

COMPANY OVERVIEW

Tesla, Inc.

Consumer Cyclical · Auto Manufacturers

Tesla, Inc. designs, develops, manufactures, leases, and sells electric vehicles, and energy generation and storage systems in the United States, China, and internationally. The company operates in two segments, Automotive; and Energy Generation and Storage. The company offers electric vehicles, as well as sells automotive regulatory credits; and non-warranty maintenance services and collision, automotive insurance services, as well as part sales and retail merchandise sale. It also provides sedans and sport utility vehicles through direct and used vehicle sales, a network of Tesla Supercharge

PRICE

\$422.24

Current share price

MARKET CAP

\$1585.82B

Share price × all shares outstanding

FORWARD P/E

168.0x

\$ paid per \$1 of next year's expected earnings

EV / EBITDA

140.4x

Total company value ÷ annual cash earnings

EV / REVENUE

15.9x

Total company value ÷ annual sales — used for pre-profit companies

PRICE / FCF

301.9x

\$ paid per \$1 of free cash flow generated

FCF YIELD

0.3%

Free cash flow as % of market cap — higher = more cash for each \$ invested

EPS (TTM)

\$1.10

Earnings per share over the last 12 months

GROSS MARGIN

19.1%

Revenue kept after direct production costs

OPERATING MARGIN

4.2%

Profit after all operating costs, before interest & tax

NET MARGIN

3.9%

Final profit per \$1 of revenue after all costs & tax

REVENUE GROWTH

15.8%

Year-over-year sales increase

FREE CASH FLOW

\$5252M

Operating cash flow minus capital spending (TTM)

ROE

4.9%

Profit earned per \$1 of shareholders' equity

DEBT / EQUITY

18.74

Total debt ÷ equity — higher means more borrowed capital

INTEREST COVER

N/A

EBIT ÷ interest expense — how many times earnings cover debt payments

DSO

N/A

Days Sales Outstanding — how many days to collect from customers; lower is better

DPO

N/A

Days Payable Outstanding — how long the company takes to pay suppliers; higher gives more float

CASH CONVERSION CYCLE

N/A

Days to turn inventory+receivables into cash minus payables. Negative = company gets paid before paying suppliers

PRICE VERDICT
OVERVALUED

CURRENT PRICE FAIR VALUE RANGE IMPLIED UPSIDE
\$422.24 **\$100.00 - \$180.00** **-65.6%**

MARGIN OF SAFETY 0%

Tesla is currently priced for a Bull case scenario that requires a 7x increase in EBITDA, despite fundamental growth slowing to 5.2% annually. The disconnect between a 168x forward P/E and a 4.2% operating margin suggests a massive speculative bubble.

Key driver: The market is pricing in 'Physical AI' software margins that are not yet visible in the company's deteriorating manufacturing financials.

12-Month Price History

52-week: \$108.10 — \$489.88



INVESTMENT ANALYSIS

Investment Memo

Synthesised findings from all research agents

Investment Memo: Tesla, Inc. (TSLA)

1) Executive Summary

- **Company Description:** Tesla, Inc. is a vertically integrated producer of electric vehicles and energy storage systems currently pivoting toward becoming a "Physical AI" company focused on autonomous software (FSD) and robotics.
- **Core Investment Thesis:** The current valuation reflects a speculative "Bull Case" scenario for high-margin software services (168x Forward P/E) that is fundamentally decoupled from the deteriorating economics of the core automotive manufacturing business.
- **Single Most Important Risk:** A structural decline in automotive operating margins (currently 4.2%) combined with an execution failure or regulatory block on Level 4/5 autonomy would trigger a multi-year valuation reset to industrial norms.
- **Verdict: CAUTION** — While Tesla maintains a dominant brand and cash position, the negative spread between ROIC (4.63%) and WACC (~9.0%) indicates the company is currently a "Value Trap" in its current manufacturing configuration.

