LPL Financial

Beyond the Numbers

Are Margins Still Mean Reverting?

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Executive Summary

Profit margins have historically been cyclical, but the recent performance of corporate America (measured using the S&P 500 index) has many investors questioning whether this rule still stands. Structural changes in the composition of the index, and the higher margin profile that results from that change, suggest that a higher baseline margin is justified. However, we argue that some portions of current and future profit margins are either cyclical or temporary, yet are being capitalized as permanent in current analyst forecasts. In this month's *Beyond the Numbers,* we analyze the historical trajectory of S&P 500 margins, estimate how much of the recent margin expansion is structural vs. cyclical/temporary, and show our work with several industry case studies.

Key Takeaways

- **Margins are still mean-reverting, but the mean has moved.** The S&P 500's shift toward technology and high-incremental-margin business models justifies a structurally higher baseline operating margin than the pre-2010 average, so a full reversion is unlikely absent a major change in index composition.
- **Only part of the S&P 500's margin expansion since 2019 looks structural.** Using the 2016–2019 average as a baseline, we attribute roughly one third to index composition, with the remaining uplift largely due to cyclical forces, deferred expense recognition, and inflationary pricing. Thus, most of the uplift remains subject to gravity.
- **The largest driver of margin expansion is cyclical.** Semiconductors and semiconductor equipment now make up nearly a fifth of the S&P 500 and have driven roughly half of index margin expansion since 2019.
- **Consensus is capitalizing forever "up and to the right" margins.** Bottom-up estimates call for record margins in 2026 and rising sharply through 2028. Investors should decompose margins into structural, cyclical, and deferred components, since only the structural piece deserves a premium multiple.

Margins are Mean-Reverting. Right?

For decades, operating margins (earnings before interest and taxes, or EBIT, divided by sales) behaved like a cyclical series. When margins rose well above trend, the forces of competition, input costs, capacity additions, and customer pushback eventually compressed profitability. That historical behavior made margin mean reversion one of the more reliable intuitive judgement for equity market analysis. As Jeremy Grantham, investor and co-founder of asset manager GMO, famously said, *"Profit margins are probably the most mean-reverting series in finance, and if profit margins do not mean-revert, then something has gone badly wrong with capitalism."*

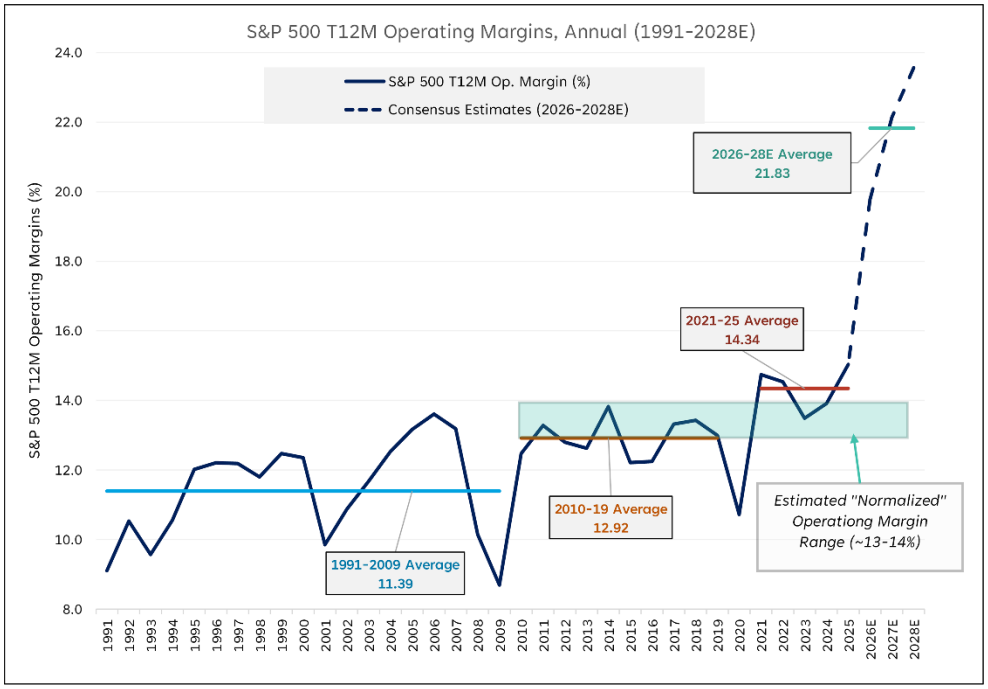
This has been a less reliable rule since the Global Financial Crisis (GFC), as S&P 500 operating margins did not revert to their historical average, but remained remarkably steady in what appeared to be a stepped-up new range from 2010 to 2019. The post-COVID-19 period has seen yet another step-change higher, and recent figures show an upward trend rather than a range. The current trailing-twelve-month operating margin is approximately 16.5%, above the calendar 2025 record of 15%, which surpassed the 2021 prior record of 14.7%, a level which several strategists thought to be a secular peak. Forward-looking bottom up estimates sourced from Bloomberg suggest calendar year records will continue to be made in 2026 (19.8%), 2027 (22.1%), and 2028 (23.6%). While these out-year estimates may ultimately prove too optimistic and likely reflect "adjusted" rather than GAAP figures, analysts are

clearly not anticipating a reversion to long-term or more recent averages. To put it mildly, when analyzing a simple historical chart ("Historical and Consensus Forecasts: S&P 500 Operating Margins"), current and forecasted margins appear stretched.

