

# Tesla

April 16, 2021

## 1 Overview of Financial statements

### Period of Analysis

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Tesla, Inc. Analysis of financial statements for years ended on:  
Dec. 31, 2020 | Dec. 31, 2019 | Dec. 31, 2018.  
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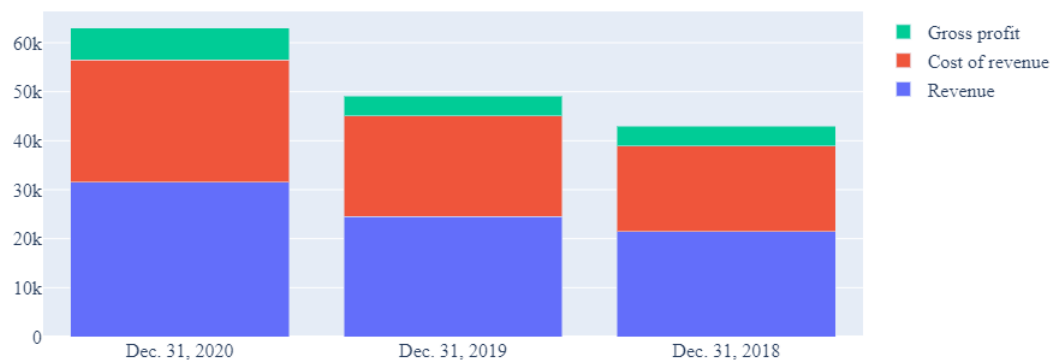
### Statement of Profit or Loss, aka Income Statement

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Tesla, Inc. statement of profit or loss, annual report  
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	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
Income Statement, MLN USD			
Automotive leasing	1052.0	869.0	883.0
Total automotive revenues	27236.0	20821.0	18515.0
Services and other	2306.0	2226.0	1391.0
Total revenues	31536.0	24578.0	21461.0
Automotive leasing	563.0	459.0	488.0
Total automotive cost of re...	20259.0	16398.0	14174.0
Services and other	2671.0	2770.0	1880.0
Total cost of revenues	24906.0	20509.0	17419.0
Gross profit	6630.0	4069.0	4042.0
Research and development	1491.0	1343.0	1460.0
Selling, general and admini...	3145.0	2646.0	2835.0
Restructuring and other	0.0	149.0	135.0
Total operating expenses	4636.0	4138.0	4430.0
Income (loss) from operations	1994.0	-69.0	-388.0
Interest income	30.0	44.0	24.0
Interest expense	-748.0	-685.0	-663.0
Other (expense) income, net	-122.0	45.0	22.0
Income (loss) before income...	1154.0	-665.0	-1005.0
Provision for income taxes	292.0	110.0	58.0
Net income (loss)	862.0	-775.0	-1063.0
Net income (loss) attributa...	141.0	87.0	-87.0

Net income (loss) attributable to common stockholders	721.0	-862.0	-976.0
Less: Buy-out of noncontrolling interest	31.0	8.0	0.0
Net income (loss) used in computing earnings per share	690.0	-870.0	-976.0
Basic	1.0	-1.0	-1.0
Diluted	1.0	-1.0	-1.0
Basic	933.0	887.0	853.0
Diluted	1083.0	887.0	853.0
Automotive Sales [Member]	0.0	0.0	0.0
Revenues	26184.0	19952.0	17632.0
Cost of revenues	19696.0	15939.0	13686.0
Energy Generation and Storage [Member]	0.0	0.0	0.0
Revenues	1994.0	1531.0	1555.0
Cost of revenues	1976.0	1341.0	1365.0