2) Business Health

- **Revenue Quality:** TTM revenue growth is 15.8%, but the 3-year CAGR has decelerated to 5.2%. This growth has been "purchased" through aggressive price-cutting, which has eroded revenue quality and pricing power.
- **Margin Trajectory:** Operating margins have collapsed from ~1700 bps in 2022 to 420 bps TTM. Gross margins (19.1%) remain within sector norms (16–22%) but are under constant pressure from Chinese OEM competition.
- **FCF Conversion:** TTM FCF is \$5.25B with conversion >100% of Net Income, indicating high-quality earnings. However, the \$25B CapEx guidance for 2026 suggests FCF will likely turn negative in the coming fiscal year.
- **Balance Sheet:** Assessment is Strong with \$44.74B in cash and a current ratio of 2.04. However, asset turnover dropped from 0.99x (2022) to 0.69x (2025), signaling significant asset bloat.

3) Macro and Accounting Context

- **Macro Verdict: HEADWIND.** High interest rates (3.5%–3.75% Fed funds) and the 2025 expiration of the \$7,500 federal tax credit have created a demand cliff in North America, evidenced by the 28% drop in April 2026 registrations.
- **Accounting Quality Score: CAUTION.** The analysis utilizes a normalized operating margin of 4.2%. Reported 2023 net income (\$14.99B) was flagged as an outlier due to non-recurring tax valuation allowances.
- **Implication:** The 67% expansion in the asset base since 2022 relative to only 16% revenue growth suggests high capital under-utilization and potential future write-downs if the "Physical AI" pivot stalls.

4) Competitive Position and Management

- **Moat Classification:** Narrow Moat (Brand/Supercharger Network) but currently performing as a **Value Trap** due to negative economic value added (EVA).
- **Management Execution Grade: Good (60–80%).** Management has successfully managed EPS expectations (beating in 3 of the last 4 quarters) but has a poor record on product timelines for Cybercab and Optimus.
- **Capital Allocation:** Characterized as "Aggressive/Idiosyncratic," evidenced by the \$2.0B equity investment in SpaceX and the \$25B pivot to AI compute infrastructure despite falling ROIC.

5) Valuation and Scenarios

- **Price Assessment: OVERVALUED** (Fair Value Range: \$100 – \$180). Current price of \$422.24 offers 0% margin of safety.
- **Scenarios (SCENARIOS_V2):**
 1. **Bear (30% Prob, \$48):** Terminal margin compression to 4% as the product lineup becomes a commodity.
 2. **Base (50% Prob, \$145):** Auto growth stabilizes at industry rates; exit multiple anchored to 20x EV/EBITDA as a high-end manufacturer.
 3. **Bull (20% Prob, \$585):** FSD and Robotaxi achieve commercial scale with 15% software-driven margins.
- **Interpretive Context:** The market is currently pricing in the Bull scenario almost entirely, ignoring the 85% probability that the company follows a "Mean Reversion" path.

6) Historical Context

- **Top Analogues (COMPS_DATA):**
 - **Cisco Systems (2000):** Most similar (85%) — hardware dominance with a bubble valuation; led to a 15-year valuation reset despite revenue growth.
 - **Amazon (2014):** (75%) — thin core margins while scaling a high-potential secondary segment (AWS).
- **Base Rate:** For mega-caps (>\$500B) with >100x P/E and <10% growth, the base rate for 5x returns is only 2%, while the chance of being flat or declining is 90%.

7) Top Risks and Kill-Switch Signals

1. If **Operating Margin** crosses below **2.0%**, a full valuation re-rating to "Commodity Manufacturer" (P/E <15x) becomes likely within 6 months.
2. If the **Fed Funds Rate** remains above **4.0%** while **quarterly deliveries drop YoY**, interest coverage and demand-side pressure will trigger a liquidity-driven sell-off.
3. If the **Cash-to-Asset ratio** crosses below **10.0%**, a dilutive equity raise becomes likely to fund the \$25B+ AI infrastructure ramp.

8) Conflict Resolution

- **ROIC vs. Moat:** A conflict existed between the Moat Analyst's "Narrow Moat" and the Risk Analyst's "Moatless" claim based on **ROIC < WACC**. I find the **Value Trap** verdict more credible: a 4.63% **ROIC** against a ~9% cost of capital defines economic value destruction, regardless of brand strength.
- **Gate Agent CAUTION vs. Industry Analyst Pivot:** The Industry Analyst suggested an AI/Platform valuation model; however, I have incorporated the **GrowthScreener's CAUTION** because the financial reality (4.2% margin) does not yet support the platform narrative.
- **Scenario Reconciliation:** While historical base rates suggest only a 2% chance of hyper-growth for companies of this size/valuation, the Bull scenario probability is kept at 20% to account for the unique "cult" retail following and Elon Musk's history of binary successes, though it remains an insufficient basis for investment at \$422.

