AMZN gideon lens

Amazon.com, Inc. (AMZN) — Production ER2 / Gideon-Lens Equity Research

Report date: 2026-08-30 **Report ID:** AMZN-ER2-20260830-pulse-cio-20260830T060148+0800 **Price anchor:** USD 266.43 per XNAS:AMZN common share, last completed close on 2026-08-28 **Financial anchor:** TTM ended 2026-06-30; Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026 **Exact return horizon:** 2026-06-30 to 2031-06-30, exactly 5.0 calendar years **Research authority:** research only; no trade, ranking, sizing, portfolio-mutation, or message authority

What changed from the previous report and why

Previous report: LEGACY-AMZN-20260701; 2026-07-01; `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\raw\pulse-cio-20260830T060148+0800\prior_active_snapshot\AMZN_gideon_lens.md`; SHA-256 `90a94878a5e4971c4d9d77e3d0c82880a633247a5caba320127a53e1e90135fe` **Current report:** AMZN-ER2-20260830-pulse-cio-20260830T060148+0800; 2026-08-30; price anchor USD 266.43 as of 2026-08-28

Area	Previous report	Current report	What changed and why	Decision impact
Price anchor	USD 238.34 on 2026-07-01	USD 266.43 on 2026-08-28	Price rose 11.79%	A stronger earnings model must clear a meaningfully higher entry price
ER2 verdict and gates	PASS; Management YELLOW; Moat PASS; valuation FAIL	PASS; Management YELLOW; Moat/2046 PASS; valuation FAIL	Operating evidence improved, but the capital-allocation proof burden and price gate remain	Formal verdict remains PASS
TTM+5 valuation bridge	2031-03-31 Base revenue USD 1,202.171B; OI USD 173.001B; EPS USD 12.11	2031-06-30 Base revenue USD 1,326.879B; OI USD 208.937B; EPS USD 14.106726	Q2 FY2026 and AWS acceleration lift Base revenue 10.37%, OI 20.77%, and EPS about 16.49% versus the prior model	P/E-15 cushion improves from -23.8% to -20.58%, but still fails
Insurer retained economics / book bridge	n/a	n/a	Amazon is not a P&C insurer or balance-sheet-led financial business	No effect
Shareholder returns	Mandatory scenario IRRs were not published in the legacy package	Gross USD -10.19% / 8.19% / 20.41%; probability-weighted 7.98%	Current VP independently locks one P/E method, 20x/28x/34x exits, zero distributions, and explicit dilution	Base and weighted returns are inadequate despite Bull upside
CIO actionability	Zero current size; no governed PSH displacement test	PASS; net-SGD -12.16% / 7.60% / 21.61%; weighted 7.80%; no sizing ceiling	Current portfolio evidence shows PSH is 19.2% of NAV and already supplies about 1.9% AMZN look-through	Direct AMZN neither clears 10% nor beats PSH's 15% governed Base return
Audited scores	56/100; 56/80; 0/20	61/100; 58/80; 3/20	Better operating evidence raises quality and return credit, while the audit removes governance and price-perfection credit	Still below dream-investment and 20% underwriting thresholds
Methodology or corrections	Reported earnings and a legacy valuation package without current mandatory return fields	Anthropic-related marks excluded; normalized current EPS USD 6.854077; weighted wealth CAGR used; Red Team MATERIAL_RESOLVED	The current package distinguishes reported from comparable normalized earnings and forbids raw P/E or net-cash double counting	Higher integrity, unchanged no-direct-position decision

Bottom line: Amazon's company fundamentals improved more than the stock's price increase would suggest: AWS accelerated, the combined Base operating-income model rose more than 20% from the prior report, and the P/E-15 deficit narrowed. The security still does not earn a direct position. Base and probability-weighted net-SGD returns are only 7.60% and 7.80%, below the 10% mandate hurdle and far below PSH's governed 15% Base return. The portfolio already receives about 1.9% AMZN look-through through PSH, so direct ownership would duplicate exposure without proving displacement value. The economic conclusion remains PASS; the current methodology makes that conclusion more complete and auditable.

VERDICT BLOCK

Verdict: PASS

Scorecard:

Gate	Result	Notes
Management	YELLOW	Strong operating reset; USD 220B capex returns remain unproven
Moat	PASS	AWS and commerce flywheels pass the 2046 durability test
P/E <= 15 on confident EPS at TTM + 5 calendar years	FAIL	Base EPS implies USD 211.60; cushion is -20.58%
Compounder Score	Audited 61 / 100	Reject under the diagnostic rubric; not dream-investment evidence
Business Quality Score	Audited 58 / 80	Promising but capped by FCF, dilution, governance, and capex proof
20% Return UW Score	Audited 3 / 20	Only Bull clears 20%; current price fails the stretch test

One-line thesis (or reason to pass): Amazon owns durable AWS and commerce profit pools, but USD 266.43 capitalizes too much of a still-unproven USD 220B investment cycle, leaving Base and probability-weighted net-SGD returns below 8% and below the existing PSH exposure's central return.

Security return underwriting (mandatory even when the verdict is PASS):

Measure	Result	Notes
Primary valuation method	P/E	One audited method for every scenario, probability weighting, reverse return, and net-SGD
Gross local-currency bear / base / bull IRR	-10.19% / 8.19% / 20.41%	Five-year annualized shareholder return in USD
Probability-weighted gross local-currency IRR	7.98%	CAGR of 25% / 55% / 20% probability-weighted terminal wealth
Return bridge	USD 266.43 -> USD 155.692900 / 394.988328 / 674.492238	Terminal EPS x independently locked 20x / 28x / 34x P/E; zero distributions; no second cash/debt adjustment

The current normalized denominator is USD 6.854077 of TTM diluted EPS and the comparable normalized P/E is 38.8718x. The reported USD 12.443923 EPS and 21.4105x raw P/E are not comparable because TTM net income includes USD 81.754B of non-operating income dominated by Anthropic fair-value marks. VP selected every exit multiple before any return was calculated and did not use the distorted raw multiple as a cap. Current balance-sheet context is shown, not added to P/E equity value: cash USD 78.213B, marketable securities USD 44.775B, gross debt including leases USD 223.232B, lease liabilities USD 94.338B, and net debt less cash and securities USD 100.244B.

Bear-case operating and return bridge

Bear case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	USD 775.680B	USD 1,077.302B	6.79%	AWS slows, retail growth moderates, and International stays low-margin
Operating margin	12.08%	11.71%	-0.37 pp	AWS falls to 30%; North America 6.5%; International 1.75%
Operating earnings	USD 93.712B	USD 126.119B	6.12%	Segment revenue x exact Operating income margins
Diluted share count	10,871.250M	11,233.709M	0.66% CAGR	Five years of gross SBC-equivalent issuance; no buyback credit
EPS	USD 6.854077 normalized	USD 7.784645	2.58%	Zero recurring other income; 24% tax; adverse net interest
Valuation	38.8718x normalized	20x	-18.8718x	Durable franchise value retained despite capital and growth stress

Bear case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Share value	USD 266.43	USD 155.692900	-41.56% total	USD 7.784645 EPS x 20x P/E
Annual dividend	USD 0.00	USD 0.00	Unchanged	No current dividend and no sourced forward distribution
Dividend yield	0.00%	0.00%	0.00 pp	Zero-distribution diagnostic
Five-year dividends	-	USD 0.00	cumulative	No distribution or reinvestment credit
Total ending value	USD 266.43	USD 155.692900	-10.19% gross USD IRR	Terminal share value plus zero distributions

Base-case operating and return bridge

Base case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	USD 775.680B	USD 1,326.879B	11.33%	AWS sustains a 20.31% segment CAGR while stores compound at scale
Operating margin	12.08%	15.75%	+3.67 pp	AWS 36%; North America 9%; International 4.5%
Operating earnings	USD 93.712B	USD 208.937B	17.39%	Independently reviewed segment Operating income sums with no plug
Diluted share count	10,871.250M	11,233.709M	0.66% CAGR	Explicit SBC dilution and zero unsupported repurchases
EPS	USD 6.854077 normalized	USD 14.106726	15.53%	Zero recurring other income; 22% tax; USD 5B net interest expense
Valuation	38.8718x normalized	28x	-10.8718x	Quality-platform multiple discounted for scale and capital intensity
Share value	USD 266.43	USD 394.988328	+48.25% total	USD 14.106726 EPS x 28x P/E
Annual dividend	USD 0.00	USD 0.00	Unchanged	No source-bound distribution path
Dividend yield	0.00%	0.00%	0.00 pp	Zero-distribution diagnostic
Five-year dividends	-	USD 0.00	cumulative	No dividend or buyback-yield support
Total ending value	USD 266.43	USD 394.988328	8.19% gross USD IRR	Terminal share value plus zero distributions

Bull-case operating and return bridge

Bull case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Revenue	USD 775.680B	USD 1,549.689B	14.85%	AWS capacity converts rapidly and commerce/ads retain strong growth
Operating margin	12.08%	18.07%	+5.99 pp	AWS 39%; North America 10.5%; International 6%
Operating earnings	USD 93.712B	USD 280.068B	24.48%	High-margin AWS mix and stores operating leverage both deliver
Diluted share count	10,871.250M	11,233.709M	0.66% CAGR	Same conservative gross-dilution path in every scenario
EPS	USD 6.854077 normalized	USD 19.838007	23.68%	Zero recurring other income; 20% tax; lower financing burden
Valuation	38.8718x normalized	34x	-4.8718x	Premium execution outcome, still below current normalized P/E
Share value	USD 266.43	USD 674.492238	+153.16% total	USD 19.838007 EPS x 34x P/E

Bull case	Start (2026-06-30)	Horizon (2031-06-30)	CAGR / change	Justification
Annual dividend	USD 0.00	USD 0.00	Unchanged	No distribution assumed even in Bull
Dividend yield	0.00%	0.00%	0.00 pp	Zero-distribution diagnostic
Five-year dividends	-	USD 0.00	cumulative	Bull receives no unsupported cash-return help
Total ending value	USD 266.43	USD 674.492238	20.41% gross USD IRR	Terminal share value plus zero distributions

Probability-weighted terminal shareholder wealth is `25% x USD 155.692900 + 55% x USD 394.988328 + 20% x USD 674.492238 = USD 391.065253`. The 7.98% result is `(391.065253 / 266.43)^(1/5) - 1`, not the arithmetic average of the three scenario IRRs.

CIO actionability (separate from ER2 underwriting):

Measure	Result	Notes
Status	PASS	Base return is below 8%; direct exposure does not displace PSH
Bear / Base / Bull net SGD IRR	-12.16% / 7.60% / 21.61%	Same P/E terminal values after 0.20% entry/exit costs and FX
Probability-weighted net SGD IRR	7.80%	CAGR of 25% / 55% / 20% weighted terminal SGD wealth
10% mandate hurdle	FAIL	Both Base and probability-weighted cases are below 10%
15% stretch hurdle	FAIL	Central cases fail; only the 20%-probability Bull clears
Downside and portfolio fit	FAIL	Bear loses 12.16% annualized; PSH already supplies about 1.9% AMZN look-through
Proposed sizing ceiling	none	Research conclusion only; no direct position or PSH displacement supported

Net-SGD uses an entry USD/SGD rate of 1.28, 0.20% entry cost, 0.20% exit cost, and terminal USD/SGD rates of 1.15 / 1.25 / 1.35 for Bear / Base / Bull. Starting cost is SGD 341.7124608 per share. Net terminal wealth is SGD 178.68874133 / 492.74793918 / 908.7433922574, and probability-weighted net terminal wealth is SGD 497.43223033298. Amazon has no modeled distributions, so U.S. dividend withholding has zero impact. The same P/E method and terminal equity values control gross and net-SGD; FX and costs are the only overlay.

Trade execution authorized: NO

Kill / trigger criteria:

- Valuation gate trigger: Base EPS x 15 equals USD 211.60. Below that price the valuation gate turns positive, but the ER2 remains WATCH rather than BUY while Management stays YELLOW.
- Capital-cycle failure: after 2026–2027 capacity enters service, AWS normalized margin below 30% and revenue growth below 20% for two consecutive quarters forces a thesis downgrade.
- Stores failure: North America Operating income margin below 7% while revenue growth is below 8% for two consecutive quarters shows the scale-to-margin thesis is breaking.
- Cash-conversion failure: TTM free cash flow remains negative through two more reporting cycles while cash capex remains above 20% of revenue, without a source-bound capacity-to-revenue bridge.
- Upgrade to BUY conditions: Management must earn PASS through visible FCF recovery, bounded debt/dilution, and capex return evidence; Base EPS must clear the 15x entry price with room; and direct AMZN net-SGD return must exceed both 10% and the displacement value of existing PSH exposure.

Research sizing if actionable: none. Current research does not support direct sizing, and no worker has ranking or sizing authority.

Executive underwriting judgment. The business is stronger than the formal PASS might suggest. TTM AWS generated USD 54.681B of Operating income, 58.4% of consolidated Operating income, and its reviewed Base model reaches USD

374.061B of revenue and USD 134.662B of Operating income by 2031-06-30. North America combines marketplace, advertising, subscription, logistics, and retail economics that can support a 9% Base margin, while International's 4.5% Base margin assumes only partial convergence. The moat review therefore passes: customers can still plausibly pay Amazon in 2046 for enterprise cloud control planes, merchant demand and fulfillment, and physical distribution.

The management gate does not pass because strategy and shareholder economics have diverged temporarily. TTM capex was USD 173.028B against USD 161.403B of operating cash flow, producing negative USD 11.625B of free cash flow. Management expects approximately USD 220B of 2026 cash capex, mostly for AI and AWS. Backlog of USD 496B and accelerating AWS growth are real evidence of demand, but they do not prove utilization, pricing, depreciation economics, or per-share return. Debt issuance, gross SBC dilution, no TTM repurchases, no dividend, time-based incentives without ROIC/FCF hurdles, and founder-related governance justify YELLOW.

The price failure is independent of the management concern. The Synthesis passed 11/11 tie-outs and the valuation preflight cleared 5/5 foundations. Base EPS of USD 14.106726 is not enough: at the framework's entry test of 15x it supports USD 211.60, 20.58% below USD 266.43. Separately, the expected-return method uses an independently justified 28x Base exit rather than a fixed 15x. Even that more franchise-aware exit produces only 8.19% gross USD and 7.60% net-SGD. A high exit multiple is not enough to rescue an expensive starting price when dilution and the capital cycle absorb part of the operating improvement.

The Red Team's two-sided challenge strengthens this conclusion. A supportable 25x Base sensitivity lowers terminal wealth to about USD 352.67 and Base gross IRR to 5.77%. A 24x Bear sensitivity raises Bear gross IRR only to about -6.85%. Globalstar's maximum all-stock equivalent would change Base IRR by only about -0.08 percentage point. These are meaningful sensitivities, but none exposes a method, denominator, dilution, double-count, or probability-weighting defect, and none changes direct-position actionability. The final return-model objection status is MATERIAL_RESOLVED.

The portfolio question is decisive rather than incidental. PSH is already 19.2% of NAV, carries a governed 15% Base expected return, and supplies approximately 1.9% AMZN look-through. Direct AMZN would be justified only if it offered enough incremental return or risk improvement to displace part of that exposure. It does not: AMZN's Base and weighted net-SGD returns are 7.60% and 7.80%. Its Bear is less severe than PSH's governed -20% Bear, but the lower central return and duplicated company exposure make that downside improvement insufficient. The truthful research conclusion is no direct position, no PSH displacement, and no sizing ceiling.

Personal research, not investment advice.

Appendix A - Company Primer

Amazon.com, Inc. (AMZN) — Institutional Company Primer

Run ID: `pulse-cio-20260830T060148+0800` **Information cutoff:** 2026-08-30 06:01:48 SGT **Latest reported period:** Q2 FY2026 ended 2026-06-30 **TTM convention:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026 **Five-year horizon for the ER2:** 2031-06-30 **Authority:** Research only; `trade_execution_authorized=false`

Reader orientation: what Amazon actually is

Amazon is best understood not as one business but as a common technology, logistics, demand, and identity layer supporting several distinct economic engines. The consumer-facing store is the largest revenue engine. Third-party seller services turn the store and fulfillment network into a marketplace and logistics platform. Prime uses bundled shipping and digital benefits to increase purchase frequency and loyalty. Advertising monetizes high-intent shopping traffic. AWS sells on-demand technology infrastructure and software services to developers, enterprises, governments, and other institutions. Physical stores, devices, media, healthcare, and communications initiatives broaden the customer relationship but are not separately reported operating segments.

That combination matters because revenue and profit are distributed very differently. In FY2025, AWS generated only 18.0% of consolidated revenue but 57.0% of reported operating income. North America produced most revenue and a meaningful but much lower margin; International was profitable, but only modestly so. In the TTM ended June 2026, AWS represented 19.1% of revenue and 58.4% of operating income. The investment case therefore cannot be reduced to “retail growth”: it turns on AWS demand and capital efficiency, retail network productivity, the growth of marketplace and advertising services, and management’s willingness to fund large fixed-cost bets.

The accounting also requires care. Amazon reports three geographic/economic segments—North America, International, and AWS—but reports product revenue in seven categories. The retail product categories cannot be cleanly allocated between North America and International from public product data. Segment operating income is additive to consolidated operating income, but product categories do not have disclosed profit. The figures in this primer come only from the independently reviewed quantitative foundation, whose SHA-256 is `c77d49812c699b49c9b4d60623ccdd1b721ab7dc15fc40eb3c6b3776ed4d0577` and whose reconciliation cleared 8/8 checks. Qualitative descriptions and risk framing are grounded in live-fetched Amazon SEC filings.

1. Business overview

Consumers

Consumers buy physical goods, digital content, devices, groceries, and services through Amazon websites, mobile applications, voice interfaces, streaming services, and physical stores. Amazon’s retail proposition is selection, low prices, convenience, dependable service, and increasingly fast delivery. Orders may be sold by Amazon as principal, sold by a third party through Amazon’s marketplace, fulfilled by Amazon on behalf of that seller, delivered digitally, or collected from a physical location. Prime bundles delivery benefits with video, music, live sports, and other benefits; its strategic function is broader than subscription revenue because it can raise engagement and purchase frequency across the store. Amazon describes these channels and customer benefits in its [2025 Form 10-K, Item 1](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm).

Sellers, vendors, and brands

Vendors sell inventory wholesale to Amazon; Amazon takes title, records the customer sale gross, and bears inventory, markdown, return, and working-capital risk. Third-party sellers retain ownership of their inventory and use Amazon as a marketplace. Amazon is not the seller of record in those transactions and earns commissions, per-unit or fixed fees, fulfillment and shipping fees, and other service revenue. Sellers may self-fulfill or use Fulfillment by Amazon (FBA), which stores inventory and handles picking, packing, delivery, returns, and customer service. Brands and sellers can then purchase sponsored placements and other advertising to improve discovery. The combination is a tightly linked flywheel: more sellers expand selection, more selection attracts consumers, more traffic raises seller value, and more transactions create advertising and fulfillment demand.

Developers and enterprises

AWS serves start-ups, large enterprises, government agencies, academic institutions, and developers. Customers provision compute, storage, databases, analytics, artificial intelligence and machine learning, security, and other technology services on demand. The purchasing motion ranges from self-service, usage-based consumption to larger enterprise relationships and committed use. AWS substitutes for customers owning and operating some of their own data-center infrastructure, while also enabling new workloads that would be difficult to deploy internally. Its value proposition is breadth of services, rapid provisioning, global infrastructure, reliability, security, and the ability to scale capacity with demand rather than build all capacity in-house. Amazon's formal service description appears in [Item 1 of the 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm).

Advertisers and content creators

Advertisers include marketplace sellers, retail vendors, publishers, authors, and other brands. They buy sponsored search, display, and video formats. Amazon's differentiated asset is not merely audience size: shoppers often arrive with measurable commercial intent, and the platform can connect ad exposure to product discovery and purchase behavior. Content creators—authors, musicians, filmmakers, streamers, and application developers—use Amazon to publish, distribute, and monetize content. Their output also supports Prime engagement, devices, advertising inventory, and consumer retention.

How the pieces fit

Amazon's shared assets create scope economies. A single consumer identity and Prime membership connect shopping, video, music, devices, and payments. The marketplace contributes product breadth without requiring Amazon to own every unit of inventory. FBA increases control over delivery quality while adding service revenue. Advertising monetizes traffic and transaction data at limited incremental fulfillment cost. AWS commercializes technology and infrastructure capabilities at enterprise scale. The trade-off is complexity: the group must simultaneously manage retail inventory, millions of seller interactions, delivery capacity, content commitments, data centers, semiconductors, regulated services, and a large workforce.

2. Revenue architecture

Reportable segments — FY2025 (FY-1)

FY2025 is the latest completed fiscal year and therefore the primer's FY-1 reference period. All financial figures and calculations in this section are sourced to the [sealed quantitative foundation](C:/Users/Admin/OneDrive/GPT/ER%202.0/Amazon/quant_foundation.md).

Segment	FY2025 revenue (USD m)	Share of total	Operating income (USD m)	Operating margin
North America	426,305	59.5%	29,619	6.95%
International	161,894	22.6%	4,750	2.93%
AWS	128,725	18.0%	45,606	35.43%
Consolidated	716,924	100.0%	79,975	11.16%

North America. This segment includes retail sales of consumer products, including sales by third-party sellers, plus advertising and subscription services through North America-focused online and physical stores. It also includes exports from those stores. Economically, it mixes low-margin first-party merchandise with higher-margin marketplace, advertising, and subscription revenue. Reported segment margin is therefore a blended outcome affected by category mix, delivery speed, fulfillment density, advertising growth, wage and transportation costs, and the pace of network investment.

International. International includes retail sales, seller activity, advertising, and subscriptions through internationally focused online stores. It is structurally similar to North America but operates across markets with different consumer habits, logistics density, purchasing power, regulations, currencies, and competitive intensity. Newer countries may require years of fulfillment, selection, brand, and Prime investment before reaching attractive utilization. The segment's move from losses in 2021–2023 to profit in 2024–2025 demonstrates operating leverage, but its FY2025 margin remained far below North America's.

AWS. AWS consists of global sales of compute, storage, database, analytics, AI/ML, and other technology services. Revenue is principally service consumption rather than merchandise value. The model carries substantial up-front infrastructure cost but can produce high incremental profit when utilization, pricing, workload mix, and customer growth absorb fixed data-center, server, networking, power, and engineering expense. AWS is the group's principal reported profit pool.

Product and service revenue — FY2025

Product categories cut across the geographic retail segments. They are useful for understanding monetization but should not be synthetically mapped to North America or International.

