidiaries	790	437	279	0	0	0	0	0	0
Distributions paid to noncontrolling interests in subsidiaries	-262	-227	-311	0	0	0	0	0	0
Payments for buy-outs of noncontrolling interests in subsidiaries	0	-6	-9	0	0	0	0	0	0
Net cash provided by financing activities	4,415	574	1,529	-87	125	-1,220	-512	604	-732
Restricted cash									
Effect of exchange rate changes on cash and cash equivalents and restricted cash	40	-23	8	0	0	0	0	0	0
Net increase in cash and cash equivalents and restricted cash	198	312	2,506	-214	1,887	1,236	2,936	5,211	5,174
Cash and cash equivalents and restricted cash, beginning of period	3,767	3,965	4,277	\$6,783	\$6,569	\$8,456	\$9,693	\$12,629	\$17,840
Cash and cash equivalents and restricted cash, end of period	\$3,965	\$4,277	\$6,783	\$6,569	\$8,456	\$9,693	\$12,629	\$17,840	\$23,013
Cash Flow Statement Drivers		Actual				Assumed			
Stock-based compensation (% of revenue)	3.97%	3.49%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%
Purchases of property and equipment excluding finance leases, net of sales (CapEx)	-3,415	-2,101	-1,327	-1,327	-1,460	-1,606	-1,766	-1,943	-2,137



Appendix

Debt Schedule

Tesla Inc.	Historical Results			Forecast					
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Outstanding Balances:									
Recourse debt									
0.25% Convertible Senior Notes due 2019	869	-	-	-	-	-	-	-	-
1.25% Convertible Senior Notes due 2021	1,186	1,244	1,304	1,304	-	-	-	-	-
2.365% Convertible Senior Notes due 2022	842	871	902	902	902	-	-	-	-
2.00% Convertible Senior Notes due 2024	-	-	1,383	1,383	1,383	1,383	1,383	-	-
5.30% Senior Notes due in 2025	1,776	1,779	1,782	1,782	1,782	1,782	1,782	1,782	-
Credit Agreement	1,109	1,540	1,586	1,586	1,586	1,586	1,586	1,586	1,586
1.625% Convertible Senior Notes due 2019	511	-	-	-	-	-	-	-	-
0% Convertible Senior Notes due 2020	86	92	-	-	-	-	-	-	-
Solar Bonds and other Loans	25	100	53	0	1,304	902	0	1,383	1,782
Total recourse debt	6,405	5,626	7,010	6,957	6,957	5,653	4,751	4,751	3,368
Non-recourse debt									
Automotive Asset-backed Notes	-	704	997	1,007	1,017	1,027	1,037	1,048	1,058
Solar Asset-backed Notes	857	1,155	1,123	1,123	1,123	1,123	1,123	1,123	1,123
China Loan Agreements	-	-	297	297	297	297	297	297	297
Cash Equity Debt	454	442	430	430	430	430	430	430	430
Solar Loan-backed Notes	229	193	164	164	164	164	164	164	164
Warehouse Agreements	478	78	146	146	146	146	146	146	146
Solar Term Loans	-	162	152	152	152	152	152	152	152
Canada Credit Facility	56	41	16	16	16	16	16	16	16
Solar Renewable Energy Credit and other Loans	351	10	67	67	67	67	67	67	67
Total non-recourse debt	2,424	2,785	3,392	3,402	3,412	3,422	3,432	3,443	3,453
Total long term debt	8,829	8,411	10,402	10,359	10,369	9,075	8,183	8,194	6,821
Finance leases									
2018	127	-	-	-	-	-	-	-	-
2019	137	417	-	-	-	-	-	-	-
2020	167	504	474	-	-	-	-	-	-
2021	138	506	478	478	-	-	-	-	-
2022	134	24	600	600	600	-	-	-	-
2023	-	5	224	224	224	224	-	-	-
2024	-	-	5	5	5	5	5	-	-
Thereafter	82	6	13	13	13	13	13	13	13
Total minimum lease payments	785	1,461	1,794	1,320	842	242	18	13	13
Less: Interest	99	122	176	-	-	-	-	-	-
Present value of finance leases	686	1,339	1,618	1,320	842	242	18	13	13
Less: Current portion	97	346	386	316.8	202.08	58.08	4.32	3.12	3.12
Total long term lease obligations	589	993	1,232	1,003	640	184	14	10	10
Debt and finance leases, net of current portion (BS line 39)	9,418	9,404	11,634	11,362	11,009	9,259	8,197	8,204	6,831
Issuance/Repayment of New Debt	-	-14	2,230	-272	-353	-1,750	-1,062	7	-1,373
Debt Schedule									
		Actual			Assumed				
Opening debt and finance leases, net of current portion	5,860	9,418	9,404	11,634	11,362	11,009	9,259	8,197	8,204
Debt issuance/repayment	3,558	-14	2,230	-272	-353	-1,750	-1,062	7	-1,373
Closing debt and finance leases, net of current portion	9,418	9,404	11,634	11,362	11,009	9,259	8,197	8,204	6,831
Interest expense (% of opening long term debt)	8.04%	7.04%	7.28%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Total debt	10,215	11,972	13,419	13,069	12,931	11,448	10,673	11,014	10,019
Cash and cash equivalents	3,368	3,686	6,268	6,569	8,456	9,693	12,629	17,840	23,013
Net debt	6,847	8,286	7,151	6,500	4,475	1,755	-1,956	-6,826	-12,995