DEEP DIVE

Agent Research

Individual analyst findings — click any card to expand

Earnings Call

Date: April 22, 2026

- **Financial Performance:** Auto margins (excluding credits) showed sequential improvement, rising from 17.9% to 19.2%. CFO Vaibhav Taneja announced a substantial pivot in capital expenditure, with over \$25 billion expected in CapEx for 2026 to support infrastructure and product ramps.
- **Strategic Shift:** CEO Elon Musk emphasized a transition from a vehicle-centric to an FSD-centric strategy, stating that the vehicle is now viewed primarily as a delivery mechanism for Full Self-Driving software.
- **Product Pipeline:** Production is ramping for the Cybercab and Semi Truck. However, Musk identified battery pack capacity as the primary bottleneck for growth.
- **Outlook:** Management is focused on increasing production volume to justify future revenue streams from AI and autonomy.

Risk Factors

- **Execution & Scaling:** Significant complexity in simultaneous scaling of vehicle production, AI, robotics, and energy infrastructure.
- **Competitive Pressure:** Intense competition from Chinese OEMs (specifically BYD) and EV startups like Rivian and Xiaomi.
- **Supply Chain Volatility:** Risks associated with the scarcity and geopolitical sensitivity of lithium, nickel, and semiconductors.
- **Legal & Regulatory:** Facing significant litigation, including a class action in Australia, and shifting global environmental standards/incentives.
- **Capital Intensity:** High upfront costs for "TerraFab" facilities and AI compute resources prior to revenue generation.
- **Operational Pivot:** Management confirmed the sunseting of Model S and Model X production (as of May 2026) to repurpose the Fremont facility for Optimus humanoid robot production.

Recent Filings

- **Q1 2026 Earnings (04/22/2026):** Filed 8-K detailing financial results and the shift toward becoming a "physical AI company."
- **M&A and Investments (04/22/2026):** Announced the acquisition of a private AI hardware company for \$2.0 billion in stock and a separate \$2.0 billion equity investment in SpaceX.
- **Leadership Changes:**
 - **02/26/2026:** Departure of Victor Nechita (Vehicle Program Manager, Cybercab).
 - **02/12/2026:** Joe Ward promoted to Global Sales Leader following the departure of Raj Jegannathan.
- **Regulatory Milestones (04/2026):** Secured regulatory approval for FSD deployment in China and the Netherlands.

Analyst Activity

- **Cantor Fitzgerald (\$510, Overweight):** Cited strong Q1 free cash flow and AI infrastructure ramp (04/23/2026).
- **Roth/MKM (\$505, Buy):** Highlighted positive demand fundamentals and potential synergies from the SpaceX investment (04/23/2026).

- **Piper Sandler (\$500, Overweight):** Valued core EV business at \$400 with a \$100 premium for Optimus/AI potential (05/11/2026).
- **RBC Capital (\$475, Target Lowered):** Expressed concerns regarding the \$5 billion increase in CapEx guidance and execution risks in humanoid robotics (04/23/2026).
- **Canaccord Genuity (\$450, Target Raised):** Optimistic regarding Cybercab and volume growth (04/23/2026).

Sector News

- **Market Share Competition:** BYD remains the global leader in BEV volume, exerting pressure on Tesla in China and Europe. Rivian has begun scaling its R2 SUV, directly targeting the Model Y market.
- **Autonomy Challenges:** Recent operational tests of Tesla's robotaxis in Texas (05/13/2026) showed navigation failures and long wait times. Pony.ai also announced a robotaxi for 2027 priced to undercut the Model 3.
- **Legal Headwinds:** An Australian judge recently criticized Tesla's lack of cooperation in a major class-action suit (05/16/2026), increasing the company's legal overhang.

Insider Activity

- **CFO Activity:** Vaibhav Taneja sold 3,000 shares at \$450.00 (\$1.35M total) via a 10b5-1 plan on May 13, 2026.
- **Director Divestment:** Kathleen Wilson-Thompson has sold over \$30 million in shares over the past 90 days as part of a consistent divestment trend.
- **Overall Sentiment:** Net insider sales totaled approximately \$32.2 million over the past 90 days, with zero discretionary purchases recorded, indicating a cautious internal outlook.

