

Yardeni Research



February 6, 2025

Morning Briefing

Palantir, Semis & Tesla's Big Year

Check out the accompanying chart collection.

Executive Summary: Nvidia remains king of the AI play, but another AI company has been turning investors' heads: Palantir. This government supplier has also been saving corporate America much time and money with its AI software solutions. Jackie recaps takeaways from the company's recent conference call, including insights about the commoditization of LLMs, competitive threats from China, and the opportunity that is DOGE. ... Also: Semiconductor chip makers reported mixed December-quarter results. ... And: Tesla plans impressive product launches in the areas of autonomous vehicles, electric trucks, and humanoid robots. But the humanoid competitive playing field is crowded.

Information Technology I: Al Software Reigns. Palantir is known for providing software to the US government, so when its Al business with corporate America accelerated sharply, surprised investors sent its shares surging higher. Companies are using Palantir's Al software to cut costs and become dramatically more efficient. "Al is a pivotal component in driving innovation and efficiency, something companies need to embrace or fall behind," said Palantir's Chief Revenue Officer Ryan Taylor on its February 3 earnings <u>conference call</u>.

Palantir's Q4 total revenue increased 36% y/y to \$828 million, and revenue from its US government business grew 45% y/y to \$343 million. But it was the 64% y/y jump in revenue from Palantir's US commercial business, to \$214 million, that captured investors' attention. The company expects 2025 total revenue growth of 31% y/y, the midpoint of its estimate range. Palantir's shares surged 24.0% on Tuesday to \$103.83, far outpacing the S&P 500's 0.72% gain.

Palantir executives shared some interesting perspectives on its conference call about large language models (LLMs), corporate adoption of AI, the unofficial US war with China, DeepSeek, and the Trump administration's new Department of Government Efficiency (DOGE). Here's a look:

(1) Palantir on LLM commoditization. Palantir has benefitted from the plethora of LLMs that have entered the market. LLMs are being commoditized as they grow more similar and the price of inference drops "like a rock," said Chief Technology Officer Shyam Sankar on the conference call. That benefits the companies that use LLMs, like Palantir; but it hurts companies that make LLMs, like Alphabet's Google.

Alphabet announced on Tuesday that its capital expenditures would increase to \$75 billion this year, up nearly 50% from \$52.5 billion in 2024. It's not the only company spending like a drunken sailor. Microsoft plans to spend \$80 billion on capital expenditures in its fiscal year ending June, up from \$55.7 billion the prior year. It said most of the funds would be used to build Al infrastructure. Conversely, Palantir spent only \$12.6 million on capex last year and didn't state its plans for 2025. Ballooning capex spending on Al and related infrastructure has raised concerns about whether the big spenders will ever earn a reasonable return on their investments.

- (2) Palantir on the power of its AI programs. Palantir executives illustrated how companies are deploying Palantir's Artificial Intelligence Platform (AIP) to save time, increase efficiency, and cut costs with examples including:
 - A global insurance company's two-week underwriting process was reduced to three hours.
 - A multinational bank's back-office processes were shortened from five days to three minutes.
 - An engineering and construction firm now identifies risks culled from large technical documents in minutes instead of months.
 - Rio Tinto uses AIP to coordinate 53 driverless trains, improving throughput and safety.

Palantir is also using AI in its Warp Speed operating system to improve manufacturing. The software optimizes production schedules, reduces bottlenecks, streamlines engineering changes, automates visual product inspections, enhances material resource planning, and provides a unified interface connecting multiple systems.

(3) Palantir on DeepSeek & China. The folks at Palantir believe that the war between the US and China has already begun, pointing to the LLM DeepSeek as the latest evidence. Sankar described the engineering of DeepSeek's R1 as "exquisite." He concludes: "[We] have to wake up with the respect for our adversary and realize that we are competing. But they absolutely did steal a lot of that through distillation of the models."

The AI race between the US and China is just the latest battle in the war that began when China entered into the World Trade Organization, said Sankar. Other battles include the opium war (fentanyl is the leading cause of death among 18- to 45-year-olds in the US), the diplomatic war (Belt and Road initiatives span the globe), and aggressions by the Chinese Communist Party that fall short of open warfare (e.g., Chinese ships are suspected of cutting underseas communications cables).