Tesla, Inc. changes in Revenue, Cost and Gross profit, MLN USD

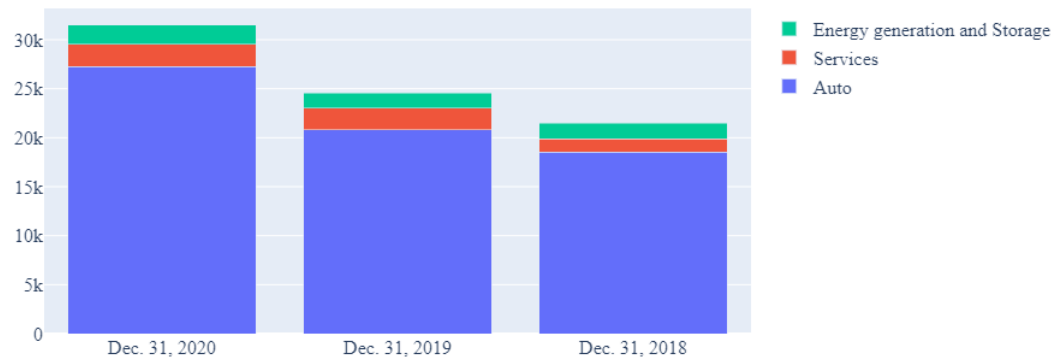


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Tesla, Inc. year to year Revenue has increased by 28.31%  
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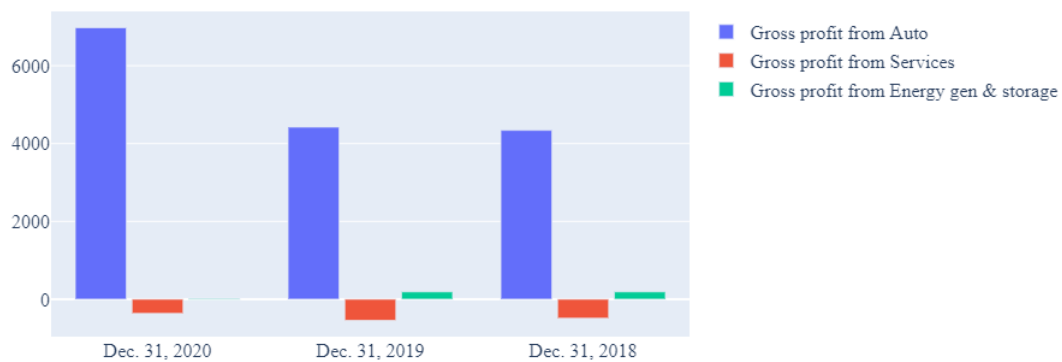
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Tesla, Inc. year to year Cost has increased by 21.44%  
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Tesla, Inc. year to year Gross profit has increased by 62.94%  
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Tesla, Inc. Revenue breakdown, MLN USD



Tesla, Inc. Gross profit by division, MLN USD




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Largest contributor to gross profit of Tesla, Inc. comes from business of its Auto division:

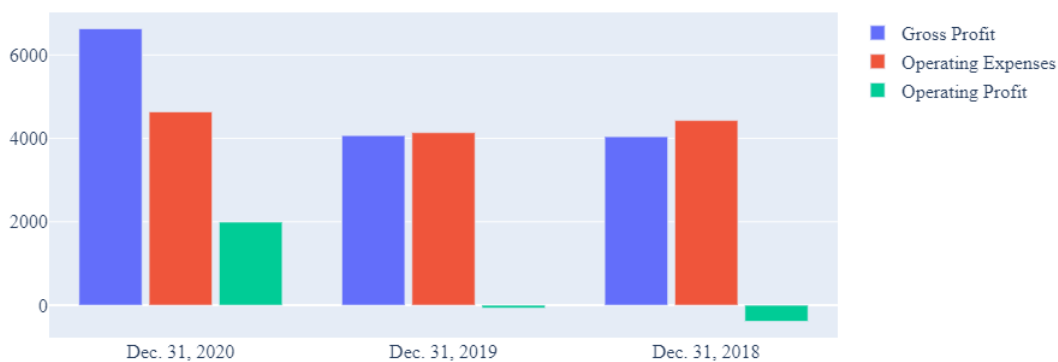
Tesla, Inc. year to year Auto Revenue has increased by 30.81%