However, the simple chart glosses over the fact that the index has structurally changed over time. The S&P 500 has migrated away from capital-intensive cyclical businesses and toward companies with predictable recurring revenue and high incremental margins. Software, payments, cloud platforms, and digital advertising businesses do not have the same margin structure as the old index.

So, has something gone badly wrong with capitalism? Or, does the mean-reversion argument need to be refined? We lean toward the latter and therefore do not expect today's S&P 500 operating margin to revert all the way back to the pre-2010 average without a significant change in the composition of the S&P 500. Therefore, a higher structural baseline is justified. The risk is that investors mistake a higher baseline for a permanently rising one.

Historical and Consensus Forecasts: S&P 500 Operating Margins



Source: LPL Research, Bloomberg 09/15/26
All indexes are unmanaged and cannot be invested in directly. Past performance is no guarantee of future results. Estimates may not realize as predicted and are subject to change.

Technology Sector Mix: Is Intellectual Capital Still Capital-Light?

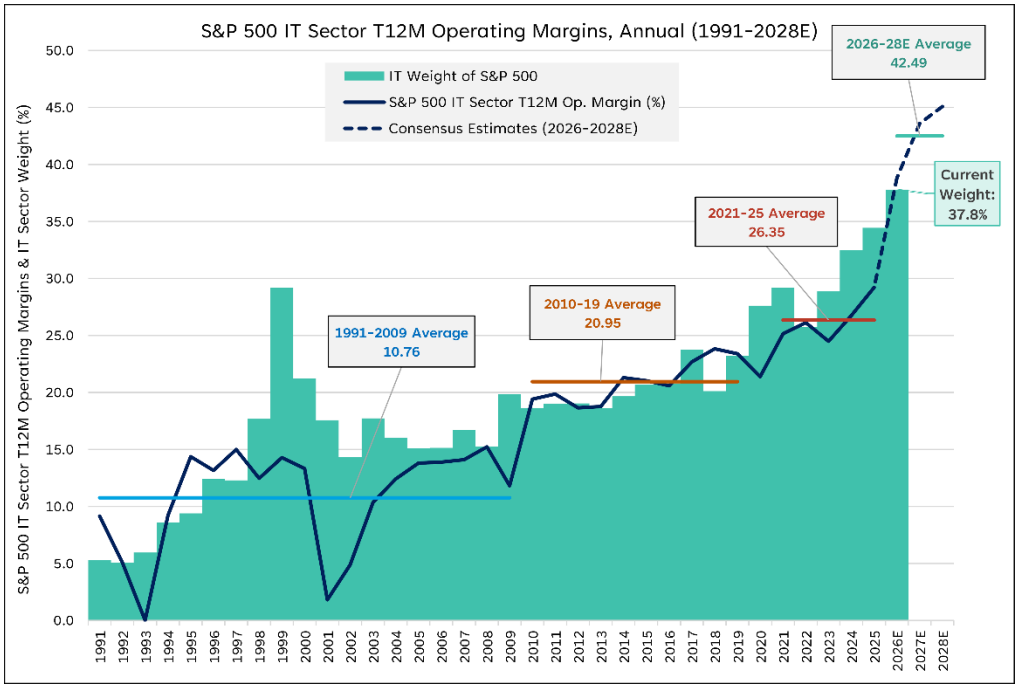
The biggest reason margins have defied historical gravity is the rising weight of the information technology (IT) sector and technology-adjacent businesses. IT now represents roughly 37% of the S&P 500. Add Google parent company Alphabet Inc. (GOOG/L) and Facebook parent Meta Platforms (META) within communication services, plus Amazon.com (AMZN) within consumer discretionary, and the technology-linked index's weighting is even larger than the formal GICS sector classification suggests at ~48%.

Technology companies have historically had fundamentally lean business economics. A scaled software or platform business can add revenue without adding proportional headcount, physical capacity, or working capital. The AI

investment cycle complicates the story, however, as it is much more capital-intensive and "asset-heavy" than the sector's typical research & development focused expenditure. Thus, the largest technology companies are increasingly combining software-like revenue models with industrial-scale capital intensity. This leads investors to wonder if the physical capital that is required to fuel the sector's "next big thing" growth bet will make index level margins less durable.

