



TESLA

KOTA INVESTMENT CLUB EQUITY RESEARCH TESLA, INC.

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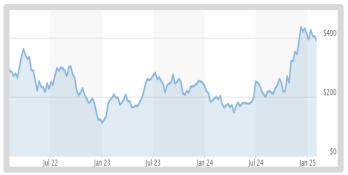
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INVESTMENT SUMMARY

STOCK INFORMATION

Exhibit 1: TSLA Share Price, 3Years (Source: MarketWatch)



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Recommendation	BUY
Current Price	\$392.21
Target Price	\$407.26
Upside Potential	+3.83%
52 Week Range	\$138.80 - \$488.54
Market Cap	\$1,233 Billion

KEY INVESTMENT CATALYST

Global Expansion:

Tesla's aggressive global expansion strategy, with new Gigafactories in Berlin, Shanghai, and Texas, positions the company to capitalize on growing EV demand worldwide. Further expansion into new markets, coupled with strategic partnerships and localized production, will be crucial for maintaining its growth trajectory. Continued build-out of the Supercharger network globally will also be a key driver of adoption and customer satisfaction.

Technological Leadership and Vertical Integration:

Tesla's relentless focus on technological innovation, particularly in battery technology, autonomous driving, and software development, provides a competitive edge. Vertical integration, encompassing battery production, software development, and charging infrastructure, allows for greater cost control and faster innovation cycles. Continued advancements in Full Self-Driving (FSD) capabilities and the development of next-generation battery technology are key catalysts for future growth.

Energy Ecosystem Expansion:

Tesla's expansion beyond electric vehicles into the broader energy ecosystem presents significant growth opportunities. The increasing demand for Powerwall and Megapack energy storage solutions, coupled with advancements in solar roof technology, positions Tesla to become a leader in sustainable energy. Integration of these energy products with its vehicle ecosystem creates synergistic benefits and strengthens customer loyalty.

Brand Strength and Customer Loyalty:

Tesla's strong brand recognition and loyal customer base provide a solid foundation for continued growth. The company's focus on design, performance, and technology has cultivated a passionate community of brand advocates. Cultivating this brand loyalty through excellent customer service, software updates, and expansion of the Supercharger network will be essential for long-term success.

FINANCIAL ANALYSIS

KEY METRICS

Revenue Growth	+0.94% YoY
Net Income	-52.44% YoY
Gross Margin	17.86%
EBIT Margin	9.5%

As of Q4 2024 Source: Yahoo! Finance

QUARTERLY HIGHLIGHTS

Quarterly Highlights

Tesla announced Q4 2024 revenues of \$25.707 billion, a modest 2.15% year-over-year increase from Q4 2023. This slight growth comes from the increased deliveries of Model 3 and Model Y vehicles, offset partially by price reductions implemented throughout the year to stimulate demand. Growth in the energy storage division, including Powerwall and Megapack, also contributed to the revenue increase.

The company achieved a net income of \$2.356 billion for Q4 2024, representing a 8.72% increase from the prior quarter, but far below the \$7.930 billion from Q4 2023. Profitability was mostly impacted by the increase in competition on the EV market, but also due to ongoing investments in new production facilities and technology development.

Key Performance Drivers

Tesla's Q4 performance was influenced by several factors. While vehicle deliveries increased, average selling prices decreased due to strategic price adjustments. Competition intensified in the EV market, with both established automakers and new entrants vying for market share. Tesla continued to invest heavily in research and development, particularly in areas like autonomous driving and battery technology, impacting profitability. Macroeconomic uncertainties, including inflation and fluctuating interest rates, also played a role in consumer spending patterns and overall market dynamics.

PEER COMPARISON

Tesla's annual revenue growth of 0.94% is far behind its main competitor, BYD, who has already experienced a 13.54% increase in revenue, with results for Q4 2024 still pending.

Tesla's gross margin of 17.86% is slightly lower than BYD's current 20.92%, reflecting differences in pricing strategies, cost structures, and economies of scale in key markets.