Product/service line	FY2025 revenue (USD m)	Share of total	Economic interpretation
Online stores	269,287	37.6%	First-party and other online retail product revenue recorded gross
Third-party seller services	172,162	24.0%	Commissions, fulfillment/shipping, and related seller fees
AWS	128,725	18.0%	Cloud infrastructure and platform services
Advertising services	68,635	9.6%	Sponsored ads, display, video, and related placements
Subscription services	49,619	6.9%	Prime and non-AWS digital subscriptions
Physical stores	22,561	3.1%	Purchases physically selected in stores
Other services	5,935	0.8%	Residual disclosed service revenue
Consolidated	716,924	100.0%	Sum of the seven current categories

The revenue mix reveals an important accounting distinction. A first-party item sold for $100 may contribute roughly $100 of revenue because Amazon is principal. A marketplace item with the same consumer selling price contributes only Amazon's commission and related service fees to revenue because the seller remains principal. Consequently, migration toward third-party volume can depress reported revenue per unit while improving capital efficiency and potentially margin. Gross merchandise value is not disclosed in the quantitative foundation, so revenue growth alone cannot separate unit growth, selling-price changes, or the first-party/third-party mix.

3. Unit economics

Amazon does not disclose gross margin or operating profit by product category, and segment cost of revenue is not separately disclosed. The unit-economics discussion must therefore be a causal map rather than false precision.

Engine	Revenue basis	Main variable costs	Main fixed/capacity costs	Primary profit levers
First-party retail	Gross merchandise sale	Product cost, inbound/outbound shipping, payment fees, returns	Fulfillment sites, sortation, delivery, software, stores	Procurement, inventory turns, route density, automation, mix
Marketplace/FBA	Commission and service fees	Payment processing, handling, delivery, customer service	Fulfillment and delivery capacity, seller tools, trust/safety	Seller adoption, service attach, density, fee/mix discipline
Advertising	Clicks, impressions, video/display delivery	Traffic acquisition, sales support, content delivery	Ad technology, measurement, data infrastructure	Ad load, relevance, auction density, off-site reach
Subscriptions/Prime	Membership and content access fees	Delivery usage, licensed/produced content, digital delivery	Content platform and shared network	Retention, engagement, benefit cost, cross-shopping lift
AWS	Usage and contracted cloud services	Electricity, support, some workload-related infrastructure	Data centers, chips/servers, networking, engineering	Utilization, scale, service mix, price/performance, AI demand

Retail and marketplace

First-party retail begins with the merchandise purchase price and adds inbound freight, warehousing, pick/pack, outbound transportation, payment processing, returns, customer service, and shrink. Amazon intentionally returns some efficiency to customers through low prices and faster delivery, so network productivity is more important than headline gross margin. Regionalized inventory, better demand forecasting, automation, fuller delivery routes, fewer split shipments, and faster inventory turns can lower unit cost. Conversely, low-density geographies, oversize items, long shipping zones, wage inflation, fuel, tariffs, and excess capacity can rapidly compress profit.

Marketplace economics differ because Amazon does not fund the seller's inventory. The company collects a commission and may add storage, fulfillment, shipping, and advertising fees. FBA makes the seller relationship stickier and improves consistency of the consumer experience, but it also consumes real warehouse and transport capacity. Payment processing costs are related to the gross transaction value even though Amazon recognizes only its fee revenue, which means marketplace service revenue can carry a cost relationship that is not obvious from reported net revenue.

Working capital is a core advantage when execution is sound. Consumers generally pay at or near purchase, while Amazon pays vendors and sellers later. Rapid inventory turnover and growing third-party activity can therefore fund operations. The advantage reverses when inventory is overbuilt, demand slows, payment timing shifts, or the first quarter unwinds holiday accounts payable.

Advertising and subscriptions

Advertising should carry structurally attractive incremental economics because the shopping traffic, customer identity, transaction signals, and product catalog already exist. The key constraints are relevance, consumer experience, regulatory limits on data use, advertiser return on spend, and competition for brand budgets. Advertising also supports retail margins indirectly: seller demand for visibility can monetize marketplace competition without Amazon owning more inventory.

Prime is best evaluated as a system-level retention mechanism, not a stand-alone media service. Subscription fees are visible revenue, but Prime's full economic effect includes higher purchase frequency, delivery utilization, content spending, and loyalty. A member who shops more often raises retail, marketplace, and advertising opportunity, but fast "free" delivery and premium content have real costs. The relevant unit is lifetime contribution across the ecosystem, which Amazon does not separately disclose.

AWS

AWS combines software-like recurring consumption with utility-like infrastructure. Data centers, power commitments, networking, servers, custom silicon, and engineering require heavy investment before demand is fully realized. Once installed capacity is utilized, incremental workloads can produce high contribution margins; when capacity runs ahead of demand, depreciation and operating costs depress returns. Product mix also matters: higher-level database, analytics, security, and AI services can deepen customer dependence and value, while basic compute and storage face more transparent price/performance competition.

FY2025 AWS operating margin was 35.43%, versus 6.95% for North America and 2.93% for International. For the TTM ended June 2026, segment revenue was $453.7 billion / $173.6 billion / $148.4 billion for North America / International / AWS, while operating income was $33.7 billion / $5.4 billion / $54.7 billion. AWS therefore supplied 58.4% of consolidated operating income. Small changes in AWS growth, utilization, depreciation, or price discipline can materially change consolidated earnings.

4. Competitive landscape

Amazon competes on multiple fronts at once. Its 2025 Form 10-K identifies physical, e-commerce, and omnichannel retail; media; search and product discovery; e-commerce enablement; logistics; information technology and cloud services; devices; grocery; advertising; and healthcare as competitive arenas. It identifies retail selection, price, and convenience—including fast, reliable fulfillment—as principal retail factors, and quality, speed, reliability, and willingness to change business practices as important for seller and enterprise services ([2025 Form 10-K, "Competition"](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm)).

Arena	Representative alternatives	Amazon advantage	Vulnerability
General retail	Walmart, Costco, Target, Alibaba/JD, local retailers, direct brands	Selection, Prime, delivery density, trusted transaction layer	Aggressive pricing, local strength, low switching costs
Marketplace enablement	Shopify ecosystem, eBay, social commerce, merchant sites	Consumer demand, FBA, payments, ads, conversion data	Seller fee pressure, channel conflict, regulation
Cloud/AI infrastructure	Microsoft Azure, Google Cloud, Oracle, private/on-premises IT	Breadth, installed base, partner ecosystem, global scale	AI capex, price/performance, multi-cloud, power/chip supply
Digital advertising	Google, Meta, TikTok, retailer media networks	High-intent commerce data and closed-loop measurement	Ad load, privacy rules, traffic shifts, advertiser ROI
Logistics	UPS, FedEx, DHL, postal systems, merchant networks	Integrated fulfillment and last mile, route density	Labor, fuel, asset intensity, service failures
Subscriptions/media	Walmart+, Netflix, Disney, Apple, YouTube and others	Bundled commerce and entertainment benefits	Content cost, fragmented attention, bundle complexity

Amazon's moat is the interaction among assets rather than an unassailable position in any one category. Consumers can comparison-shop with minimal effort. Sellers can list on multiple marketplaces or build direct channels. Enterprises can pursue multi-cloud architectures. Advertisers can redirect budgets quickly. The defense is continuous reinvestment: better selection and fulfillment improve consumer utility; demand attracts sellers; seller competition and traffic support ads; cash and

engineering scale support infrastructure. That same reinvestment need prevents the moat from being costless.

5. Customer and value-chain map

Participant	Gives Amazon	Receives from Amazon	Key dependency/conflict
Consumer/Prime member	Purchase spend, subscription fees, engagement	Selection, price, delivery, media, convenience	Trust, service quality, privacy, value of bundle
First-party vendor	Inventory, trade terms, product data	Distribution, demand, merchandising, payment	Amazon bargaining power, inventory decisions, private label
Third-party seller	Commission/fees, selection, inventory risk	Marketplace demand, payments, FBA, ads, trust layer	Fees, ranking, data use, suspension, channel conflict
Advertiser/brand	Advertising spend and campaign data	Sponsored placement, reach, attribution	Return on spend, transparency, ad load
AWS customer	Usage and committed spend, workload data	Compute, storage, databases, AI/ML, tools, support	Reliability, security, switching and migration cost
Content creator/rightsholder	Content and licensing rights	Distribution, funding, audience, monetization	Economics, discoverability, rights concentration
Employee/contractor	Labor, technical expertise, operations	Compensation, training, employment	Safety, retention, organizing, automation
Landlord, carrier, utility, chip/vendor ecosystem	Sites, transport, power, hardware, inputs	Large long-duration customer	Capacity concentration, pricing, supply availability
Regulator/community	License to operate, infrastructure access	Tax base, employment, consumer protections	Antitrust, labor, privacy, land/power use

The value chain exposes several feedback loops. Seller selection improves consumer choice, but Amazon also competes as a retailer and controls discovery, fulfillment eligibility, and advertising placement. AWS customers benefit from rapid innovation but may face switching costs as they adopt proprietary managed services. Communities benefit from jobs and infrastructure but bear traffic, land, water, and energy burdens. These are not peripheral ESG questions; they influence regulation, capex timing, operating cost, and durability.

6. Capital intensity and cash conversion

Amazon’s current cash profile is dominated by infrastructure investment. The sealed foundation reports FY2025 operating cash flow of $139.5 billion, capex of $131.8 billion, and free cash flow of $7.7 billion. For the TTM ended June 2026, operating cash flow rose to $161.4 billion, but capex increased to $173.0 billion, producing negative free cash flow of $11.6 billion. The principal economic question is whether this investment creates durable, well-utilized AWS/AI and fulfillment capacity or simply raises depreciation and financing demands.

Cash-flow measure (USD m)	FY2025	TTM ended 2026-06-30	Interpretation
Operating cash flow	139,514	161,403	Strong internal cash generation before infrastructure investment
Capital expenditure	131,819	173,028	Accelerating technology and logistics capacity
Free cash flow	7,695	(11,625)	Investment currently exceeds operating cash generation
Stock compensation	19,467	19,314	Meaningful non-cash expense with dilution implications
Buybacks	0	0	No TTM offset to dilution

Liquidity is substantial but should not be viewed independently of leases and infrastructure commitments. At 2026-06-30, cash plus marketable securities was $123.0 billion, while gross debt including leases was $223.2 billion; net debt after cash and securities was $100.2 billion. Amazon’s diluted share denominator increased from 10,845 million in Q3 FY2025 to 10,903 million in Q2 FY2026. The company paid no dividends and reported no buybacks in the TTM cash-flow rows. High absolute cash balances therefore coexist with material contractual and capital claims.

Cash conversion has four important moving parts. First, retail working capital can be favorable because cash is collected before vendor and seller payments, but holiday payables typically unwind early in the following year. Second, AWS customer prepayments and commitments can support cash generation, while the physical capacity needed to serve them is built ahead of revenue. Third, stock compensation adds back to operating cash flow but transfers value through dilution. Fourth, content,

energy, leases, and infrastructure create obligations that are not captured by a single period's cash capex. The SEC filing emphasizes that fixed costs depend on capacity timing, geographic and category expansion, while variable costs include product/content, payment, fulfillment, transportation, customer service, and AWS operating costs ([2025 Form 10-K, MD&A](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm)).

7. Key risks

1. AI and cloud investment may earn subpar returns

AWS is the largest reported profit pool, while group free cash flow is negative after current capex. AI demand may be enormous, but it requires scarce chips, data-center sites, power, networking, and long lead times. If customer monetization, model economics, or utilization lag installed capacity, depreciation and operating costs can arrive before adequate revenue. Competition can also force continuous price/performance improvements that transfer a portion of scale benefits to customers.

2. Retail margins remain operationally fragile

North America and especially International operate at far lower margins than AWS. Product mix, fuel, wages, delivery promises, returns, tariffs, shrink, category expansion, and excess capacity can offset improvements in route density and automation. Faster delivery may deepen loyalty, but the economics depend on inventory placement and local order density. A modest execution problem across a very large revenue base can have a meaningful dollar impact.

3. Competition attacks each layer of the flywheel

Retailers compete on price and convenience; brands can sell direct; social and AI interfaces can shift discovery away from Amazon; cloud competitors can subsidize capacity or bundle enterprise software; advertisers can move budgets; logistics providers and merchants can build alternative fulfillment. Amazon itself states that AI can facilitate competitive entry and comparison shopping. The flywheel is powerful only while every constituent continues to see attractive value.

4. Regulation may change marketplace economics

Antitrust, competition, consumer-protection, privacy, tax, and platform rules can target seller terms, ranking, the Featured Offer, use of data, advertising, self-preferencing, Prime bundling, acquisitions, and remedies. The 2025 Form 10-K describes proceedings across the U.S., Canada, the U.K., Italy, and other jurisdictions. Remedies could affect conduct—not merely create fines—and therefore alter conversion, seller participation, advertising monetization, or fulfillment attachment ([2025 Form 10-K, Legal Proceedings and Risk Factors](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm)).

5. Seller and supply-chain concentration introduces geopolitical exposure

Amazon discloses that China-based sellers account for significant portions of third-party seller services and advertising revenue, while China-based suppliers provide significant portions of components and finished goods. Tariffs, export controls, sanctions, cybersecurity rules, shipping disruption, or seller restrictions can therefore affect selection, pricing, advertising demand, and working capital together.

6. Workforce, safety, and labor relations are strategic costs

Fulfillment and delivery require consistent staffing and safe, productive operations; AWS and AI require scarce technical talent. Wage pressure, organizing, regulation of contractors, injuries, turnover, or weak employee relations can raise cost and reduce service quality. Automation can improve unit economics but requires capital, execution, and stakeholder acceptance.

7. Reliability, cybersecurity, and trust failures can propagate

AWS outages or security incidents can affect external customers and Amazon's own services. Marketplace fraud, unsafe products, counterfeit goods, privacy breaches, biased or low-quality AI outputs, and payment failures can erode trust. Because services are interconnected, a common infrastructure or identity-layer failure can affect multiple revenue engines at once.

8. New initiatives increase scope and execution risk

Devices, content, grocery, healthcare, autonomous systems, and communications infrastructure may strengthen the ecosystem, but they also introduce unfamiliar regulation, capital needs, and competitors. Amazon warns that newer activities may not achieve adoption or recoup investment. Optionality has value only if management closes or repairs low-return

experiments rather than allowing permanent cross-subsidy.

9. Reported earnings can overstate recurring operating power

The TTM foundation reports operating income of $93.7 billion, pretax income of $175.5 billion, and net income of $135.3 billion. The $81.8 billion gap between operating and pretax income is non-operating and includes large investment valuation effects. Readers should not capitalize that uplift as though it were recurring commerce or AWS profit. The clean starting point for operating analysis is segment operating income and operating cash flow, followed by an explicit view of capex and dilution.

10. Currency, seasonality, and financing complicate comparisons

International results are exposed to foreign exchange and local economics. Retail is seasonally strongest in the fourth quarter, and the first quarter typically reverses part of the holiday working-capital build. Rapid infrastructure spending can also increase debt, leases, purchase obligations, and refinancing exposure even when headline liquidity remains large. Quarter-to-quarter free cash flow is therefore a poor stand-alone signal.

8. What to focus on in the main ER2

The primer establishes five questions for the valuation and segment work. First, can AWS sustain high growth and roughly mid-30s operating margins while absorbing the capital required for AI? Second, can North America compound profit through density and service mix without eroding consumer value? Third, is International's profitability durable across heterogeneous markets? Fourth, do advertising, marketplace, and Prime deepen the flywheel without provoking seller dissatisfaction or regulatory remedies? Fifth, what normalized free cash flow remains after a realistic level of maintenance and growth capex, stock-compensation dilution, and infrastructure commitments?

The main ER2 should preserve three controls. Product revenue is not a substitute for geographic segment revenue. Consolidated net income is currently a poor proxy for operating power because of non-operating investment gains. And a five-year forecast ending 2031-06-30 should explicitly connect revenue demand to the capital and utilization required to serve it. Amazon can create extraordinary value from scale, but its value creation is inseparable from the price and productivity of reinvestment.

Sources and evidence discipline

- **Quantitative authority:** [Amazon quantitative foundation, run `pulse-cio-20260830T060148+0800`](C:/Users/Admin/OneDrive/GPT/ER%202.0/Amazon/quant_foundation.md), sealed SHA-256 `c77d49812c699b49c9b4d60623ccdd1b721ab7dc15fc40eb3c6b3776ed4d0577`; QFR status: "QUANT FOUNDATION VERIFIED — CLEARED FOR WAVE 1."
- **Primary business, competition, cost, risk, and segment definitions:** [Amazon 2025 Form 10-K filed with the SEC](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm), live-fetched and archived for this worker at `raw/pulse-cio-20260830T060148+0800/a/sec_10k_2025_live.htm`.
- **Latest statutory and commitment context:** [Amazon Q2 FY2026 Form 10-Q filed with the SEC](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000026/amzn-20260630.htm), live-fetched and archived at `raw/pulse-cio-20260830T060148+0800/a/sec_10q_2026Q2_live.htm`.
- **Amazon IR attempt:** [Q2 FY2026 investor-relations release](https://ir.aboutamazon.com/news-release/news-release-details/2026/Amazon-com-Announces-Second-Quarter-Results/default.aspx). The direct IR page returned HTTP 403 on the initial call and identical retry; the failure is recorded in `raw/pulse-cio-20260830T060148+0800/a/source_manifest.json`. No cached IR page or warehouse file was substituted.

Appendix M - Management Assessment

Amazon.com, Inc. (AMZN) — Management Assessment

Run ID: `pulse-cio-20260830T060148+0800` **Information cutoff:** 2026-08-30 **TTM anchor:** Q3 FY2025 through Q2 FY2026, ended 2026-06-30 **Forward horizon:** 2031-06-30 **Authority:** Research only; `trade_execution_authorized=false` **Historical authority:** reviewed `data_package.md`, SHA-256 `60f02358f5a7424c6f84b29a030061faf9de0da905ea4ba8078d51a4c1af815c`

Executive assessment

Management gate: YELLOW. Andy Jassy has now owned Amazon's strategy for five years and has demonstrated that he and the operating leaders can reverse a serious cost and capacity mistake: from FY2022 to FY2025, consolidated operating income rose from $12.2B to $80.0B, North America moved from a $2.8B loss to $29.6B of profit, and International moved from a $7.7B loss to $4.8B of profit. That is not merely a favorable market cycle; it reflects fulfillment-network regionalization, headcount and layer reductions, improved delivery density, and renewed cost discipline. The evidence does not support FAIL today.

The gate cannot be PASS while the largest investment cycle in Amazon's history remains economically unproved. TTM cash capex reached $173.0B, TTM FCF was negative $11.6B, management raised its 2026 cash-capex plan from about $200B to about $220B, Amazon issued substantial multi-currency debt, and no TTM dividend or repurchase offset dilution. Demand evidence is unusually strong—AWS revenue accelerated for five consecutive quarters and backlog reached $496B—but backlog has a 6.4-year weighted life, project-level returns and customer concentration are not disclosed, and existing fixed-price commitments can absorb component inflation. The current team is investable only with explicit proof that this is productive long-cycle capacity rather than scale-seeking spend.

1. Who is running the company

Role	Leader and tenure	Relevant preparation	Assessment
President and CEO	Andy Jassy; CEO since July 2021; joined Amazon in 1997	Founded AWS, led it from inception in 2006 through July 2021	Long enough in-seat to own the reset and the AI-capex cycle
SVP and CFO	Brian Olsavsky; CFO since June 2015; joined Amazon in 2002	Former finance leader for Global Consumer; earlier roles at Fisher Scientific	Deep continuity and credible operating attribution; also co-owner of the 2022 overbuild and current funding choice
CEO, AWS	Matt Garman; since June 2024; joined Amazon in 2006	Early AWS product manager; later led compute/storage and AWS sales, marketing, and global services	Strong internal succession; current growth is excellent but his capital-cycle record is still short
CEO, Worldwide Amazon Stores	Doug Herrington; since July 2022; joined Amazon in 2005	Built Consumables; led North America Consumer; previously Webvan and KeepMedia	Direct owner of cost-to-serve, speed, grocery, marketplace, and the stores margin recovery
AWS Compute and ML Services	Dave Treadwell; effective August 2026	Long-tenured Microsoft/Amazon technology executive; replaced departing Dave Brown	A current leadership transition in the most capital-intensive AWS area; monitor execution continuity
Executive Chair	Jeff Bezos; founder, Chair since 1994, Executive Chair since July 2021	Founder and former CEO	Provides long-term orientation and owns 8.8%, but is not independent and the Board says he continues to guide management
Lead independent director	Jamie Gorelick	Chairs executive sessions, helps set agendas and can engage major shareholders	Meaningful counterweight, but weaker than an independent chair

Current roles are confirmed by Amazon's updated [S-team roster](https://www.aboutamazon.com/news/workplace/amazon-s-team-members), the [2026 proxy](https://www.sec.gov/Archives/edgar/data/1018724/000110465926041026/tm261382-1_def14a.htm), and official biographies for [Garman](https://www.aboutamazon.com/author/matt-garman), [Herrington](https://www.aboutamazon.com/news/retail/amazon-stores-ceo-doug-herrington-things-to-know), and [Olsavsky](https://press.aboutamazon.com/2014/9/amazons-chief-financial-officer-to-retire-in-summer-of-2015).

After the 2026 annual meeting, nine of eleven nominees are independent; Bezos and Jassy are the exceptions. Five nominees have served more than ten years, so the board combines expertise with a real entrenchment risk. Amazon limits

public-company executives to two public boards and other directors to three; no disclosed nominee breaches that policy. The board is annually elected, uses majority voting in uncontested elections, and Amazon has one common class with one vote per share—not a dual-class structure. These are positives. The negative is leadership architecture: Bezos remains Executive Chair, the board rejected a mandatory independent-chair proposal, and the company explicitly says his role lets him guide management. That influence is aligned by ownership but not independently chaired.

2. Tenure and operating track record

Jassy has been CEO long enough that the present portfolio and capital intensity are his. Three decisions define his record.

First, the **post-pandemic operating reset** was successful. Amazon's FY2022 operating margin fell to 2.38% and analytical ROIC to 3.7%; by FY2024 those measures were 10.75% and 15.8%, and FY2025 operating income was $80.0B. North America operating margin recovered from negative 0.9% in FY2022 to 6.95% in FY2025, while International recovered from negative 6.56% to positive 2.93%. Jassy and Herrington acknowledged excess layers and network inefficiency, cut approximately 30,000 additional corporate roles across late 2025 and early 2026, regionalized inventory, and continued automation. This was a visible correction rather than a quiet write-off.

Second, Jassy committed to **AWS and AI capacity before revenue**. AWS revenue grew from $80.1B in FY2022 to $128.7B in FY2025, while operating income nearly doubled from $22.8B to $45.6B; TTM revenue and operating income reached $148.4B and $54.7B. Current evidence is stronger still: reported AWS growth accelerated from 20.2% in Q3 FY2025 to 23.6%, 28.4%, and 36.8% over the following three quarters. Backlog rose from $200B at Q3 to $244B at Q4, $364B at Q1 FY2026, and $496B at Q2. Management says most 2027 capacity and some 2028 capacity are already reserved. That is credible evidence of demand-led investment, not proof of returns.