Appendix

Supporting Schedules

Tesla Inc.	Historical Results			Forecast					
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
PP&E Schedule	Actual			Assumed					
Beginning gross property, plant and equipment	6,980	11,751	14,029	14,130	15,457	16,917	18,522	20,289	22,231
Capital expenditures	3,415	2,101	1,327	1,327	1,460	1,606	1,766	1,943	2,137
Retirement/Other	1,356	177	-1,226	0	0	0	0	0	0
Ending gross property, plant and equipment	11,751	14,029	14,130	15,457	16,917	18,522	20,289	22,231	24,369
Beginning accumulated depreciation and amortization	997	1,724	2,699	3,734	5,095	6,585	8,216	10,003	11,961
Depreciation and amortization	769	1,110	1,370	1,361	1,490	1,631	1,787	1,958	2,146
Average Useful life	12.17	11.61	10.28	11.35	11.35	11.35	11.35	11.35	11.35
Removal/Other	-43	-135	-335	0	0	0	0	0	0
Ending accumulated depreciation and amortization	1,724	2,699	3,734	5,095	6,585	8,216	10,003	11,961	14,107
Property, plant and equipment, net	10,028	11,330	10,396	10,362	10,332	10,306	10,285	10,270	10,262
Lease Vehicles	Actual			Assumed					
Beginning gross operating lease vehicles	3,530	4,850	2,550	2,850	3,695	4,119	4,673	5,302	6,005
Removal/Other	-203	-2,515	-464	-215	-764	-795	-891	-1,012	-1,140
Cost of vehicles for lease originations during period	Aggregated in net cost of operating lease vehicles			\$1,060	\$1,188	\$1,349	\$1,520	\$1,714	\$1,922
Net change in operating lease vehicles	1,523	215	764	845	424	554	629	703	781
Ending gross operating lease vehicles	4,850	2,550	2,850	3,695	4,119	4,673	5,302	6,005	6,786
Beginning accumulated depreciation and amortization	400	733	458	406	910	1,708	2,605	3,620	4,770
Depreciation and amortization	538	455	460	451	538	605	687	779	881
Average useful life	8	8	6	7	7	7	7	7	7
Removal/Other	-205	-731	-512	-53	-261	-292	-327	-372	-419
Ending accumulated depreciation and amortization	733	458	406	910	1,708	2,605	3,620	4,770	6,069
Operating lease vehicles, net	4,117	2,092	2,444	2,785	2,411	2,068	1,683	1,235	717
Solar Energy Systems, Leased and To Be Leased	Actual			Assumed					
Beginning gross solar energy systems, leased and to be leased	5,960	6,568	6,682	6,784	6,784	6,784	6,784	6,784	6,784
Purchases of solar systems	666	218	102	0	0	0	0	0	0
Purchase of solar systems (% of energy generation revenue)	59.66%	14.02%	6.66%						
Removal/Other	-59	-9	0	0	0	0	0	0	0
Ending gross solar energy systems leased and to be leased	6,568	6,777	6,784	6,784	6,784	6,784	6,784	6,784	6,784
Beginning accumulated depreciation and amortization	20	220	496	723	967	1,212	1,456	1,701	1,945
Depreciation and amortization	213	276	227	244	244	244	244	244	244
Average useful life	29	24	30	28	28	28	28	28	28
Removal/Other	-13	-1	0	0	0	0	0	0	0
Ending accumulated depreciation and amortization	220	496	723	967	1,212	1,456	1,701	1,945	2,190
Under construction				18					
Pending interconnection				59					
Solar energy systems, leased and to be leased, net	6,347	6,281	6,138	5,817	5,572	5,328	5,083	4,839	4,594
Intangible Assets	Actual			Assumed					
Beginning gross carrying value	383	405	406	510	510	510	510	510	510
Intangible assets purchased	0	0	5						
Internally developed intangible assets	22	1	99	0	0	0	0	0	0
Internally developed intangible assets / Previous year R&D	2.60%	0.11%	6.76%						
Ending gross carrying value	405	406	510	510	510	510	510	510	510
Beginning accumulated amortization	7	47	113	91	138	185	231	278	325
Amortization	36	47	35	47	47	47	47	47	47
Average useful life	11	9	13	11	11	11	11	11	11
Removal/Other	3	19	-56	0	0	0	0	0	0
Ending accumulated amortization	47	113	91	138	185	231	278	325	372
Intangible assets carrying value, net	358	282	339	372	325	279	232	185	138