While BYD has stronger short-term growth, Tesla's valuation reflects its leadership in autonomous driving, energy storage, and AI integration, positioning it for long-term gains despite competitive pressures.

COMPANY OVERVIEW

COMPANY BACKGROUND

Founded in July 2003 in the United States and headquartered in Austin, Texas, Tesla, Inc. has established itself as a leading manufacturer of electric vehicles (EVs) and sustainable energy solutions. Initially focused on high-performance EVs, the company has since diversified its portfolio to include energy storage systems and solar energy products.

Elon Musk joined Tesla in 2004 as an early investor and later assumed the role of CEO and Product Architect in 2008, playing a pivotal role in scaling the company's global operations.

Tesla currently operates Gigafactories across the United States, China, Germany, and Mexico, with plans for further expansion to support rising production demands. In 2023, Tesla delivered 1.79 million vehicles, marking its first annual decline in over a decade due to increased competition and global economic uncertainties.

Tesla employs approximately 140,000 people globally and operates in over 30 countries, maintaining its position as a leader in EV technology and autonomous driving software.

PRODUCTS/SERVICES AND STRATEGY

Electric Vehicles

Tesla's core business revolves around the production of Battery Electric Vehicles (BEVs). The company targets both premium and mass-market segments, offering models that focus on performance, range, and affordability.

In 2024, Tesla produced 1.78 million battery-only vehicles, maintaining its position as a global leader in EV manufacturing despite increasing competition¹. Tesla continues to focus on scalability and cost efficiency through its Gigafactories located in the U.S., China, Germany, and Mexico.

Tesla's strategy emphasizes vertical integration, allowing it to control key aspects of its supply chain, particularly battery production. This approach reduces costs, improves efficiency, and ensures access to critical materials like lithium for battery cells.

Tesla's autonomous driving technology, including its Full Self-Driving (FSD) software, plays a central role in its strategy. The company is also pursuing a robotaxi network, leveraging its existing fleet to generate recurring revenue through mobility services.

Energy Solutions

Tesla also develops renewable energy products to complement its EV business, including solar panels, solar roofs, and energy storage systems such as the Powerwall and Megapack.

The energy division aligns with Tesla's mission of sustainability and contributes to grid stability and renewable adoption worldwide.

Overall, Tesla's strategy prioritizes technology leadership, scaling production capacity, and reducing costs to maintain its competitive edge in the EV and energy markets while advancing its long-term vision of a sustainable energy ecosystem.

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¹ Tesla, Inc. (2025, January). Tesla Fourth Quarter 2024 Production, Deliveries & Deployments.

MANAGEMENT TEAM

Elon Musk	Zachary Kirkhorn	Drew Baglino	Tom Zhu
CEO	CFO	Senior Vice President	Senior Vice President
Elon Musk has served as Tesla's CEO since 2008 and has been the driving force behind the company's growth and innovation. He is widely credited with transforming Tesla into the global leader in electric vehicles and energy solutions, pioneering advancements in battery technology, autonomous driving, and renewable energy. Musk's focus on innovation, vertical integration, and scalable manufacturing has positioned Tesla at the forefront of sustainable transportation. His visionary leadership and ability to disrupt traditional industries have also cemented Tesla's reputation as a technology trailblazer, shaping the future of mobility and clean energy.	Zachary Kirkhorn has been Tesla's Chief Financial Officer since 2019 and is responsible for the company's financial planning, cost management, and capital allocation strategies. He joined Tesla in 2010 and held various finance and operational roles before assuming his current position. Kirkhorn's analytical expertise and strategic oversight have played a key role in strengthening Tesla's profitability, cash flow, and financial resilience. His leadership has supported Tesla's global expansion, enabling the scaling of Gigafactories and investments in innovation and production efficiency, positioning the company for sustained growth in the electric vehicle and renewable energy markets.	Drew Baglino joined Tesla in 2006 and currently serves as Senior Vice President of Powertrain and Energy Engineering. He oversees the development of electric drivetrains, battery systems, and energy storage solutions, including the Powerwall and Megapack. Baglino has been instrumental in advancing Tesla's battery technology and energy efficiency, strengthening the company's competitive edge in both the electric vehicle and renewable energy markets. His expertise in engineering optimization and sustainable design continues to support Tesla's mission to accelerate the world's transition to clean energy while enhancing performance and scalability across its product lineup.	Tom Zhu joined Tesla in 2014 and played a pivotal role in the success of Gigafactory Shanghai, Tesla's largest production hub and a key driver of the company's global growth. Now serving as Senior Vice President of Automotive, Zhu oversees global automotive operations, focusing on production efficiency, manufacturing expansion, and supply chain optimization. His expertise in scaling operations and streamlining processes has been instrumental in helping Tesla maintain its market leadership while accelerating its international expansion and increasing manufacturing capacity to meet rising global demand.
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CEO: Chief Executive Officer | CFO: Chief Financial Officer