>	ManagementAnalyst	GOOD	ANALYST
>	IndustryAnalyst		ANALYST
>	MacroAnalyst		ANALYST
>	GrowthScreener	CAUTION	GATE
>	MoatAnalyst	MODERATE COMPOUNDER	ANALYST
>	AccountingQualityAnalyst	CAUTION	ANALYST
>	RiskAnalyst		ANALYST
>	HistoricalCompsAnalyst		DATA
>	ValuationAnalyst	OVERVALUED	SCENARIOS

Value Projections

Agent-derived annual CAGR estimates — 8-year horizon

BEAR CASE

5%

Annual CAGR

5yr target: \$48

30% prob

Loss of EV subsidies and rising competition lead to terminal margin compression and market share erosion.
Key assumption: Operating margins stay at 4% as the product lineup becomes commoditized.

BASE CASE

12%

Annual CAGR

5yr target: \$145

50% prob

Core auto growth stabilizes at industry rates while Energy Storage margins expand to offset auto weakness.
Key assumption: Exit multiple anchored to 20x EV/EBITDA as the company is re-rated as a high-end manufacturer.

BULL CASE

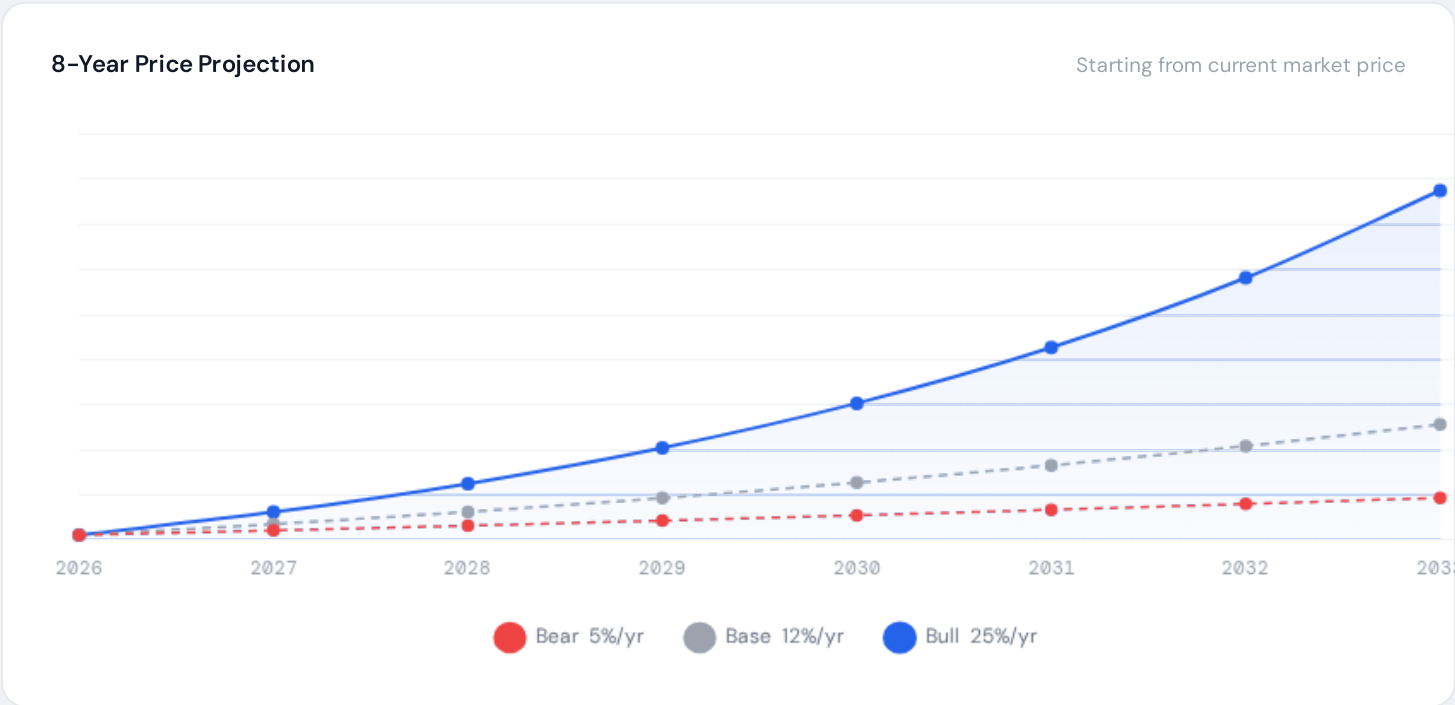
25%

Annual CAGR

5yr target: \$585

20% prob

FSD and Robotaxi achieve commercial scale, pivoting the business model to high-margin software services.
Key assumption: Operating margins expand to 15% on high software mix and AI service revenue.