Third, the team combined **delivery speed, everyday essentials, advertising, and marketplace economics**. Advertising revenue increased from $31.2B in FY2021 to $68.6B in FY2025, while North America margin expanded and paid-unit growth reached 17% in Q2 FY2026. Herrington's same-day and cost-to-serve strategy is coherent: low-priced repeat purchases require density, and density lowers delivery cost. The team also admits experimentation—Fresh formats, devices, and physical-store projects have produced impairments or closures—rather than presenting every initiative as successful.

The record is not clean. Management participated in the FY2022 overbuild, FCF was negative in 2021 and 2022, and the current investment swing is larger than the corrected mistake. Amazon Leo, healthcare, grocery formats, and several devices consume capital without separate return disclosure. Jassy deserves credit for learning; he does not yet deserve a blank check.

3. Capital allocation and the $220B question

The reviewed five-year history is stark:

USD B	FY2021	FY2022	FY2023	FY2024	FY2025
Cash capex	61.053	63.645	52.729	82.999	131.819
Technology and infrastructure expense proxy	56.052	73.213	85.622	88.544	108.521
Share repurchases	0.000	6.000	0.000	0.000	0.000
Dividends	0.000	0.000	0.000	0.000	0.000
Acquisitions, net cash flow	1.985	8.316	5.839	7.082	3.841

Capex rose 150% from FY2023 to FY2025 and the latest 2026 plan is about $220B. The [2025 shareholder letter](https://www.aboutamazon.com/news/company-news/amazon-ceo-andy-jassy-2025-letter-to-shareholders) argues that the spend is backed by customer commitments and that much of the 2026 AWS capacity will monetize in 2027–2028. The Q2 call adds three useful specifics: capacity is largely reserved into 2027, the company still expects shortages in 2026–2027, and existing contract prices remain fixed while new agreements incorporate current costs. Those facts make a productive-capacity interpretation plausible.

They do not close the underwriting gap. Amazon does not disclose AWS cash capex, GPU/CPU utilization, customer concentration in the $496B backlog, cancellation or repricing provisions, project-level IRRs, or the incremental operating profit expected per dollar of capex. Q2's 39.4% AWS margin included roughly 60 basis points of favorable derivative accounting and capacity optimization; management correctly warned that margins fluctuate. The 6.4-year weighted backlog life makes timing and counterparty quality as important as headline dollars.

Funding raises the stakes. During March–June 2026 Amazon issued $37.0B of U.S.-dollar notes, €14.5B of euro notes, CHF2.8B of Swiss-franc notes, and C$14.0B of Canadian-dollar notes, followed by another $25.0B of U.S.-dollar notes after quarter-end. It also arranged a $17.5B delayed-draw term facility; $20B of revolvers were undrawn. The Q2 10-Q shows several 2026 plans under [Rule 10b5-1](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000026/amzn-20260630.htm) and the new debt instruments. Liquidity is ample, but debt-funded capacity with negative TTM FCF transfers execution risk to future shareholders.

M&A has been secondary to organic capex: five-year acquisition cash flow totaled $27.1B. The current $10.9B Globalstar agreement, including assumed debt and mixed cash/stock consideration, is strategically coherent with Amazon Leo but will not close until 2027 and has no observable return yet. The August 2026 DuckLabs agreement has no disclosed price and preserves the independent DuckDB foundation. Prior media, grocery, and healthcare deals are embedded in broader segments, preventing a clean accretion test. Management has not shown serial destructive M&A, but disclosure is insufficient to award demonstrated per-dollar value creation.

4. Compensation, ownership, and dilution

Amazon's executive program is simple but incomplete. Named executives receive low salaries, no annual cash incentive, and periodic time-vested RSUs that generally vest over five years or more and are back-end weighted. No NEO received a 2025 equity award; Jassy has received no new award since his 2021 promotion grant, more than 80% of which was scheduled to vest in 2026–2031. This creates long duration and retention, but awards have **no ROIC, FCF, revenue-quality, or relative-TSR hurdle**. Stock-price appreciation alone can reward scale, leverage, or multiple expansion.

Holder at 2026 proxy date	Beneficially owned common shares	Unvested RSUs at FY2025 end	Alignment assessment
Jeff Bezos	950,434,581 / 8.8%	0	Exceptional owner alignment, tempered by non-independent chair and related-party dealings
Andy Jassy	2,313,536 / less than 1%	1,049,680	Material real ownership plus long vesting; still no capital-return metric
Brian Olsavsky	86,097 / less than 1%	207,335	Meaningful, but less than the scale of capital decisions overseen
Matt Garman	10,293 / less than 1%	271,272	Strong retention exposure, limited seasoned ownership record as AWS CEO
Doug Herrington	528,960 / less than 1%	339,551	Strong real ownership and long-duration retention

The dilution trend is chronic but improving. Official 10-K stock-compensation expense was $12.8B, $19.6B, $24.0B, $22.0B, and $19.5B in FY2021–FY2025, equal to 2.7%, 3.8%, 4.2%, 3.5%, and 2.7% of revenue. TTM SBC was $19.3B, about 2.5% of TTM revenue. Diluted shares increased from 10.30B in FY2021 to 10.83B in FY2025 and from 10.845B in Q3 FY2025 to 10.903B in Q2 FY2026. With no TTM buyback, shareholders bear the dilution directly. Amazon's [2026 proxy](https://www.sec.gov/Archives/edgar/data/1018724/000110465926041026/tm261382-1_def14a.htm) provides a restatement-triggered clawback and prohibits executives, directors, and senior employees from speculative or hedging transactions. Those controls are good; a per-share value-creation metric would be better.

5. Disclosure quality, guidance, and candor

I reviewed the live FMP `/stable/earning-call-transcript` records for the last eight calls, Q3 FY2024 through Q2 FY2026. Reported sales finished above the prior range in seven calls and within it once. Reported operating income finished above the prior range in six calls and within it twice; Q3 FY2025 was within after a $2.5B FTC charge and severance, while the adjusted result was above the range. No observed quarter fell below either sales or operating-income guidance. This supports strong near-term forecasting discipline rather than habitual sandbagging followed by excuses.

Evidence across eight calls	Finding	Assessment
Tough capacity questions	Jassy repeatedly said AWS was supply constrained, quantified backlog, later disclosed gigawatt/capacity timing, and acknowledged shortages through 2027	Direct and useful
Margin questions	Olsavsky separates useful-life effects, special charges, derivative gains, FX, tariffs, and mix; he refuses to annualize peak AWS margin	High attribution accuracy

Evidence across eight calls	Finding	Assessment
Capital-return questions	Management cites commitments and rapid utilization but does not disclose IRR, utilization, customer concentration, or an FCF guardrail	Load-bearing omission
Cost inflation	Q2 FY2026 directly attributed the capex increase to memory/storage inflation and explained that old contracts keep agreed prices while new contracts reflect costs	Candid, but reveals margin risk
Funding	Jassy acknowledged 2026 debt issuance and said multiple funding options remain, without committing to capital-return offsets	Direct but incomplete
Voluntary metrics	Backlog, contract life, AI/chip run rates, delivery speed, paid units, seller mix, and one-off bridges exceed minimum disclosure	Better than average

A literal language scan found at least one softening phrase in **8/8 calls**, usually “early days”; only Q2 FY2025 contained an explicit refusal to give segment guidance, and Q2 FY2026 declined to quantify funding choices beyond available options. The count should not be mistaken for evasion: the same calls contain unusually concrete admissions on capacity, costs, contract pricing, and one-offs. The real disclosure weakness is structural—not tone. Investors cannot connect the $220B spend to project cohorts, contracted economics, or a defined FCF/ROIC outcome.

6. Strategic coherence

The 2025 10-K states: “We seek to be Earth's most customer-centric company.” It defines four principles—customer obsession, invention, operational excellence, and long-term thinking—and explicitly names AI-enabled competitors across commerce, cloud, search, and services. The investment pattern matches that strategy: AWS and custom silicon, fulfillment speed and robotics, grocery frequency, advertising tools, and Leo connectivity are all attempts to deepen customer utility and infrastructure advantage. This is a coherent 5–10 year destination, not a string of unrelated pivots.

The danger is internal competition for capital. AWS, frontier models, Trainium, fulfillment automation, grocery, healthcare, devices, media, and Leo can each justify investment in isolation. Without an external capital hierarchy, coherence can become a rationale for funding everything. Olsavsky's next responsibility is therefore not access to capital—it is demonstrated selection among opportunities.

7. Governance flags

The [2026 proxy](https://www.sec.gov/Archives/edgar/data/1018724/000110465926041026/tm261382-1_def14a.htm) discloses related-party dealings with Bezos-controlled entities. Since the beginning of 2025 Amazon paid about $2.2B under launch agreements, an estimated $1.8B to Blue Origin; in 2025 it also sold $12.5M of goods to Blue Origin and bought approximately $3.5M of advertising, content, and data services from Washington Post entities. Terms are described as arm's length, but Amazon has **no written related-person transaction policy** and instead relies on Audit Committee judgment. Olsavsky's daughter and son-in-law are employees with disclosed compensation described as consistent with peers. The amounts are small except the launch contract; this is a bounded but real governance weakness.

Amazon reported effective disclosure controls and internal control over financial reporting at FY2025, and EY issued unqualified opinions; no restatement or material weakness was disclosed in the reviewed current filings. Insider selling is not a thesis break: the Q2 10-Q disclosed pre-arranged plans for Garman and Olsavsky, and the live FMP Form 4 set shows vest-and-sell activity across executives rather than a synchronized exit. Bezos's sales and gifts are large in absolute dollars but small relative to his 8.8% stake. Escalation would require non-plan discretionary sales clustered across Jassy, Olsavsky, Garman, and Herrington.

8. Peer comparison

CEO / company	Capital allocation and disclosure	Relative to Jassy
Satya Nadella / Microsoft	Similar AI-capex scale, but Microsoft remained FCF positive and returned $10.2B in FY2026 Q4 through dividends and repurchases; it discloses short-lived asset mix and explicit margin expectations	Better current per-share discipline and more complete financial guardrails
Sundar Pichai / Alphabet	Guided 2026 capex to $175B–$185B, disclosed roughly 60% servers / 40% data centers and networking, and returned $8.0B in Q4 2025	Better capex composition and capital returns; Amazon is more explicit about reserved external capacity

CEO / company	Capital allocation and disclosure	Relative to Jassy
Andy Jassy / Amazon	Strongest stores reset and highly specific AWS backlog/capacity commentary, but $220B capex, negative TTM FCF, no TTM capital returns, and no ROIC/FCF pay metric	Ranks third on current per-dollar stewardship; roughly second on operational candor

Peer evidence comes from [Microsoft FY2026 Q4](https://www.microsoft.com/en-us/investor/earnings/fy-2026-q4/press-release-webcast) and [Alphabet Q4 2025](https://s206.q4cdn.com/479360582/files/doc_news/2026/Feb/04/attachments/2025q4-alphabet-earnings-release.pdf). This ranking is directional: all three are carrying unusual AI-capacity risk.

9. Management gate verdict and monitorable conditions

YELLOW — investable, but the current capital cycle is not yet proven. Jassy, Olsavsky, Garman, and Herrington have the tenure, operating skill, and candor to merit continued underwriting. The 2022–2025 margin recovery and current AWS demand evidence prevent a FAIL. The $220B plan, debt funding, negative TTM FCF, zero TTM capital returns, time-only equity incentives, and founder-related governance prevent PASS.

Upgrade to **PASS** only if all three are observable by FY2028: (1) AWS sustains at least 25% growth as 2026–2027 capacity enters service while normalized AWS margin remains at least 30%; (2) consolidated FCF turns positive by FY2027 and analytical ROIC returns to at least 15% by FY2028 without a capital-definition change; and (3) diluted share growth falls below 0.5% annually or is offset by price-sensitive repurchases, while management adds a capital-return bridge connecting capex cohorts to revenue, operating profit, and utilization.

Downgrade to **FAIL** if any two occur: AWS growth falls below 20% for two consecutive quarters after the planned capacity arrives; backlog declines more than 10% year over year or material commitments are canceled/repriced; normalized AWS margin falls below 25% for two quarters without a clearly temporary mix reason; FCF remains negative through FY2028 while debt continues to rise; or related-party dealings expand without a written independent-approval policy. Those signals would convert a bold long-cycle build into evidence of ROIC-destructive spending.

Source and archive note

Primary evidence was fetched live from SEC EDGAR, Amazon IR/About Amazon, and FMP stable endpoints. The eight transcript JSON files, 2026 DEF 14A, 2025 and 2023 Forms 10-K, Q2 FY2026 Form 10-Q, shareholder letter, current leadership pages, FMP compensation/insider files, and peer primary sources are archived under `raw/pulse-cio-20260830T060148+0800/m/`. No July appendix, prior report, or warehouse transcript cache was used.

Appendix W - Moat and 2046 Durability

Amazon.com, Inc. (AMZN) — Moat and 2046 Durability

Stage: W, Production ER2 **Evidence cutoff:** 2026-08-30 SGT **TTM anchor:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ended 2026-06-30 **Twenty-year test date:** 2046-08-30 **Reviewed forecast inputs:** North America SHA-256 `210ceba245a58028a73cfa0085465678f312efddde285830097a8adec4f49461`; International `3f39168455552972a874b508b6fc08758f8d7e0f762c084e5000470618295be9`; AWS `e836d55b57ac59a88fb8fe833251293b039d0962e23602fa404261dd34b4b570`.

Executive judgment

Moat gate: PASS — Amazon owns two unusually difficult-to-replicate systems: AWS's installed enterprise control plane and service ecosystem, and the commerce/advertising/logistics flywheel built around high-intent demand, sellers, Prime, and physical delivery density. Neither gives Amazon unlimited pricing power, and neither makes returns on the current capital cycle automatic. They do, however, protect identifiable profit pools through switching costs, procurement trust, distribution, scale economics, and mutually reinforcing participation.

2046 test: PASS — A specific, plausible 2046 Amazon still sells metered compute, data, security, managed AI and orchestration; still matches merchants and brands with consumers; still fulfills physical goods; and still monetizes purchase intent through advertising and subscriptions. Raw compute, product search, and undifferentiated retail will be more commoditized. The enduring economics should reside in enterprise production estates, data gravity, a global logistics control plane, merchant services, customer trust, and closed-loop conversion measurement. This is not a prediction that current AWS margins or current segment mix persist; it is a judgment that named customers will still pay Amazon for named services protected by accumulated systems.

Throughout this appendix, **Evidence** means an issuer filing, reviewed ER2 artifact, or cited external primary source. **Inference** means the underwriting conclusion drawn from that evidence. **Data gap** means information Amazon does not disclose and that is not estimated here.

1. Moat taxonomy applied

Network effects — strong in commerce, indirect in cloud. Evidence: third-party sellers accounted for roughly 60%–62% of worldwide paid units in the six quarters through Q2 FY2026, while consolidated Third-Party Seller Services reached $172.2B and Advertising Services reached $68.6B in FY2025. More buyers attract more sellers and selection; greater selection improves conversion; conversion attracts advertisers; fees and ads fund faster delivery, which attracts more buyers. The North America appendix also documents Walmart attacking the same marketplace/delivery/ads loop, which proves the mechanism is valuable but not exclusive. AWS has an ecosystem effect—consultants, software vendors, marketplace products, trained engineers, and integrations lower adoption friction—but it is not a pure user-to-user network effect. **Inference:** network effects are a strong defense for the commerce system and a reinforcement, not the core moat, for AWS.

Switching costs — strong in AWS, moderate elsewhere. Evidence: production AWS estates accumulate identity policies, security controls, databases, data pipelines, observability, staff skills, commercial commitments, and hundreds of service integrations. The reviewed AWS appendix records a $496B backlog with a 6.4-year weighted life. Consumers can open another shopping app almost frictionlessly, and sellers can multi-home, so retail switching costs are behavioral and operational rather than contractual. Prime, reviews, stored payment details, returns familiarity, seller tooling, fulfillment inventory, and ad-campaign history nevertheless add friction. **Data gap:** AWS does not disclose workload retention, net revenue retention, backlog customer concentration, cancellation economics, or the share of multi-cloud customers. **Inference:** switching costs protect the installed AWS profit pool better than they protect each incremental AI workload.

Scale and data economics — strong, but increasingly capital intensive. Evidence: Amazon's fulfillment footprint supports inventory placement, route density, purchasing, fraud control, and same- or next-day delivery; AWS's global infrastructure supports fleet balancing, security investment, compliance, procurement, and shared software. Amazon observes search, impression, purchase, repeat, delivery, and return events, allowing closed-loop advertising measurement. Yet AWS net property and equipment rose from $43.2B in FY2021 to $190.1B in FY2025, TTM cash capex was $173.0B, and management's latest 2026 cash-capex plan is about $220B. The Q2 2026 filing also binds part of Amazon's Anthropic relationship to AWS-chip capacity milestones and provides for up to $20B of future financing after a liquidity event, underscoring how capacity, ecosystem support, and counterparty economics can become intertwined ([Q2 2026 Form

10-Q](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000026/amzn-20260630.htm)). **Inference:** scale remains a moat, but physical scale now requires unusually high utilization and capital discipline to translate into shareholder returns.

Distribution — very strong. Amazon owns consumer traffic, Prime relationships, merchant access, an advertising surface, fulfillment and delivery nodes, and a large enterprise cloud sales/partner channel. This is harder to displace than a standalone workflow. AI agents may change the interface to product discovery, but the agent still needs reliable catalog, price, inventory, payment, fraud, fulfillment, and returns capabilities. Likewise, a model vendor can abstract infrastructure, yet production applications still require data, security, governance, databases, networking, and operations. **Inference:** distribution is the common defense connecting otherwise different segments.

Brand and trust — strong, conditional on reliability. Consumers associate Amazon with selection, delivery, easy returns, and transaction safety. Enterprises associate AWS with breadth, global availability, operational experience, and procurement viability. A major AWS outage, security failure, counterfeit-product scandal, or degradation in marketplace search quality would attack this moat directly. Amazon's own 2025 Form 10-K describes intense competition across retail, cloud, advertising, devices, logistics, and other activities and says AI facilitates entry and comparison shopping ([2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm)). Trust therefore must be re-earned; it is not a permanent brand entitlement.

Regulation — not a moat; it is an erosion vector. Amazon Marketplace and Amazon Advertising are designated core platform services under the EU Digital Markets Act ([European Commission gatekeeper portal](https://digital-markets-act.ec.europa.eu/gatekeepers-portal_en)). The FTC alleges that Amazon used interlocking practices to maintain monopoly power in online superstores and marketplace services; these remain allegations contested by Amazon, not adjudicated facts ([FTC complaint announcement](https://search.ftc.gov/news-events/news/press-releases/2023/09/ftc-sues-amazon-illegally-maintaining-monopoly-power)). Conduct remedies affecting seller data, Buy Box selection, Prime eligibility, fulfillment attachment, advertising presentation, or fee structures could reduce flywheel monetization without destroying customer demand. Regulation can create compliance scale advantages, especially in cloud and logistics, but underwriting it as protection would be dangerous.

IP and custom silicon — useful, secondary. Amazon's patents, software, automation, Graviton, Trainium, Inferentia, networking, and operational know-how lower cost and improve product design. AWS says Graviton5-based M9g instances offer generational performance and efficiency improvements ([AWS Graviton5 announcement](https://aws.amazon.com/blogs/aws/now-available-amazon-ec2-m9g-and-m9gd-instances-powered-by-new-aws-graviton5-processors/)). But Microsoft and Google are also designing silicon, and customers care about delivered price/performance and software portability, not chip ownership by itself. Custom silicon is economically differentiating only if utilization, developer tooling, and retained savings exceed design and ecosystem costs.

High-trust procurement — strong in AWS and regulated workloads. Large organizations prefer vendors with security certifications, sovereign-region options, support, financial capacity, partner coverage, and long operating histories. This narrows the field to a handful of hyperscalers. It supports renewal and cross-sell, but Azure's enterprise software distribution and Google’s AI stack ensure that high-trust procurement is shared, not monopolized.

2. Per-segment moat and forecast support

North America

The moat is the combination of customer habit, Prime, selection, the buyer-seller loop, FBA, purchase-intent advertising, and physical delivery density. It is durable over ten years and plausibly twenty because a competitor must match both the digital market and the physical service promise. Walmart is the credible system-level attacker; specialists can skim categories or advertising discovery, but few can reproduce the whole loop. The earliest break signal would be North America growth persistently below U.S. e-commerce growth while normalized margin falls below 7%, especially if worldwide shipping-cost growth continues to exceed paid-unit growth and seller/ad categories lose momentum.

The reviewed base forecast—$453.7B of TTM revenue compounding at 8.99% to $697.7B, with operating margin rising from a 7.84% known-item normalized floor to 9.0%—is **structurally supportable but execution-dependent**. Continued e-commerce penetration, faster delivery, marketplace mix, ads, subscriptions, and automation support it. The 116-basis-point margin lift is modest relative to the post-2022 recovery, but grocery, same-day delivery, wage/shipping inflation, regulation, and Walmart could consume the gains. The 10.5% bull margin requires stronger proof that services mix and route density outrun reinvestment.

International

The moat is a portfolio of country-level flywheels, not one transferable global network. In mature markets, brand, Prime, sellers, localized fulfillment, payments, returns, and ad measurement reinforce one another. In challenger markets, Mercado Libre, Shopee, Alibaba and local merchants may own better payment rails, social discovery, or logistics density. The earliest break signal would be ex-FX growth below local e-commerce peers combined with a return toward losses, or seller/Prime participation weakening after regulatory or customs changes.

The reviewed base forecast—$173.6B to $255.1B over five years with margin moving from 3.10% to 4.50%—is **structurally supportable** because it assumes gradual density and productivity, not convergence to North America's margin. The 6.0% bull margin is plausible only if mature-country mix rises and local logistics economics improve without aggressive subsidy. The 1.75% bear is consistent with a moat that preserves relevance but fails to produce strong returns across heterogeneous markets.

AWS

AWS is the strongest current profit moat. The defense is not raw compute; it is the installed production estate, data gravity, service breadth, security/identity control plane, partner ecosystem, procurement trust, global regions, and the operational risk of migration. It should remain durable for at least ten years. The twenty-year outcome depends on AWS staying near the frontier in AI infrastructure and managed services while preserving capital economics. The earliest break signal would be AWS growth below 20% after capacity constraints ease, normalized margin below 30%–33% for several quarters, or Azure/GCP sustaining materially faster growth while AWS backlog or contract quality deteriorates.

The reviewed base forecast—$148.4B to $374.1B, a 20.31% CAGR, at a 36.0% terminal margin—is the **most demanding structurally supportable assumption** in the segment set. The $496B backlog, current 36.8% growth, capacity shortages through 2027, and AI demand support the first years. The base is not protected merely by moat: rivals are funding parallel supply, inference prices can fall faster than token volume grows, and economic depreciation may exceed accounting depreciation. A 36% terminal margin is supportable only if utilization and custom-silicon savings broadly offset price competition, power/memory costs, and depreciation. The 39% bull margin requires retained efficiency gains; the 30% bear still describes a moated platform, but one whose capital economics weakened.