SHAREHOLDER COMPOSITION

Shares Outstanding	3.216 Billion
Institutional Ownership	46.1%
Insider Ownership	12.9%
Retail Ownership	41%
Float Percentage of TSO	86.98%

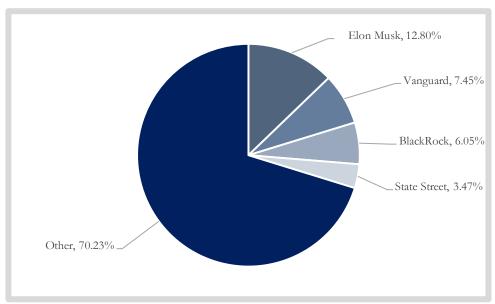


Exhibit 2: Tesla Ownership as of February 2025 (Source: Simply Wall Street)

The company's balanced ownership structure—spanning insiders, institutions, and retail investors—supports stock price stability while aligning management's interests with those of shareholders. Tesla's popularity among individual investors reflects confidence in its growth potential and innovative technology.

Elon Musk's substantial personal stake underscores a long-term commitment to performance and value creation, fostering trust in Tesla's future growth trajectory.

INDUSTRY ANALYSIS

MARKET OVERVIEW

The global electric vehicle market size is anticipated to surge from \$671.47 billion in 2024 to \$1,891.08 billion by 2032, exhibiting a CAGR of 13.8% during this period². The United States of America's electric vehicle market is expected to grow significantly in the coming years, thanks to favourable government subsidies and policies, to reach a projected value of about \$233.70 billion by 2032.

Several factors have characterized the development of the global electric vehicle market segments, with the adoption of BEVs and PHEVs gaining significant traction. In 2018, BEVs stood at 1.4 million vehicles globally, marking the beginning of a transformative trend.

The year 2021 proved to be a remarkable one, as the number of BEVs on the roads increased drastically to 4.7 million, indicating a substantial shift towards electrified transportation. The momentum continued into 2022, when 7.3 million BEVs contributed to reducing further carbon emissions and reinforcing the global transition to sustainable mobility

Battery EV growth is expected to maintain this upward trend with forecasts of 9.6 million units in 2025. At an ever-improving technology and infrastructure offering, the BEVs would scale up to 10.7 million by 2026 before scaling up further to 13.5 million in 2028³.

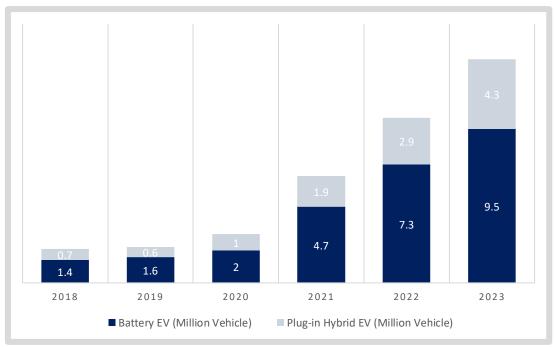


Exhibit 3: Global Electric Vehicles Market Size by Segment 2018-2023 (Source: International Energy Agency)

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² Fortune Business Insights, (2023, June). Electric Vehicle Market Share, Trends & Growth Analysis 2026.