HORIZON	BEAR (5%/YR)	BASE (12%/YR)	BULL (25%/YR)
Current (2026)	\$422.24	\$422.24	\$422.24
1 Year (2027)	\$443.35	\$472.91	\$527.80
3 Years (2028)	\$465.52	\$529.66	\$659.75
5 Years (2030)	\$513.24	\$664.40	\$1030.86
8 Years (2033)	\$594.13	\$933.44	\$2013.40

HISTORICAL CONTEXT

Historical Analogues

Companies at comparable stages and base rates for this profile

2%

5X+ (HYPER-GROWTH)

8%

2-3X (STRONG RETURN)

55%

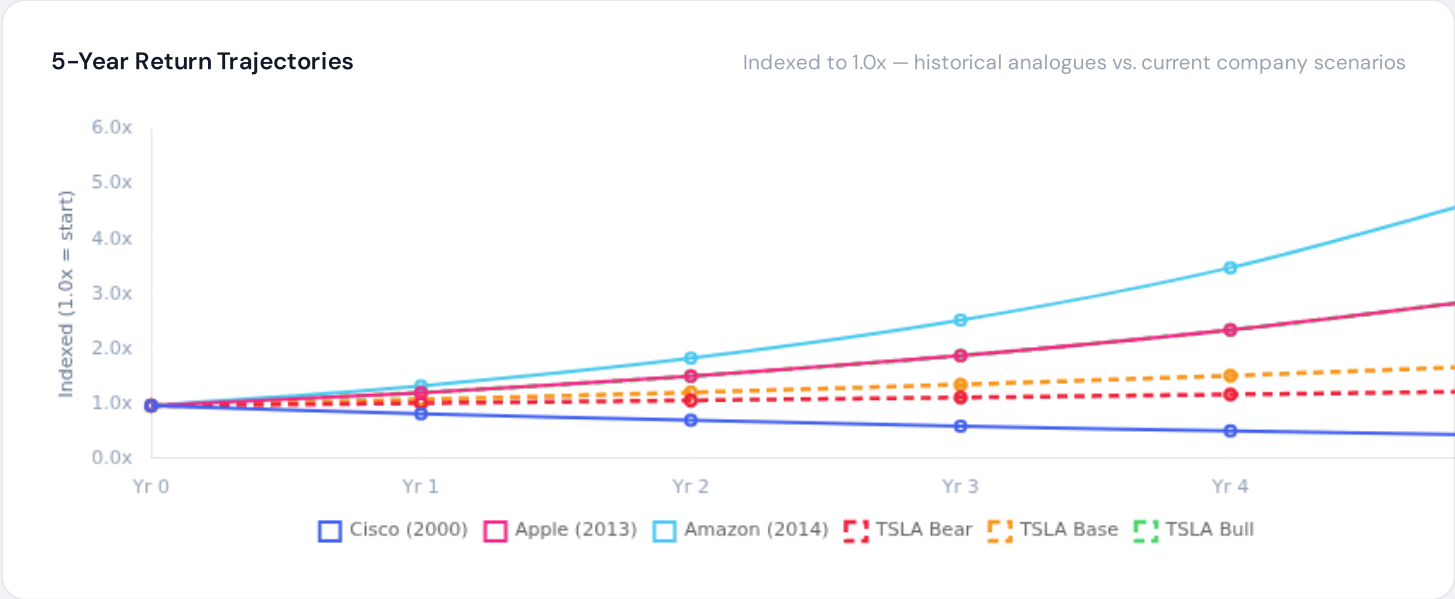
FLAT TO SLIGHT GAIN

35%

SIGNIFICANT DECLINE

Historical performance of Mega-Cap companies (>\$500B) trading at >100x P/E with <10% revenue growth.