- (4) Palantir on DOGE. Sankar sounded optimistic about Elon Musk's leadership of DOGE, with good reason: Palantir stands to benefit if the government uses more of Palantir's products to become more efficient. "[T]the work that we've done in government, it's deeply operational, it's deeply valuable, and we're pretty excited about exceptional [DOGE] engineers getting in there under the hood and being able to see that for a change," said Sankar.
- (5) *Investors' new AI darling?* Palantir joined the S&P 500 last fall as a member of the Application Software stock price index, which has climbed 9.7% over the past year, hitting a new high late last year (*Fig. 1*). The industry's revenue growth has been extremely steady: 11.1% in 2024, 10.8% in 2025, and 11.1% in 2026 (*Fig. 2*). Earnings growth has decelerated from 29.2% in 2023 to an expected 12.6% this year and 14.5% in 2026 (*Fig. 3*).

The industry's forward P/E has fallen a bit over the past few years, but not Palantir's. The Application Software industry's forward P/E is 34.4, down from a recent peak of 53.8 in November 2021 (*Fig. 4*). That looks like peanuts compared to Palantir's forward P/E of 189.2—more than triple its P/E in mid-2024 (*Fig. 5*). Watch out, Nvidia, the stock market may have adopted a new darling.

Information Technology II: Semi Stocks Are Cheaper Now. A handful of semiconductor companies have reported mixed quarterly earnings results over the past few days.

Advanced Micro Devices shares fell 6.2% on Wednesday—bringing their one-year decline to 35.7%—even after reporting a 69% jump in chip sales to data centers. The segment's \$3.9 billion of revenue missed analysts' \$4.1 billion forecast. The reaction may be overdone given that the company posted 24% Q4 revenue growth and 43% adjusted operating income growth.

In the December quarter, Qualcomm's revenue rose 17% y/y, and its adjusted earnings per share jumped 24% to \$3.41, beating analysts' estimates. Shares of the cell phone chip manufacturer fell roughly 4.5% in aftermarket trading on Wednesday, giving back some of

the 14.5% ytd gains the shares had enjoyed.

Infineon Technologies, a German semiconductors manufacturer for auto and industrial use, reported an 8% y/y decline in December-quarter sales. Despite the decline, investors may be signaling that the worst is over because the shares have climbed roughly 13% over the past two days and are up 24.9% from November's low.

Nvidia shares have tumbled 17.2% since their January peak, spooked by news that China's DeepSeek managed to develop a competitive AI offering without spending billions on Nvidia's most advanced chips. However, some have speculated that DeepSeek did have access to at least some of Nvidia's highest-end chips and essentially used distillation to steal ChatGPT's knowledge. Also reassuring for Nvidia investors has been the planned capex announced by Google and Microsoft, a sign that chip spending will continue. Nvidia's shares have climbed 4.0% so far this week (through Wednesday's close).

Nvidia's recent downdraft has taken some of the excess out of the S&P 500 Semiconductors index's valuation. While analysts expect the industry to produce robust earnings growth of 45.5% this year, its forward P/E has fallen to a more reasonable 25.6 from a recent high of 49.7 on June 19, 2024 (*Fig.* 6 and *Fig.* 7).

Disruptive Technology: Tesla's Big Year. Ever effusive, Elon Musk recently said 2025 may be the most important year in Tesla's history. The company plans over the next 12 months to introduce unmanned autonomous vehicles in the US, to produce Optimus humanoid robots, and to produce a semi-trailer truck.

Musk needs investors to focus on the future because sales of Tesla's electronic vehicles (EVs) have slowed. Last year was the first time that the number of Teslas sold worldwide declined. In Q4, Tesla's automotive revenue fell 8% y/y to \$19.8 billion, its total operating income dropped 23% y/y to \$1.6 billion, and the operating margin contracted to 6.2% from 8.2% a year earlier as the company cut prices to move inventory. Sales may fall further if President Trump successfully eliminates the rebates that EV buyers receive.

Nonetheless, Musk sounded optimistic during the company's recent earnings <u>conference</u> <u>call</u>: "I'm highly confident that all transport will be autonomous electric, including aircraft, and that [the transition] simply can't be stopped any more than one could have stopped the advent of ... the internal combustion engine." So far, investors are going along for the ride. The company's stock price remains near its record high, and its forward P/E is a lofty 129.8 (<u>Fig. 8</u> and <u>Fig. 9</u>).

Here's a look what Musk had to say about Tesla's 2025 product launches as well as the competition Tesla faces.