³ Market.us Scoop. (2024, June). Electric Vehicle Statistics 2024 By Best Transport Tech.

CATALYSTS FOR GROWTH

Government Policies and Incentives

Government initiatives worldwide continue to drive electric vehicle adoption through tax credits, subsidies, and regulatory mandates aimed at reducing carbon emissions. In the U.S., the Inflation Reduction Act provides EV purchase incentives of up to \$7,500, encouraging consumer adoption. Similarly, European Union regulations mandate a 55% reduction in emissions from new cars by 2030, pushing automakers toward EV production.

Countries like China (Tesla's largest market) have extended EV subsidies and incentives, helping to accelerate the transition to clean energy vehicles and infrastructure development for charging networks. These policies create a favourable environment for Tesla's continued growth and profitability.

Battery Technology Advancements

Improvements in battery technology are reducing costs whilst enhancing energy density and range, addressing two of the biggest challenges to EV adoption—affordability and range anxiety. The average range for a new battery electric car has gone from 200km in 2015 to around 350km today. Tesla's 4680 battery cells promise higher efficiency, longer lifespans, and faster charging capabilities, giving it a competitive edge in battery performance.

Ongoing research in solid-state batteries and recycling technologies would further reduce costs and improve sustainability, benefiting Tesla as a vertically integrated battery manufacturer.

Growing Charging Infrastructure

The rapid expansion of charging networks is making EV ownership more convenient and practical. Tesla's Supercharger network, with over 60,000 stations worldwide⁴, remains a market leader, offering fast charging and seamless integration with its vehicles.

In addition, Tesla has opened its charging infrastructure to non-Tesla EVs, generating additional revenue streams while supporting industry-wide adoption. Government funding programs for charging infrastructure—like the U.S. Bipartisan Infrastructure Law, which allocates \$7.5 billion for EV chargers—further reinforce market growth.

On top of this, advancements in fast-charging capabilities, coupled with batteries designed to accept rapid charging, dramatically reduce charging times. This combination of extended range and faster charging makes EVs increasingly viable for long-distance travel and more convenient for daily use.

Increased Consumer Awareness and Adoption

Rising environmental awareness and concerns about climate change are driving consumer preferences toward sustainable solutions like electric vehicles. Tesla's brand recognition and technological leadership have positioned it as the go-to option for consumers entering the EV market.

Declining battery costs and improvements in autonomous driving technology are further enhancing the appeal of EVs, making Tesla a compelling choice for both early adopters and mainstream buyers.

⁴ Tesla Website (February 2025)

COMPETITIVE LANDSCAPE (PORTER'S 5 FORCES)

Competitive Rivalry - High

The electric vehicle industry is highly competitive, with well established automakers like General Motors, Ford, and Volkswagen expanding their EV lineups, alongside pure-play EV companies such as BYD, Rivian, and Lucid Motors. Tesla remains the market leader but faces increasing competition, particularly in the mass-market segment.

Price wars, especially in China and Europe, have intensified, putting pressure on margins. However, Tesla's brand strength, technology leadership, and vertical integration provide a competitive edge, enabling it to defend its market share while expanding into new regions.

Supplier Power - Moderate

The electric vehicle industry heavily relies on key suppliers for batteries, semiconductors, and raw materials such as lithium and cobalt. Tesla mitigates supplier power through vertical integration, producing 4680 battery cells in-house and partnering with suppliers like Panasonic for additional capacity.

Despite Tesla's scale and supply chain control, global shortages of semiconductors and battery materials pose risks, potentially driving cost volatility. Tesla's investments in raw material sourcing and manufacturing scalability help buffer supply risks.

