Tesla Inc. (TSLA): Tesla begins robotaxi operations - initial takeaways

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Tesla began robotaxi operations on 6/22 in Austin, Texas for a small group of early access individuals (generally those that report regularly on Tesla on X with podcasts and/or as FSD Beta testers). Recall Tesla had said the initial fleet would likely be 10-20 Model Y vehicles.

Based on available data on Tesla's robotaxi launch from news reports and the social media platform X, our initial view is that the launch is both a sign of the progress that Tesla has made with its FSD technology but also that scaling in the near term will be slow. We discuss our views on three key items from the launch, and valuation/stock implications in this note. Specifically: 1) Our initial thoughts on performance of the early rides, which generally show a good degree of drive smoothness in our opinion but with one user posting a navigation issue with improper use of a left turn lane and the vehicle driving temporarily in the turn lane for traffic going the other direction; 2) How Tesla's Austin service currently compares to Waymo, including the operating area; 3) Our views on how fast Tesla will scale (we continue to expect it to be measured in the near-term).

We will monitor for additional disclosures from Tesla going forward to better assess the technical progress and financial impact.

Separately, please see our recent AV deep dive report for more on our industry expectations and AV market forecast.

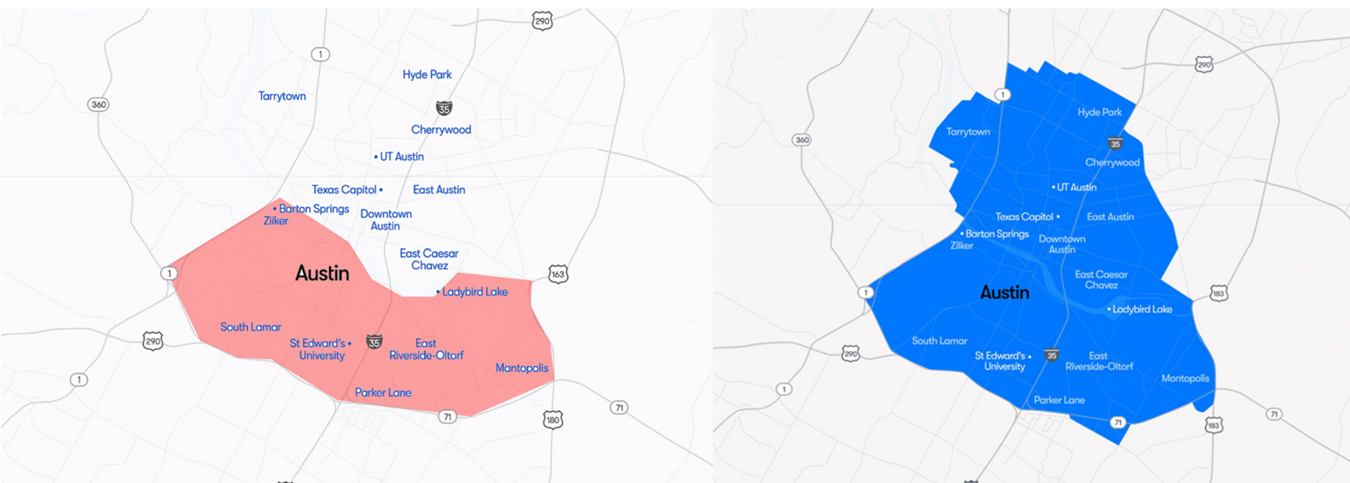
Initial takeaways on the launch

1) AV Ride Performance - **Initial user reactions to robotaxi rides they experienced have largely been positive, with riders generally noting a smooth drive. However, one user showed a video with an incorrect use of a left turn only lane** — Reviews from users on X generally noted that the vehicles were able to navigate very smoothly including handling turns and speed bumps, and this was evident based on videos posted on X. Users stated that the vehicle also had some robotaxi specific features on the rear screen, such as a customer support button, and the robotaxi remembered user preferences from their Tesla account like their favorite music. Rides were handled via a robotaxi specific app from Tesla, and there was a Tesla employee in the front passenger side seat (we assume to help with some aspects like potentially aiding the vehicle in difficult situations that are more

likely to be handled fully with remote assistance in the long-term). However, one user posted a video where the Tesla robotaxi went straight from a left hand turn only lane and then drove briefly in the turn lane for vehicles going the opposite direction (as reported on by Bloomberg). We consider this navigation error as somewhat concerning about the overall level of tech readiness, especially in light of the limited number of vehicles on the road, but also we appreciate that this behavior is not unprecedented to see from human drivers either.

2) Waymo Comparison - The areas and conditions in which the Tesla Robotaxi can operate are currently more limited relative to Waymo — Waymo currently operates 24/7 in ~37 sq miles of Austin, whereas Tesla is limited to 6 am to midnight and in a smaller area of Austin (Exhibit 1). Additionally, the Tesla Robotaxi service is only available to a select group of early access users, while Waymo is available to all users on the Uber app. On pricing, Tesla is currently pricing its rides at a flat fee of $4.20, while Waymo (operating through the Uber app) is charged like a traditional Uber ride (with pricing shown at time of booking).

Exhibit 1: Tesla vs Waymo operating map in Austin
Tesla area shown in red, Waymo shown in blue



Source: Company data, X

3) Scaling - The use of an Austin-specific tech stack, a Tesla employee being present in the vehicle (albeit on the passenger side), and the navigation/lane issue reported in the first day of use suggests scaling will be slow in the near-term in our view — As we discussed in our note from 6/20, we hadn't initially expected a Tesla employee to be in vehicle. Given this news, the navigation related error from one early consumer ride, and other factors like geofencing and a version of the software that at least for now is specific to Austin, suggests in our view that scaling in the near-term will be slow. We also believe this suggests that it will be some time before consumers can use FSD on their personal vehicles in a wide operating area.