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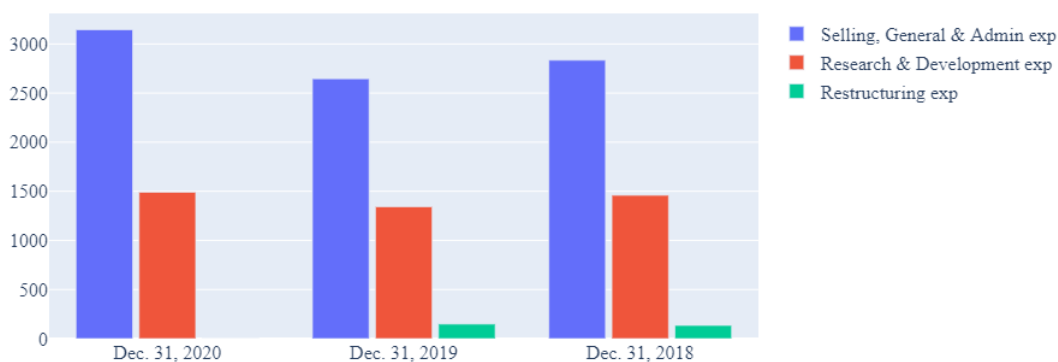
Tesla, Inc. year to year Auto Gross profit has increased by 57.74%

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Tesla, Inc. Operating profit year to year change, MLN USD



Tesla, Inc. Operating expenses by type, MLN USD

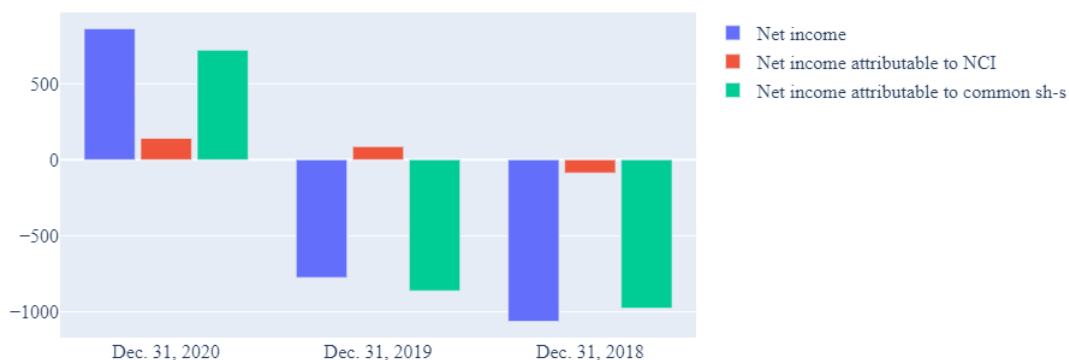


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 Operating profit boosted to the large extent by high gross profit,  
 and only slightly due to cost efficiency:

Tesla, Inc. year to year Operating Profit has increased by 2989.86%

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 Tesla, Inc. year to year Operating Expenses has increased by 12.03%

### Tesla, Inc. Net Profit, MLN USD



### Statement of Financial Position, aka Balance Sheet

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 Tesla, Inc. statement of financial position, annual report  
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	Dec. 31, 2020	Dec. 31, 2019
Balance Sheet, MLN USD		
Cash and cash equivalents	19384.0	6268.0
Accounts receivable, net	1886.0	1324.0
Inventory	4101.0	3552.0
Prepaid expenses and other ...	1346.0	959.0
Total current assets	26717.0	12103.0
Property, plant and equipme...	12747.0	10396.0
Operating lease right-of-us...	1558.0	1218.0
Intangible assets, net	313.0	339.0
Goodwill	207.0	198.0
Other non-current assets	1536.0	1470.0
Total assets	52148.0	34309.0
Accounts payable	6051.0	3771.0
Accrued liabilities and other	3855.0	3222.0
Deferred revenue	1458.0	1163.0
Customer deposits	752.0	726.0
Current portion of debt and...	2132.0	1785.0
Total current liabilities	14248.0	10667.0
Debt and finance leases, ne...	9556.0	11634.0
Deferred revenue, net of cu...	1284.0	1207.0
Other long-term liabilities	3330.0	2691.0
Total liabilities	28418.0	26199.0
Commitments and contingenci...	0.0	0.0