Appendix



Revenue Model

Tesla Inc.	Historical Results				Forecast				
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Base Case	Actual				Assumed				
Model S&X Vehicles Delivered	101,250	149,030	66,771	61,763	67,322	75,232	84,260	92,686	100,101
% Growth	-	47.19%	-55.20%	-7.50%	9.00%	11.75%	12.00%	10.00%	8.00%
Less: Model S&X Vehicles Under Lease Accounting	2,263	6,718	8,578	6,176	6,732	7,523	8,426	9,269	10,010
% of Vehicles Delivered	2.24%	4.51%	12.85%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Total Models S&X Vehicles Sold	98,987	142,312	58,193	55,587	60,590	67,709	75,834	83,417	90,091
Average Selling Price	\$85,526	\$91,220	\$102,971	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000
Total Models S&X Revenue	8,465.97	12,981.69	5,992.22	5837	6362	7109	7963	8759	9460
Model 3/Y Vehicles Delivered	1,770	81,974	300,885	275,310	330,372	396,446	467,806	556,690	662,461
% Growth	-	4531.30%	267.05%	-8.50%	20%	20%	18%	19%	19%
Less: Model 3 Vehicles Under Lease Accounting	0	0	16,861	13,765	16,519	19,822	23,390	27,834	33,123
% of Vehicles Delivered	0	0.00%	5.60%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Total Model 3 Vehicles Sold	1,770	81,974	284,024	261,544	313,853	376,624	444,416	528,855	629,338
Average Selling Price	\$39,000	\$50,000	\$49,150	\$49,250	\$49,250	\$49,250	\$49,250	\$49,250	\$49,250
Total Model 3 Revenue	69.03	4,098.70	13,959.78	12,881	15,457	18,549	21,887	26,046	30,995
Automotive Sales	8,535.00	17,080.39	19,952.00	18,718	21,819	25,658	29,850	34,805	40,454
Total vehicles delivered	103,020	231,004	367,656	337,073	397,694	471,678	552,066	649,376	762,562
Automotive leasing	1,107	883	869	912	903	894	885	876	868
% Growth		-20.23%	-1.59%	5.00%	-1.00%	-1.00%	-1.00%	-1.00%	-1.00%
Total Automotive Revenues	9,642	17,963.39	20,821.00	19,630	22,723	26,552	30,735	35,681	41,322
Energy Generation and Storage	1,116	1,555	1,531	1,531	1,684	1,895	2,191	2,619	3,258
% Growth		39.34%	-1.54%	0.00%	10.00%	12.50%	15.63%	19.53%	24.41%
Services and other	1,001	1,391	2,226	2,226	2,449	2,693	2,963	3,259	3,585
% Growth		38.96%	60.03%	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Total Revenues	11,759	20,909	24,578	23,387	26,855	31,141	35,889	41,559	48,165
Global EV sales		2,000,000	3,000,000	4,000,000	5,000,000	6,250,000	7,812,500	9,765,625	12,207,031
Tesla market share (% of global EV sales)		11.55%	12.26%	8.43%	7.95%	7.55%	7.07%	6.65%	6.25%