Buyer Power - Moderate to High

As the electric vehicle market expands, buyers have more choices across price segments. Established automakers are leveraging their dealer networks and existing customer bases to attract EV buyers, increasing competitive pressure on Tesla.

Tesla counters this by offering a direct-to-consumer sales model, which simplifies pricing and enhances the customer experience. Additionally, its Full Self-Driving (FSD) technology and over-the-air software updates provide a value proposition that differentiates Tesla vehicles.

Threat of Substitution - Moderate

Hybrid vehicles (HEVs and PHEVs) and alternative fuels, like hydrogen fuel cells, present viable substitutes for battery electric vehicles (BEVs), especially in markets where charging infrastructure is underdeveloped.

Tesla mitigates this risk through its autonomous driving features, Supercharger network, and focus on affordability with vehicles like the Model 3 and Model Y. However, innovations in hybrid technology by competitors like Toyota and Honda pose ongoing challenges that might well increase the pressure on Tesla.

Threat of New Entrants - Low to Moderate

High capital investment, R&D requirements, and the need for scalable manufacturing create barriers to entry for new players. Established automakers entering the EV space, such as Ford and Volkswagen, have the resources to scale quickly, intensifying competition.

Tesla's vertical integration, global supply chain, and brand recognition create defensive barriers, making it difficult for startups to replicate its economies of scale.

INVESTMENT CATALYSTS

Hard investment catalysts are tangible, measurable drivers of growth tied directly to operational and financial outcomes, such as global expansion, supply chain efficiency, and e-commerce integration. These initiatives deliver clear, long-term value through revenue growth, cost savings, or market share gains.

In contrast, soft investment catalysts are intangible factors such as consumer behaviour, technological advancements, and brand reputation, which indirectly influence growth by enhancing customer loyalty and competitive positioning. Together, these catalysts highlight both structural investments and softer enablers of Walmart's sustained success.

Hard Catalysts

Global Expansion

Tesla continues to expand globally, leveraging its Gigafactories to scale production and reduce logistics costs. With major facilities in Shanghai, Berlin, New York, Nevada, California and Texas⁵, Tesla is positioned to increase output and meet growing demand in international markets.

Expansion into emerging markets, including Southeast Asia and South America, offers growth potential while diversifying geographic revenue streams.

Additionally, Tesla's localized production helps bypass tariffs and reduces reliance on exports, maintaining cost efficiency and competitive pricing.

Supply Chain Efficiency and Vertical Integration

Tesla's vertical integration strategy, including in-house production of 4680 battery cells, reduces dependency on third-party suppliers and lowers production costs. The company's investments in lithium mining and raw material sourcing ensure supply chain stability, providing a cost advantage amid volatile commodity prices. Tesla's energy storage solutions, such as the Megapack, further strengthen its revenue diversification.

New Product Launches

Tesla's upcoming products, including the Cybertruck and Tesla Semi, are expected to drive incremental revenue growth. The Cybertruck appeals to both commercial and consumer buyers, while the Tesla Semi focuses on fleet electrification and operational savings. Tesla's robotaxi program, leveraging its Full Self-Driving (FSD) technology, represents a potential disruptor in the mobility-as-a-service industry, offering recurring revenue through ride-hailing services.

Soft Catalysts

Growing EV Adoption

The global EV market continues to grow, driven by government mandates, incentives, and environmental awareness. Tesla benefits from its early-mover advantage, brand loyalty, and a growing customer base seeking sustainable transportation solutions.

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⁵ Tesla Website

Advancements in Technology

Tesla's development of Full Self-Driving (FSD) and AI-driven software keeps it at the forefront of innovation. Continuous updates via over-the-air (OTA) enhance performance and maintain competitiveness against new entrants.

Energy Storage and Renewable Solutions

Tesla's focus on energy storage systems, including Powerwall and Megapack, complements its EV business and capitalizes on the transition to renewable energy.