Separately, the regulatory environment will be key to monitor and could determine the speed of the ramp as well. California currently requires permits for robotaxi deployments, and on 6/20 the Texas governor signed a bill that requires robotaxi/AV operator permits starting in September. However, new federal rules could help speed AV adoption.

Implications

We see the commercial launch as a step toward Tesla addressing the AV rideshare market (we estimate the market for AV rideshare in 2030 in the US will be about $7 bn). However, **we were surprised by the magnitude of the move higher in shares** on 6/23 (TSLA stock was up ~8% or $26.52 per share compared to the S&P 500 up 1%), as we believe from our investor discussions that many investors had expected Tesla to meet its June target (and some degree of AV related profit was already in the stock in our opinion). With the move higher on 6/23/25, Tesla added >$90 bn to its market cap or roughly double Waymo's reported valuation of >$45 bn as of October 2024 per Bloomberg.

As we detailed in our AV deep dive, to help frame the potential present value for Tesla's robotaxi business, we constructed an illustrative DCF of the incremental value assuming a fleet of 100K - 1 mn AVs on the road with an EBIT margin of 10-40% in 2040, which implies a wide range of outcomes in value per share (Exhibit 2). We believe this analysis suggests that the ultimate value of its rideshare business will depend on the degree to which it can scale and earn a differentiated margin. One downside risk in this dimension is what has happened with the ADAS market in China, with many local OEMs now including hands-free technology as a standard feature or at low cost even for mainstream vehicles (suggesting that if AI technology allows for many entrants in AVs, profits will be diminished). An accident or other impediment to scaling is also a downside risk. However, if Tesla is able to benefit from scale/early-mover benefits/low hardware costs, there are scenarios where it could have a very attractive margin, in our view.

Exhibit 2: Tesla illustrative robotaxi DCF per share of incremental value

	Illustrative Robotaxi DCF Fleet size (in Ks)						
	100	150	250	500	750	800	1000
EBIT margin 10%	$2.50	$3.50	$6.00	$12.00	$18.00	$19.25	$24.25
20%	$4.25	$6.50	$10.75	$21.75	$32.50	$34.75	$43.25
30%	$6.25	$9.50	$15.75	$31.25	$47.00	$50.00	$62.50
35%	$7.25	$10.75	$18.00	$36.00	$54.00	$57.75	$72.25
40%	$8.25	$12.25	$20.50	$40.75	$61.25	$65.50	$81.75

We assume a WACC of 12% in the near-term decreasing to 8.7% in 2040 and a terminal growth rate of 3%

Source: Goldman Sachs Global Investment Research

We are Neutral rated on the stock. Our 12-month price target is $285, which is based on 120X (implying about 100X non-GAAP EPS, which is near the higher end of Tesla's historical trading range) applied to our Q5-Q8E EPS estimate including SBC. A downside valuation scenario for the stock, assuming less volume growth and slower margin improvement, could be ~$150 (assuming a ~20% reduction to our 2027E EPS estimate including SBC and a multiple of ~60X). An upside valuation scenario could be ~$400, assuming a 115X multiple applied to non-GAAP 2027E EPS.

Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, a larger than expected tariff impact or negative effects from government policy changes more generally, slower EV demand, delays with products/capabilities such as FSD/4680, key person risk, the internal control environment, margins, and operational risks associated with Tesla's high degree of vertical integration. Upside risks include faster EV adoption and/or share gain by Tesla, a stronger macroeconomic environment for new vehicle sales more generally, earlier new product launches than we expect, an earlier/larger impact from AI-enabled products (e.g., FSD, Optimus and robotaxis), and a smaller than expected tariff impact than we currently anticipate.

TSLA	12m Price Target: **$285.00**	Price: **$348.68**	Downside: **18.3%**

Neutral

Market cap: $1.2tr
Enterprise value: $1.2tr
3m ADTV: $37.2bn
United States
Americas Autos & Industrial Tech
M&A Rank: 3

GS Forecast

	12/24	12/25E	12/26E	12/27E
Revenue ($ mn)	97,690.0	89,472.7	106,969.8	126,633.7
EBITDA ($ mn)	16,013.0	13,659.1	19,692.0	25,471.1
EBIT ($ mn)	7,076.0	3,506.5	7,351.9	11,585.2
EPS ($)	2.04	1.10	2.05	3.00
P/E (X)	113.0	NM	170.5	116.3
EV/EBITDA (X)	45.3	81.4	56.7	43.7
FCF yield (%)	0.4	0.2	0.2	0.9
Dividend yield (%)	0.0	0.0	0.0	0.0
Net debt/EBITDA (X)	(0.7)	(1.0)	(0.8)	(1.0)

	3/25	6/25E	9/25E	12/25E
EPS ($)	0.14	0.21	0.31	0.43

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 23 Jun 2025 close.

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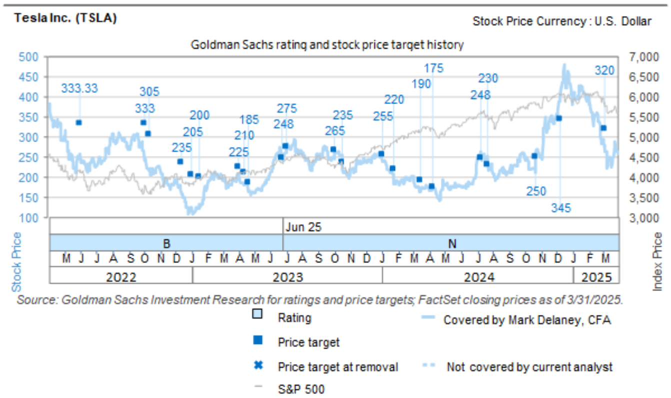

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