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Stock Report

TESLA
TICKER: TSLA



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A REPORT BY AP
CAPITAL RESEARCH
ON TESLA

Business model and overview

TESLA

Tesla is the world-leading producer of battery-operated electric vehicles and plug-in electric vehicles capturing 16% of the plug-in market. Tesla also produces photovoltaic systems in the US under its Tesla energy subsidiary. Tesla became the largest automobile producer in the world by market cap in July 2020. Tesla's market cap is currently 1.2 trillion USD with revenues of \$31,536M in 2020.

Models

- The roadster model developed in 2009 was the first production car that was produced by Tesla. Its successor was announced in 2015 **Cost: £92,000**
- The Model S is a sedan type car that was first developed in 2012, it was the top-selling plug-in electric in 2015 and 2016 until it was later surpassed by the Model 3. It has a range of 400 miles on a single charge and has sold over 250,000 units since its release.
Cost: £73,990
- Model X was Tesla's SUV offering released in 2015, the Model X is the 7th most popular plug-in car and comes with the Tesla autopilot driver assistance software.
Cost: £81,990
- The Model Y released in 2020 is a crossover vehicle between the Model S and Model X and is put into the class of a crossover utility vehicle; it is a smaller and less expensive version of the Model X. **Cost: £35,500**
- The Model 3 released in 2017 is the best selling electric vehicle of all time and was the first electric vehicle to surpass 1 million units sold. It is seen as an affordable luxury electric vehicle. It also has full self-driving technology. It was originally meant to be called the Model E but due to patents held by Ford, it was named in the elite script.
Cost: £42,500

Services:

Charging: In 2012, Tesla started building its supercharging network building 480 stations across the US, as of late 2020. Tesla has a network of 20,000 chargers in 2,100 locations worldwide.

Vehicle servicing: Typically, servicing is a key profit-making tool within the automobile industry, however, Musk has previously said Tesla doesn't try to make a profit from this service.

Software add ons: Tesla offers many additional add ons such as; Full Self-Driving (FSD) software, acceleration boosts and heated seats.

1.2T

Market Cap

20,000

Chargers in 2,100 locations

16%

Market share in the plug
in market

Management Team + Social Media Following

TESLA



Elon Musk: Chief Executive Officer

Musk graduated from the University of Pennsylvania with a bachelor's degree in Physics and Economics in 1997. After selling his first business Zip2 in 1999, Musk used \$10 million to start X.com, which later became Paypal. Musk then founded SpaceX in 2002 with some of the proceeds from Paypal, before investing heavily into Tesla Motors from 2004. He then assumed leadership as Tesla CEO and product architect in 2008.



Zachary Kirkhorn: Chief Financial Officer

Kirkhorn graduated from the University of Pennsylvania in 2006 with two bachelor of science degrees, before earning an MBA from Harvard Business School. Kirkhorn worked as a senior business analyst before joining Tesla in 2010 as a Senior Analyst in Finance. Kirkhorn assumed various roles with Tesla, including Vice President and Financial Planning. He was then named CFO in 2019.



Andrew Baglino: Senior Vice President

Baglino graduated from Stanford University in 2004 with a BSc in Electrical Engineering. He then became a research assistant at Resources for the Future, before joining Tesla in March 2006. Baglino was pivotal to the engineering prowess of Tesla, designing the dual motor system for the Model S and the powertrain control algorithms. He became director of engineering for Tesla Energy in 2014 and became SVP in 2019.

Social Media

Tesla has one of the largest combined social media followings of the major big tech companies than any other automotive company in the world. They have also effectively utilised Youtube and used different Youtube creators such as Mr Beast with his 52 million subscribers who features Tesla cars in his videos. Elon Musk utilizes his own personal Twitter account due to his enormous following to promote Tesla products and regularly engages with his followers. They have recently created "Engage Tesla" for its public policy team and the owner's clubs to further increase communication between Tesla members and the owners. Overall, Tesla stays away from traditional marketing and uses innovative ways of manipulating social media to increase its popularity and perception.