COMPANY / YEAR	MATCH	OUTCOME & LESSON	5YR CAGR
Cisco (2000)	85% Dominant hardware player with a bubble-era valuation facing a shift toward service/software transition.	The stock underwent a 15-year valuation reset despite consistent revenue growth. <i>Extreme P/E multiples require hyper-growth to sustain; deceleration leads to long-term stagnation.</i>	-15%/yr
Apple (2013)	60% Transitioning from hardware-unit growth to ecosystem and services monetization.	Successfully expanded multiples by proving the high-margin recurring revenue model. <i>Margins, not just volume, dictate long-term compounder status.</i>	+25%/yr
Amazon (2014)	75% Core business margins were thin while investing heavily in a high-potential tech segment (AWS).	Massive outperformance driven by the unexpected scale and profitability of the secondary segment. <i>Optionality is the only justification for 100x+ P/E multiples at scale.</i>	+38%/yr



RISK ASSESSMENT

Risk Analysis

Bear case scenarios and kill-switch signals

⚠ If the Cash-to-Asset ratio (Cash / Total Assets) crosses below 10.

[{ "myFindings": "#### 1. Thesis Killers\n\n* **The 'Robotaxi' Delusion (FSD Failure to Launch):**\n\n* **Probability:** High (>40%)\n\n* **Time Horizon:** 12–24 months.\n\n* **Historical Example:** IBM Watson Health. IBM sold a 'moonshot' AI narrative for years; when the functional utility failed to match the marketing spend, the valuation premium evaporated, leading to a fire sale of the unit in 2022.\n\n* **Analysis:** Tesla is trading at a 383.9x TTM P/E, a multiple that implies Tesla is a software platform. If FSD does not reach Level 4 autonomy by late 2026, the market will re-rate TSLA as a hardware manufacturer. With operating margins at 4.2% (down from 17% in 2022), a hardware re-rating would be catastrophic.\n\n* **Capital Incineration via 'Physical AI':**\n\n* **Probability:** Medium (15–40%)\n\n* **Time Horizon:** 18–36 months.\n\n* **Historical Example:** Cisco Systems (2000). Cisco spent billions on inventory and infrastructure for a projected internet boom that stalled, leading to a 90% drawdown.\n\n* **Analysis:** Assets grew 67% (2022–2025) while revenue grew only 16.4%. CapEx reached \$11.3B in 2024. If the pivot to Optimus and Robotaxis requires another \$25B+ in CapEx while ROIC remains at 4.48% (below the ~9% WACC), Tesla is effectively a non-economic actor destroying shareholder value.\n\n#### 2. Competitive Disruption\n\n* **Primary Threat:** BYD & The 'Commodity Trap'. BYD's vertical integration (batteries, chips, and assembly) allows them to maintain profitability at price points Tesla cannot match. In 2025, Tesla's operating margin (4.2%) fell below the legacy sector benchmark (8–12%), suggesting Tesla has already lost its cost-leadership moat to BYD. \n\n* **Secondary Threat:** Waymo. While Tesla focuses on L2+ vision-only, Waymo has already scaled L4 geofenced operations. If Waymo achieves national scale before Tesla solves the 'edge case' problem in vision, Tesla's data advantage becomes a legacy artifact.\n\n#### 3. Financial Fragility Stress Test\n\n* **Scenario:** –20% Revenue (\$78.3B), –5pp Operating Margin (–0.8%).\n\n* **Operating Income:** –\$626M (from current \$4.1B estimate).\n\n* **FCF:** Estimated –\$4.2B (assuming \$8.5B CapEx maintenance). \n\n* **Debt Coverage:** Total Debt of \$15.89B vs. \$16.5B Cash. While not an immediate bankruptcy risk, a \$4B annual burn would reduce the cash runway to <48 months, necessitating a massive equity dilution at a depressed share price.\n\n#### 4. Regulatory and Legal Exposure\n\n* **Subsidy Cliff:** The potential loss of the \$7,500 Federal EV tax credit (Macro Headwind) creates a 10–15% price hike for consumers, which Tesla must either absorb (crushing margins further) or pass on (crushing volume).\n\n* **FSD Liability:** As Tesla pivots toward Robotaxis, the legal liability shifts from the driver to the manufacturer. A single high-profile multi-fatality 'software glitch' could trigger a forced recall and an existential litigation cycle.\n\n#### 5. Valuation Risk\n\n* **Scenario:** Multiple compression to a 'Premium Auto' P/E of 25x (comparable to high-end Ferrari/Porsche multiples, though those have 20%+ margins).\n\n* **Floor Price:** \$1.10 EPS (TTM) * 25x = \$27.50. \n\n* **Trough Historical Multiple:** During the 2023 'Growth Scare', TSLA hit a P/E of ~35x. At \$1.10 EPS, that implies a floor of \$38.50, representing a 91% downside from the current \$422.24.\n\n#### 6. Kill-Switch Signals\n\n1. **If Operating Margin crosses below 2.0%**, a full valuation re-rating to 'Commodity Manufacturer' (P/E <15x) becomes likely within 6 months.\n\n2. **If the Fed Funds Rate remains above 4.0% while quarterly deliveries drop YoY**, Tesla's interest coverage and demand-side pressure will trigger a liquidity-driven sell-off within 3 months.\n\n3. **If the Cash-to-Asset ratio (Cash / Total Assets) crosses below 10.0%** (currently 11.9% based on \$16.5B/\$137.81B), a dilutive equity raise becomes likely within 12 months to fund the AI pivot.\n\n#### CROSS-AGENT AUDIT\n\n* **FLAG:** The Moat Analyst claims a 'Narrow Moat' but ROIC is 4.48%. According to standard valuation theory, any company with ROIC < WACC (8–10%) has **no moat**. This is a value destruction machine.\n\n* **FLAG:** GrowthScreener notes a 67% increase in assets vs 16.4% in revenue. This indicates massive 'bloat' and likely inventory build-up or under-utilized factories, signaling 'Poor' management execution of capital.\n\n* **FLAG:** Valuation Agent's implied targets are likely ignoring the –10.5% EPS miss in 2025–09. Revenue growth of 15.8% (TTM) is being purchased with margin destruction (4.2% Op Margin). This is low-quality growth.