Appendix

Ratios

Tesla Inc.	Historical Results				Forecast				
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Reference Items									
Short Term Debt	797.00	2,568.00	1,785.00	1,706.85	1,922.05	2,189.03	2,475.55	2,810.06	3,187.31
Long Term Debt	9,418.00	9,404.00	11,634.00	11,362.17	11,008.96	9,259.13	8,197.16	8,203.74	6,831.22
Total Debt	10,215.00	11,972.00	13,419.00	13,069.02	12,931.01	11,448.16	10,672.71	11,013.80	10,018.52
Market Capitalization	52,554.90	57,442.30	75,717.70						
Enterprise Value	59,401.90	65,728.30	82,868.70						
Total Debt / T12M EBITDA	2,605.87	7.91	5.34	5.75	6.53	4.04	2.76	2.17	1.53
Net Debt / T12M EBITDA	1,746.68	5.48	2.85	2.86	2.26	0.62	-0.51	-1.35	-1.99
EBITDA to Interest Expense Coverage Ratio	0.01	2.28	3.67	2.60	2.32	3.43	5.57	8.25	10.62
EBITDA-CapEx / Interest Expense	-7.24	-0.89	1.73	1.08	0.61	1.48	3.02	5.09	7.15
EBIT to Interest Expense Coverage Ratio	-3.46	-0.59	-0.10	0.13	0.57	1.45	2.99	5.07	7.13
EBITDA to Cash Interest Paid	0.02	3.97	5.52						
EBITDA-CapEx / Cash Interest Paid	-18.68	-1.54	2.60						
EBIT to Cash Interest Paid	-8.94	-1.02	-0.15						
Common Equity / Total Assets	14.79	16.55	19.29	20.89	22.46	26.22	30.72	35.02	40.66
	167.22	148.96	143.45	132.66	115.63	82.37	59.04	46.73	30.50
Long-Term Debt / Book Value Capital	59.43	51.43	54.04	52.52	49.03	40.81	33.38	28.72	21.07
Long-Term Debt / Total Assets	32.87	31.62	33.91	33.56	30.80	24.90	20.32	17.89	13.29
Total Debt / Book Value Equity	181.37	189.64	165.46	152.59	135.82	101.84	76.87	62.74	44.73
Total Debt / Book Value Capital	64.46	65.47	62.33	60.41	57.59	50.46	43.46	38.55	30.91
Total Debt / Total Assets	35.65	40.26	39.11	38.60	36.17	30.78	26.46	24.01	19.49
Total Debt / Market Capitalization	19.44	20.84	17.72						
Total Debt / Enterprise Value	17.20	18.21	16.19						
Net Debt / Equity	121.57	131.25	88.18	75.89	47.00	15.62	-14.09	-38.88	-58.02
Net Debt / Capital	43.21	45.32	33.22	30.05	19.93	7.74	-7.97	-23.89	-40.09
Net Debt / Enterprise Value	11.53	12.61	8.63						
Cash From Operations	-61.00	2,098.00	2,405.00	1,200.08	2,930.69	3,770.66	4,923.56	6,258.17	7,752.04
Gross Cash Flow	-28.00	1,455.00	1,975.00	2,272.53	3,069.27	3,912.56	4,832.86	5,918.79	7,237.15
Free Cash Flow to the Firm	-3,940.00	-588.00	299.00	-202.05	2,357.04	2,988.97	3,822.77	4,868.90	6,128.49
Working Capital	-1,104.00	-1,686.00	1,436.00	1,841.74	3,200.61	3,890.55	6,233.09	10,738.76	15,109.29
Current Ratio	0.86	0.83	1.13	1.18	1.29	1.31	1.45	1.69	1.87
Quick Ratio	0.51	0.46	0.71	0.78	0.88	0.90	1.04	1.28	1.46
Cash Ratio Acid Test	0.44	0.37	0.59	0.65	0.75	0.77	0.91	1.15	1.33
CFO to Average Current Liabilities	-0.01	0.24	0.23	0.12	0.27	0.32	0.37	0.43	0.47
CFO / Total Liabilities	-0.26	8.96	9.18	4.75	11.18	14.53	18.61	22.11	26.72