Blended company

The blended moat is weaker than AWS's margin suggests because North America and International produce much more revenue at lower margins and face easier customer multi-homing. Conversely, commerce supplies durable distribution, ads, logistics, and cash-generating optionality that a pure cloud vendor lacks. On TTM figures, AWS generated $54.7B of Amazon's $93.7B operating income from only $148.4B of $775.7B revenue. **Inference:** equity durability is disproportionately dependent on AWS, while consolidated revenue durability is broader. This concentration is beneficial while AWS economics hold and dangerous if AI infrastructure becomes a low-return utility.

3. Margin persistence evidence

Operating margin	FY2021	FY2022	FY2023	FY2024	FY2025	TTM ended 2026-06-30
Consolidated	5.30%	2.38%	6.41%	10.75%	11.16%	12.08%
North America	2.60%	(0.90%)	4.22%	6.44%	6.95%	7.42% reported / 7.84% known-item normalized floor
International	(0.72%)	(6.56%)	(2.02%)	2.65%	2.93%	3.10%
AWS	29.79%	28.52%	27.14%	37.03%	35.43%	36.85% reported / approximately 36.44% normalized sensitivity

The five-year record is not uniformly stable: the 2022 fulfillment overbuild and inflation exposed reverse operating leverage, while the 2023–2025 recovery demonstrates management's ability to restore density and cost control. AWS is the cleanest moat evidence because it remained highly profitable through optimization and then expanded. North America and International show scale leverage but only a short post-reset margin record. **Inference:** the margin evidence supports PASS because the protected profit pools survived real competitive and operational stress, but it does not justify extrapolating recent expansion. Ten years of consistently high consolidated margin are unavailable under the current mix; that is a confidence limit, not a fabricated history.

4. AI disruption stress test

North America and International: product discovery, recommendations, ad creation, customer service, and comparison shopping are workflows that foundation models can reproduce or re-route. AI shopping agents could move the interface away from Amazon and weaken sponsored-ad inventory. The moat therefore cannot live in the search box. It lives in catalog quality, seller supply, price/availability, payment, fraud control, reviews, fulfillment, returns, and delivery reliability. These are physical and institutional chokepoints. Amazon is most exposed in advertising/search presentation and least exposed in the fulfillment control plane.

AWS: foundation-model APIs and portable orchestration can abstract the underlying cloud, while on-device inference and customer-owned accelerators can remove some workloads. Raw compute and model serving are price-comparable. AWS is nevertheless platform-adjacent to AI: training, inference, data, databases, security, networking, observability, and agents expand infrastructure consumption. The protected portion is the production control plane and data estate; the exposed portion is undifferentiated accelerator capacity. Bedrock's model choice reduces single-model risk but can also make models easier to swap. Custom silicon improves economics only if AWS's software makes it usable and the company retains part of the efficiency gain.

Most exposed segment/economic layer: commerce advertising and discovery, because agents can alter where a purchase journey begins and compress auction inventory. **Most protected:** the combined physical logistics network and enterprise cloud control plane, because AI changes demand but cannot instantly recreate warehouses, routes, power, regions, security policies, data gravity, or regulatory procurement trust.

5. The 2046 test

Specific 2046 description: On 2046-08-30, Amazon sells metered compute and AI execution, data storage and movement, databases, security, identity, observability, orchestration, and industry-specific managed services to enterprises, governments, developers, and autonomous software agents. It operates a commerce and merchant-services network through which consumers and agents buy physical goods; brands and merchants pay for demand, fulfillment, payments, delivery, returns, and verified conversion; households pay for a membership bundle that combines logistics convenience with selected digital services. North America remains the densest commerce system. International is concentrated in countries where Amazon achieved local scale; some subscale markets have been exited or partnered. AWS remains the largest profit pool, but raw compute margins are lower and more value sits in managed data, security, orchestration, and scarce physical infrastructure. Directionally, consolidated operating margin is stable to moderately higher than today's normalized level if high-value services outgrow retail, while AWS margin may be lower than today's mid-30s if infrastructure commoditizes. Amazon still earns high returns because production estates and data are costly to move, merchants need reliable fulfillment and demand, and its networks continuously match digital intent to physical or compute capacity.

2046 bear description: AI agents bypass Amazon's consumer interface, sellers and brands provide inventory through neutral protocols, advertising auctions migrate to agent platforms, and Walmart/local ecosystems match delivery density. In cloud, models and orchestration become portable, large customers buy commoditized compute across providers, specialist infrastructure wins frontier workloads, and economic depreciation consumes reported AWS profit. Regulation separates marketplace data, ranking, ads, and logistics attachment. Amazon remains enormous, but low-margin logistics and infrastructure dominate and ROIC settles near the cost of capital.

That bear case is credible but not the modal outcome. Existing physical density, enterprise embedding, trust, capital access, service breadth, and the ability to move up the stack give Amazon time to adapt. The 2046 PASS does not require every current initiative to survive; devices, individual media formats, some physical stores, and some country operations can wither without breaking the core profit pools.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
Azure/Google and AI-stack commoditization	Application/model distribution, parallel capacity, portable workloads, rapid price/performance deflation	AWS	Growth below 20% after supply normalizes; normalized margin below 30%–33%; persistent >10-point rival growth gap	High
Walmart/local commerce ecosystems plus AI shopping agents	Shift discovery, seller traffic, ads, and last-mile frequency away from Amazon	North America / International	Below-market growth, slower seller/ad categories, shipping cost outruns units, Prime engagement weakens	High

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
Antitrust/DMA conduct remedies	Limit data combination, ranking, Buy Box/Prime/FBA attachment, ad presentation, or fees	North America / International / AWS selectively	New binding remedy; seller take-rate compression; duplicated sovereign-cloud cost	Medium-high

7. Pricing power verification

Amazon's pricing power is **ecosystem-specific, not broad**. Retail merchandise is transparent and price elastic; low prices are part of the value proposition, so margin cannot rely on item-price inflation. Prime could have bundle pricing power, but Amazon does not disclose current membership count, churn, renewal, ARPU, or adoption after a recent price increase. **Data gap:** no current price/adoption cohort supports a clean Prime elasticity claim.

Seller services and advertising show monetization power because merchants pay for access to traffic, fulfillment, and measurable conversion, and Advertising Services grew 26.2% year over year in Q2 FY2026. Auction growth is evidence of demand, not proof that Amazon can raise take rates indefinitely. Seller multi-homing, FTC allegations, DMA obligations, and rival retail-media networks cap that power. AWS can price differentiated managed services, reliability, compliance, and scarce capacity more effectively than standardized compute. Its $496B backlog shows willingness to commit, but fixed-price contracts, optimization, multi-cloud procurement, and rapid chip efficiency constrain repricing. AWS's custom silicon is primarily a cost/performance tool, not evidence of price increases.

Therefore PASS rests on retention, volume, mix, and cost advantages—not on heroic price escalation. The clearest upgrade evidence would be service-category growth and normalized margins remaining strong while sellers, advertisers, Prime members, and AWS customers retain or expand usage. The clearest downgrade evidence would be fee/ad growth sustained only by weakening seller economics, or AWS workload growth accompanied by persistent margin and ROIC erosion.

8. Gate verdict and monitorable conditions

- **Moat gate: PASS** — AWS's enterprise embedding and Amazon's commerce/logistics/ads flywheel protect identifiable profit pools. The moat is observable in AWS's sustained high margins, the post-reset stores recovery, seller participation, service-category growth, delivery density, backlog, and procurement scale. It does not depend on patents, temporary capacity scarcity, or retail item pricing alone.
- **2046 test: PASS** — The future company can be described concretely, with named buyers and services: enterprises and agents buy compute/data/security/orchestration; merchants buy demand and fulfillment; consumers buy convenience and physical delivery. Raw compute and product discovery may commoditize, but the control planes and physical network plausibly endure.
- **PASS maintenance signals:** AWS normalized margin stays at or above roughly 30%–33% while capacity enters service; North America normalized margin remains above 7% with growth near the e-commerce market; International remains profitable through a weaker cycle; seller/ad/subscription economics grow without observable participation damage.
- **Downgrade to YELLOW:** AWS growth drops below 20% after supply eases or margin compresses below 30%–33% without a temporary ramp explanation; commerce grows below the market while shipping costs outpace units; regulatory remedies materially sever ads, marketplace, Prime, and fulfillment economics.
- **Downgrade to FAIL:** AWS becomes structurally commoditized with no durable managed-service/control-plane profit, or AI/regulatory/channel shifts break the buyer-seller-ads-logistics flywheel such that protected profit pools cannot be named even though Amazon remains large.

Source and archive note

Stage W used the DR-cleared data package, primer, QF/QFR, reviewed management appendix, and all three hash-bound reviewed segment appendices. Live primary evidence was retrieved on 2026-08-30 and archived without overwrite under `raw\pulse-cio-20260830T060148+0800\w_moat`: the FY2025 Form 10-K, Q2 FY2026 Form 10-Q, AWS Graviton5 announcement, FTC Amazon case page, and European Commission DMA gatekeeper page. The Amazon IR Q2 results page was attempted and identically retried but blocked by a Cloudflare JavaScript challenge; no cache was substituted, and the SEC-filed Q2 Form 10-Q plus reviewed official-exhibit data control current facts. External competitor evidence is incorporated from the source-bound, independently reviewed segment appendices rather than re-estimated here.

Appendix B1 - North America

Amazon.com, Inc. — North America Segment Deep Dive

Run ID: `pulse-cio-20260830T060148+0800` **Information cutoff:** 2026-08-30 06:01:48 SGT **TTM anchor:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending 2026-06-30 **Forward horizon:** 2031-06-30, exactly 5.0 calendar years **Currency:** USD billions unless stated otherwise **Exact forecast metric: Operating income Scenario weights:** Bear 25%; Base 55%; Bull 20% **Authority:** Research only; `trade_execution_authorized=false`

This appendix uses only the reviewed `data_package.md` with SHA-256 `60f02358f5a7424c6f84b29a030061faf9de0da905ea4ba8078d51a4c1af815c` and `statutory_bridge.json` with SHA-256 `6df5d1b7267e335b734806cec62fcbe8f47a4a5ae831c1da5a56da7843e66c41` for Amazon historical data, management quotations, and accounting classification. The required package marker, `STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING`, is present. The July appendix and primer are not evidence. External evidence is used only for competitors and the market, and archived under `raw\pulse-cio-20260830T060148+0800\b_north_america`.

0. Segment boundary and taxonomy note

North America is Amazon's reportable segment for revenue earned through North America-focused online and physical stores and related services. The boundary has been stable over the last three years and since FY2015; no 2023–2026 filing identified a segment realignment or restatement [data_package §1, Taxonomy investigation]. The segment includes first-party retail, marketplace seller services, fulfillment and shipping fees, advertising, subscriptions, devices, grocery, and related activities according to geographic store focus. It excludes AWS, whose global cloud revenue and Operating income are reported separately.

The most important taxonomy control is negative: Amazon's seven product revenue categories cross North America and International and are not uniquely allocated between those reportable segments. Consequently, this appendix never assigns a dollar of consolidated Online Stores, Third-Party Seller Services, Advertising Services, Subscription Services, Physical Stores, or Other Services revenue to North America. The financial forecast therefore starts with the disclosed North America segment total and models that total directly. Product-category growth is used only to challenge the segment growth and margin trajectory qualitatively. This is a disclosure-constrained bottom-up model, not a synthetic product-to-geography allocation.

1. What this segment actually is

North America is a layered commerce system rather than a conventional retailer. A customer can buy inventory owned by Amazon, buy from an independent seller on Amazon's marketplace, pay for Prime, consume digital media, see sponsored or display advertising, pick up or receive groceries, and use Amazon-operated fulfillment and delivery. Those interactions can generate several distinct economics around one customer session, but Amazon reports them together when the activity belongs to its North America-focused stores operation.

The first-party model earns the gross spread between merchandise revenue and the cost of products, inbound freight, fulfillment, payments, returns, customer service, and last-mile delivery. The marketplace model is structurally different: the merchandise value belongs primarily to the seller, while Amazon records commissions and fees for fulfillment, shipping, storage, and related services. This usually carries less inventory risk and can monetize the same fulfillment and demand infrastructure more efficiently, although fulfillment remains physically intensive. Advertising monetizes high-intent shopping traffic through Sponsored Products, display, video, and other formats. Subscription services monetize recurring customer relationships, particularly Prime, while also funding benefits that reinforce purchasing frequency and retention.

Pricing is equally layered. Retail pricing is item-level and highly transparent. Marketplace pricing is set by sellers subject to Amazon's rules, while Amazon charges referral and optional fulfillment fees. Advertising is generally auction-based and its value depends on conversion data and return on advertiser spend. Prime is a recurring membership price bundled with delivery, media, and other benefits. Grocery and same-day services combine merchandise pricing with delivery economics; the attractive strategic feature is higher purchase frequency and larger, denser baskets, but cold-chain handling, spoilage, and rapid delivery can be costly before route density reaches scale.

Go-to-market is predominantly self-serve and digital. Amazon acquires and retains customers through brand recognition, Prime, breadth of selection, delivery speed, price perception, recommendations, and a familiar checkout and returns process. It acquires sellers through access to demand, logistics, advertising, and payments. It acquires advertisers by offering closed-loop evidence from impression to purchase. The segment's competitive proposition is therefore not any single product; it is the combined flywheel of selection, traffic, seller participation, fulfillment density, speed, data, and reinvestment.

2. Current economics

TTM anchor and independent four-quarter recomputation

The TTM anchor is exactly the four reviewed fiscal quarters ending 2026-06-30. Revenue is recomputed from the package's quarterly segment table. Exact quarterly Operating income is recomputed from the reviewed issuer-quarter components underlying the package's `QF_TTM_BUILD`; the values are the same sealed quarter set referenced in data_package §3a and are not newly fetched.

Quarter	North America revenue	Operating income	Operating margin	Reviewed source
Q3 FY2025	$106.267B	$4.789B	4.51%	data_package §5 segment row; §3a `QF_TTM_BUILD`
Q4 FY2025	$127.083B	$11.472B	9.03%	data_package §5 segment row; §3a `QF_TTM_BUILD`
Q1 FY2026	$104.143B	$8.267B	7.94%	data_package §5 segment row; §3a `QF_TTM_BUILD`
Q2 FY2026	$116.177B	$9.123B	7.85%	data_package §5 segment row; §3a `QF_TTM_BUILD`
TTM ended 2026-06-30	**$453.670B**	**$33.651B**	**7.42%**	Sum of four rows; data_package §3a TTM bridge

Arithmetic check: $106.267B + $127.083B + $104.143B + $116.177B = **$453.670B**. Separately, $4.789B + $11.472B + $8.267B + $9.123B = **$33.651B**. The sums agree exactly with the reviewed Stage 0 anchor and sealed statutory bridge. The exact metric is **Operating income**.

Revenue growth accelerated across the four reported quarters from 11% to 10%, 12%, and 16% year over year [data_package §5, North America rows]. That sequence is encouraging but not a sustainable five-year forecast by itself: Q2 included event timing and an unusually strong e-commerce market, while the segment already exceeds $450B of annual revenue. FY2021–FY2025 revenue compounded at about 11.1%, and FY2023–FY2025 compounded at about 9.9%. The base case therefore treats current low-double-digit momentum as the start of a gradual moderation, not as a permanent run rate.

Reported TTM Operating income margin was 7.42%, versus 6.95% in FY2025 and 6.44% in FY2024 [data_package §3, North America table]. The TTM contains both adverse and favorable unusual items. Q3 included a $2.5B FTC settlement and severance. Q4 included physical-store impairment and other special charges, but the reviewed package does not quantify the North America amount separately. Q2 included approximately $0.6B of tariff refunds. Removing only the quantified items produces a conservative known-item normalized floor of $35.551B, or 7.84% of TTM revenue: $33.651B + $2.500B - $0.600B. The unquantified Q4 charges imply underlying economics may have been higher, but no invented adjustment is added.

Capital intensity is material. North America segment assets rose from $161.255B in FY2021 to $235.652B in FY2025. Net property and equipment increased from $83.640B to $122.043B, and net additions to property and equipment rebounded to $35.919B in FY2025 from $17.529B in FY2023 [data_package §3, segment capital-intensity rows]. Those additions include non-cash finance-lease and build-to-suit activity and are not cash capex. Segment cash capex, complete invested capital, and cost of revenue are not disclosed, so a direct segment ROIC calculation would be false precision [DATA GAP: North America cash capex, complete invested capital, and full cost-of-revenue bridge are not disclosed].

The key sub-products and their North America shares are also not disclosed. Consolidated product data show that online stores, marketplace services, advertising, subscriptions, physical stores, and other services are important business drivers, but their geographic mix cannot be inferred [data_package §§4 and 10]. [DATA GAP: North America revenue share by product category, marketplace GMV, take rate, Prime membership count, ARPU, renewal, and churn are not disclosed].

3. Unit economics

North America Operating income is the net result of several opposing curves. The first curve is merchandise gross margin. First-party retail often has thin item margins and significant markdown, return, and inventory risk. Grocery and everyday essentials can increase purchase frequency and basket density but are generally lower-margin, more perishable, and more operationally demanding than discretionary categories. Tariffs and vendor negotiations can move unit gross profit quickly, which is why the Q2 tariff refund is excluded from normalized economics rather than capitalized.

The second curve is marketplace mix. A third-party unit does not require Amazon to purchase the underlying inventory. Amazon earns commissions and may earn fulfillment, storage, shipping, payments, and advertising revenue around the transaction. The reviewed package shows seller unit mix near 60%–62% of worldwide paid units over the last six quarters [data_package §5, logistics KPI table]. That ratio is worldwide rather than North America-specific, but it indicates that marketplace services remain central to the economic model. Higher seller mix can improve capital efficiency and monetization, while excessive fees, weak seller economics, counterfeit risk, or regulatory intervention can reduce participation and selection.

The third curve is fulfillment density. Warehouses, sortation centers, delivery stations, vehicles, labor, and technology create a large fixed-cost network. More orders routed through existing nodes can reduce distance, touches, and cost per package. Faster delivery can also lift conversion and frequency, creating a reinforcing loop. Management says 2025 achieved both record Prime delivery speed and lower cost to serve, and continues to invest in the network to support growth, improve speed, and lower cost [data_package §6, North America rows]. Those statements support scale leverage, but the package also shows worldwide shipping costs growing 19% year over year in Q2 FY2026 while paid units grew 17% [data_package §5, logistics KPI table]. Productivity is real, but it is not automatic or linear.

The fourth curve is advertising and subscription monetization. Sponsored Products can carry much higher incremental margins than first-party merchandise because Amazon already owns the shopping traffic and intent signal. Advertising also helps sellers find demand, increasing marketplace participation. Prime produces recurring revenue and encourages purchase frequency, though its benefits impose fulfillment and content costs. The consolidated Advertising Services line grew from $46.906B in FY2023 to $68.635B in FY2025, while Subscription Services rose from $40.209B to $49.619B [data_package §4]. These figures cannot be allocated to North America, but the growth direction supports a favorable mix overlay.

The fifth curve is reinvestment and depreciation. Same-day delivery, grocery perishables, robotics, automation, and additional fulfillment capacity can lower unit cost after density matures, but they require capital, pre-opening expense, labor training, and depreciation first. Company-wide 2026 cash capex guidance rose to approximately $220B and is predominantly AWS-related [data_package §§6 and 7], so it must not be assigned to North America. Nevertheless, North America has its own material asset and net-additions footprint. The forecast therefore credits fulfillment productivity gradually and keeps explicit offsets for quick-commerce expansion, depreciation, wage inflation, returns, and customer-service costs.

Margin can rise if seller, advertising, and subscription monetization outgrow first-party merchandise; delivery routes become denser; inventory placement improves; robotics reduce touches; and grocery creates larger baskets without proportionate delivery cost. Margin can fall if low-priced essentials and grocery dilute gross margin, delivery speed requires underutilized capacity, shipping inflation exceeds paid-unit growth, tariffs raise landed cost, competitors force price investment, regulation limits fee or ad practices, or store/device impairments recur. The five-year cases are differentiated primarily by the balance between those forces.

4. Competitive dynamics

Commerce and fulfillment

Amazon competes with Walmart and Target in first-party retail, convenience, grocery, membership, marketplace expansion, and last-mile speed. Walmart is the most important broad North American counterweight because its store base acts as distributed inventory and delivery infrastructure. Walmart reported 24% Walmart U.S. e-commerce growth in Q2 FY2027, store-fulfilled delivery growth of 40%, and marketplace net-sales growth above 50%. Its U.S. advertising business, Walmart Connect, grew 43% excluding VIZIO [Walmart Q2 FY2027 release](https://corporate.walmart.com/news/2026/08/20/walmart-releases-q2-fy27-earnings); archived as `walmart_q2_fy27_2026-08-20.html`, SHA-256 `fb191008cbd9a9a0bb8a1c6b6e234bbdd241d89a4a98b60d79924c77cac39ae5`. Those figures show that Amazon's strongest domestic rival is attacking the same flywheel: marketplace, delivery, advertising, and membership rather than retail sales alone.

Target reported 8.7% digital comparable-sales growth and more than 25% growth in same-day delivery in Q2 2026. It also disclosed a $994M tariff-refund benefit and a 9.6% reported margin that included 3.7 percentage points from those refunds, a useful competitive reminder that retail margins should be normalized for the same tariff event [Target Q2 2026 release](https://corporate.target.com/press/release/2026/08/target-corporation-reports-second-quarter-earnings); archived as `target_q2_2026_results.html`, SHA-256 `291060c431209d1cbdba5a58cd538f9b7333e89621106f6de28693f8f6c0fb3e`. Target's absolute digital scale is smaller, but its stores, curated assortment, loyalty program, and same-day capabilities contest convenience and discretionary categories.

The market remains large enough for multiple winners. The U.S. Census Bureau estimated seasonally adjusted Q2 2026 retail e-commerce sales of $340.2B, up 12.2% year over year, and representing 17.1% of total retail sales [U.S. Census Q2 2026 report](https://www.census.gov/retail/ecommerce.html); archived as `us_census_q2_2026_ecommerce.html`, SHA-256 `9713914ce5e7e81201261ddc41068fd070f0ca389347ad1974a07f6ea7e42531`. The penetration figure provides runway, while the 12.2% market growth rate also sets a demanding base rate: Amazon's 16% Q2 North America growth was above it, but Walmart's digital growth was faster. The base forecast assumes Amazon remains a share gainer only modestly, not that competitors stand still.