Bulls argue that the return on investment will be great enough to drive incremental shareholder value. We're not so sure, as it's never quite that simple. History is littered with successful executives committing ever more capital into exciting and innovative business opportunities, with only subpar returns to show for it. Time will tell if "this time is different". What we do know is that many of the underlying businesses that drove index level margins to new heights have fundamentally changed.

IT Sector Margins and Index Weight



Source: LPL Research, Bloomberg 08/25/26
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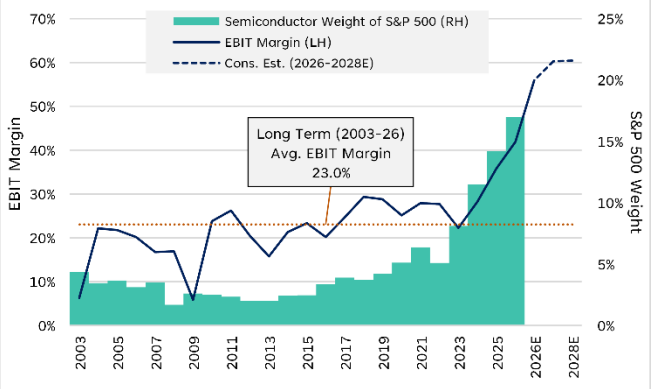
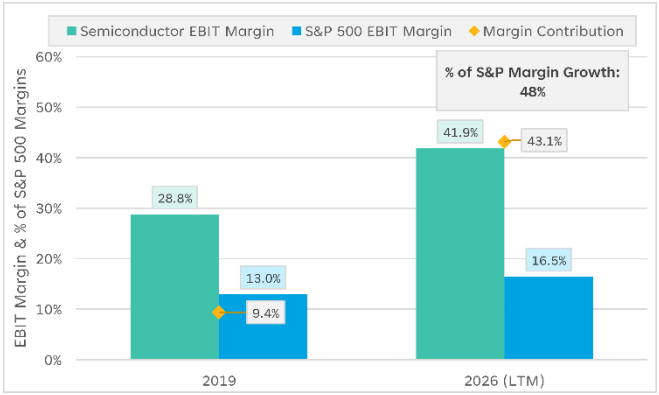
The "IT Sector Margins and Index Weight" chart tells the story of the two impacts the IT sector has had on the market writ large. The first impact, sector mix, is structural and argues against operating margins mean-reverting to the pre-2010 average. Simply put, higher-margin technology businesses have become a larger share of the economy and the index. The second impact is the intra-sector effect of technology margins themselves being at record levels as many of the largest companies are undergoing a capital-intensive business transformation. It's in this second impact where cyclicality is hiding in plain sight. We'll dig deeper into these intra-sector effects later.

Beyond the shift in the capital intensity of previously "asset-light" IT platform and software businesses, we also highlight the massive influence the semiconductor industry now has on S&P 500 operating margins as further evidence that investors should not capitalize current margins into perpetuity. The semiconductor industry has long been the cyclical corner of the tech sector, with booms and busts that produce a very different through-cycle

earnings trajectory than subscription-based "software-as-a-service" (SaaS) businesses. As the primary beneficiary of the AI investment boom, led by top S&P 500 weight NVIDIA (NVDA), the semiconductor and semiconductor equipment industry group now makes up ~45% of the technology sector, and ~17% of the entire S&P 500. If the IT GICS sector were broken up into its three GICS industry groups, semiconductors would be the largest sector in the broad market index. Additionally, the industry has seen margins expand to record highs in the current cycle, by our estimates, driving nearly half of the index level margin expansion from 2019. The left panel in "Semiconductor margins at all-time highs and have driven ~48% of S&P 500 margin expansion" charts the historical margin trajectory of the semiconductor industry group against its weight in the S&P 500, and the right panel plots our estimates of margin contribution. **To summarize: The now largest industry group that has driven nearly half of S&P 500 margin expansion since 2019 is a cyclical industry with a history of capital cycle booms and busts.**

Semiconductor Margins at All-Time Highs and Have Driven ~48% of S&P 500 Margin Expansion





Sources: LPL Research, Bloomberg, Company Reports, 9/14/26
Semiconductor index = S&P 500 Semiconductors and Semiconductor Equipment Industry Group GICS 2 Index
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Three Sources Driving Excess Margins

Today's record S&P 500 operating margins, when compared to a post-GFC/pre-COVID baseline, reflect the structural index composition effect previously outlined, plus three overlapping forces that we argue remain subject to the laws of gravity and are likely to reverse. We make a best-effort estimate of each factor below and plot their contributions in "Estimated Sources of S&P 500 Margin Growth Since the 2016-2019 Average." However, we note these are rough estimates of a *normalized* margin level, and therefore we are not making an estimate on the timing of the reversion in temporary drivers of margin growth. This analysis is illustrative of our view of a *normalized* operating margin and is not part of LPL Research's index EPS estimates.