8.7M

INSTAGRAM
FOLLOWERS

9M

TWITTER
FOLLOWERS

14.1M

LINKEDIN
FOLLOWERS

Financials + Institutions

TESLA

Revenue has been increasing substantially in the last 3 years and has been rising from 2015, increasing from \$4,046M to \$31,536M in 2020. The revenue of Tesla is mainly caused by the increase in automotive sales which accounts for 93% of their total revenue. Most recently, Tesla's Model 3 was the top-selling car in the UK with 6,879 cars sold, despite the shortage of semiconductor computer chips that are crucial for the production of the latest models. Tesla's gross profit margin has remained consistent over the past 5 years averaging at 20%.

Tesla also invests heavily in research and development, such as collaborating with LG and CG to promote cobalt-free batteries, which last longer and weigh much less. Furthermore, they have increased their dominance in the electric car market and reduced the cost of production of their cars through their new plant in Shanghai. This has maintained its dominance in China. This reduction in the cost of production means cars such as Model 3's can bring in a gross profit margin of 35%. Thus, they can substantially reduce the market price to stifle petrol vehicle competitors, therefore they can capitalize on market share in the global automobile industry.

Tesla recently reported making \$1.14 billion in the second quarter of 2021, due to increased automotive sales and the sale of pollution credits to other companies to meet environmental guidelines conducted by the US and the EU. The new Shanghai plant in China has seen a production growth and has led to a substantial increase in sales in China despite there being an issue of semiconductor shortages and general supply chain issues globally. They also reached earnings per share of \$1.02 which beat a consensus expectation for net income of \$600 million.

Despite supply chain issues globally and a shortage of chips, Tesla's performance has been extremely strong and has hardly been affected by the substantial economic problems currently in the world, which is admirable to investors and shareholders. This is demonstrated by the consistent growth in net income, operating income, gross profit and revenue.

(in millions \$)	2020	2019	2018	2017	2016	2015
Revenue	31,536	24,578	21,461	11,759	7,000	4,046
COGS	24,906	20,509	17,419	9,536	5,400	3,122
Gross Profit	6,630	4,069	4,042	2,223	1,600	924
SGA	3,145	2,646	2,835	2,476	1,432	922
Operating Income	1,994	-69	-388	-1,632	-667	-716
Net Income	862	-775	-1,063	-1,632	-667	-716
Financial Ratios	2020	2019	2018	2017	2016	2015
Revenue YoY	28%	15%	83%	68%	73%	
Gross Profit Margin	21%	17%	19%	19%	23%	23%
SGA/Gross Profit	47%	65%	70%	111%	90%	100%
Operating Margin	6%	0%	-2%	-14%	-10%	-18%
Net Profit Margin	3%	-3%	-5%	-14%	-10%	-18%
Current Ratio	1.88	1.13	0.83	0.86	1.07	0.99

Top 5 Tesla Shareholders

Institutional traders hold a large proportion of the ownership of Tesla, with 41.26% of shares held by institutions. Tesla's Institutional Holdings are at 1,004m Total Shares Outstanding, of which 815m are float, which are shares that have been issued to the public by Tesla and are made available for investors to trade.

Shareholder	Holding Shares
The Vanguard Group Inc	58,931,414
BlackRock Inc	50,452,309
Capital World Investors	37,282,565
State Street Corporation	29,828,814
Baillie Gifford and Company	13,853,124

\$1.43
Q3 EPS

160.11
EV/EBITDA

20%
Tesla's Gross profit Margin

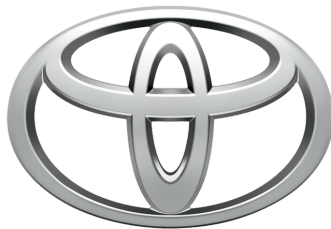
Competitors

TESLA

Tesla is the largest automobile manufacturer in the world. Even though it only produces plug-in electrical vehicles and not the typical ICE engines found in most vehicles. We could say that its competitors are all automobile manufacturers. The case for this is further developed due to Tesla's success and the global consensus for greener vehicles. Many of these competitors are transitioning to plug-in electric vehicle products.