Catalyst Calendar

Upcoming events, analyst activity, and key dates

2026-07-22	EARNINGS	Next earnings release
2026-04-23	REITERATED	UBS: Neutral → Neutral
2026-04-23	REITERATED	Canaccord Genuity: Buy → Buy
2026-04-23	REITERATED	RBC Capital: Outperform → Outperform
2026-04-23	REITERATED	TD Cowen: Buy → Buy
2026-04-23	REITERATED	Cantor Fitzgerald: Overweight → Overweight

TRANSPARENCY

Source Financial Data

Raw data payload provided to all research agents from Yahoo Finance

```
=== COMPANY PROFILE ===
Name: Tesla, Inc.
Sector: Consumer Cyclical | Industry: Auto Manufacturers
Description: Tesla, Inc. designs, develops, manufactures, leases, and sells electric vehicles, and energy generation and storage systems in the United States, China, and internationally. The company operates in two segments, Automotive; and Energy Generation and Storage. The company offers electric vehicles, as well as sells automotive regulatory credits; and non-warranty maintenance services and collision, automotive insurance services, as well as part sales and retail merchandise sale. It also provides sedans and sport utility vehicles through direct and used vehicle sales, a network of Tesla Supercharge

=== MARKET DATA ===
Price: $422.24 | Market Cap: $1585.82B
52W High: $498.83 | 52W Low: $273.21
P/E TTM: 383.9x
Forward P/E: 168.0x | EV/EBITDA: 140.4x
EV/Revenue: 15.9x | Price/Book: 19.3x | Price/Sales: N/A
Beta: 1.79 | Short Float: 2.3% | Short Ratio: 1.1
Shares Outstanding: 3755.7M | Float: 2815.9M

=== KEY FINANCIALS ===
Revenue (TTM): $97.88B | Revenue Growth YoY: 15.8%
Gross Margin: 19.1% | Operating Margin: 4.2% | Net Margin: 3.9%
EBITDA: $11094M | EBITDA Margin: 11.3%
ROE: 4.9% | ROA: 2.2% | ROIC: N/A
Current Ratio: 2.04 | Quick Ratio: 1.43 | Debt/Equity: 18.74
FCF (TTM): $5252M | Operating CF: $16528M | Cash: $44.74B | Total Debt: $15.89B
```