For this analysis, we use the 2016–2019 average S&P 500 index level operating margin of 13.0% as our baseline level and decompose the incremental contributions to the current trailing 12-month operating margin of 16.5%, a total margin expansion of ~3.5%.

First, the structural effect. We have already described the impact of the index's composition and its heavier weight to higher margin tech businesses. Here, we make an estimate of how much of that structural impact persists in a current normalized operating margin range. We estimate ~1% of the ~3.5% margin uplift is attributable to this structural index composition effect. We conservatively derive this estimate by taking the difference in the average tech sector index margin from 2021 to current and the average margin from 2016 to 2019, normalized by the higher average sector weighting in the broad index.

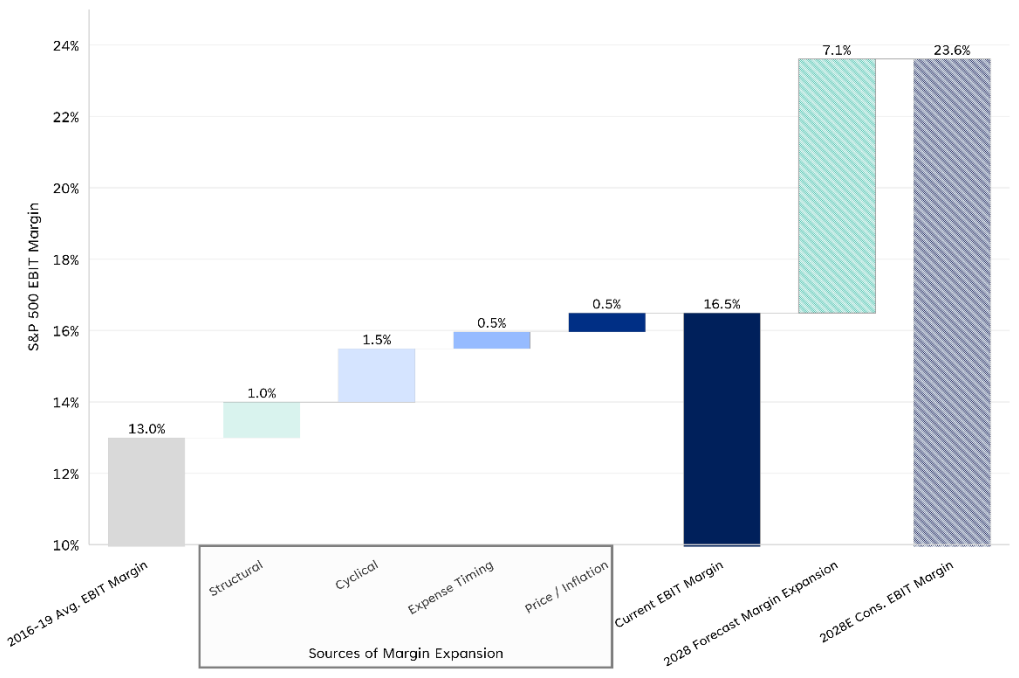
Second, the cyclical effect. This is primarily driven by the AI trade, as discussed with the semiconductor industry's cyclicality and record margins. We discuss the AI trade further in our case studies, using bottom up fundamentals

from a focused basket of businesses in the hyperscaler and semiconductor industry. This effect is admittedly the most opaque, and hardest to quantify. Given the record margin contribution driven by scarcity economics in the semiconductor industry, alongside those same scarcity economics driving data center capacity additions from the hyperscalers, we are comfortable applying the lessons from capital cycle theory in our 1.5% margin contribution assumption. Further, when we think about contributors driving forward margin estimates, should they come to pass, we would place most of that potential ~7% expansion from current levels to 2028 into this cyclical bucket.

Third, a temporary, accounting-based impact. The hyperscalers' cash capital expenditures have not yet fully reflected on income statements where GAAP EBIT margins are derived, due to the delayed recognition of depreciation expenses and leases. Simply put, hyperscaler capital spending is running far ahead of current accounting expense recognition. Typically, cash investment/accounting recognition mismatches such as this are localized in corners of the economy and not worth considering at a broad index level. However, the size and scale of this investment cycle merit an estimate of the impact. To do this, we simply calculate the margin impact of using the group's historical average capex / depreciation ratio against the current level of annualized capex. We then apply this implied uptick in margin based on expense recognition timing to the ~3.5% uptick in index-level operating margin. This works out to ~0.5% contribution, which we believe is fair, given the AI investment cycle's beneficiaries large overall contribution to index-level margins.

Finally, inflationary price-led revenue growth. In the years following the pandemic and inflation shock, many companies were able to raise prices faster than unit volumes declined. This created a margin scenario where revenue rose, gross profit margins expanded, and operating costs were absorbed across a larger nominal sales base. The risk is that price-led revenue can look like durable operating leverage when it is really a temporary pricing umbrella. As inflation normalizes and consumers become more value-conscious, volume and mix will matter more. This final margin expansion bucket serves as our plug to get from our baseline estimate to the current margin level, and therefore represents a 0.5% contribution to margin expansion. We dig into a few case studies across industries, including the cautionary case of airlines where pricing led revenue growth has failed to cover rising input costs, leading to declining operating margins.