Ford: Ford's market cap is \$61.95 billion with a current share price of \$15.51. Ford, for the greater part of the last century, was the market leader, however now it is only the 9th largest automobile company by market cap. In terms of direct competition, Ford offers a range of all-electric vehicles (EV) and some plug-in hybrids (PHEV). Most notably the all-electric Mustang has a range of 370 miles and costs £40,270. Its share of the global automobile market is 5.1%.



TOYOTA

Toyota: Toyota's market cap is \$245.72 billion and has a current share price of \$175.77. Toyota, as well as being the second largest manufacturer by market cap is also Japan's largest manufacturer. Toyota has several EV and PHEV models; the most famous PHEV is the Toyota Prius which cost £31,344. Its newest EV model is the Toyota bZ4X that was unveiled in 2021. Toyota had a market share of 8.5% in 2020.



PORSCHE

Porsche: Porsche does not only compete with Tesla in the automobile industry, it also competes in the charging aspect of the company. It does this through the research and development of synthetic fuel, a net-zero alternative to electricity. As of September 2021, Porsche has broken ground on its production facility for this hydrogen-based synthetic fuel and expects to begin fueling cars in 2022. In the automobile market, Porsche is owned by the Volkswagen group. This group has a market cap of \$142.56 billion, the third-highest in the market and has a current share price of \$228.69. The Volkswagen group has a wide range of EVs such as the Audi Q4 e-Tron, costing £41,325, as its high-end luxury offering and the Volkswagen ID.4. Volkswagen has a market share of 9.86 %.

79%

of EVs sold in the US in
2020 were Teslas

\$82.6BN

Car & Automobile
Manufacturing in the US
Market Size in 2021

24%

Tesla's market share
in the BEV industry

SWOT Analysis

TESLA

Strengths

One of the main strengths of Tesla is its software and the built-in research and development they have done in both the autonomous driving of their cars and electric cars in general. For example, their battery technology is still advanced when compared to its competitors due to their continued research and development. As a result, they were the first to use lithium-ion commodity cell-based batteries, with their new batteries being 56% cheaper and having a 54% longer range. Another key strength of Tesla is, it has embraced digitisation and does not have a developed network of dealerships instead relying on the internet and has few choices in in-person locations in high footfall areas such as large shopping centres.

Weaknesses

Tesla is dependent on the success of the growing electric vehicles industry. Although it has diversified its products and services to be less dependent on the sector's success, Tesla may still be dependent on automobile sales as this account for 93% of its revenue. In the previous strategy, Tesla could have been said to be risky as they typically put all its eggs in one basket. The perfect example of this is the initial roadster. The company came close to bankruptcy after missing projections. However, since 2016, this has been less of a concern. Also, apart from the Model 3 which is a mid-range priced car, the car's range is quite highly-priced.

Opportunities

Opportunities for Tesla would be to continue diversifying its models into the transport sector with its electric semi-truck however this project has been delayed twice. Tesla should continue to grow its infrastructure with the supercharger network. This can create a consistent revenue stream post-sale of their cars and reduce their dependence on automobile sales. A key opportunity for Tesla will be the continued development of their Gigafactories used for producing and recycling their batteries.

Threats

The largest threat to Tesla's success would be the dependence on electric vehicles as their popularity is mainly based on them being the environmental alternative transport. As previously mentioned, they are susceptible to losing market share by other alternative energies such as the Porsche synthetic fuel. This synthetic fuel also has the benefit of working with the current infrastructure and if it has a low enough cost could compete Tesla out of the market.

56%

Cheaper batteries due to
Tesla's ongoing R&D

26.8%

Projected CAGR in the Global
Electric Vehicles market

34,756

Projected units sold by 2030

Technical Analysis

TESLA



Tesla's went on a run in mid-November 2020 after announcements broke out that Tesla was going to be added to the S&P500 index. This caused Tesla to break out of its symmetrical triangle and drove its share price to reach a high of \$883.

After peaking at \$883, the price became bearish after a tweet from Elon Musk about Tesla's cyber truck pick up being delayed. This caused the price to break below the 50ema and pull back, making a lower low and lower high before failing to break the swing low. The price tested the 200ema and support was held at \$565. At this point, the price broke below slightly and retested the 200ema on 03 June 21 and the price also broke and retested above the 50ema on 08 July 21. This is signifying a continuation of the bullish trend.