Brand Recognition and Leadership

Tesla's strong brand identity and visionary leadership under Elon Musk continue to attract investors and customers, reinforcing its market position and supporting long-term growth.

A Brake on Growth

Despite its innovative edge and market leadership, Tesla faces several challenges that could hinder its future growth trajectory. Intensifying competition in the EV market from both established automakers and emerging startups poses a significant threat to Tesla's market share and pricing power. Scaling production to meet soaring demand while maintaining quality and managing complex global supply chains remains a critical operational hurdle.

The increasing complexity of Tesla's technology stack, including autonomous driving capabilities and software development, requires substantial and sustained R&D investment, with no guarantee of timely breakthroughs. Regulatory scrutiny regarding safety features and environmental impact could lead to costly delays and compliance burdens.

Furthermore, macroeconomic factors such as fluctuating raw material prices, inflation, and potential economic downturns could impact production costs and consumer demand for high-priced EVs. Tesla's reliance on Elon Musk's leadership also presents a key person risk.

These multifaceted challenges underscore the need for Tesla to execute flawlessly on its strategic vision, manage risks effectively, and continuously adapt to the rapidly evolving automotive landscape to sustain its growth momentum.

VALUATION

Free Cash Flow									
Fiscal Year	2021A	2022A	2023A	2024A	2025E	2026E	2027E	2028E	2029E
Revenue	53823	81462	96773	97690	103076	120786	142174	158508	184396
% Growth		51.35%	18.80%	0.95%	5.51%	17.18%	17.71%	11.49%	16.33%
Cost of goods sold	40217	60609	79113	80240	84431	96325	110122	122044	137195
% of Revenue	74.72%	74.40%	81.75%	82.14%	81.91%	79.75%	77.46%	77.00%	74.40%
Selling General and Administrative % of Revenue	4517 8.39%	3946 4.84%	4800 4.96%	5150 5.27%	5434 5.27%	6368 5.27%	7495 5.27%	8356 5.27%	9721 5.27%
R&D	2593	3075	3969	4540	4790	5613	6607	7366	8570
% of Revenue	4.82%	3.77%	4.10%	4.65%	4.65%	4.65%	4.65%	4.65%	4.65%
Net Interest Income/Expense	-315	106	910	1219	1298	1521	1790	1996	2322
% of Revenue	-0.59%	0.13%	0.94%	1.25%	1.26%	1.26%	1.26%	1.26%	1.26%
Tax expense	699	1132	-5001	1837	2803	4248	6077	7915	10469
Tax rate	1.30%	1.39%	-5.17%	1.88%	2.72%	3.52%	4.27%	4.99%	5.68%
Net Profit	5482	12806	14802	7142	6916	9753	13663	14823	20763
Pre Tax Income	6181	13938	9801	8979	9719	14001	19740	22738	31232
Net Interest Income/Expense	-315	106	910	1219	1298	1521	1790	1996	2322
Depreciation & Amortization	2911	3747	4667	5368	9344	10388	12069	13762	15534
EBITDA	8777	17791	15378	15566	20361	25910	33599	38496	49088
Tax	699	1132	-5001	1837	2803	4248	6077	7915	10469
Capex	8014	7172	8899	11342	11293	13233	15577	17366	20202
Change in NWC	-8355	2365	809	1586	-1390	1211	830	159	1059
Free Cash Flow	8,419	7,122	10,671	801	7,655	7,218	11,115	13,056	17,358
Assumptions									
	20244	20224	20224	20244	20255	20255	20275	20225	22225
Fiscal Year	2021A	2022A	2023A	2024A	2025E	2026E	2027E	2028E	2029E
COGS % of Revenue	75%	74%	82%	82%	82%	80%	77%	77%	74%
SG&A % of Revenue	8%	5%	5%	5%	5%	5%	5%	5%	5%
Tax % of EBITDA	8%	6%	-33%	12%	14%	16%	18%	21%	21%
Capex % of Revenue	15%	9%	9%	12%	11%	11%	11%	11%	11%
Change in NWC % of Capex	-104%	33%	9%	14%	-12%	9%	5%	1%	5%
Free Cash Flow (mm)									
Fiscal Year	2021A	2022A	2023A	2024A	2025E	2026E	2027E	2028E	2029E
Free Cash Flow	8,419	7,122	10,671	801	7,655	7,218	11,115	13,056	17,358
Projection Year					1	2	3	4	5
,									