Estimated Sources of S&P 500 Margin Growth Since 2016–2019 Average



Source: LPL Research, Bloomberg, 09/15/26
Past performance is no guarantee of future results.

Unpacking Margins Across Select Industries

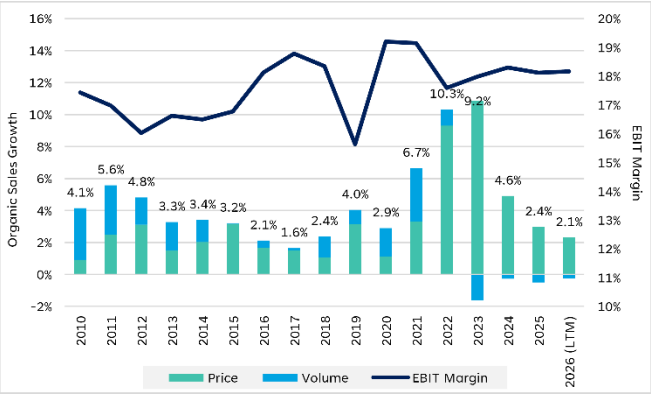
To stress-test whether today's elevated S&P 500 GAAP EBIT margins are structural or cyclical, we look across four industry case studies that each highlight a different margin mechanism. Consumer staples show how inflation-era pricing protected profitability even as volume softened, raising the question of whether margins can hold as the pricing lever fades. Airlines provide the opposite lesson. Commodity producers (oil & gas producers and miners) illustrate the capital cycle. Finally, the AI-exposed cohort (hyperscalers and semiconductors) captures the largest and most important current margin debate. Taken together, these case studies suggest that the margin story is multi-faceted. Part of today's uplift is structural, part is cyclical, and part is simply a timing mismatch between investment and expense recognition.

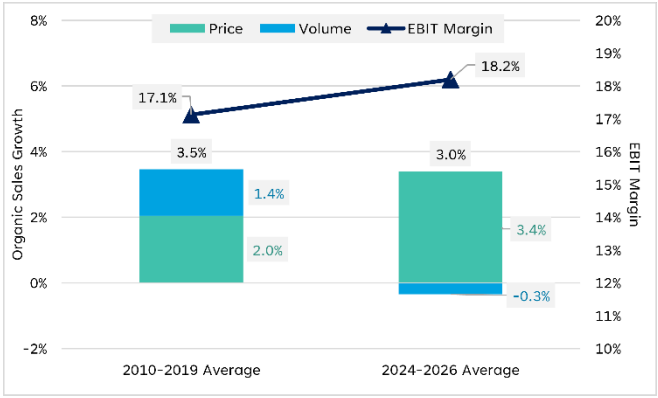
Consumer Packaged Goods (CPG / Consumer Staples)

Consumer packaged goods businesses in the consumer staples sector provide a clean case study in margin quality because the group's organic growth can be separated into price and volume. From 2010–2019, our CPG cohort generated average annual organic growth of 3.5%, with a reasonably balanced contribution from price (+2.0%) and volume (+1.4%), while GAAP EBIT margins averaged 17.1%. The post-pandemic period looks very different. Pricing became the dominant growth driver as companies pushed through inflation-related increases, with price contributing +9.3% in 2022 and +10.9% in 2023, while volume turned negative in 2023 at -1.6%. That pricing power helped protect profitability through the cost shock, and margins have remained elevated: from 2024 through the 2026 last twelve months (LTM) period, GAAP EBIT margins averaged 18.2%, about 110 basis points above the 2010–2019 average. The concern is that the composition of growth has weakened. Organic growth averaged only 3.0% from 2024–2026 LTM, below the pre-pandemic average, while volume remained slightly negative at -0.3% despite price contribution moderating to +3.4%. In other words, the sector is earning higher margins than it did pre-pandemic, but on slower organic growth and negative unit demand. That does not argue for an imminent margin

break, but it does suggest the current margin plateau is more fragile than it appears. **Put simply, CPG margins have not reverted because price did the work volume used to do**.