(1) Full self-driving arriving. Autonomous vehicles and humanoid robots have the same problem: Both require huge amounts of Al training that consumes vast amounts of computer processing. Yet both products are massive opportunities for Tesla. Optimus has the potential to generate more than \$10 trillion in annual revenue, Musk said.

Tesla expects to launch in June unsupervised full self-driving (FSD) cars as a paid service in Austin, using Tesla's fleet of cars. That will be followed by unsupervised FSD in California and in other regions this year and in all of North America in 2026. Next year, private Tesla owners will be able rent out their vehicles by adding them to the fleet of company-owned Teslas available for hire.

Also happening this year: Tesla owners will be able to use their FSD mode without watching the road (currently, they can use FSD but must keep their eyes on the road). During Q4, Teslas using Autopilot experienced one crash for every 5.9 million miles driven compared to the US average of one crash every 700,000 miles.

Internationally, the rollout of FSD is being delayed by "regulations and bureaucracy" in Europe and by the Chinese government, which won't let Tesla train its software in China. Instead, Tesla is training its FSD software on videos of China's streets that are publicly available. Musk estimates that unsupervised FSD will be available in most countries by the end of next year.

Tesla currently has thousands of unsupervised FSD cars operating at its California factory. Musk said other automakers are interested in licensing Tesla's FSD technology, realizing that they'll need to offer this feature to remain competitive.

(2) Optimus arriving. Optimus humanoid robots require even more training than autonomous vehicles due to their varied uses and complexity. Fortunately, the cost of training is dropping "dramatically," said Musk. By year-end, Tesla should have several thousand Optimus robots working in its factories on the most boring, tedious, annoying, and dangerous tasks. We'll be interested to see if profit margins improve when the company no longer has to pay humans for this work.

Tesla may start delivering Optimus robots to customers in 2H-2026. Once production rises to one million robots a year, the cost of production will fall to \$20,000 per robot or less, and

the robot's price will be determined by market demand.

- (3) Commercial trucks coming too. Telsla's electric semi-trailer truck factory in Reno is under construction, and the first few semis are expected to roll off the production line late this year. With more truck drivers leaving the profession than joining it, there's a need for autonomous trucks, which could grow into a \$10 billion to \$12 billion a year business for Tesla, Musk said.
- (4) *Tesla faces competition.* As we discussed in the August 8 <u>Morning Briefing</u>, Tesla faces international competition. In China, Shanghai Qingbao makes robots used in tourism and conventions, and UBTech's robots are on NIO's EV factory floors, a February 4 *South China Morning Post <u>article</u>* reports. Unitree Robotics' robots recently went <u>viral dancing</u> during China's Spring Festival Gala.

At home, Figure AI has robots set for BMW's factory floors later this year, and Boston Dynamics' Atlas continues to improve. It can now analyze and adapt to its surroundings, functioning on its own without any preprogrammed sequences or remote control, as it reportedly did in this *video*.

The most recent addition to the party: OpenAI. The company filed a trademark application on January 31 for hardware that includes headphones, goggles, glasses, remotes, laptop and phone cases, smartwatches, smart jewelry, and virtual and augmented reality headsets, a February 3 PYMNTS <u>article</u> reported. The application also mentioned robots, and OpenAI has begun putting together a robotics team—of human hires (for now?).

Calendars

US: Wed: ADP Employment Change 150k; MBA Mortgage Applications; Goods Trade Balance -\$96.5b; Jefferson. **Thurs:** Nonfarm Productivity & Unit Labor Costs 1.7%, 3.4%; Initial Claims 215k. (FXStreet estimates)

Global: Wed: Eurozone Industrial Production 0.1%; Eurozone PPI 0.4%m/m, -09.1%y/y; Eurozone, Germany & France C-PMIs 50.2, 50.1, 48.3; Eurozone, Germany & France NM-PMIs 51.4, 52.5, 48.9; UK C-PMI & NM-PMI 50.9, 51.2; Japan NM-PMI 52.7; China NM-PMI 52.3. **Thurs:** Eurozone Retail Sales 0.0%m/m, 2.0%y/y; Germany Factory Orders 1.6%; UK Interest Rate Decision 4.50%. (FXStreet estimates)