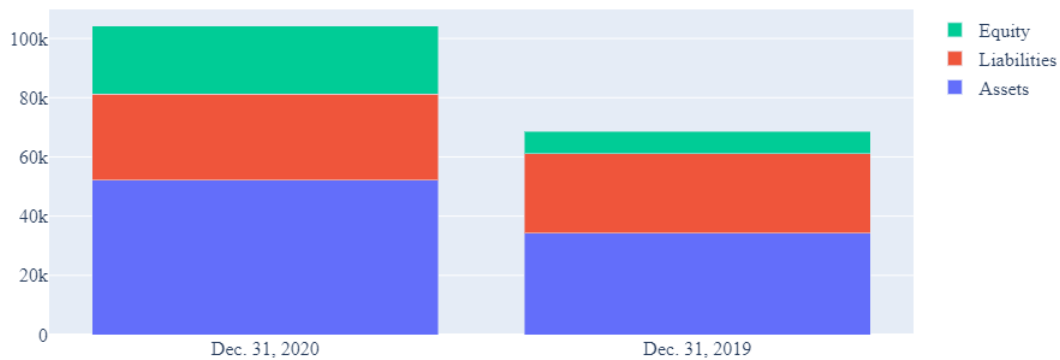
Redeemable noncontrolling i...	604.0	643.0
Convertible senior notes (N...	51.0	0.0
Preferred stock; \$0.001 par...	0.0	0.0
Common stock; \$0.001 par va...	1.0	1.0
Additional paid-in capital	27260.0	12736.0
Accumulated other comprehen...	363.0	-36.0
Accumulated deficit	-5399.0	-6083.0
Total stockholders' equity	22225.0	6618.0
Noncontrolling interests in...	850.0	849.0
Total liabilities and equity	52148.0	34309.0
Operating Lease Vehicles [M...	0.0	0.0
Operating lease vehicles, net	3091.0	2447.0
Solar Energy Systems [Member]	0.0	0.0
Solar energy systems, net	5979.0	6138.0

For analysis I have included hybrid securities and redeemables of Tesla, Inc. in Liabilities rather than in Equity.

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Verify the fundamental accounting identity holds:  
Assets = Liabilities + Equity:

Dec. 31, 2020      True  
Dec. 31, 2019      True  
dtype: bool

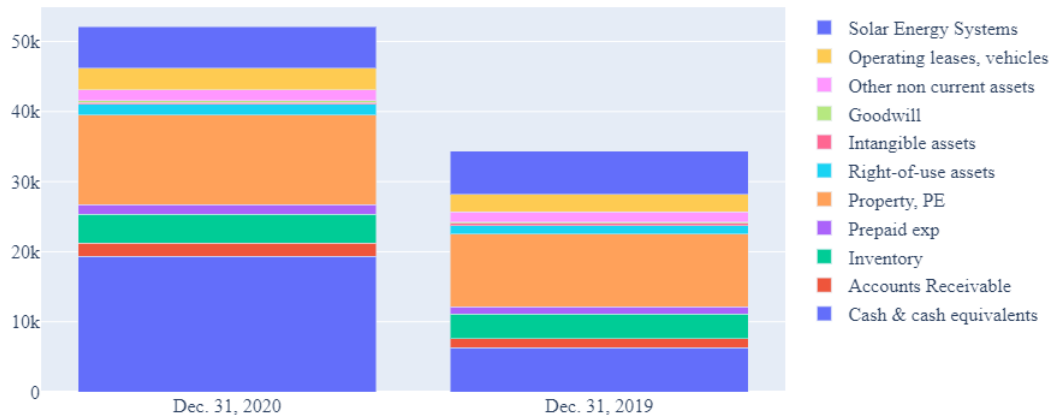
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Tesla, Inc. year to year changes in financial position, MLN USD



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Verify all listed assets of Tesla, Inc. sum up to total assets shown:

```
Dec. 31, 2020    True
Dec. 31, 2019    True
dtype: bool
```