CPG Businesses Have Maintained Margins on Back of Price, Not Volume Growth



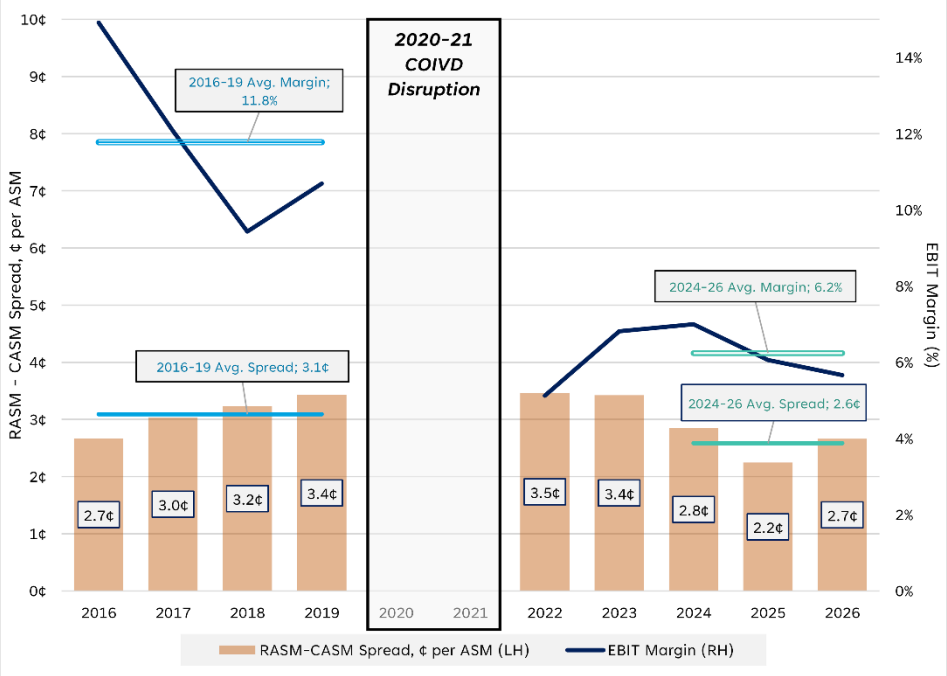


Sources: LPL Research, Bloomberg, Company Reports, 9/14/26
CPG (Consumer Packaged Goods) cohort consists of Coca-Cola (KO), PepsiCo (PEP), Proctor & Gamble (PG), Colgate-Palmolive (CL), Church & Dwight (CHD), Kimberly-Clark (KMB), General Mills (GIS), and Mondelez International (MDLZ)
Past performance is no guarantee of future results.

Airlines

Airlines are not directly accretive to S&P 500 operating margin growth in the current cycle. As a group, which we define as the big four domestic operators, Delta (DAL), United (UAL), American (AAL), and Southwest (LUV), operating margins have declined meaningfully from pre-pandemic levels. But that is precisely why they are a useful case study. The price-volume framework is similar to staples, even though the industry vocabulary is different. The key margin bridge is the spread between revenue per available seat miles (RASM) and operating costs per available seat miles (CASM) ex-fuel, which strips out the most volatile cost input and isolates the underlying non-fuel unit economics. On that basis, the post-pandemic recovery looks less healthy than the revenue data alone would suggest. From 2015–2019, the airline cohort generated average GAAP EBIT margins of 12.8%, with RASM of 13.7 cents and CASM ex-fuel of 10.6 cents, implying a 3.1-cent non-fuel unit spread. From 2023 through the current LTM period, RASM improved to 16.7 cents, up roughly 22%. But CASM ex-fuel rose even faster, to 13.9 cents, up roughly 31%, compressing the RASM less CASM ex-fuel spread to 2.8 cents. EBIT margins averaged only 6.4% over that period, roughly half the pre-pandemic average. Importantly, utilization was largely unchanged, so the margin compression was not a utilization problem, but a unit economics problem. Unlike staples, where pricing more than protected margins through the inflation shock, airlines saw higher nominal fares absorbed by structural cost inflation in labor, maintenance, airport costs, and other non-fuel expenses. In a business that sells a product that can't be sold again (once a half full plane has flown, the revenue and expenses are booked) and a hard utilization ceiling, pricing power must exceed cost inflation to expand margins, and in the current cycle, it has not. **The takeaway is that relying on price alone can only go so far.**