Strategy Indicators

S&P 500 Earnings, Revenues, Valuation & Margins (*link*): The S&P 500's forward revenues ticked down a hair again during the January 30 week to 0.1% below its record high during the January 9 week. Forward earnings ticked down 0.1.% w/w from a record high. As a result, the forward profit margin remained steady w/w at a record high of 13.6%. It is now 3.3ppts above its seven-year low of 10.3% during April 2020. The consensus expectations for forward revenues growth dropped 0.1ppt w/w to 5.6%, and is just 0.2ppt below its 23-month high of 5.8% during the August 1 week. It has gained 3.3ppts from its 33-month low of 2.3% during the February 23, 2023 week. That's down from a record high of 9.6% growth at the end of May 2021 and compares to 0.2% forward revenues growth during April 2020, which was the lowest reading since June 2009. The forward earnings growth forecast fell 0.3ppt w/w to a 12-week low of 13.8%, and is 0.5ppt below its 38-month high of 14.3% during the December 12 week. It's now 10.5ppts above its 31-month low of 3.3% during the February 16, 2023 week. That's down from its 23.9% reading at the end of April 2021, which was boosted by the recovery from the pandemic to its highest reading since June 2010 and up substantially from its record low of -5.6% at the end of April 2020. Analysts expect revenues to rise 5.4% in 2025 (down 0.1ppt w/w) and 6.3% in 2026 (down 0.1ppt w/w), an acceleration from 2024's forecasted 4.7% (up 0.1ppt w/w). They expect an earnings gain of 13.7% in 2025 (down 0.3ppt w/w) and a 14.0% rise in 2025 (up 0.1ppt w/w) compared to 2024's forecasted earnings gain of 10.3% (up 0.1ppt w/w). Analysts expect the profit margin to rise 1.0ppt y/y to 13.4% in 2025 (unchanged w/w) and another 1.0ppt y/y in 2026 to 14.4% (unchanged w/w), compared to 2024's forecasted 12.4% (unchanged w/w). The S&P 500's weekly reading of its forward P/E ticked down 0.1pt w/w to 22.1 from a 4week high of 22.2, and is just 0.3pt below its 43-month high of 22.4 during the December 12 week. It's up 2.4pts from a 14-week low of 19.7 during the August 8 week and 6.8pts from a 30-month low of 15.3 in October of 2022. It also compares to 23.1 in early September 2020, which was the highest level since July 2000, and to a 77-month low of 14.0 in March 2020. The S&P 500 weekly price-to-sales ratio fell 0.02pt w/w to 2.99 and is just 0.03pt below its December 12 record high. That's up from a six-month low of 2.22 during the October 26, 2023 week and compares to a 49-month low of 1.65 in March 2020.

S&P 500 Sectors Earnings, Revenues, Valuation & Margins (*link*): During the January 30 week, forward revenues rose for four of the 11 S&P 500 sectors and forward earnings rose for one. This led to rising forward profit margins for two of the 11 sectors too. Health Care was the only sector to post record-high forward revenues this week. These seven sectors are less than 0.4% below their record-high forward revenues of recent weeks:

Communication Services, Consumer Discretionary, Consumer Staples, Financials, Information Technology, Real Estate, and Utilities. Industrials' forward revenues remains 3.0% below its early September record. Improvement for Materials and Energy has stalled again, and they remain the biggest laggards at 6.0% and 16.3% below, respectively. While none of the 11 sectors had record-high forward earnings this week, these seven are close behind at less than 0.6% below their recent records: Communication Services, Consumer Discretionary, Consumer Staples, Financials, Industrials, Information Technology, and Utilities. Real Estate is 2.0% below its record high in August 2022, and Health Care is 1.1% below its February 2022 record. Among the remaining two sectors, forward earnings remains depressed for Energy and Materials, which are 33.6% and 24.6% below their respective highs during 2022. Looking at the record-high forward profit margin club, Financials' was steady w/w after entering the club during the January 16 week for the first time since August 2021. Also at a record high this week is Communication Services. In recent weeks, the Consumer Discretionary, Industrials, and Information Technology sectors were in that club. Among the laggards, Energy's forward margin of 9.5% is just 0.2pt from its 34-month low of 9.3% in late December and has tumbled 1.4ppts since its six-month high of 10.9% in mid-June; Consumer Staples' 6.8% is just 0.1ppt above its seven-year low in March 2023; Health Care's fell 0.1ppt w/w to 8.6% and is only 0.1ppt above its record low in April; and Real Estate's dropped 0.1ppt w/w to 16.9%, but that's up from a low of 12.4% in December 2020. Here's how the S&P 500 and its 11 sectors rank based on their current forward profit margin forecasts along with their record highs: Information Technology (27.0%, up 0.1ppt w/w and down from its 27.6% record high in September prior to lowmargin Dell's index addition, which lowered the margin 1.3ppts then to 26.3%), Financials (20.0, a record high this week, its first since August 2021), Communication Services (18.6, a record high this week), Real Estate (16.9, down 0.1ppt w/w and from its 19.2 record high in 2016), Utilities (14.4, down from its 14.8 record high in April 2021), S&P 500 (13.6, a record high this week and in 21 of the past 22 weeks), Materials (10.8, down 0.2ppt w/w to a ninemonth low and from a 20-month high of 11.6 in July 2023 and a 13.6 record high in June 2022), Energy (9.5, just 0.2ppt above its 34-month low of 9.3 in late December and down from its 12.8 record high in November 2022), Industrials (11.2, down 0.1ppt from its 11.3 record high in early January), Consumer Discretionary (9.3, down 0.1ppt from its 9.4 record high a week earlier), Health Care (8.6, down 0.1ppt w/w to 0.1ppt above its 8.5 record low at the end of April and down from its 11.5 record high in February 2022), and Consumer Staples (6.8, down from its 7.7 record high in June 2020).