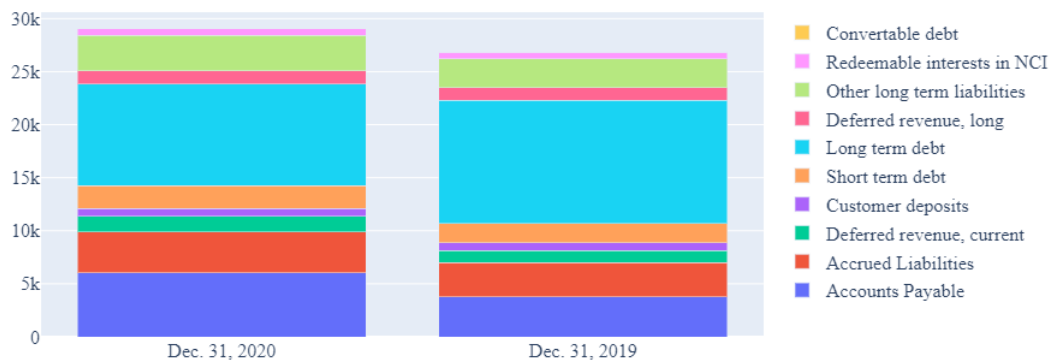
Tesla, Inc. breakdown of disclosed assets, MLN USD



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Verify all listed liabilities of Tesla, Inc. sum up to total liabilities shown:

```
Dec. 31, 2020    True
Dec. 31, 2019    True
dtype: bool
```

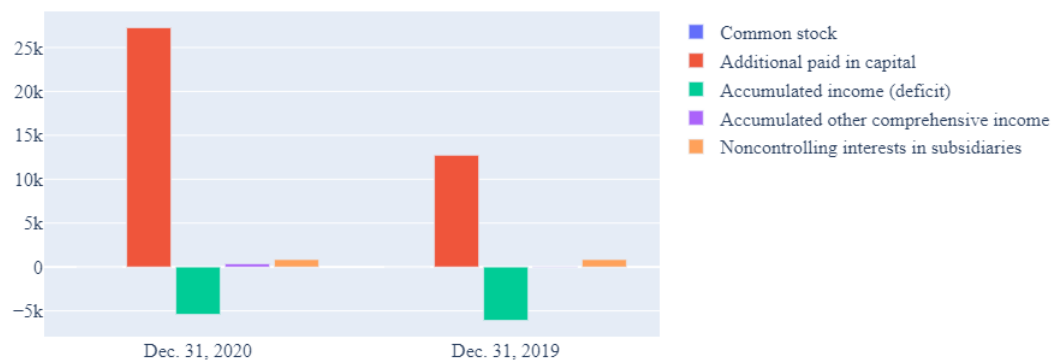
Tesla, Inc. breakdown of disclosed liabilities, MLN USD



-----  
Verify all listed equity elements of Tesla, Inc. sum up to total equity shown:

Dec. 31, 2020      True  
Dec. 31, 2019      True  
dtype: bool  
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Tesla, Inc. breakdown of disclosed equity, MLN USD



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The most significant year to year changes in statement of financial position of Tesla, Inc. occurred in Equity and Assets.

Equity has increased by 209.03%

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Total Assets have increased by 52.0%

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Largest portion of changes in assets due to boost in Cash raised in equity market.

Cash & Cash equivalents have increased by 209.25%

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Change in liabilities is relatively small, driven primarily by changes in long term debt and accounts payable:

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Total liabilities have increased by 8.31%

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Long term debt has decreased by -17.86%

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Accounts payable have increased by 60.46%