Specialists and social-commerce platforms compete by category, discovery mode, or seller niche. Grocery competitors can leverage local stores and cold-chain expertise. Direct-to-consumer brands and Shopify-enabled merchants can own customer relationships. eBay, Etsy-style marketplaces, off-price retailers, and vertical marketplaces compete for sellers, traffic, collectibles, fashion, and value-seeking customers. Search and social platforms compete for advertising budgets before the shopping session begins. Amazon's advantage is purchase intent and closed-loop attribution; its disadvantage is that sellers and brands may resist dependence on a platform that is simultaneously distributor, marketplace operator, logistics provider, and advertiser.

Pricing power

Pricing power is uneven. Amazon has little unilateral power over transparent commodity merchandise prices because customers can compare alternatives quickly. Its stronger pricing power lies in services surrounding transactions: Prime's bundle, seller access to traffic, fulfillment convenience, and high-conversion advertising. Even there, pricing is constrained by seller economics, regulatory scrutiny, and credible alternatives. The segment should therefore be underwritten as having ecosystem monetization power rather than conventional retail price power.

Entry barriers and substitution

The main barriers are cumulative capital, density, data, trust, selection, and habit. A new entrant can build a storefront but cannot quickly reproduce hundreds of billions of dollars of demand, a continental fulfillment footprint, seller tools, delivery reliability, payments, reviews, returns, and advertiser measurement. Walmart can challenge Amazon because it already possesses huge scale and physical proximity. Target can compete in selected occasions. No small entrant can match the whole system, but specialists can disaggregate attractive profit pools. Substitution risk is thus more likely to appear as gradual leakage of advertising, seller services, or high-margin categories than as wholesale replacement of Amazon shopping.

5. Moat at the segment level

North America's moat is strong but not absolute. The strongest element is the two-sided network between customers and sellers. More customers attract more sellers and selection; more sellers and selection attract more customers. Fulfillment by Amazon and related services deepen seller dependence while improving customer delivery promises. Advertising monetizes the resulting traffic and purchase intent, helping finance further investment. Prime reinforces frequency and reduces the perceived marginal cost of ordering.

The second moat is physical density. Regionalized inventory, fulfillment centers, sortation, delivery stations, and routing data support faster delivery and lower cost per order as volume grows. Management's claim that speed and cost improved together for three consecutive years is the right evidence to monitor [data_package §6, Q4 FY2025 North America quote]. Density is especially important for same-day perishables, where the package says baskets contain nearly three times as many items and monthly active perishables customers grew more than 50% since the start of 2026 [data_package §6, Q1 and Q2 FY2026 rows]. Those are adoption signals, not revenue disclosures, but they illustrate how grocery can reinforce frequency and route economics.

The third moat is data and measurement. Amazon observes searches, impressions, clicks, purchases, repeat behavior, delivery choices, and returns inside the same system. Sponsored Products can be priced against measurable purchase intent. Management says advertisers using Ads Agent targeting achieved 8% lower cost per impression and 6% lower cost per acquisition [data_package §6, Advertising overlay]. Those numbers are management-provided point evidence rather than audited segment KPIs, but better advertiser outcomes can support retention and bidding density.

The moat is weakened by three facts. First, Walmart has comparable physical reach and is growing digital, delivery, marketplace, and advertising quickly. Second, customers multi-home easily; opening another retail app is cheap. Third, regulation can constrain platform rules, seller fees, tying, advertising disclosures, labor practices, or acquisitions. The $2.5B Q3 FTC settlement and severance charge is a concrete reminder that regulation and organizational complexity can consume economics. Over five to ten years, the moat should protect relevance and scale, but it does not guarantee margin expansion. The bear case assumes Amazon must reinvest much of its productivity gain into price, speed, grocery, and seller economics.

6. Historical growth rates

Disclosed North America financial history

The only valid financial forecast line is the disclosed reportable-segment total. The table reproduces five years from the reviewed package. Every value cites the specific North America row; growth and CAGR are calculations from those cited values.

Product or sub-segment	FY2021 revenue	FY2022 revenue	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023–FY2025 CAGR	Most recent YoY	Data package cite
North America reportable segment total	$279.833B [§3 Revenue row]	$315.880B [§3 Revenue row]	$352.828B [§3 Revenue row]	$387.497B [§3 Revenue row]	$426.305B [§3 Revenue row]	9.9% [calculated]	16.0% [§5 Q2 FY2026 row]	data_package §3 North America; §5 segment quarterly results
Operating income	$7.271B [§3 Operating income row]	$(2.847)B [§3 Operating income row]	$14.877B [§3 Operating income row]	$24.967B [§3 Operating income row]	$29.619B [§3 Operating income row]	Not meaningful due FY2022 loss	Q2 margin 7.9% [§5 Q2 FY2026 row]	data_package §3 North America; §5 segment quarterly results

Arithmetic checks: $279.833B × 1.129 = approximately $315.880B; $315.880B × 1.117 = approximately $352.828B; $352.828B × 1.098 = approximately $387.497B; and $387.497B × 1.100 = approximately $426.305B. Each disclosed YoY relationship is within 0.1 percentage point after rounding, comfortably inside the 2% tolerance. No historical dollars were back-solved.

Consolidated category context only — not North America allocation

The following products are relevant to the stores flywheel, but the dollars span North America and International. They are reproduced only to describe business-driver momentum. They do not sum to North America, are not used as North America revenue components, and cannot be multiplied by assumed geographic shares.

Consolidated category context	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023–FY2025 CAGR	Latest YoY	Modeling use
Online Stores	$231.872B [§4 row]	$247.029B [§4 row]	$269.287B [§4 row]	7.8%	14.6% [§5 Q2 product row]	Qualitative demand and first-party mix signal only
Physical Stores	$20.030B [§4 row]	$21.215B [§4 row]	$22.561B [§4 row]	6.1%	3.6% [§5 Q2 product row]	Qualitative physical and grocery signal only
Third-Party Seller Services	$140.053B [§4 row]	$156.146B [§4 row]	$172.162B [§4 row]	10.9%	15.9% [§5 Q2 product row]	Qualitative marketplace monetization signal only
Advertising Services	$46.906B [§4 row]	$56.214B [§4 row]	$68.635B [§4 row]	21.0%	26.2% [§5 Q2 product row]	Qualitative high-margin mix signal only
Subscription Services	$40.209B [§4 row]	$44.374B [§4 row]	$49.619B [§4 row]	11.1%	12.5% [§5 Q2 product row]	Qualitative recurring relationship signal only
Other Services	$4.958B [§4 row]	$5.425B [§4 row]	$5.935B [§4 row]	9.4%	Not separately shown in §5 table	Qualitative context only

The internal arithmetic check passes for the disclosed segment history. The consolidated categories also reproduce the reviewed package, but no product-to-North-America arithmetic is attempted because that would violate issuer taxonomy. [DATA GAP: Amazon does not disclose product revenue by reportable geographic segment].

7. Management guidance

Amazon does not provide a long-range North America revenue or Operating income margin target. The relevant management statements in the reviewed package are operational anchors rather than numeric segment guidance.

- **Q3 FY2025, Andy Jassy:** “We continue to make it easier for customers to order low-priced perishable groceries from Amazon.” [data_package §6, North America row 1]. This supports a frequency and basket-expansion opportunity but also implies lower-priced mix and cold-chain reinvestment.

- **Q3 FY2025, Brian Olsavsky:** “Additionally, we continue to invest in our fulfillment and transportation network to support the growth of the business, improve delivery speeds, and lower our cost to serve.” [data_package §6, North America row 2]. This is the core margin mechanism: capital and operating expense precede density and cost-to-serve gains.

- **Q4 FY2025, Andy Jassy:** “In 2025, everyday essentials grew nearly twice as fast as all other categories in The US, representing one out of three units sold in our store.” [data_package §6, North America row 3]. Essentials can improve frequency and retention, but lower average selling prices mean unit growth need not translate one-for-one into revenue growth.

- **Q4 FY2025, Brian Olsavsky:** “For the third year in a row, globally in 2025, we achieved both our fastest ever delivery speeds for Prime members while also reducing our cost to serve.” [data_package §6, North America row 4]. The direction supports scale leverage, but the statement is global and does not quantify North America dollars or basis points.

- **Q1 FY2026, Andy Jassy:** “Prime members are loving the convenience of getting fresh groceries alongside other products they're buying on Amazon.” [data_package §6, North America row 5]. Grocery is intended to broaden shopping occasions and reinforce Prime rather than stand alone.

- **Q1 FY2026, Andy Jassy:** “Customers shopping same-day perishables build larger baskets, adding nearly 3x as many items to their order.” [data_package §6, North America row 6]. Larger baskets can improve route economics, but the package provides no cohort profitability or North America revenue contribution.

- **Q2 FY2026, Andy Jassy:** “The number of monthly active perishables customers grew over 50% since the start of the year.” [data_package §6, North America row 7]. Adoption is accelerating from an undisclosed base; the forecast does not convert this into invented revenue.

- **Q2 FY2026, Andy Jassy:** “We continue speeding up overall delivery and once again achieved record delivery speeds for customers in the first half of the year.” [data_package §6, North America row 8]. Speed remains a moat investment and a conversion lever.

- **Q2 FY2026, Brian Olsavsky:** “While operating margin may fluctuate and progress may not always be linear, we take a deliberate approach to achieving sustained long-term improvement in our cost to serve.” [data_package §6, North America row 9]. This explicitly argues against annualizing a single quarter and supports a gradual, uneven margin cadence.

Advertising provides an additional overlay. Management said Sponsored Products remains the largest offering and a key growth driver, Prime Video ads and live sports continue to grow engagement, and Ads Agent targeting reduced cost per impression by 8% and cost per acquisition by 6% [data_package §6, Advertising overlay]. Those statements support mix improvement, but because advertising dollars are not split between North America and International, no separate North America advertising line is forecast.

[DATA GAP: No issuer-provided long-range North America revenue growth, Operating income margin, product-by-geography mix, or segment capex target exists in the reviewed package].

8. Forward growth assumptions

Forecast architecture

The financial model has one issuer-disclosed revenue line: North America total. The model compounds the exact $453.670B TTM anchor for exactly five calendar years. It uses explicit annual growth steps, so terminal values do not hide a straight-line extrapolation. Consolidated product categories act as qualitative checks on whether the total trajectory is plausible; their contextual CAGRs are never converted into North America dollars.

Base case — 55% probability

Product or driver	Historical CAGR	Latest YoY	Management FY+1 guide	Base CAGR TTM to TTM+5y	Justification
North America total financial line	9.9% FY2023–FY2025	16.0% Q2 FY2026	No numeric segment guide	**8.99%**	Growth steps down from 11% to 7% as scale rises; e-commerce penetration and faster delivery support demand, while Walmart and saturation limit sustained share gains.
Online Stores context	7.8% consolidated	14.6% consolidated Q2	No geographic guide	8% contextual, not allocated	Current acceleration fades toward mature retail growth; convenience and essentials support frequency, but low-priced mix tempers dollars.
Physical Stores context	6.1% consolidated	3.6% consolidated Q2	No geographic guide	3% contextual, not allocated	Grocery and store initiatives grow, but the small disclosed category and impairment history argue for restraint.
Third-Party Seller Services context	10.9% consolidated	15.9% consolidated Q2	No geographic guide	10% contextual, not allocated	Marketplace selection, fulfillment, and seller services remain strong, moderated by seller economics and regulation.
Advertising Services context	21.0% consolidated	26.2% consolidated Q2	No geographic guide	17% contextual, not allocated	Sponsored Products and new video inventory compound rapidly, but scale and Walmart Connect competition produce gradual deceleration.
Subscription Services context	11.1% consolidated	12.5% consolidated Q2	No geographic guide	8% contextual, not allocated	Prime engagement and grocery deepen value, while penetration and affordability constrain pricing-led growth.
Other Services context	9.4% consolidated	Not disclosed for Q2	No geographic guide	7% contextual, not allocated	Maintains a modest contribution without inventing product detail.

Base annual North America growth is 11%, 10%, 9%, 8%, and 7%. The sequence is deliberately below the latest 16% because $453.670B is already enormous, the U.S. e-commerce market grew 12.2% in Q2 2026, and Walmart U.S. e-commerce grew 24%. Amazon can remain structurally advantaged without outgrowing every competitor every year. The base path produces $697.734B of 2031-06-30 revenue, an 8.99% five-year CAGR.

Bull case — 20% probability

Product or driver	Historical CAGR	Latest YoY	Management FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
North America total financial line	9.9% FY2023–FY2025	16.0% Q2 FY2026	No numeric segment guide	**11.99%**	Growth moderates only gradually from 14% to 10% as grocery, speed, marketplace, ads, and subscriptions reinforce one another and Amazon takes modest share.
Online Stores context	7.8% consolidated	14.6% consolidated Q2	No geographic guide	11% contextual, not allocated	Essentials and same-day grocery sustain double-digit demand with stronger baskets and share gains.
Physical Stores context	6.1% consolidated	3.6% consolidated Q2	No geographic guide	5% contextual, not allocated	Store productivity and grocery integration improve without another material impairment cycle.
Third-Party Seller Services context	10.9% consolidated	15.9% consolidated Q2	No geographic guide	13% contextual, not allocated	Seller selection and fulfillment adoption remain strong while fee value stays compelling.

Product or driver	Historical CAGR	Latest YoY	Management FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
Advertising Services context	21.0% consolidated	26.2% consolidated Q2	No geographic guide	22% contextual, not allocated	Sponsored Products, video, live sports, and AI targeting preserve high growth and advertiser returns.
Subscription Services context	11.1% consolidated	12.5% consolidated Q2	No geographic guide	11% contextual, not allocated	Prime adds value through grocery and speed, supporting retention and pricing.
Other Services context	9.4% consolidated	Not disclosed for Q2	No geographic guide	10% contextual, not allocated	Adjacent services scale with traffic and engagement.

Bull annual North America growth is 14%, 13%, 12%, 11%, and 10%. This path does not hold the latest 16% flat; even the bull case acknowledges scale. It assumes the 12.2% e-commerce market growth base remains healthy, Amazon sustains modest share gains, and the operating flywheel converts grocery frequency into broader shopping rather than merely cannibalizing existing orders. The result is $799.203B of horizon revenue, an 11.99% CAGR.

Bear case — 25% probability

Product or driver	Historical CAGR	Latest YoY	Management FY+1 guide	Bear CAGR TTM to TTM+5y	Justification
North America total financial line	9.9% FY2023–FY2025	16.0% Q2 FY2026	No numeric segment guide	**4.98%**	Growth falls from 8% to 2.5% as price competition, slower discretionary demand, lower-priced mix, and Walmart's omnichannel gains erode share and monetization.
Online Stores context	7.8% consolidated	14.6% consolidated Q2	No geographic guide	4% contextual, not allocated	Essentials grow but weak discretionary categories, price investment, and saturation reduce dollars.
Physical Stores context	6.1% consolidated	3.6% consolidated Q2	No geographic guide	0% contextual, not allocated	Store rationalization and impairment risk offset grocery traffic.
Third-Party Seller Services context	10.9% consolidated	15.9% consolidated Q2	No geographic guide	5% contextual, not allocated	Seller pushback, fee pressure, regulation, and alternative channels slow monetization.
Advertising Services context	21.0% consolidated	26.2% consolidated Q2	No geographic guide	10% contextual, not allocated	Retail-media competition and advertiser budget normalization halve the recent growth rate.
Subscription Services context	11.1% consolidated	12.5% consolidated Q2	No geographic guide	4% contextual, not allocated	Membership penetration matures and affordability limits price increases.
Other Services context	9.4% consolidated	Not disclosed for Q2	No geographic guide	2% contextual, not allocated	Non-core services do not materially offset retail pressure.

Bear annual North America growth is 8%, 6%, 5%, 3.5%, and 2.5%. The deceleration is severe but not an immediate collapse; the segment's installed customer, seller, and fulfillment base still grows. The path assumes Walmart's 24% U.S. digital growth, Target's improving same-day service, and specialty channels take incremental share while Amazon reinvests in price and delivery. The result is $578.526B of horizon revenue, a 4.98% CAGR.

Year-by-year revenue cadence

Case	TTM anchor	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30	Five-year CAGR
Bear	$453.670B	$489.964B	$519.361B	$545.329B	$564.416B	$578.526B	4.98%
Base	$453.670B	$503.574B	$553.931B	$603.785B	$652.088B	$697.734B	8.99%
Bull	$453.670B	$517.184B	$584.418B	$654.548B	$726.548B	$799.203B	11.99%

9. Forward Operating income margin assumptions

TTM normalization bridge

Normalization line	Operating income impact	Cumulative Operating income	Cumulative margin	Treatment
Reported TTM	—	$33.651B	7.42%	Sealed historical value; unchanged
Reverse Q3 FTC settlement and severance	+$2.500B	$36.151B	7.97%	Exclude disclosed one-off charge from normalized starting economics
Reverse Q2 tariff refund	$(0.600)B	$35.551B	7.84%	Exclude favorable refund; do not treat as recurring margin
Q4 physical-store impairment and special charges	Not separately quantified	$35.551B known-item floor	7.84% known-item floor	Explicitly recognized but no invented dollar adjustment
Current capex and productivity effects	No historical plug	$35.551B known-item floor	7.84% known-item floor	Reflected prospectively in scenario cadence, not used to alter sealed history

This normalization changes no sealed historical value. It establishes a conservative known-item normalized floor. The Q3 adjustment lifts margin by about 55 basis points; removing the Q2 refund reduces it by about 13 basis points. Q4 charges would add an unknown positive amount if precisely normalized, but the package does not provide a North America figure. [DATA GAP: North America amount of Q4 FY2025 physical-store impairment and other special charges is not separately quantified].

Current capex and productivity effects are handled prospectively. Fulfillment regionalization, automation, delivery density, larger grocery baskets, and higher service monetization can increase margin. New same-day and perishables capacity, depreciation, wage and shipping inflation, returns, price investment, and competitive response can absorb those gains. Because company-wide $220B cash capex is predominantly AWS and not allocated by segment, it is not charged mechanically to North America. North America's own FY2025 $35.919B of net property-and-equipment additions is the relevant disclosed intensity signal, not a cash-capex proxy.

Case assumptions and mechanisms

Case	Known-item normalized floor	2031-06-30 Operating income margin	Change versus floor	Specific mechanism
Bear	7.84%	6.50%	(134) bps	Price investment, low-margin essentials and grocery mix, underutilized same-day capacity, shipping and wage inflation, seller and ad fee pressure, and recurring impairments outweigh productivity.
Base	7.84%	9.00%	+116 bps	Fulfillment density, regionalization, automation, delivery productivity, and service mix modestly exceed grocery, depreciation, and competitive reinvestment.
Bull	7.84%	10.50%	+266 bps	Strong marketplace, advertising, and subscription mix combines with high asset utilization, route density, larger baskets, and automation while competition does not force full reinvestment of gains.

The base terminal margin exceeds the conservative normalized floor by 116 basis points over five years, roughly 23 basis points annually. This is not heroic relative to the improvement from FY2023's 4.22% to FY2025's 6.95%, but the earlier recovery included post-pandemic network rationalization and cannot be extrapolated. The base therefore slows the pace materially. A 9.0% margin on a nearly $700B segment still implies Amazon retains only part of its scale and mix benefits.

The bull terminal margin of 10.5% requires more than normal cost discipline. Advertising and marketplace monetization must continue to outgrow merchandise; Prime and grocery must increase frequency without proportional fulfillment expense; robotics and inventory placement must reduce touches and miles; and Walmart's competing ecosystem must not force Amazon to give away most gains through price or service subsidies. The 266-basis-point lift is possible but appropriately receives only a 20% weight.

The bear margin declines to 6.5% despite revenue growth. This captures a plausible outcome in which the network remains relevant but incremental growth comes from lower-priced essentials, grocery, and expensive delivery while higher-margin sellers and advertisers gain alternatives. It also allows physical-store and quick-commerce investments to produce recurring impairment or underutilization. The bear case does not assume the segment becomes structurally loss-making; Amazon's density and ecosystem should provide a floor absent a much more severe regulatory or competitive break.

Year-by-year Operating income margin and Operating income

Case	2027-06-30 margin	2027 Operating income	2028-06-30 margin	2028 Operating income	2029-06-30 margin	2029 Operating income	2030-06-30 margin	2030 Operating income	2031-06-30 margin	2031 Operating income
Bear	7.10%	$34.787B	6.90%	$35.836B	6.70%	$36.537B	6.60%	$37.251B	6.50%	$37.604B
Base	8.00%	$40.286B	8.20%	$45.422B	8.50%	$51.322B	8.80%	$57.384B	9.00%	$62.796B
Bull	8.40%	$43.443B	9.00%	$52.598B	9.60%	$62.837B	10.10%	$73.381B	10.50%	$83.916B

No product-level margin weighting is presented because Amazon discloses neither product revenue by geography nor product-level Operating income. A revenue-weighted product margin would therefore be fabricated. The segment margin is applied only to disclosed North America total revenue.

10. Segment rollup

Disclosure-constrained bottom-up construction

The rollup has one financial revenue line because that is the finest additive issuer disclosure. This is the only structure that can reconcile exactly without allocating consolidated product dollars to North America. Business-driver overlays from online stores, physical stores, seller services, advertising, subscriptions, and other services influence the chosen total growth cadence and margin, but are not separate dollar rows.

Case	Financial revenue line	TTM revenue	Five-year growth cadence	Horizon revenue	Operating income margin	Operating income	Reconciliation
Bear	North America total	$453.670B	8.0%; 6.0%; 5.0%; 3.5%; 2.5%	$578.526B	6.50%	$37.604B	$578.526B × 6.50% = $37.604B
Base	North America total	$453.670B	11.0%; 10.0%; 9.0%; 8.0%; 7.0%	$697.734B	9.00%	$62.796B	$697.734B × 9.00% = $62.796B
Bull	North America total	$453.670B	14.0%; 13.0%; 12.0%; 11.0%; 10.0%	$799.203B	10.50%	$83.916B	$799.203B × 10.50% = $83.916B

All totals tie exactly at displayed precision, well within the 1% requirement. There is no segment-to-product reconciliation because the issuer does not disclose one. A model that summed consolidated product lines and labeled the result North America would be numerically detailed but economically wrong.

The probability-weighted horizon values are $688.226B of revenue and $60.722B of Operating income. The implied probability-weighted margin is 8.82%. These figures are calculated as scenario-weighted outcomes using 25%, 55%, and 20%; they are not a fourth scenario and should not replace the discrete bear, base, and bull cases.

Arithmetic audit

For Bear, $453.670B × 1.08 × 1.06 × 1.05 × 1.035 × 1.025 = $578.526B. For Base, $453.670B × 1.11 × 1.10 × 1.09 × 1.08 × 1.07 = $697.734B. For Bull, $453.670B × 1.14 × 1.13 × 1.12 × 1.11 × 1.10 = $799.203B. Applying 6.50%, 9.00%, and 10.50% respectively produces $37.604B, $62.796B, and $83.916B of Operating income after rounding.

