

Pricing the AI Supercycle: A Technology Sector Valuation Deep-Dive

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EXECUTIVE SUMMARY

Technology remains the U.S. equity market's dominant growth engine at the midpoint of 2026 - and its most contested valuation debate. The sector is up roughly 21.9% YTD, more than double the S&P 500, powered by an unprecedented AI infrastructure buildout, expanding margins, and earnings guidance concentrated overwhelmingly in tech. Forward multiples are elevated (~28x) but, by most measures, well short of dotcom-era extremes. The key second-half question is not whether tech is expensive in isolation, but whether its growth — and the market's own gains — have become too concentrated in too few names.

A Supercycle, Not a Cycle

What distinguishes the current advance from prior technology rallies is its source. Historically, tech-led markets have been driven by consumer product cycles or enterprise software adoption. The 2026 advance is instead being driven by capital formation itself: the buildout of AI compute capacity. Amazon, Alphabet, Meta, and Microsoft are together projected to lift AI-related capital expenditure by 60–74% year-over-year in 2026, with independent estimates placing the five-company infrastructure spending range near \$660–690 billion. That spending flows almost immediately into supplier revenue - chipmakers, foundries, memory producers, networking and power-equipment firms - creating a self-reinforcing chain in which today's capex line becomes tomorrow's earnings beat for a different company in the value chain.

The scale shows up clearly at the industry level. IDC now forecasts global semiconductor revenue will surge past \$1 trillion in 2026, reaching an estimated \$1.29 trillion, up 52.8% from 2025. Within that total, DRAM revenue is expected to nearly triple on high-bandwidth memory demand, while data-center semiconductors alone are projected to approach \$477 billion. Deloitte's independent estimate is more conservative in dollar terms (near \$975 billion) but agrees on direction: growth accelerating to roughly 26% for the year, with AI chips generating close to half of industry revenue.

The Valuation Question: Expensive by What Measure?

The sector's forward price-to-earnings ratio stood at roughly 28.3x as of late May 2026 - modestly above the S&P 500's overall forward multiple of about 20.1–20.4x, itself running above its ten-year average near 19.0x. On a standalone basis, a technology sector trading near 28x forward earnings invites comparisons to the dotcom bubble. Those comparisons largely fail on closer inspection. J.P. Morgan Asset & Wealth Management's 2026 market outlook estimates that tech valuations today sit at roughly half the peak levels reached in 2000, and that PEG ratios - price-to-earnings divided by expected growth — for the sector run in a 1x-to-3x range currently, versus 4x-to-8x at the dotcom peak. Today's higher multiple is being paid for materially higher and more durable earnings growth, not simply extrapolated hope.

The more useful comparison may not be tech versus its own history, but tech versus the rest of the market. The same analysis notes that technology capital spending, as a share of GDP, has now moved past dotcom-era levels - and that this capex has been a primary engine of the broader economy: technology-related spending is estimated to have contributed 40–45% of U.S. GDP growth over the past several quarters, up from under 5% in the first three quarters of 2023. A basket of roughly 42 S&P 500 stocks tied directly to the AI buildout - spanning chipmakers, hyperscalers, and power and capital-equipment suppliers - has generated an estimated 65–75% of the index's earnings, profit, and capital-spending growth since generative AI entered the mainstream in late 2022. Viewed that way, the sector's premium multiple looks less like speculative excess and more like a market correctly identifying where growth is actually being produced - with the caveat that concentration risk rises correspondingly.

Earnings Are (Mostly) Keeping Pace

Multiple expansion means little without earnings delivery, and on that front the sector's second-quarter setup looks constructive. Aggregated bottom-up estimates show Information Technology's net profit margin for Q2 2026 running near 30.7%, up from 25.2% a year earlier — the largest year-over-year margin improvement of any S&P 500 sector. Guidance trends echo that strength: of the S&P 500 companies that have issued positive EPS guidance for the quarter, roughly 70% sit within Information Technology, a concentration well above the sector's weight in the index. Since March 31, sell-side analysts have raised their bottom-up price targets for the sector by more than 15%, the largest upward revision of any of the eleven GICS sectors over that stretch.

Where the Debate Splits: Capex Versus Monetization

The bull and bear cases for the second half both start from the same data and reach different conclusions. Bulls point to the earnings and margin trends above as evidence that AI investment is already converting into profit, not merely promise. Bears focus on the widening gap between suppliers - chip designers, foundries, and equipment makers who can convert spending commitments into orders almost immediately - and funders, the hyperscalers whose revenue from that same spending arrives on a multi-year lag. That timing mismatch has already produced volatility: a single trading session in early June saw two major chipmakers' shares fall sharply after cautious AI-chip commentary from a bellwether supplier, combined with a deepening memory-chip cost squeeze and softening global smartphone demand - a reminder that a powerful secular trend and painful short-term drawdowns are not mutually exclusive.

Regulatory risk adds a further layer. In late June, the U.S. Commerce Department closed a third-country loophole and formally banned exports of Nvidia's newest-generation AI chips to Chinese-controlled entities, reintroducing a demand overhang in one of the industry's largest addressable markets. Separately, the January 2026 U.S.–Taiwan trade agreement - which committed \$250 billion in direct Taiwanese investment plus \$250 billion in credit guarantees toward U.S. chip capacity - illustrates how thoroughly geopolitics is now embedded in the sector's supply chain, for better and worse. At least one major brokerage has flagged possible supply-chain pressure specifically in the second half of 2026, and one prominent ETF strategist downgraded technology to a sector-underperform rating for the back half of the year despite the sector's strong first-half showing, citing concentration risk rather than fundamentals.

Risk Map for the Second Half

Three risks stand out. First, valuation compression: even without an earnings miss, a re-rating from 28x toward the sector's own history could produce a meaningful drawdown given the index-level concentration in a small number of names. Second, capex discipline: if hyperscaler spending growth decelerates faster than expected - whether from investor pressure for near-term returns or genuine capacity constraints - suppliers further down the chain would feel it first and hardest. Third, policy risk: export-control tightening, tariff actions, or an escalation in the broader technology dimension of U.S.-China relations could disrupt both revenue and supply chains with little warning, as the recent export restriction demonstrated.

Bottom Line

Technology's 2026 leadership is unusually well-supported by fundamentals relative to prior tech-led rallies: margins are expanding, earnings guidance is concentrated in the sector, and the capital-spending story is showing up in GDP data, not just corporate press releases. The sector's premium valuation is real but is not, on the available evidence, dotcom-scale excess - it reflects a market pricing durable, high-margin growth at multiples closer to historical norms than headlines suggest. The more relevant risk for investors is less “is tech expensive” and more “is tech's growth this concentrated” - a small number of AI-exposed names are doing an outsized share of the sector's, and the market's, heavy lifting, which raises the cost of being wrong about any one of them.

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