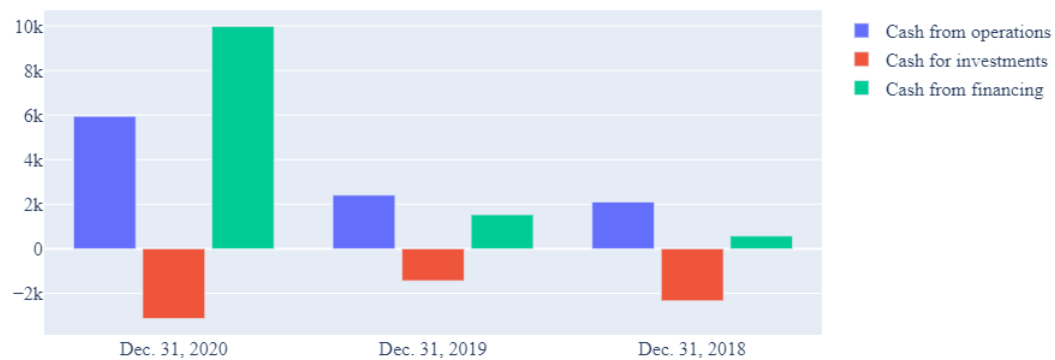
## Statement of Cash Flows

Tesla, Inc. statement of cash flows, annual report

	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
Cash Flows, MLN USD			
Net income (loss)	862.0	-775.0	-1063.0
Depreciation, amortization ...	2322.0	2154.0	1901.0
Stock-based compensation	1734.0	898.0	749.0
Amortization of debt discou...	180.0	188.0	159.0
Inventory and purchase comm...	202.0	193.0	85.0
Loss on disposals of fixed ...	117.0	146.0	162.0
Foreign currency transactio...	114.0	-48.0	-2.0
Non-cash interest and other...	228.0	186.0	49.0
Operating cash flow related...	0.0	-188.0	0.0
Accounts receivable	-652.0	-367.0	-497.0
Inventory	-422.0	-429.0	-1023.0
Operating lease vehicles	-1072.0	-764.0	-215.0
Prepaid expenses and other ...	-251.0	-288.0	-82.0
Other non-current assets	-344.0	115.0	-207.0
Accounts payable and accrue...	2102.0	646.0	1797.0
Deferred revenue	321.0	801.0	406.0
Customer deposits	7.0	-58.0	-96.0
Other long-term liabilities	495.0	-5.0	-25.0
Net cash provided by operat...	5943.0	2405.0	2098.0
Purchases of property and e...	-3157.0	-1327.0	-2101.0
Purchases of solar energy s...	-75.0	-105.0	-218.0
Receipt of government grants	123.0	46.0	0.0
Purchase of intangible assets	-10.0	-5.0	0.0
Business combinations, net ...	-13.0	-45.0	-18.0
Net cash used in investing ...	-3132.0	-1436.0	-2337.0
Proceeds from issuances of ...	12269.0	848.0	0.0
Proceeds from issuances of ...	9713.0	10669.0	6176.0
Repayments of convertible a...	-11623.0	-9161.0	-5247.0
Repayments of borrowings is...	0.0	0.0	-100.0
Collateralized lease repaym...	-240.0	-389.0	-559.0
Proceeds from exercises of ...	417.0	263.0	296.0
Principal payments on finan...	-338.0	-321.0	-181.0
Debt issuance costs	-6.0	-37.0	-15.0
Purchase of convertible not...	0.0	-476.0	0.0
Proceeds from issuance of w...	0.0	174.0	0.0
Proceeds from investments b...	24.0	279.0	437.0
Distributions paid to nonco...	-208.0	-311.0	-227.0
Payments for buy-outs of no...	-35.0	-9.0	-6.0
Net cash provided by financ...	9973.0	1529.0	574.0

Effect of exchange rate cha...	334.0	8.0	-23.0
Net increase in cash and ca...	13118.0	2506.0	312.0
Cash and cash equivalents a...	6783.0	4277.0	3965.0
Cash and cash equivalents a...	19901.0	6783.0	4277.0
Equity issued in connection...	0.0	207.0	0.0
Acquisitions of property an...	1088.0	562.0	249.0
Estimated fair value of fac...	0.0	0.0	94.0
Cash paid during the period...	444.0	455.0	381.0
Cash paid during the period...	115.0	54.0	35.0