Implied Share Price Calculation	
Sum of PV of FCF	34,826
Growth Rate	13%
WACC	15.72%
Terminal Value	721,732
PV of Terminal Value	347,838
Enterprise Value	382,663
(+) Cash	36,563
(-) Debt	9,753
(-) Minority Interest	767
Equity Value	408,706
Shares Outstanding (mm)	3,216
Implied Share Price (USD)	127.09
Current Share Price (USD)	392.21

Present Value of Free Cash Flow

Weighted Average Cost of Capital (WACC)	
<u> </u>	
Cost of Debt	2.6%
Tax Rate	17.2%
D/(D+E)	1.0%
After Tax Cost of Debt	2.1%
Risk Free Rate (10 Year U.S. Treasury)	3.5%
Expected Market Return	9.5%
Market Risk Premium	6.0%
Levered Beta	2.06
E/(D+E)	99.0%
Cost of Equity	15.86%
WACC	15.72%

5,390

7,173

7,281

8,366

6,615

The fact that the share is overvalued does not necessarily mean the price will fall in the near term or at all. Overvalued shares can remain at elevated levels for extended periods due to various factors such as market sentiment and momentum, growth expectations, or popularity.

Expected Market Return : Statista Levered Beta : Infront Analytics

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⁶ 10 Year U.S. Treasury: Trading Economics

RISK ASSESSMENT AND MITIGATION

MARKET RISKS

Competitive Pressure - High

Risk: Tesla faces intensifying competition from both legacy automakers (e.g., Volkswagen, General Motors) and pure EV players (e.g., BYD, Rivian, Lucid Motors). Competitors are rapidly scaling their EV production capacity and introducing lower-cost models, which could erode Tesla's market share and pricing power.

Mitigation: Tesla continues to invest in innovation and vertical integration to maintain its technology leadership. The rollout of the Cybertruck, Semi, and next-gen vehicles is expected to attract new customers and retain its competitive edge.

Supply Chain Disruptions - Moderate

Risk: Dependence on critical raw materials (e.g., lithium, cobalt, nickel) exposes Tesla to supply shortages and price volatility. Global disruptions, including geopolitical tensions and logistics constraints, can delay production and deliveries.

Mitigation: Tesla has secured long-term supply agreements and is expanding in-house battery production with 4680 cells⁷. It is also investing in raw material sourcing, such as lithium refining plants in the U.S., to reduce reliance on third-party suppliers.

Regulatory and Policy Risks - Moderate

Risk: Tesla operates in a heavily regulated industry, where changes in government policies, emission standards, and subsidies could impact demand. For instance, reductions in EV tax credits may affect affordability and sales volumes.

Mitigation: Tesla maintains proactive engagement with policymakers and advocates for incentives promoting clean energy adoption. Its diversified global footprint helps reduce dependency on any single market's regulatory environment.

Technological Disruption – Moderate

Risk: Rapid advances in battery technology or alternative fuels (e.g., hydrogen fuel cells) could make Tesla's current technology obsolete. Additionally, delays in Full Self-Driving (FSD) deployment may affect investor sentiment and revenue streams tied to software sales.

Mitigation: Tesla continues to invest heavily in R&D to stay ahead in battery technology, AI, and autonomous driving. Its over-the-air software updates enable continuous improvements, keeping vehicles competitive over time.

Production and Scaling Risks - Moderate to High

Risk: Scaling operations at Gigafactories presents challenges, including cost overruns, labor shortages, and delays in ramp-up. Aggressive production targets could strain quality control and supply chains.