11. Key risks and wildcards

- **Bear — omnichannel competition:** Walmart's 24% U.S. e-commerce growth, 40% store-fulfilled delivery growth, marketplace growth above 50%, and Walmart Connect growth of 43% show a well-capitalized rival scaling the same higher-margin layers. If Amazon must match price and speed while losing incremental marketplace or ad share, both growth and margin compress.

- **Bear — grocery and same-day economics:** Perishables can increase frequency and basket size, but cold-chain handling, spoilage, labor, and rapid delivery are expensive. Adoption growth above 50% from an undisclosed base

does not prove positive contribution margin. The bear assumes density arrives slowly and some capacity remains underutilized.

- **Bear — regulation and litigation:** The Q3 $2.5B FTC settlement and severance charge is already visible in the TTM. Future rules could affect marketplace practices, seller fees, advertising disclosures, labor, data use, subscriptions, or acquisitions. Regulatory costs can recur even when classified as unusual historically.

- **Bear/Base — tariff and landed-cost volatility:** Q2 included a $0.6B North America tariff refund, which is removed from normalized economics. Future tariff changes can alter pricing, vendor negotiations, inventory decisions, and gross margin. The base assumes neither permanent refund benefits nor an extreme structural tariff burden.

- **Bear/Base — capital intensity and depreciation:** North America net property and equipment reached $122.043B and FY2025 net additions reached $35.919B. A faster network and automation can improve unit cost, but poor utilization or technology obsolescence can create depreciation and impairment before productivity arrives.

- **Base/Bull — advertising durability:** Sponsored Products and closed-loop measurement are attractive, but Walmart Connect, search, social, and retailer media networks compete for budgets. The bull requires Amazon advertising growth and advertiser ROI to remain strong without relying on undisclosed North America ad dollars.

- **Base/Bull — marketplace health:** Seller services can improve mix and capital efficiency, but fee increases, weak seller returns, counterfeit concerns, or alternative channels can erode selection. The model assumes the ecosystem remains mutually economic, not merely that Amazon has bargaining leverage.

- **Bull — fulfillment productivity:** The bull depends on regionalization, inventory placement, robotics, route density, and larger grocery baskets producing durable cost-to-serve improvement. A failure to see margin progress alongside record delivery speeds would invalidate the bull more quickly than a temporary revenue miss.

- **All cases — disclosure opacity:** Product-to-geography revenue, product-level Operating income, North America cash capex, and segment invested capital are unavailable. This prevents a product-level revenue-weighted margin build and direct segment ROIC. The model deliberately sacrifices apparent granularity to preserve accounting truth.

Monitoring triggers

The base case should be cut if North America growth remains below U.S. e-commerce market growth for several quarters without a deliberate low-margin mix explanation; reported margin, after disclosed unusual items, falls below 7% while delivery investment remains high; worldwide shipping-cost growth persistently exceeds paid-unit growth by several points; or Walmart's marketplace and retail-media growth continues far above Amazon's relevant consolidated category growth. The bull requires the opposite: North America growth near or above the market, normalized margin progressing toward 9%, service-category growth remaining faster than merchandise, and evidence that grocery and same-day density improve rather than dilute cost to serve.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$578.526B	Operating income	6.50%	$37.604B	25%
Base	$697.734B	Operating income	9.00%	$62.796B	55%
Bull	$799.203B	Operating income	10.50%	$83.916B	20%

The segment enters the forecast from a sealed $453.670B revenue and $33.651B Operating income TTM base. Known-item normalization produces a conservative 7.84% margin floor after reversing the Q3 FTC and severance charge and the Q2 tariff refund, while leaving the unquantified Q4 impairment and special charges unmodeled rather than inventing a plug. The base case underwrites continued e-commerce penetration, modest share gains, fulfillment productivity, and favorable service mix, but assumes competitors remain aggressive and much of the gain is reinvested. The core uncertainty is not whether North

America remains large and strategically central; it is how much of its density and monetization advantage Amazon can retain as Operating income rather than return to customers, sellers, employees, and network investment.

Appendix B2 - International

Amazon.com, Inc. — International Segment Deep Dive

Run ID: `pulse-cio-20260830T060148+0800` **Information cutoff:** 2026-08-30 06:01:48 Singapore time **TTM anchor:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending 2026-06-30 **Forward horizon:** 2031-06-30, exactly 5.0 calendar years after the TTM anchor **Currency:** USD billions unless otherwise noted **Exact segment profit metric: Operating income Scenario weights:** Bear 25%; Base 55%; Bull 20% **Authority:** Research only; `trade_execution_authorized=false`

The reviewed inputs are hash-bound to `data_package.md` SHA-256 `60f02358f5a7424c6f84b29a030061faf9de0da905ea4ba8078d51a4c1af815c` and `statutory_bridge.json` SHA-256 `6df5d1b7267e335b734806cec62fcbe8f47a4a5ae831c1da5a56da7843e66c41`. The data package contains the required marker `STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING`. The bridge is issuer-disclosed rather than a fallback: International Operating income adds with North America and AWS Operating income directly to Amazon's statutory operating income, with no corporate or unallocated operating adjustment.

0. Segment boundary and taxonomy note

Amazon's reportable structure has been stable since FY2015 and was not restated during 2023–2026. International comprises revenue earned through internationally focused online stores and related services; AWS is a separate global segment, while North America captures North America-focused stores. The boundary is geographic store focus, not customer nationality and not a mechanical allocation of Amazon's seven consolidated product categories. Advertising, subscriptions, third-party seller services, physical stores, devices, and first-party online sales can all occur inside the geographic stores segments, but Amazon does not disclose their dollar split between North America and International. This appendix therefore forecasts International total revenue and Operating income only. Product and customer evidence is used to explain drivers, never to manufacture a product-to-geography revenue allocation. [data_package §1, reporting-structure paragraph and taxonomy investigation; §10, product-by-geography data gap]

1. What this segment actually is

International is Amazon's consumer-commerce system outside the North America stores perimeter. A customer sees a country-specific storefront or app, searches a catalog that combines Amazon-owned inventory with third-party offers, checks out using localized payment and tax arrangements, and receives an order through a mixture of Amazon-operated fulfillment, sortation, and delivery capacity and outside carriers. Merchants can sell inventory directly to customers or pay Amazon for marketplace access, fulfillment, shipping, and related seller services. Consumers may pay for Prime or other subscriptions. Brands and merchants can buy advertising around high-intent shopping traffic. Physical stores, devices, digital content, and other activities can also be present where Amazon operates them.

That description matters because International is not simply an online retailer with a gross merchandise value multiplied by a take rate. First-party retail revenue is generally recorded gross; marketplace commissions and fulfillment services are service revenue; advertising and subscriptions have different gross-margin profiles; and Amazon does not disclose the geographic mixture of these revenue streams. Gross reported segment revenue can therefore grow slower or faster than underlying paid units depending on seller mix, category mix, price, currency translation, and whether inventory is owned by Amazon or a merchant. The segment's economics are also shaped by the cost of promising fast delivery across markets with different population density, labor rules, postal infrastructure, address quality, payment habits, and import regimes.

The customer proposition has four linked elements. First is **selection**: customers return when a local storefront has breadth, local brands, competitive prices, and reliable availability. Second is **convenience**: Prime, trusted checkout, returns, and increasingly rapid delivery reduce the friction of an online purchase. Third is **value**: competitive item prices and shipping economics determine frequency, especially for everyday essentials. Fourth is **ecosystem monetization**: when traffic and purchase intent deepen, Amazon can earn seller-service, advertising, and subscription economics alongside retail revenue. These layers create a flywheel, but the flywheel is local. A warehouse, last-mile route, seller base, payment method, and regulatory approval in one country cannot be transferred costlessly to another.

Go-to-market is consequently market-by-market. Mature operations such as the United Kingdom, Germany, and Japan have broader selection, deeper fulfillment density, and more habitual demand than newer or less-developed country operations. The country-revenue table is not identical to reportable segments, yet it illustrates the scale of three important non-U.S.

markets: Germany generated $45.900B, the United Kingdom $43.212B, and Japan $30.688B of FY2025 customer-location revenue. Rest of world was $107.467B, but that includes countries and activities beyond a clean International-segment mapping, so these amounts are context rather than inputs to the segment forecast. [data_package §0a, Country revenue table]

Pricing is multi-sided. Consumers see item prices, shipping fees, and Prime membership value. Sellers see referral and fulfillment fees, ad auctions, and the conversion benefit of Prime-eligible logistics. Advertisers price against measurable shopping outcomes. Amazon's advantage is that improvements to speed and selection can lift purchase frequency and seller conversion, which creates more advertising inventory and fulfillment volume. The offset is that each local system needs sustained investment before route density and fixed-cost absorption become attractive. International's five-year path from losses to modest profit is evidence of that maturation curve, not proof that every country will converge to North America's margin.

2. Current economics: TTM ended 2026-06-30

International generated TTM revenue of **$173.606B** and exact issuer-disclosed **Operating income of $5.380B**, producing a **3.10% Operating income margin**. The independent recomputation from the four reviewed quarters is:

- Revenue: $40.896B + $50.724B + $39.789B + $42.197B = **$173.606B**.
- Operating income: $1.199B + $1.040B + $1.424B + $1.717B = **$5.380B**.
- Operating income margin: $5.380B / $173.606B = **3.0989%**, rendered as 3.10%.

These sums match the reviewed QF TTM construction and the sealed statutory bridge exactly. [quant_foundation P4, Q3 FY2025 through Q2 FY2026 rows and TTM row; data_package §3a, TTM bridge]

The four-quarter margin path was **2.9%, 2.1%, 3.6%, and 4.1%**. It is encouraging but not monotonic: Q4 fell to 2.1% and contained special charges, Q3 included severance, and Q2's 4.1% is only one quarter. Q2 is the highest point in the reviewed set, so using 4.1% as a permanent starting margin would ignore seasonality, investments, and the explicit management warning from the stores discussion that sustained cost-to-serve improvement may not be linear. The TTM margin of 3.10%, which incorporates all four periods, is the proper forecast anchor. [data_package §5, Segment quarterly results; §6, International commentary]

Reported International growth over those quarters was 14%, 17%, 19%, and 15%. The cleaner currency-neutral signal disclosed for the first three was 10%, 11%, and 11%; Q2's cited segment table did not provide an ex-FX figure. The gap between reported and ex-FX growth in Q4 and Q1 demonstrates that translation can move headline growth materially without changing local customer demand. A forecast in dollars must therefore treat FX separately from organic volume and monetization rather than assume the recent reported rate is durable.

Capital intensity is substantial but materially below AWS. At FY2025, International had $81.984B of segment assets, $30.632B of net property and equipment, and $7.617B of net additions to property and equipment. Against $161.894B of FY2025 segment revenue, those figures imply approximately 1.97x revenue-to-segment-assets, net PP&E equal to 18.9% of revenue, and net additions equal to 4.7% of revenue. The last figure is not cash capex: Amazon states that net additions include non-cash finance-lease and build-to-suit activity. Segment cash capex, full invested capital, and cost of revenue are not separately disclosed, so a defensible International ROIC cannot be calculated. [data_package §3, Segment capital-intensity history; §10, segment capital data gap]

Product mix is economically important but quantitatively unavailable by geography. Consolidated TTM product revenues—$285.081B Online Stores, $183.660B Third-Party Seller Services, $76.072B Advertising Services, $52.853B Subscription Services, $23.012B Physical Stores, and $6.598B Other Services—span North America and International. None can be assigned to International without an unsupported allocation. The forecast therefore makes no claim about International advertising dollars, seller-service dollars, subscription dollars, GMV, or take rate. [data_package §0a, Material KPI history; §4, products separately disclosed; §10, true non-disclosures]

3. Unit economics

International's unit economics are a contest between local density and local complexity. A retail order begins with product gross margin or a seller-service fee. From this economics Amazon must fund inbound handling, warehousing, pick-and-pack, line haul, sortation, last mile, returns, customer service, payment processing, content and Prime benefits, technology, and

country overhead. A faster network can initially cost more because facilities and delivery stations open ahead of demand. Once volume fills those assets, more units travel through existing nodes and routes, delivery miles per package can fall, inventory can be placed nearer the customer, and fixed labor and technology are spread over more revenue. That operating leverage is the central margin opportunity.

Fulfillment density is the first lever. High order frequency in compact urban corridors permits fuller vehicles and shorter routes. Everyday essentials and perishables can increase frequency, but they also add cold-chain, spoilage, handling, and service-level complexity. The economic question is not whether those categories grow; it is whether incremental basket contribution exceeds incremental fulfillment cost. Amazon's global evidence that faster delivery and lower cost to serve can coexist supports the mechanism, but International-specific cost per package is not disclosed. The base case therefore assumes gradual productivity, not a step change.

Selection and marketplace participation are the second lever. More local sellers improve breadth and availability without requiring Amazon to own every item. More attractive selection draws buyers, and higher buyer conversion attracts sellers. Marketplace economics can be better than first-party retail economics because service revenue is earned without booking the full merchandise cost, but Amazon withholds the product-to-geography mix. The model captures the benefit only as a modest segment-level margin progression. It does not assume an invented increase in a marketplace percentage or take rate.

Advertising and subscriptions are the third lever. High-intent traffic makes sponsored placements valuable, while Prime can improve retention and purchase frequency. These are plausible mix-positive activities in International, but their geographic dollars, margins, Prime members, ARPU, churn, and renewal rates are undisclosed. They are thus qualitative support for scale leverage, not standalone forecast lines. A key discipline is to avoid importing consolidated Advertising Services growth of more than 20% directly into the International model.

Price and input pressure can reverse leverage. International sources products and services across many currencies, and dollar translation can distort revenue while local wages, fuel, utilities, postage, and lease costs move on different schedules. Tariffs or customs fees can raise landed costs, alter seller economics, or shift demand among domestic and cross-border offers. Aggressive local competitors can subsidize shipping, advertising, or seller acquisition, forcing Amazon to reinvest the gains from density. Regulation can restrict marketplace ranking practices or cross-service data use, increasing compliance costs and reducing the ease of monetizing traffic.

Reinvestment remains necessary even after profitability. FY2025 International net PP&E was $30.632B and net additions were $7.617B, up from $25.618B and $6.643B in FY2024. This is consistent with ongoing network build, not a fully harvested estate. A mature-margin thesis must pay for replacement, automation, new market capacity, and customer-experience improvements. The base case's 4.50% horizon margin is therefore well below North America's FY2025 6.95% margin and does not assume International becomes asset-light.

The historical loss-to-profit swing shows the size of operating leverage but also its cyclicality. International Operating income margin moved from (0.72%) in FY2021 to (6.56%) in FY2022, (2.02%) in FY2023, 2.65% in FY2024, 2.93% in FY2025, and 3.10% on the current TTM. The FY2022 loss warns that unfavorable demand, cost inflation, currency, or overcapacity can overwhelm the network. The 2024–2026 recovery shows that established infrastructure can become profitable when volume, price, and productivity align. The correct five-year model is neither perpetual losses nor straight-line convergence to North America; it is a range with real downside sensitivity.

4. Competitive dynamics

Competition is local and multi-dimensional. Amazon faces general merchants, specialist retailers, grocery chains, local marketplaces, global cross-border platforms, social-commerce formats, payments ecosystems, and direct-to-consumer brands. Rivals can attack price, selection, entertainment, seller fees, advertising, or delivery speed. The relevant comparison is not simply annual revenue; it is whether a competitor owns the consumer habit, seller relationship, payment rail, and last-mile density in a market where Amazon is trying to improve returns.

Latin America: Mercado Libre is an especially strong local ecosystem competitor. Its Q2 2026 shareholder letter reported 89 million unique active commerce buyers, approximately $21.9B of GMV, 36% FX-neutral GMV growth, 795 million items sold with 45% growth, and 77% of fast shipments delivered within 48 hours. Brazil items sold grew 56% and FX-neutral GMV grew 39%. Those rates are far above Amazon International's recent 10%–11% disclosed ex-FX growth and show that a scaled local platform can reinvest heavily while deepening customer frequency. Mercado Libre also integrates payments, credit, advertising, and logistics, making its moat more than a website. [Mercado Libre Q2 2026 shareholder letter](https://investor.mercadolibre.com/open-file?file=aHR0cHM6Ly9odHRwMi5tbHN0YXRpYy5jb20vc3RvcmFnZS9tbC1jbXMtYmFja2VuZC9jbXMt

ZG9jdW1lbnRzLXByb2QvNWRiYmE5MTktNzIxYy00OTE2LWJiOTEtYzc2YTg3MTNmN2YwLzIxYzk4MzdhLWMyMTItNGQ2ZC1hYTE0LTMwNDFjMjZiMTE0My9MZXR0ZXJfdG9fU2hhcmVob2xkZXJzLnBkZg%3D%3D)

Southeast Asia, Taiwan, and Brazil: Sea describes Shopee as the largest pan-regional e-commerce platform in Southeast Asia and Taiwan and a leading platform in Brazil. In Q1 2026 Shopee GAAP revenue grew 44.4% to $4.503B. Its cost of revenue grew faster, 54.7% to $2.993B, partly because of order growth and logistics investment; Shopee Operating income fell to $138.9M from $195.0M. This is the competitive pattern most relevant to the Amazon bear case: a rival can prioritize scale, logistics, and price while accepting lower current profit. Sea's FY2025 results deck also set a 2026 objective of around 25% Shopee GMV growth while keeping full-year adjusted EBITDA no lower than 2025 in absolute dollars. Amazon cannot assume competitors will maximize margin at the same time it does. [Sea Q1 2026 results](https://cdn.sea.com/investor/1Q2026/HEEdeRDe0NyiZ1PrWIvH/2026.05.12%20Sea%20First%20Quarter%202026%20Results.pdf) [Sea FY2025 results deck](https://cdn.sea.com/investor/4Q2025/JcKns4LaJC8bxcQdJwXz/2026.03.03%20Sea%20Fourth%20Quarter%20and%20Full%20Year%202025%20Results%20Deck.pdf)

Cross-border and Europe: Alibaba's June 2026 results show a mixed but instructive position. International E-commerce revenue declined 1% year over year to RMB27.761B, yet AliExpress achieved Operating profit, which Alibaba attributed to logistics optimization and cost-efficiency improvement; Alibaba also said the proportion of sales from local product supplies increased significantly. This supports two conclusions. First, cross-border growth is not guaranteed despite enormous selection and low prices. Second, localization of supply and logistics can turn a previously investment-heavy platform profitable—the same mechanism in Amazon's base case. [Alibaba June quarter 2026 results, pp. 2 and 7](https://data.alibabagroup.com/ecms-files/1532295521/fa5d65fc-9b3e-4e82-a8fc-4ce1c3e2c407/Alibaba%20Group%20Announces%20June%20Quarter%202026%20Results.pdf)

Regulation and customs: Amazon Marketplace and Amazon Advertising are designated core platform services under the EU Digital Markets Act. That designation subjects the services to conduct obligations and ongoing compliance review, which can constrain self-preferencing or cross-service data advantages and add compliance costs. The EU also imposed a temporary €3 customs duty per item category in small parcels below €150 from 1 July 2026. The direct effect on Amazon is ambiguous: the measure raises costs for cross-border low-value offers but may improve the relative position of locally stocked goods and sellers. It nevertheless increases operational and seller-compliance complexity, so the bear case treats regulatory and tariff pressure as a margin headwind rather than assuming Amazon is a pure beneficiary. [European Commission gatekeepers portal](https://digital-markets-act.ec.europa.eu/gatekeepers-portal_en) [Council of the EU small-parcel customs rules](https://www.consilium.europa.eu/en/press/press-releases/2026/02/11/council-gives-final-green-light-to-new-customs-duty-rules-for-small-parcels/pdf/)

No reliable, like-for-like current Amazon International market-share figure is disclosed in the reviewed package or these competitor filings. Mercado Libre and Sea make leadership claims for their own regions, while Amazon reports a geographically aggregated segment. A fabricated global share would obscure rather than clarify the competition. The practical inference is that Amazon has scale and brand strength in several mature markets but does not possess a uniform global leadership position.

Pricing power is therefore conditional. Amazon has consumer trust, convenience, and delivery speed; sellers may accept fees because Prime-eligible traffic converts. But switching costs for shoppers are modest, price comparison is easy, and merchants often list on multiple platforms. Advertising pricing power is stronger when purchase-intent data and conversion measurement are differentiated, yet DMA constraints and rival retail-media ecosystems can narrow that advantage. Fulfillment infrastructure is a meaningful entry barrier, but Mercado Libre, Shopee, and Alibaba show that well-capitalized regional systems can build their own networks.

5. Moat at the segment level

International has a real but uneven moat. The strongest defense is the interaction of brand trust, local selection, Prime membership, seller participation, shopping-intent data, and a dense fulfillment network. Each element reinforces the others. A new entrant can build a storefront cheaply, but matching delivery reliability, returns, fraud controls, seller tools, customer service, ad measurement, and country-level tax compliance at Amazon's scale is capital intensive. Where Amazon already has dense assets and habitual Prime demand, the system should support better unit economics and resilience.

The moat is not uniformly transferable. A distribution center in Germany does not solve last-mile economics in India or consumer payment preferences in Brazil. Local champions may have deeper payments integration, social discovery, merchant relationships, or logistics reach. International's lower margin than North America is partly a consequence of operating many local flywheels at different maturity points. The segment moat should therefore be thought of as a portfolio of

country-level positions, not a single borderless network effect.

Over five to ten years, three components appear durable. First, physical density and operational learning are difficult to replicate quickly. Second, the buyer-seller-selection loop grows more valuable as frequency rises. Third, advertising tied to purchase intent can subsidize customer value and logistics. Durability weakens if competitors match speed at lower cost, regulation prevents Amazon from leveraging marketplace and advertising data, or seller economics deteriorate enough to reduce selection. The segment's moat is best rated **moderate and strengthening in mature markets, uncertain in challenger markets**, not equivalent to AWS's switching-cost moat.

The margin implication is modest. A moat strong enough to lift TTM margin from 3.10% toward 4%–5% over five years is credible if fulfillment productivity continues. A moat claim requiring 7%–8% margin across all countries would be much weaker because it assumes away reinvestment, local competition, and regulatory heterogeneity. The scenario range explicitly preserves that distinction.

6. Historical growth rates

The only financial-projection line is International total because Amazon does not disclose consolidated products by geography. The three-year window below uses FY2023 through FY2025, which contains two compounding intervals; its CAGR is therefore calculated as `(FY2025 / FY2023)^(1/2) - 1`. Every historical dollar and disclosed growth rate is reproduced from the reviewed data package.

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	Three-year-window CAGR	Most recent annual YoY	Data package cite
International total	$131.200B [data_package §3, International Revenue row FY2023]	$142.906B [data_package §3, International Revenue row FY2024]	$161.894B [data_package §3, International Revenue row FY2025]	11.1% calculated from the same row	13.3% [data_package §3, International YoY row FY2025]	[data_package §3, International table Revenue and YoY rows]

The full comparable five-year history provides the downside cycle that the short window omits.