Airlines Have Leaned on Pricing, but Have Not Been Able To Offset Rising Costs



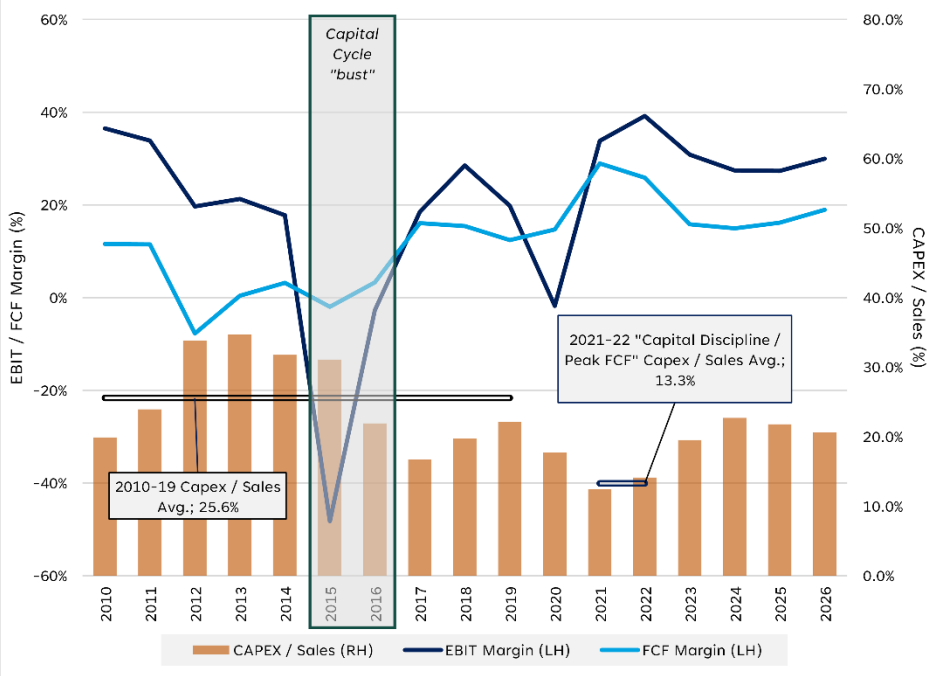
Source: LPL Research, Company Filings, Bloomberg 09/15/26
Airline cohort consists of AAL, DAL, LUV, UAL.
Past performance is no guarantee of future results.

Commodity Producers (E&Ps, Miners)

Commodity producers are the clearest example of why margin mean reversion remains relevant, even in a market where index-level margins may deserve a higher structural baseline. Our E&P and miner cohort is currently generating a GAAP EBIT margin of 30.0% on an LTM basis, well above the full-cycle average and far removed from the 2015–2016 bust, when margins fell to -48.2% in 2015 and -2.7% in 2016. The current profitability is partially the product of a prior capital starvation cycle. After the last overinvestment period, when capex/sales reached 33.8% in 2012, 34.7% in 2013, and 31.8% in 2014, the industry was forced into a multi-year retrenchment. By 2021–2022, capex/sales had fallen to just 12.5% and 14.1%, respectively, while free cash flow (FCF) margins surged to 28.9% in 2021 and 25.8% in 2022. In other words, the group's post-bust margin growth was a price story *and* a capital discipline story. However, we know elevated returns tend to attract incremental capital, and eventually all management teams face the same prisoner's dilemma.

For the S&P 500, this is not the dominant source of record margins as commodity producers represent only about 11% of the EBIT-weighted contribution, but it is one of the more obviously cyclical pieces. Put simply, commodity producers have not yet repeated the last capex mistake, but the conditions that usually lead to that mistake (high margins, strong FCF, and investor confidence in "new discipline") are increasingly in place.

Commodity Producer (E&Ps, Miners) Margins May Soon Attract Supply Additions



Source: LPL Research, Company Filings, Bloomberg 09/15/26
Past performance is no guarantee of future results.
Commodity producer cohort includes APA Corp (APA), ConocoPhillips (COP), Devon Energy (DVN), EOG Resources (EOG), EQT Corp (EQT), Expand Energy (EXE), Diamondback Energy (FANG), Occidental Petroleum (OXY), BHP Group (BHP), Freeport-McMoRan (FCX), Newmont (NEM), Rio Tinto (RIO).

The AI Trade (Hyperscalers, Semiconductors)

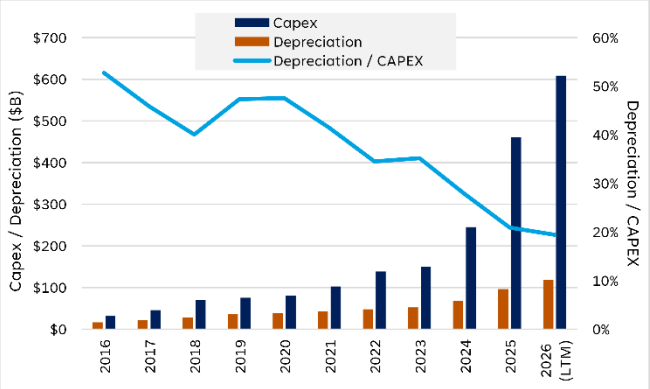
The AI trade is the most important margin story in the market, and it is also the most two-sided. For the hyperscalers, the bull case is that AI demand is real and growing and capital outlays will generate returns to justify the spend. The risk is timing. GAAP EBIT margins today do not yet fully reflect the future depreciation and lease expense associated with the current infrastructure build. Alphabet (GOOGL), Amazon's (AMZN) AWS Segment, Microsoft (MSFT), Meta (META), and Oracle (ORCL) purchased approximately $609 billion of property and equipment in the four quarters through June 2026, against roughly $118 billion of reported depreciation. As discussed in both the July and August issues of ***Beyond the Numbers***, the gap between these two figures is the issue at hand. Capex is an immediate cash cost, while depreciation is a gradual accounting expense. If revenue ramps ahead of depreciation, margins can hold. If revenue lags, EBIT margins face a mechanical headwind.