Tesla, Inc. Cash Flows, MLN USD



## Statement of changes in shareholders equity

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Tesla, Inc. statement of changes in shareholders equity:  
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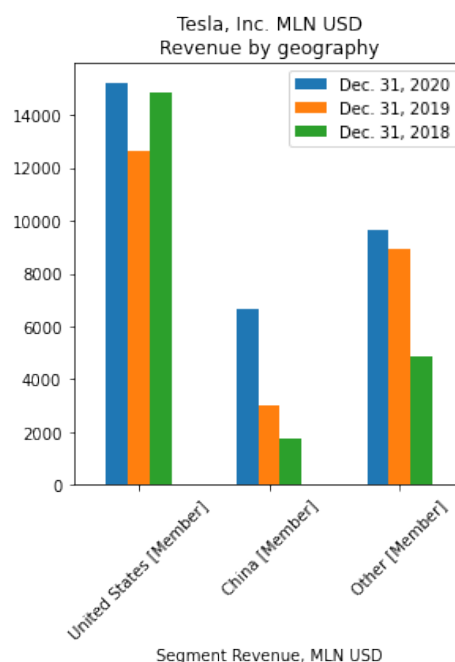
	Total
Statement of Equity	
Balance at Dec. 31, 2017	5234.0
Balance (Accounting Standar...	534.0
Balance (Accounting Standar...	9.0
Issuance of common stock fo...	296.0
Stock-based compensation	775.0
Contributions from noncontr...	161.0
Distributions to noncontrol...	-210.0
Net income (loss)	-1001.0
Other comprehensive income ...	-41.0
Balance at Dec. 31, 2018	5757.0
Balance (Accounting Standar...	97.0
Purchase of convertible not...	-476.0

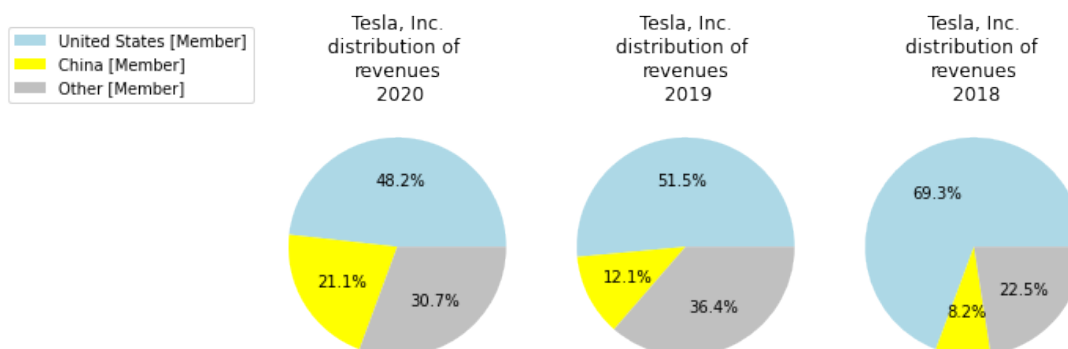
Sales of warrants	174.0
Issuance of common stock fo...	482.0
Stock-based compensation	973.0
Contributions from noncontr...	174.0
Distributions to noncontrol...	-198.0
Other	-4.0
Net income (loss)	-823.0
Other comprehensive income ...	-28.0
Balance at Dec. 31, 2019	7467.0
Balance (Accounting Standar...	-37.0
Reclassification between eq...	-51.0
Exercises of conversion fea...	59.0
Issuance of common stock fo...	417.0
Issuance of common stock pu...	12269.0
Stock-based compensation	1861.0
Contributions from noncontr...	17.0
Distributions to noncontrol...	-132.0
Buy-outs of noncontrolling ...	-31.0
Net income (loss)	837.0
Other comprehensive income ...	399.0
Balance at Dec. 31, 2020	23075.0

## Revenue by geography

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Tesla, Inc. Revenue by geographical region:  
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	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
United States [Member]	15207.0	12653.0	14872.0
China [Member]	6662.0	2979.0	1757.0
Other [Member]	9667.0	8946.0	4832.0





## 2 Profitability Analysis

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Tesla, Inc. profitability ratios:

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	Dec. 31, 2020	Dec. 31, 2019
Gross profit margin %	21.02	16.56
Operating profit margin %	6.32	-0.28
Net profit margin %	2.73	-3.15
Asset turnover ratio	0.73	No data
Return on assets %	1.99	No data
Return on capital employed %	5.26	-0.29
Return on common shareholde...	4.72	No data

## 3 Liquidity and Working Capital Turnover Analysis

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Tesla, Inc. Liquidity and Working Capital turnover ratios:

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	Dec. 31, 2020
Current ratio	1.88
Quick ratio	1.59
Operating CF to Current Lia...	0.42
Inventory turnover	6.51
Inventory days	56.08
Accounts receivable turnover	19.65
Receivables days	18.58

Accounts payable turnover	5.07
Payables days	71.97
Required financing for days	2.68

## 4 Solvency Analysis

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Tesla, Inc. Solvency ratios:  
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	Dec. 31, 2020	Dec. 31, 2019
Liabilities to Assets Ratio	0.56	0.78
Liabilities to Shareholders...	1.26	3.59
Long term debt to Long term...	0.29	0.61
Long term debt to equity ratio	0.41	1.56
Gearing %	50.65	179.71
Interest cover times	2.78	0.11
Operating cash flow to tota...	0.21	No data

### Free Cash Flows

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Tesla, Inc. Free Cash Flows MLN USD:  
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Dec. 31, 2020	2811.0
Dec. 31, 2019	969.0
Dec. 31, 2018	-239.0

dtype: float64

### Bankruptcy Prediction Models Using Multiple Discriminant Analysis (MDA)

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Z-scores of less than 1.81 indicated a high probability of bankruptcy,  
while Z-scores higher than 3.00 indicated a low probanbility of bankruptcy.  
Scores between 1.81 and 3.00 were in the gray area  
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Tesla, Inc. Altman's Z-score:  
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Dec. 31, 2020	39.30
Dec. 31, 2019	42.07

dtype: float64

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Probability of Tesla, Inc. Bunkruptcy is Low  
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## Beneish Manipulation Index to assess the likelihood of earnings manipulation

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Tesla, Inc. Probability of earnings manipulation %:

0.20078000000000001

## ----- EPS and market perception

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Tesla, Inc. basic EPS:

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0.74

Tesla, Inc. diluted EPS:

-----  
0.64

Tesla, Inc. latest P/E ratio from Yahoo finance on this date 2021-04-16:

-----  
1154.4531

Tesla, Inc. Market cap from Yahoo finance MLN USD on this date 2021-04-16:

-----  
709188.124672

Tesla, Inc. Share Price from Yahoo finance USD on this date 2021-04-16:

-----  
743.1

Tesla, Inc. Net Assets MLN:

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23075.0

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## Conclusion, comparison to industry leaders (US market)

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 Tesla, Inc. profitability ratios compared to ratios of GM and Ford  
 for the same year  
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	Dec. 31, 2020	GM	Ford
Gross profit margin %	21.02	20.37	11.32
Operating profit margin %	6.32	5.42	-3.47
Net profit margin %	2.73	5.10	-1.00
Asset turnover ratio	0.73	0.53	0.48
Return on assets %	1.99	2.70	-0.49
Return on capital employed %	5.26	4.27	-2.59
Return on common shareholde...	4.72	14.39	-3.99

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 Tesla, Inc. liquidity ratio compared to ratios of GM and Ford  
 for the same year  
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	Dec. 31, 2020	GM	Ford
Current ratio	1.88	1.01	1.20
Quick ratio	1.59	0.88	1.09
Operating CF to Current Lia...	0.42	0.21	0.25
Inventory turnover	6.51	9.45	10.44
Inventory days	56.08	38.61	34.95
Accounts receivable turnover	19.65	16.52	2.21
Receivables days	18.58	22.10	165.47
Accounts payable turnover	5.07	4.76	5.26
Payables days	71.97	76.61	69.40
Required financing for days	2.68	-15.91	131.02

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 Tesla, Inc. solvency ratios compared to ratios of GM and Ford  
 for the same year  
 -----

	Dec. 31, 2020	GM	Ford
Liabilities to Assets Ratio	0.56	0.79	0.88
Liabilities to Shareholders...	1.26	4.12	7.67
Long term debt to Long term...	0.29	0.23	0.78
Long term debt to equity ratio	0.41	0.30	3.57
Gearing %	50.65	73.51	523.82
Interest cover times	2.78	1.61	2.75
Operating cash flow to tota...	0.21	0.09	0.11

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Tesla, Inc. leads by almost all indicators.  
However its financials and industry prospects do not justify  
an extreme valuation at 1154 !

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