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Reviewed source
International revenue	$127.787B	$118.007B	$131.200B	$142.906B	$161.894B	[data_package §3, International Revenue row]
YoY growth	Not applicable	(7.7%)	11.2%	8.9%	13.3%	[data_package §3, International YoY row]
Operating income	$(0.924)B	$(7.746)B	$(2.656)B	$3.792B	$4.750B	[data_package §3, International Operating income row]
Operating income margin	(0.72%)	(6.56%)	(2.02%)	2.65%	2.93%	[data_package §3, International Margin row]

Internal arithmetic check:

- $127.787B × (1 – 7.7%) = $117.948B versus disclosed $118.007B; 0.05% difference from rounded growth, within 2%.
- $118.007B × (1 + 11.2%) = $131.224B versus disclosed $131.200B; 0.02% difference, within 2%.
- $131.200B × (1 + 8.9%) = $142.877B versus disclosed $142.906B; 0.02% difference, within 2%.
- $142.906B × (1 + 13.3%) = $161.911B versus disclosed $161.894B; 0.01% difference, within 2%.

All checks pass. No product dollars were back-solved, and no estimated-dollar tie-out is needed. The FY2022 contraction and loss demonstrate that the segment has both FX and operating leverage in reverse. The FY2024–TTM recovery is meaningful, but it spans a favorable normalization period and should not be extrapolated at the same slope for five more years.

7. Management guidance and commentary

Amazon provides no International long-range revenue or margin target and no region-by-region guidance. The relevant reviewed statements are reproduced below from data-package §6; interpretations are analytical.

- **Q3 FY2025, Brian Olsavsky:** “International segment operating income was $1.2 billion, with an operating margin of 2.9%.” [data_package §6, International row 1] This establishes positive profitability in a quarter that also contained severance; it supports using positive margin as the anchor but not assuming steady quarterly expansion.

- **Q3 FY2025, Brian Olsavsky:** “Excluding the impact of the severance charge, International segment operating margins expanded year-over-year.” [data_package §6, International row 2] The underlying direction was stronger than the reported 2.9%. Because the amount was not disclosed, this appendix does not add back an invented charge.

- **Q4 FY2025, Brian Olsavsky:** “International segment revenue was $50.7 billion, an increase of 11% year over year excluding the impact of foreign exchange.” [data_package §6, International row 3] The 11% ex-FX rate is a cleaner demand anchor than 17% reported growth. It also shows roughly six points of favorable translation in that quarter.

- **Q4 FY2025, Brian Olsavsky:** “International segment operating income was $1 billion with an operating margin of 2.1%.” [data_package §6, International row 4] The sequential decline from Q3 warns against a straight-line quarterly margin model. Q4 included special charges, but the exact International amount was not disclosed.

- **Q1 FY2026, Brian Olsavsky:** “International segment revenue was $39.8 billion, an increase of 11% year-over-year, excluding the impact of foreign exchange.” [data_package §6, International row 5] Organic growth remained around 11% while reported growth reached 19%, reinforcing the need for a separate FX assumption.

- **Q1 FY2026, Brian Olsavsky:** “International segment operating income was $1.4 billion with an operating margin of 3.6%.” [data_package §6, International row 6] Profitability improved despite continued investment. It is one data point above the TTM margin, not a new floor.

- **Q2 FY2026, Brian Olsavsky:** “International segment operating income was $1.7 billion with an operating margin of 4.1%.” [data_package §6, International row 7] This is the four-quarter peak. The model treats it as evidence that a 4% handle is achievable, but the base case reaches a 4.50% full-year-equivalent horizon margin only gradually.

- **Q2 FY2026, Brian Olsavsky:** “Looking ahead, we see meaningful opportunities to further enhance productivity across our global fulfillment network.” [data_package §6, International row 8] This is the clearest forward driver for margin, but it is qualitative and global. It supports fulfillment leverage without supplying a margin target.

The latest company-level Q3 FY2026 guide is $197B–$202B of sales, 9%–12% growth, and $22.5B–$26.5B of Operating income, with roughly 80 basis points of adverse FX and Prime Day timing reducing reported growth by nearly 400 basis points. It is not an International guide and is not used as one, but the adverse-FX assumption reinforces the forecast's translation sensitivity. [data_package §5, Guidance issued on last four calls, Q2 FY2026 row]

[DATA GAP: Amazon provides no International FY+1 revenue guide, no long-range margin target, no country-level forecast, and no product-by-geography dollar allocation.]

8. Forward growth assumptions

The model compounds the TTM $173.606B segment total for exactly five calendar years to 2031-06-30. Because no product dollars are allocable to International, each scenario has one financial line. The bottom-up differentiation is in three forecast drivers: local demand and unit growth; mix and monetization from selection, marketplace, Prime, and advertising; and dollar translation. These are forecast assumptions, not issuer-disclosed product splits.

Base case growth

Product / financial line	Three-year historical CAGR	Latest YoY	Management FY+1 guide	Base CAGR TTM to TTM+5y	Justification
International total	11.1%	15% reported Q2; 11% ex-FX in Q4 and Q1	No segment guide	8.0%	Organic growth moderates as Europe and Japan mature, while selection, Prime, seller services, advertising context, and fulfillment density sustain high-single-digit dollars. FX contributes only modestly over five years.

The base case assumes 5.0% annual contribution from local demand and unit growth, 2.5% from price, mix, and monetization, and 0.5% from net dollar translation, totaling 8.0%. This is three points below the clean 11% ex-FX rates disclosed in Q4 and Q1, but the deceleration occurs gradually as the $173.606B revenue base grows. The structural offset is higher frequency and better local selection. Mercado Libre and Shopee show that regional e-commerce can still grow rapidly, but they also show why Amazon must reinvest rather than capture all market growth as margin.

Bull case growth

Product / financial line	Three-year historical CAGR	Latest YoY	Management FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
International total	11.1%	15% reported Q2; 11% ex-FX in Q4 and Q1	No segment guide	11.0%	Local demand stays near the recent ex-FX rate as same-day coverage, essentials, selection, and seller adoption lift frequency; monetization improves without harming conversion, and FX is favorable.

The bull case assumes 6.5% local demand and unit contribution, 3.0% mix and monetization, and 1.5% favorable dollar translation. At 11.0%, the forecast does not require acceleration above the recent clean organic rate; it requires persistence. The case is supported by rapid regional e-commerce growth shown by Mercado Libre and Shopee and by Amazon's own current double-digit ex-FX growth. It also requires Amazon to localize inventory and fulfillment effectively, much as Alibaba cites local product supply and logistics optimization in AliExpress's profitability. FX is an important part of the difference from base, so this is not a pure volume forecast.

Bear case growth

Product / financial line	Three-year historical CAGR	Latest YoY	Management FY+1 guide	Bear CAGR TTM to TTM+5y	Justification
International total	11.1%	15% reported Q2; 11% ex-FX in Q4 and Q1	No segment guide	4.5%	Mature markets slow, local platforms retain traffic and sellers, customs and regulatory friction rises, and a stronger dollar offsets part of local growth. Amazon protects the customer proposition through reinvestment.

The bear case assumes 3.0% local demand and unit contribution, 2.0% price, mix, and monetization, and a negative 0.5% translation contribution. This is not a return to FY2022's outright revenue contraction; it is a sustained slowdown to mid-single digits. The competitor evidence makes that downside credible: Shopee is willing to accept lower Operating income while logistics costs grow rapidly, Mercado Libre is expanding much faster in Latin America, and Alibaba demonstrates that cross-border International E-commerce revenue can decline even while a platform improves profitability. EU customs and DMA compliance add friction, while Amazon keeps prices and shipping attractive rather than maximize near-term take rates.

Growth bridge and year-by-year deceleration

Case	Local demand and units	Price, mix, and monetization	FX translation	Five-year CAGR	TTM+5y revenue
Bear	3.0%	2.0%	(0.5%)	4.5%	$216.345B
Base	5.0%	2.5%	0.5%	8.0%	$255.084B
Bull	6.5%	3.0%	1.5%	11.0%	$292.536B

The annual revenue paths make the compounding explicit. The constant-CAGR implementation is a simplification of a gradually slowing organic business and varying FX; it is chosen so the five-year endpoint is reconstructable. The forecast does not imply each year's actual reported rate will be identical.

Case	TTM anchor 2026-06-30	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30
Bear revenue	$173.606B	$181.418B	$189.582B	$198.113B	$207.028B	$216.345B
Base revenue	$173.606B	$187.494B	$202.494B	$218.694B	$236.189B	$255.084B
Bull revenue	$173.606B	$192.703B	$213.900B	$237.429B	$263.546B	$292.536B

9. Forward Operating income margin assumptions

The exact profit metric is **Operating income** in every case. The anchor is the 3.10% TTM Operating income margin, not Q2's 4.1% peak. There are no corporate or statutory-bridge adjustments allocated into the segment.

Case	TTM Operating income margin	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30	TTM+5y change
Bear	3.10%	2.70%	2.40%	2.10%	1.90%	1.75%	(135) bp
Base	3.10%	3.20%	3.50%	3.80%	4.15%	4.50%	140 bp
Bull	3.10%	3.60%	4.20%	4.80%	5.40%	6.00%	290 bp

Base mechanism: the 140-basis-point expansion comes from route and facility density, inventory placement, automation, broader local selection, and modest favorable service mix. It is deliberately gradual: 10 basis points in year one, then 30–35 basis points annually. A 4.50% horizon margin is only 40 basis points above the latest single quarter and remains 245 basis points below North America's FY2025 margin. The case therefore recognizes Q2's proof point without treating it as a permanent base.

Bull mechanism: the 290-basis-point expansion requires strong utilization of existing assets, fewer delivery miles per package, continued seller adoption, higher purchase frequency, and favorable advertising and subscription context. It also assumes new-market losses become smaller relative to mature-market profit and that competitive shipping subsidies ease. The 6.00% horizon margin approaches but does not exceed North America's FY2025 6.95%. This is plausible only if growth stays near 11%; lower growth would reduce density leverage.

Bear mechanism: the 135-basis-point contraction assumes Amazon responds to slower growth and aggressive local competitors by spending more on price, shipping, seller incentives, and delivery coverage. A stronger dollar hurts translated revenue while many local costs remain, and tariffs, customs, and DMA compliance add cost. The margin stays positive because the current network is more mature than in FY2022, but Operating income declines despite revenue growth. This is the critical downside insight: International can grow dollars and still destroy incremental profit if cost-to-serve rises faster.

No product-level margins are shown because Amazon does not disclose International product revenue or profit. A revenue-weighted product margin would require invented weights and therefore be less accurate than the segment-level model.

10. Segment rollup

Because International total is the only disclosed geographic financial line, each scenario's bottom-up sum consists of exactly that one line. The revenue totals reconcile by construction to Section 8, and Operating income equals revenue multiplied by the Section 9 Operating income margin.

Bear rollup

Financial line	TTM revenue	Five-year CAGR	TTM+5y revenue	Operating income margin	TTM+5y Operating income
International total	$173.606B	4.5%	$216.345B	1.75%	$3.786B
Reconciled segment total	$173.606B	4.5%	$216.345B	1.75%	$3.786B

Base rollup

Financial line	TTM revenue	Five-year CAGR	TTM+5y revenue	Operating income margin	TTM+5y Operating income
International total	$173.606B	8.0%	$255.084B	4.50%	$11.479B
Reconciled segment total	$173.606B	8.0%	$255.084B	4.50%	$11.479B

Bull rollup

Financial line	TTM revenue	Five-year CAGR	TTM+5y revenue	Operating income margin	TTM+5y Operating income
International total	$173.606B	11.0%	$292.536B	6.00%	$17.552B
Reconciled segment total	$173.606B	11.0%	$292.536B	6.00%	$17.552B

The year-by-year Operating income cadence is also reconstructable.

Case	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30
Bear Operating income	$4.898B	$4.550B	$4.160B	$3.934B	$3.786B

Case	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30
Base Operating income	$6.000B	$7.087B	$8.310B	$9.802B	$11.479B
Bull Operating income	$6.937B	$8.984B	$11.397B	$14.231B	$17.552B

All displayed rollup values reconcile within rounding. For example, Base horizon Operating income is $255.084B × 4.50% = $11.4788B, displayed as $11.479B. Bear is $216.345B × 1.75% = $3.7860B, and Bull is $292.536B × 6.00% = $17.5522B.

At the shared weights, probability-weighted horizon revenue is **$252.890B** and probability-weighted Operating income is **$10.770B**, an implied 4.26% margin. This is a scenario-weighted diagnostic, not a fourth operating case, because revenue and margin should not be averaged independently.

Probability-weighted diagnostic	Revenue contribution	Operating income contribution
Bear at 25%	$54.086B	$0.947B
Base at 55%	$140.296B	$6.313B
Bull at 20%	$58.507B	$3.510B
Total	$252.890B	$10.770B

11. Key risks and wildcards

Bear — local champions out-invest Amazon. Mercado Libre and Shopee are not marginal entrants. They combine commerce, logistics, advertising, and payments, and their recent growth is materially faster than Amazon International's disclosed ex-FX rate. If they use superior local density or payments data to subsidize shipping and merchant acquisition, Amazon may face a choice between slower share capture and lower margin. The earliest warning is sustained International ex-FX growth below mid-single digits while fulfillment investment remains high.

Bear — regulation weakens ecosystem monetization. DMA obligations for Amazon Marketplace and Amazon Advertising can increase transparency and limit the use of cross-service data or ranking advantages. Country-level labor, product-safety, tax, and marketplace-liability rules add fixed compliance costs. A material restriction on ad targeting or marketplace self-preferencing could reduce the high-margin support needed to fund fast delivery.

Bear — tariff and customs friction. The EU's small-parcel duty is one example of a broader policy shift toward platform responsibility and tighter customs treatment. Higher landed cost can lower conversion, reduce seller selection, or require Amazon to absorb part of the cost. The effect may favor locally stocked Amazon inventory relative to direct imports, but it also increases administration and can fragment selection.

Bear — FX translation and mismatch. Q4 and Q1 reported growth exceeded ex-FX growth by six and eight points. The reverse is possible. A stronger dollar could depress reported revenue while labor, delivery, and lease expenses remain sticky in local currency. The bear case's negative 0.5% annual FX contribution is modest relative to recent favorable moves, so a severe currency cycle could be worse.

Bear and Base — new-market dilution. Mature countries may generate attractive contribution profit while newer countries consume it. Amazon does not disclose country profitability, making it impossible to distinguish broad-based margin improvement from a few mature-market profit pools. If expansion continues into lower-density markets, segment margin could stay near 3% even with healthy revenue growth.

Base — fulfillment productivity fails to offset shipping inflation. Worldwide shipping costs rose 19% year over year in Q2 FY2026 while paid units grew 17%. These are consolidated figures, not International-specific, but they show that unit growth alone does not guarantee leverage. Base requires route density, inventory placement, and automation to reverse that relationship over time. [data_package §5, Logistics and unit-volume KPI table]

Bull — selection and Prime create a frequency flywheel. Faster delivery, essentials, and local sellers could convert occasional users into habitual ones. Higher frequency improves route density, seller conversion, and advertising relevance simultaneously. The bull case is most plausible where Amazon already has substantial country revenue and fulfillment assets rather than in greenfield markets.

Bull — localization improves both growth and margin. Alibaba's AliExpress commentary shows that more local product supply and logistics optimization can coexist with profitability even when headline International E-commerce revenue is weak. If Amazon localizes inventory, payments, and seller tools faster than expected, it can reduce cross-border friction and improve delivery economics without relying on price increases.

All cases — undisclosed mix. The largest modeling uncertainty is not the arithmetic; it is the hidden geographic product mix. Advertising, seller services, and subscriptions could be a larger or smaller share of International than assumed qualitatively. Because no dollars are disclosed, this appendix cannot test the sensitivity of margin to each category. Any future issuer disclosure of product-by-geography revenue, International GMV, take rate, Prime members, or country profit would materially improve the model.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$216.345B	Operating income	1.75%	$3.786B	25%
Base	$255.084B	Operating income	4.50%	$11.479B	55%
Bull	$292.536B	Operating income	6.00%	$17.552B	20%

The base case is a disciplined normalization thesis rather than an extrapolation of the latest quarter: International revenue compounds below the recent 11% ex-FX pace, and Operating income margin rises only 140 basis points from the 3.10% TTM anchor over five full years. The bear case is especially important because it shows that revenue growth does not guarantee profit growth; sustained competitive and regulatory reinvestment can reduce 2031 Operating income below the current $5.380B. The bull case requires continued double-digit local demand, favorable FX, and fulfillment density strong enough to approach but remain below North America's mature margin.

Data gaps carried forward

- [DATA GAP: Product revenue split between North America and International is not disclosed; no product dollars are allocated to International.]
- [DATA GAP: International GMV, marketplace take rate, paid units, seller mix, Prime members, ARPU, churn, and advertising sub-product revenue are not disclosed.]
- [DATA GAP: International cash capex, full invested capital, and cost of revenue are not disclosed; segment ROIC cannot be calculated.]
- [DATA GAP: No International FY+1 revenue guide, long-range margin target, country-level forecast, or country-level profit is disclosed.]

External evidence archive

Current competitor and regulatory evidence used in Section 4 is archived under `raw\pulse-cio-20260830T060148+0800\b_international`. These sources provide only external competitive context. Amazon's historical financials, management quotations, accounting labels, and TTM anchor remain exclusively sourced from the reviewed data package and sealed bridge.

Appendix B3 - Amazon Web Services

Amazon Web Services (AWS) — Segment Deep Dive

Company: Amazon.com, Inc. **Run ID:** `pulse-cio-20260830T060148+0800` **Information cutoff:** 2026-08-30 **TTM anchor:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending 2026-06-30 **Forward horizon:** 2031-06-30, exactly 5.0 calendar years **Currency:** USD billions unless otherwise stated **Exact segment profit metric: Operating income** **Authority:** Research only; `trade_execution_authorized=false`

0. Segment boundary and taxonomy note

AWS is Amazon's global reportable cloud segment: compute, storage, databases, machine learning, and other cloud services. The boundary has been stable since FY2015 and was not restated in the 2023–2026 source set. The analysis therefore compares FY2021–FY2025 dollar values on a common segment perimeter. It does not allocate Amazon's store advertising, subscriptions, seller services, or internal technology costs to AWS, and it does not turn AWS service names into fictional reportable subsegments. The sealed statutory bridge identifies the common issuer-disclosed segment profit basis as **Operating income**, with no corporate/unallocated or operating-bridge adjustment between the three reportable segments and statutory operating income [data_package §1, Taxonomy investigation; §3a, Sealed packet].

1. What this segment actually is

AWS rents technology infrastructure and software capabilities to organizations and developers. A customer can buy raw virtual machines and accelerated instances, object and block storage, networking, managed databases, analytics, security, developer tooling, and higher-level machine-learning services. The commercial model is primarily consumption based: customers pay for resources used, subject to service-specific meters, with discounts for longer commitments, reserved capacity, savings plans, and negotiated enterprise agreements. That creates a revenue model that is neither a conventional fixed-seat subscription nor hardware sales. Usage can rise with an application, but optimization can temporarily reduce the bill even when the customer's underlying workload continues to grow.

The customer set spans start-ups, software vendors, public-sector entities, and large enterprises. The go-to-market combines direct enterprise selling, solution architects, systems integrators, independent software vendors, a marketplace, and self-service developer adoption. The land motion may start with one workload; the expansion motion adds databases, observability, security, data lakes, analytics, and AI. This breadth matters because the economic value of AWS is not just a rack of servers. It is a control plane, a large service catalog, an identity and security system, a partner ecosystem, and an installed base of applications whose operational procedures are built around AWS APIs.

For financial modeling, however, AWS must remain a single line. Amazon discloses aggregate AWS revenue and aggregate AWS Operating income, but no GAAP revenue or profit dollars for EC2, S3, databases, Bedrock, SageMaker, Trainium, Graviton, or other individual services [data_package §4, AWS rows; §10, AWS product-revenue gap]. Management's statements that AI services and chips each exceeded a $25B annual revenue run rate are directional indicators, not audited product series, and may overlap with broader billed services or different measurement conventions. They are not added to AWS revenue, used as stand-alone forecast bases, or labeled GAAP product revenue here.

The present investment cycle is capacity-led. Customers want more conventional and accelerated compute than AWS can install, power, network, and cool. The $496B backlog at 2026-06-30 has a 6.4-year weighted life, while management expects approximately $220B of Amazon cash capital expenditures in 2026, predominantly for AWS and AI [data_package §0a, Material KPI history; §6, AWS rows 8–10]. This backlog is demand evidence, not a five-year revenue guarantee: obligations can have long recognition periods, usage can differ from commitments, new bookings can replace recognized backlog, and the infrastructure must be financed before much of the associated revenue appears.

2. Current economics

TTM recomputation and profit identity

The reviewed quarterly AWS revenue values sum exactly to the required TTM anchor. Exact issuer-disclosed quarterly AWS Operating income also sums to the sealed TTM amount. The margin is recomputed rather than copied.

Reviewed quarter	AWS revenue	Operating income	Operating margin	Reviewed source
Q3 FY2025	$33.006B	$11.434B	34.64%	SEC Exhibit 99.1, 2025-10-30; sealed QF P4; data_package §5
Q4 FY2025	$35.579B	$12.465B	35.03%	SEC Exhibit 99.1, 2026-02-05; sealed QF P4; data_package §5
Q1 FY2026	$37.587B	$14.161B	37.67%	SEC Exhibit 99.1, 2026-04-29; sealed QF P4; data_package §5
Q2 FY2026	$42.232B	$16.621B	39.36%	SEC Exhibit 99.1, 2026-07-30; sealed QF P4; data_package §5
TTM ended 2026-06-30	**$148.404B**	**$54.681B**	**36.85%**	Sum of four reviewed quarters; sealed bridge TTM AWS row

The arithmetic is `33.006 + 35.579 + 37.587 + 42.232 = 148.404` for revenue and `11.434 + 12.465 + 14.161 + 16.621 = 54.681` for Operating income. The exact reported TTM margin is `54.681 / 148.404 = 36.846%`. This also agrees with the sealed statutory bridge, whose AWS TTM Operating income is $54,681M and whose segment-sum, corporate-bridge, operating-income, pretax, and net-income residuals are all zero [data_package §3a, TTM bridge].

The latest-quarter growth rate was 36.8% on the precise product table, rounded to 37% in the segment table [data_package §5, Major product quarterly revenue and growth]. That rate was the fourth sequential acceleration from 20.2% in Q3 FY2025 to 23.6%, 28.4%, and 36.8%. It is a strong demand signal, but not a sustainable five-year starting assumption without a deceleration path: AWS is already a $148.4B TTM business, supply is constrained, and rival capacity is expanding.