Tesla's price continued on a steady gain after the deliveries report of record deliveries of 241,300 in Q3, despite the semiconductor chip shortage. This led Tesla to achieve multiple winning streaks. The price went parabolic after the announcement from Hertz that they are ordering 100,000 Teslas on 25 Oct 21 signifying the market of Tesla's dominance and growth within the Global Electric Vehicles market.

Forecasting where we could see Tesla's price pullback after the strong bullish momentum, the price could continue to rally to 1.786 fib level (\$1289). As we can see already, the price has broken above our 1.618 fib level however the bearish daily Doji from yesterdays market close could signify a shift in momentum. As it is, the RSI is overbought at 87.26, with it peaking at 94.25 when it hit the 1.618 fib level.

73%

Past 3 months share
price growth

\$1243.49

52 Week High

\$1000

19:09 25/10/21. Tesla
broke above this level and
closed at 1001.75

Final Thoughts

TESLA

Kieran Sassone

Tesla is currently at the top of one of its peak cycles similar to the January peak, so it might be wise to hold off on purchasing stock at the moment however due to the continued popularity of EVs and Tesla's position as a market leader the future does look bright in this sector. The leadership of CEO Elon Musk and his history of success at Space X and SolarCity also comes into play when looking at Tesla as a potential investment. His proven track record of overcoming adversity is a necessary skill when looking forward to threats such as hydrogen synthetic fuels and competitors entering the market space.

In the midst of a pandemic, Tesla really showed its resilience as a company delivering record-high profits despite a chip shortage and a paradigm shift in the way that we have worked. Through its continued development of a diversified revenue stream consisting of its network of supercharging stations and sale of additional technology and add-ons. Tesla is a good long term investment for ESG minded individuals.

Harry Bowman

Tesla is a renowned name in the automotive industry. With a CEO like Elon Musk, who tests the boundaries of human ambition and innovation, Tesla has gained recognition which now spans into other industries and households. Their Financials reflect this and are admirable to investors, showing the impressive way in which Tesla can overcome supply chain issues, chip shortages and pandemic induced complications and continue to deliver results.

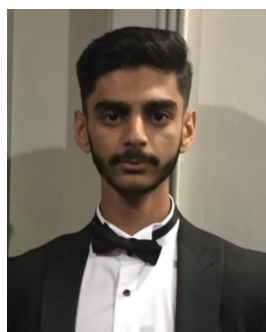
Technicals display a slightly bullish market, with an ascending channel having formed since mid-May. It could be interpreted that the price is reaching the resistance of this channel, so I would wait until this level is tested and retested before buying in. The late January peak level is the next area of resistance after this, with around \$835 being a price target.

Sonak Patel

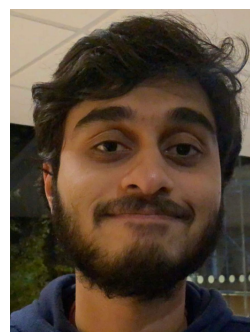
Despite supply chain issues such as chip shortages and the pandemic affecting large sectors of the economy, Tesla continues to substantially increase its revenue quarter on quarter and continues to innovate and diversify its product which helps Tesla maintain their hold over the electric car market despite an increase in the competition coming from China and petrol cars. Tesla's continued investment in research and development gives confidence to shareholders and clients that their new world-renowned products continue to test the boundaries of car manufacturing which eliminates most competition from other car brands. I'd recommend Tesla as a buy due to their constant innovation and their release of new high-end products and the relative strength rating of 86 over 99 which shows that Tesla has out-performed 86% of all of its stock in the last 12 months



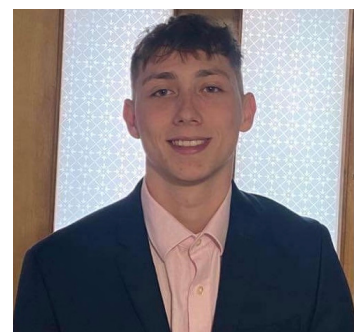
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TESLA

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