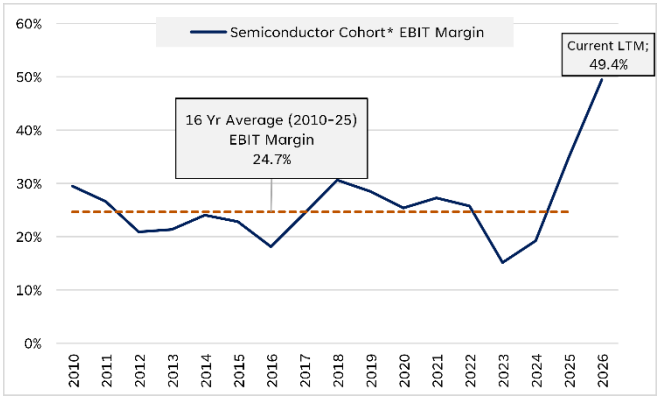
This makes GAAP EBIT an incomplete forward-looking measure. Depreciation schedules, useful-life assumptions, and leased data center commitments matter more now than they did in the last technology cycle. The market is effectively underwriting a future return on AI infrastructure before that return is fully visible in the income statement.

Semiconductors are the other side of the same AI margin coin, as previously discussed when dissecting the technology sector's impact on S&P 500 margins. The industry is experiencing scarcity economics in leading-edge chips, advanced packaging, high-bandwidth memory, and AI networking. Taiwan Semiconductor Manufacturing Corp. (TSMC, ADR Ticker: TSM) reported 2Q26 revenue of approximately $40.2 billion, up 33.7% year over year, with gross margin of 67.7% and operating margin of 44.9%. NVDA's GAAP gross and operating over the trailing four quarters are even higher, at 74.7% and 65.2% respectively. Those are extraordinary margins by any historical semiconductor standard.

But extraordinary margins attract extraordinary capital. Semiconductor equipment sales are expected to rise sharply in 2026, and the supply response is already underway across leading-edge capacity, packaging, and memory. AI may extend the cycle, but it does not repeal semiconductor cyclicality. The historical pattern remains: tight supply drives pricing and utilization; pricing and utilization drive margins; margins attract capex; capex eventually normalizes supply and compresses returns.

Hyperscaler Capex Not (Yet) Flowing Into Earnings, and Semiconductor Margins at Record Levels





Sources: LPL Research, Bloomberg, Company Reports, 9/15/26
Hyperscaler cohort consists of GOOGL, MSFT, META, ORCL, and the AWS segment of AMZN
Semiconductor cohort consists of NVDA, Broadcom (AVGO), Advanced Micro Devices (AMD), Intel (INTC), Micron (MU), Texas Instruments (TXN), Analog Devices (ADI), Marvell Technology (MRVL), and QUALCOMM (QCOM)
Past performance is no guarantee of future results.

Conclusion

If we were to summarize everything in one sentence, it would be that *margins are still mean-reverting, but the mean has moved*. The S&P 500 has earned a higher structural operating margin than it did in prior cycles because the index is more technology-heavy, more intangible-heavy, and more exposed to businesses with high incremental margins. A simple return to the old operating margin average would require either a major shift in index composition or a major deterioration in the profitability of the largest technology platforms.

But accepting a higher structural baseline is not the same as accepting today's record margins as permanent. Several current margin supports look cyclical or timing-dependent. Price-led revenue in the consumer and industrial sectors may fade as volume matters more. Commodity producers are experiencing strong margins after prior "bust"-led downcycles led to years of underinvestment, and the cycle will eventually attract capital yet again. Semiconductor and AI infrastructure margins reflect scarcity conditions that are already attracting new supply. Hyperscaler GAAP EBIT margins have not yet absorbed the full depreciation and lease burden of the current AI capex cycle.

The right framework for investors is not "margins must revert" versus "margins have permanently broken higher." It is to decompose the margin level into structural, cyclical, and deferred components. The structural component earns a higher multiple, the cyclical component does not, and the deferred component requires scrutiny.

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Because of their narrow focus, sector investing will be subject to greater volatility than investing more broadly across many sectors and companies.

Beta Measures a portfolio's volatility relative to its benchmark. A Beta greater than 1 suggests the portfolio has historically been more volatile than its benchmark. A Beta less than 1 suggest the portfolio has historically been less volatile than its benchmark.

The PE ratio (price-to-earnings ratio) is a measure of the price paid for a share relative to the annual net income or profit earned by the firm per share. It is a financial ratio used for valuation: a higher PE ratio means that investors are paying more for each unit of net income, so the stock is more expensive compared to one with lower PE ratio.

Earnings per share (EPS) is the portion of a company's profit allocated to each outstanding share of common stock. EPS serves as an indicator of a company's profitability. Earnings per share is generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio.

All index data from Bloomberg.

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