⁷ Reuters. (October, 2024). Tesla plans four new batteries in 2026, including for robotaxi, The Information reports.

Mitigation: Tesla's vertical integration reduces bottlenecks, while ongoing process automation enhances efficiency. Recent factory expansions, such as Berlin and Texas, support scalable production capacity and global supply chain optimization.

Macroeconomic Risks - Moderate

Risk: Economic downturns, inflationary pressures, and higher interest rates may affect consumer spending on premium vehicles like Tesla's. Exchange rate fluctuations also pose risks in international markets.

Mitigation: Tesla is expanding into lower-cost vehicle segments, targeting price-sensitive buyers with its next-gen compact EVs. It also maintains strong cash reserves to navigate economic uncertainties.

Cybersecurity and Data Privacy Risks - Low to Moderate

Risk: As Tesla relies heavily on connected technologies and autonomous driving systems, it faces vulnerabilities related to data breaches and cyberattacks.

Mitigation: Tesla employs advanced encryption and security protocols to protect user data. Regular software updates address vulnerabilities and enhance system defences against cyber threats.

INTERNAL RISK ASSESSMENT

According to our internal criteria, Tesla has an SRI rating of 5/7, indicating a moderate-to-high risk profile in both financial and ESG aspects.

Financial Risk - High Volatility:

Tesla's historical stock volatility is approximately 59.5%, which places it in the 30% to 80% range in our classification. This is significantly higher than the market average, reflecting substantial price fluctuations due to factors such as investor sentiment, regulatory developments, and competitive pressures in the EV market.

Despite its volatility, Tesla remains a dominant player in the EV industry, with strong revenue growth and increasing production capacity. However, its profitability remains cyclical, and recent concerns over slowing demand, cost pressures, and macroeconomic conditions contribute to its high financial risk.

ESG Exposure & Management

Exposure ESG (Medium, Grade: 3):

Tesla is a pioneer in sustainable energy and transportation, positioning itself as an ESG-friendly company. However, its battery production process, reliance on resource-intensive mining (such as lithium and cobalt), and emissions from factories expose the company to environmental risks. Additionally, the firm's global expansion presents challenges in terms of supply chain sustainability and labour rights.

Management ESG (Average, Grade: 3):

While Tesla has ambitious sustainability goals, its governance and social responsibility efforts remain average. It has received criticism for lack of transparency in reporting ESG metrics, employee treatment issues (e.g., accusations of union suppression), and high executive influence from Elon Musk. The company's approach to ESG integration is improving but still lags behind leading ESG-focused firms.

Controversies & Governance Risks

Tesla has been involved in multiple controversies, particularly regarding:

Labor rights & workplace safety: Reports of unsafe working conditions in factories, lawsuits over racial discrimination, and challenges related to unionization.

Product safety concerns: Several cases of autopilot-related accidents and recalls due to quality control issues.

Corporate governance: High executive influence from Elon Musk, regulatory disputes with the SEC, and ongoing discussions about Tesla's corporate decision-making process.

Given the extent of these controversies, Tesla receives the highest controversy risk rating (Grade: 7) in our framework.

Long-Term Outlook & ESG Strategy

Tesla has made notable progress in sustainable transportation and renewable energy solutions, with initiatives like its solar business, battery technology advancements, and continued EV innovation. The company's goal to become carbon-neutral by 2040 is ambitious but still faces major challenges in emissions reduction and ethical sourcing of materials.

Final Assessment

Tesla's SRI profile reflects a strong financial position with high volatility risks, medium ESG exposure, average ESG management, and significant controversy risks. The company still has room for improvement in ESG transparency, risk management, and corporate governance.

While Tesla remains an innovative and financially attractive company, its ESG risks and controversy profile require active monitoring by investors. Future improvements in supply chain sustainability, ethical labor practices, and product safety will be key to lowering its long-term investment risk.

CONTACT, DISCLAIMER & SOURCES

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SOURCES

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