8

US Economic Indicators

ADP Employment (link): "We had a strong start to 2025 but it masked a dichotomy in the labor market. Consumer-facing industries drove hiring, while job growth was weaker in business services and production," noted Nela Richardson, chief economist of ADP. Private payroll employment was stronger than expected, rising 183,000 in January, above the consensus estimate of 150,000, following an upwardly revised 176,000 in December, which was stronger than the 122,000 initial estimate. Job growth during January was concentrated in the service sector, which increased 190,000 during the month, led by trade-transportation & utilities (56,000) and leisure & hospitality (54,000), followed by education & health services (20,000), information (18,000), other services (15,000), professional & business services (14,000), and financial activities (13,000). Goods-producing jobs fell 6,000 in January, dragged down by a 13,000 drop in manufacturing jobs; natural resources and construction jobs added 4,000 and 3,000, respectively, to payrolls during the month. By size, medium-sized companies added 92,000 jobs in January, followed by a 69,000 increase in large-sized companies, with small establishments adding 39,000. According to the report, the yearly pay increase for job-stayers was 4.7% y/y during January, while the rate for job-changers was 6.8%.

Global Economic Indicators

Global Composite PMIs (*link*): "Growth of global economic output and new orders slow at start of 2025" is the headline of the January report. The Global <u>C-PMI</u> Output Index sank to a 12-month low of 51.8 in January, down from 52.6 at the end of 2024. The headline index has held above the neutral level of 50.0 over the past two years. The <u>Services Business Activity</u> index fell from a seven-month high of 53.8 in December to a 13-month low of 52.2 in January, though continued to outperform its manufacturing counterpoint for the 25th successive month. All three of the service sub-sectors covered by the survey weakened in January. There was some encouraging news on the manufacturing front in January, as both new orders and production both moved back into expansionary territory. <u>By industry</u>, output in the consumer goods sector expanded at the fastest pace in seven months, while the intermediate goods sector returned to marginal growth. Meanwhile, growth in the investment goods sector contracted for the eighth straight month. <u>Business optimism</u> climbed to an eight-month high after reaching a recent low in December.

Developed nations were more positive about the coming year (on average) than emerging markets. *Turning to pricing*, price pressures continued to rise in January, with both input

costs and output charges increasing at their fastest paces in eight months. Rates for both prices measure were higher (on average) in developed nations than emerging markets.

Contact us by email or call 480-664-1333.

Ed Yardeni, President & Chief Investment Strategist, 516-972-7683 Eric Wallerstein, Chief Markets Strategist, 201-661-3575 Debbie Johnson, Chief Economist, 480-664-1333 Joe Abbott, Chief Quantitative Strategist, 732-241-6502 Melissa Tagg, Senior Global Investment Strategist, 516-782-9967 Mali Quintana, Senior Economist, 480-664-1333 Jackie Doherty, Contributing Editor, 917-328-6848 Valerie de la Rue, Director of Institutional Sales, 516-277-2432 Mary Fanslau, Manager of Client Services, 480-664-1333 Sandy Cohan, Senior Editor, 570-228-9102