Energy-derivative normalization

Q2 FY2026 included approximately $0.6B of favorable energy-derivative remeasurement, primarily in AWS [data_package §5, normalization note]. Amazon did not disclose an exact AWS allocation, so the reported $16.621B of quarterly Operating income and 39.36% margin remain the authoritative figures. An intentionally conservative sensitivity that assigns the full $0.6B to AWS would produce $16.021B of adjusted Q2 Operating income, a 37.94% margin, and $54.081B of adjusted TTM Operating income, a 36.44% margin. The true normalization lies between the exact reported result and that full-allocation sensitivity. Accordingly, the model does not annualize Q2's 39.4% margin and uses roughly 36.4%–36.8% as the current normalized band.

Capital intensity and disclosure limits

AWS segment assets increased from $63.835B in FY2021 to $252.588B in FY2025, while AWS property and equipment, net rose from $43.245B to $190.055B. Net additions to AWS property and equipment were $22.047B, $27.755B, $24.843B, $53.267B, and $96.496B in FY2021–FY2025 [data_package §3, Segment capital-intensity history]. Net additions are not cash capital expenditures; they include non-cash finance-lease and build-to-suit activity. Amazon also does not disclose segment cash capex or a complete AWS invested-capital bridge. Therefore a precise AWS ROIC would be false precision. The valid conclusion is narrower: asset growth has outrun current revenue growth, utilization and depreciation are now first-order determinants of future Operating income, and the burden of proof rises with the 2026 capex step-up.

At the consolidated level, TTM cash capex was $173.028B and TTM free cash flow was negative $11.625B on the reviewed definition. Management's current 2026 cash-capex estimate is approximately $220B, predominantly AI and AWS [data_package §7]. That cash burden does not appear inside AWS Operating income immediately; it reaches the income statement through depreciation and operating costs over time. A growth case that recognizes backlog quickly but delays depreciation would be internally inconsistent.

3. Unit economics

AWS converts customer usage into Operating income through four linked economic layers: workload demand, effective pricing, infrastructure utilization, and the operating cost of the service and selling layer. The first layer is consumption. A new instance, database, storage bucket, or inference request creates metered revenue. Enterprise commitments improve visibility and can support procurement planning, but revenue still depends on contract terms, availability, and actual deployment. Optimization is a recurring counterforce. Customers can right-size instances, move to cheaper storage tiers, reserve capacity, adopt efficient chips, or redesign software; those actions reduce dollars per unit even as compute units grow.

The second layer is effective pricing and mix. Compute has a different cost structure from storage, networking, databases, security, and managed software. Training a frontier model is accelerator- and network-heavy. Inference economics depend on tokens, model size, latency requirements, batchability, memory bandwidth, cache hit rates, and utilization. Managed services can carry more software value, but competition constrains how much of an efficiency gain AWS retains. The report therefore treats service mix as a margin overlay, not a revenue decomposition, because Amazon does not publish the necessary dollars.

The third layer is physical infrastructure. AWS must procure accelerators, CPUs, memory, networking gear, power equipment, land, data centers, and long-duration energy. A large share of the cost is fixed or committed before a facility reaches useful utilization. New capacity depresses near-term returns when installed ahead of revenue; then margin improves as workloads fill the fleet. Management explicitly said much of 2026 AWS capex will be installed in future years [data_package §6, Q1 FY2026 AWS row]. The forecast therefore separates the capacity-constrained 2026–2027 phase from the utilization phase after 2027.

The fourth layer is the service and selling stack: engineering, data-center operations, support, security, solution architects, and partner economics. AWS benefits from scale in shared software and procurement, but AI infrastructure also brings higher power density, more complex networking, and scarce talent. Custom silicon can reduce the total cost of a workload only if performance, software support, and utilization offset design and ecosystem costs. Graviton for general compute and Trainium/Inferentia for machine learning can strengthen AWS economics, but they are not automatically margin accretive. AWS may pass savings to customers to win workloads, and a less-portable stack can slow adoption.

Memory is a particularly important current input. Amazon raised the 2026 cash-capex expectation from approximately $200B to $220B and cited higher memory costs [data_package §9, 2026-07-30 action]. Accelerated systems require high-bandwidth memory and large conventional memory footprints; inference also becomes memory-bound when models use long contexts and large key-value caches. Higher component prices raise cash outlay and eventually depreciation. They can also delay capacity installation. In the bear case, memory and power costs remain tight while cloud prices decline; in the base case, procurement and custom design partially offset them; in the bull case, utilization and performance-per-watt improve fast enough to absorb them.

Inference is not economically identical to training. Training demand can be project-like and concentrated; inference is recurring when an application reaches production, but it is more price-elastic and susceptible to rapid cost reduction. Lower cost per token can expand volume dramatically while reducing revenue per unit of intelligence. The five-year revenue outcome depends on elasticity: if token volumes expand faster than effective prices fall, AWS wins; if open models, on-device compute, customer-owned accelerators, or rival clouds commoditize serving, spectacular workload growth may translate into ordinary revenue growth. This is why the forecast does not infer a five-year revenue CAGR from management's AI run-rate growth.

Margin movements are therefore governed by a simple discipline. Positive: higher fleet utilization, more managed-service mix, custom-silicon adoption, software automation, procurement scale, and power efficiency. Negative: capacity installed ahead of revenue, higher memory/power costs, accelerator depreciation, lower effective prices, customer optimization, and duplicated regional or sovereign capacity. The base terminal margin of 36.0% assumes these forces roughly balance after normalization. The bull reaches 39.0% only with high utilization and retained custom-silicon savings. The bear falls to 30.0% because competition and input costs prevent utilization gains from reaching Operating income.

4. Competitive dynamics

AWS competes most directly with Microsoft Azure and Google Cloud Platform. It also competes with Oracle, specialist GPU clouds, colocation and private-cloud solutions, customer-owned infrastructure, open-source software, and increasingly with model providers that can abstract the underlying cloud. The decisive comparison is not one headline market-share estimate. It is whether AWS can secure scarce capacity, offer a competitive model and accelerator portfolio, integrate enterprise data and security, and deliver a lower cost per useful outcome.

Live primary-source competitor evidence

Competitor evidence	Current disclosed signal	Implication for AWS
Microsoft FY2026 Q4	Azure and other cloud services grew 43%; annual Azure revenue exceeded $100B and grew 41%; demand still exceeded capacity	AWS's 37% quarter is not an uncontested category acceleration; Azure is growing faster at large scale
Microsoft AI infrastructure	Maia 200 claimed 30% better performance per dollar than Microsoft's latest fleet hardware; Microsoft said capacity efficiency helped Q4 growth	Custom silicon is an industry necessity, not a unique AWS advantage

Competitor evidence	Current disclosed signal	Implication for AWS
Google Cloud Q4 2025	Cloud revenue grew 48% to $17.7B; Operating margin reached 30.1%; backlog reached $240B	GCP combines rapid growth, improving profit, and a large commitment base, increasing enterprise competition
Google serving economics	Alphabet said Gemini serving unit costs fell 78% during 2025; Google TPU 8i claims up to 80% better inference performance per dollar than Ironwood	Rapid unit-cost deflation can expand usage but pushes every cloud to share efficiency savings with customers
Rival capex	Alphabet guided 2026 capex of $175B–$185B; Microsoft added 31 data centers in its quarter and another gigawatt of capacity	AWS's capacity shortage is not a durable scarcity moat; rivals are funding parallel supply

Sources: [Microsoft FY2026 Q4 earnings call](https://www.microsoft.com/en-us/investor/events/fy-2026/earnings-fy-2026-q4), [Microsoft FY2026 Q4 release](https://www.microsoft.com/en-us/investor/earnings/fy-2026-q4/press-release-webcast), [Alphabet 2025 Q4 earnings call](https://abc.xyz/investor/events/event-details/2026/2025-Q4-Earnings-Call-2026-Dr_C033hS6/default.aspx), and [Google Cloud TPU 8t/8i technical deep dive](https://cloud.google.com/blog/products/compute/tpu-8t-and-tpu-8i-technical-deep-dive). These are issuer claims, not independent benchmarks. Retrieved copies and source notes are archived under `raw\pulse-cio-20260830T060148+0800\b_aws`.

Azure's competitive advantage is its enterprise distribution and application layer. Identity, Microsoft 365, GitHub, databases, security, and developer tools can pull infrastructure consumption into Azure. Microsoft's FY2026 Q4 disclosure that Azure grew 43% and annual Azure revenue exceeded $100B is a hard warning against assuming AWS gains share merely because its growth accelerated. Microsoft's capacity remained constrained too, suggesting the near-term category is supply-limited across hyperscalers. Its reported Intelligent Cloud margin is not comparable to AWS Operating income because the segment includes other businesses and allocations, so it is used only as directional evidence.

Google Cloud's advantage is a vertically integrated AI stack: TPUs, Gemini, data and analytics, global infrastructure, and first-party workload experience. Its Q4 2025 Cloud revenue growth of 48% and margin of 30.1% show it can take demand while improving segment profitability. The $240B backlog and planned $175B–$185B 2026 Alphabet capex reinforce capacity competition. Google's technical claim of up to 80% better TPU 8i inference performance per dollar versus its prior generation also demonstrates the pace of hardware deflation. AWS must match that cost curve across silicon, networking, schedulers, and model serving; brand alone cannot protect inference economics.

AWS still has meaningful advantages. It has long operating experience, broad service depth, a large installed base, a mature partner ecosystem, and credibility with customers that want model choice rather than dependence on a single first-party model. Its ability to offer NVIDIA alongside Trainium and multiple model providers can reduce single-vendor risk. Bedrock can make the model layer easier to consume while keeping data, identity, and observability inside AWS. But model portability is double-edged: if applications can swap providers easily, infrastructure pricing power weakens.

Pricing power is therefore conditional, not absolute. AWS can charge for reliability, security, data locality, integration, and specialized managed services. It has less power in standardized compute or inference when customers can benchmark price per token or move batch workloads. Long contracts and data gravity raise switching costs, but large customers increasingly use multiple clouds and negotiate aggressively. The base case assumes AWS preserves attractive economics through service depth and unit-cost reductions, not through broad price increases.

Entry barriers remain formidable at hyperscale: global data centers, power procurement, networking, chip supply, control-plane software, compliance, and developer ecosystems require vast capital and time. Yet the relevant entrants are already funded at extraordinary scale. The risk is not a start-up recreating AWS in five years; it is Azure or Google using application/model distribution to capture incremental AI workloads, and specialist clouds taking the most accelerator-intensive jobs while AWS retains lower-growth legacy infrastructure.

5. Moat at the segment level

AWS has a real moat, but it is strongest in the installed base and operating system around the infrastructure, not in raw compute. Customers accumulate security policies, architecture patterns, data stores, monitoring, trained staff, commercial commitments, and third-party integrations. Moving a regulated production estate is costly and risky. Each additional managed service deepens this operational embedding. This supports retention and cross-sell, particularly where downtime, auditability, and data governance matter more than the lowest posted price.

The ecosystem reinforces that moat. Consultants, independent software vendors, marketplace sellers, and certified practitioners lower the customer's cost of adopting AWS. The breadth of regions and services lets a global enterprise standardize on one platform while meeting many local requirements. Scale can improve purchasing, fleet balancing, security investment, and engineering productivity. The $496B backlog is consistent with large customers making long-duration commitments, although it is not proof of future margins.

The moat is weaker at the frontier of AI than in mature cloud. Accelerators are constrained across all providers, models change rapidly, and developers may choose a cloud because a particular model or chip is available. Azure's relationship with OpenAI and enterprise software estate, Google's Gemini/TPU integration, and specialist GPU clouds all weaken the idea that AWS is the default home for every new workload. AWS's model-choice strategy and Anthropic relationship are responses to that threat, but neither makes model demand captive.

Custom chips can widen the moat if AWS delivers a persistent cost/performance lead and a usable software toolchain. They can also become a tax if customers prefer CUDA portability or if competing chips leapfrog. Google and Microsoft are pursuing the same vertical integration. Therefore the bull case treats Trainium and Graviton as an execution advantage, the base as necessary parity with partial benefit, and the bear as insufficient to prevent price pressure.

Over five to ten years, AWS should remain one of a small number of global hyperscale platforms. The more difficult question is whether it sustains a mid-30s or better Operating income margin while funding a much more capital-intensive AI mix. The segment passes a durability test but not an invulnerability test. Its moat protects relevance and a large profit pool; it does not guarantee share gains, stable depreciation, or retention of every inference efficiency gain.

6. Historical growth rates reproduced from the reviewed data package

Amazon discloses AWS only in aggregate; service/component dollars are not disclosed. The required historical financial row is therefore AWS segment total. No AI, Trainium, Graviton, Bedrock, compute, storage, or database dollars are back-solved.

Product / sub-segment	FY-3 rev	FY-2 rev	FY-1 rev	3-year CAGR	Most recent YoY	Data package cite
AWS segment total	$90.757B [2025 Form 10-K Note 8; sealed QF P2]	$107.556B [2025 Form 10-K Note 8; sealed QF P2]	$128.725B [2025 Form 10-K Note 8; sealed QF P2]	19.1% [calculated from the same Note 8 values]	36.8% [SEC Exhibit 99.1, 2026-07-30; data_package §5]	2025 Form 10-K Note 8; sealed QF P2; Q2 FY2026 SEC Exhibit 99.1

The 19.1% figure is the CAGR from FY2023 to FY2025 across the three displayed annual observations, or two compounding intervals. For an exact three-year compounding span, FY2022 revenue of $80.096B to FY2025 revenue of $128.725B produces 17.1%. Both measures are shown transparently so the forecast does not choose the more favorable label.

AWS historical metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source row
Revenue	$62.202B	$80.096B	$90.757B	$107.556B	$128.725B	2023 and 2025 Forms 10-K Note 8; sealed QF P2
YoY growth	Not applicable	28.8%	13.3%	18.5%	19.7%	Calculated from the cited Note 8 revenue values
Operating income	$18.532B	$22.841B	$24.631B	$39.834B	$45.606B	2023 and 2025 Forms 10-K Note 8; sealed QF P2
Operating income margin	29.79%	28.52%	27.14%	37.03%	35.43%	Calculated from the cited Note 8 revenue and Operating income values

Arithmetic checks pass within 2%: `$62.202B × 1.288 = $80.116B` versus $80.096B; `$80.096B × 1.133 = $90.749B` versus $90.757B; `$90.757B × 1.185 = $107.549B` versus $107.556B; and `$107.556B × 1.197 = $128.745B` versus $128.725B. The small differences are rounding. No historical dollars were estimated or back-solved.

The annual pattern shows why a single base rate is insufficient. AWS slowed sharply to 13.3% in FY2023 as customers optimized spend, then recovered to 19.7% in FY2025. The four reviewed quarters accelerated further to 36.8% by Q2 FY2026. Margin also moved by nearly ten percentage points between FY2023 and FY2024. That volatility supports explicit annual cadences and normalized terminal margins rather than a straight extrapolation of the latest quarter.

7. Management guidance from the reviewed data package

Amazon gave no five-year AWS revenue or Operating income target. The relevant management anchors are demand, backlog, capacity, and capex statements, all reproduced from data_package §6.

- **Q3 FY2025, Andy Jassy:** “AWS is growing at a pace we haven't seen since 2022, reaccelerating to 20.2% year-over-year, our largest growth rate in 11 quarters.” This established the acceleration before the 2026 step-up; it is not itself forward guidance.
- **Q3 FY2025, Andy Jassy:** “Backlog grew to $200 billion by Q3 quarter end.” This was an early point in the commitment build, later superseded by $496B.
- **Q3 FY2025, Andy Jassy:** “You're going to see us continue to be very aggressive investing in capacity because we see the demand.” The capacity program is demand-led, but the investment precedes revenue and cash returns.
- **Q4 FY2025, Andy Jassy:** “AWS growth continued to accelerate to 24%, the fastest we've seen in thirteen quarters.” This was the second sequential acceleration point.
- **Q4 FY2025, Andy Jassy:** “We expect to invest about $200 billion in capital expenditures across Amazon.com, Inc., but predominantly in AWS, because we have very high demand.” This initial 2026 capex anchor was subsequently raised.
- **Q1 FY2026, Andy Jassy:** “On the backlog, the backlog for Q1 is $364 billion.” The sequential increase supported demand visibility but did not disclose cancellation, pricing, or recognition details.
- **Q1 FY2026, Andy Jassy:** “Of the AWS CapEx we intend to spend in 2026, much of which will be installed in future years, we have high confidence this will be monetized well.” The key modeling instruction is timing: capex and revenue do not arrive together.
- **Q2 FY2026, Andy Jassy:** “Our backlog stands at $496 billion, growing triple digits year-over-year.” This is the strongest demand anchor, tempered by its 6.4-year weighted life [data_package §0a, KPI table].
- **Q2 FY2026, Andy Jassy:** “We now believe we will spend approximately $220 billion in cash CapEx in 2026.” This is the current anchor and supersedes $200B.
- **Q2 FY2026, Andy Jassy:** “Even at that amount, we will still not have enough capacity to meet all the demand we have in 2026, and I believe this dynamic will also be true in 2027, too.” This is why the base case remains supply constrained through 2027 rather than converting backlog instantly.
- **Q2 FY2026, Brian Olsavsky:** “We've said before, these margins will fluctuate.” This directly prohibits annualizing the 39.4% Q2 margin, especially given the energy-derivative benefit.

The guidance supports above-historical growth in the near term and a long runway of deployments. It does not establish the mix, cancellation rate, gross margin, depreciation schedule, or rate at which commitments turn into recognized revenue. The forecast uses backlog to support the first two years of growth, capacity constraints to cap those years, and competitive evidence to force deceleration thereafter.

8. Forward growth assumptions

Because no service/component GAAP dollars exist, the financial projection uses one reconstructable line: AWS segment total. Service drivers are bounded overlays and are not added to that line.

Base case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Base CAGR TTM→TTM+5y	Justification
AWS segment total	17.1% FY2022–FY2025	36.8% Q2 FY2026	No numeric revenue guide; $496B backlog and capacity short through 2027	20.31%	Growth stays above the historical CAGR because backlog and AI demand are exceptional, but decelerates as capacity normalizes and Azure/GCP expand

The base annual cadence is 27%, 24%, 20%, 17%, and 14%. The first two years remain below Q2's 36.8% because management says capacity is insufficient in both 2026 and 2027. Growth then decelerates as comparisons rise, rival supply arrives, and inference cost per unit falls. The resulting 20.31% CAGR is only 3.18 percentage points above the 17.13% FY2022–FY2025 CAGR, is 16.49 points below Q2's latest YoY rate, and ends at 14%, below the historical CAGR. The $374.061B horizon revenue is not based on converting a fixed percentage of backlog; it is a consumption forecast constrained by supply and competition. This base case fails if capacity remains unavailable after 2027, if rival supply captures the unmet demand, or if inference price declines outrun workload growth.

Bull case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bull CAGR TTM→TTM+5y	Justification
AWS segment total	17.1% FY2022–FY2025	36.8% Q2 FY2026	No numeric revenue guide; $496B backlog and demand above capacity	25.28%	Faster capacity installation, strong inference elasticity, and successful Trainium/Graviton adoption sustain growth despite large scale and competition

The bull annual cadence is 33%, 30%, 25%, 21%, and 18%. Even this case decelerates from the latest quarter; it does not assume that a $148B business compounds at 37% for five years. It requires AWS to install constrained capacity on schedule, retain large AI workloads, and translate custom-silicon efficiency into attractive customer economics without surrendering all savings through price.

Bear case growth

Product	3-year historical CAGR	Latest YoY	Mgmt FY+1 guide	Bear CAGR TTM→TTM+5y	Justification
AWS segment total	17.1% FY2022–FY2025	36.8% Q2 FY2026	No numeric revenue guide; capacity shortage remains through 2027	13.73%	Power, memory, and installation constraints limit near-term supply; Azure/GCP take incremental workloads and falling inference prices outrun volume after 2028

The bear annual cadence is 20%, 16%, 13%, 11%, and 9%. The sharp deceleration is not a generic maturity assumption. It is tied to an explicit mechanism: constraints prevent AWS from serving some demand in 2026–2027; rivals bring capacity online; customers multi-source; and the price per unit of inference falls faster than consumption expands. The ending growth rate remains positive because cloud and AI demand continue to expand.

Year-by-year thesis-consistency check

Case	2027-06-30 growth / revenue	2028-06-30 growth / revenue	2029-06-30 growth / revenue	2030-06-30 growth / revenue	2031-06-30 growth / revenue
Bear	20% / $178.085B	16% / $206.578B	13% / $233.434B	11% / $259.111B	9% / $282.431B
Base	27% / $188.473B	24% / $233.707B	20% / $280.448B	17% / $328.124B	14% / $374.061B
Bull	33% / $197.377B	30% / $256.591B	25% / $320.738B	21% / $388.093B	18% / $457.950B

The comparable path is not a historical claim that a rival followed an identical five-year curve. Rather, current rival evidence shows Azure growing 43% and Google Cloud growing 48% while both remain supply constrained. That evidence argues against an abrupt category-wide collapse, but it also argues against assuming AWS monopolizes the incremental demand. The base cadence splits the difference: strong growth through constrained years, followed by orderly deceleration as scale and supply catch up.

Bounded service-driver overlays, not financial product forecasts

Driver overlay	Bear	Base	Bull	Why it matters
AI and inference volume	High unit growth, severe price deflation	Volume exceeds price declines	Exceptional elasticity and production adoption	Determines whether tokens become revenue rather than only usage
Trainium and Graviton	Adoption trails rival alternatives	Partial parity and procurement savings	Strong customer adoption and retained savings	Affects cost and differentiation, not a separately modeled GAAP revenue line
Core compute, storage, database	Optimization and multi-cloud pressure	Durable installed-base expansion	AI pulls adjacent data and database demand	Provides recurring workload foundation
Capacity delivery	Delays through 2027 and power bottlenecks	Management plan broadly achieved	Faster installation and high utilization	Gates backlog conversion and depreciation absorption
Pricing	Efficiency passed through aggressively	Balanced customer savings and retention	Service mix protects realized economics	Connects performance per dollar to revenue and margin

The overlays are deliberately non-additive. AI services and chip run rates above $25B are not included as separate revenue blocks because Amazon has not disclosed audited component dollars or a reconciliation to AWS revenue. The financial model

remains at AWS total and uses the overlays only to choose the total growth cadence.

9. Forward Operating income margin assumptions

The exact forecast metric is **Operating income**. The reported TTM margin is 36.85%; the approximate full-allocation energy-derivative normalization is 36.44%. The model starts from that band and does not treat Q2's 39.4% as the steady state.

Case	Current reported Operating income margin	Normalized current reference	2031-06-30 Operating income margin	Change vs reported	Specific mechanism
Bear	36.85%	Approximately 36.44%	30.00%	(685) bps	Price pressure, memory/power costs, depreciation, lower utilization, duplicated capacity, and adverse AI mix
Base	36.85%	Approximately 36.44%	36.00%	(85) bps	Utilization and custom-silicon savings broadly offset depreciation and competitive price declines
Bull	36.85%	Approximately 36.44%	39.00%	+215 bps	High utilization, managed-service mix, performance-per-watt gains, and retention of some silicon savings

The base margin is 85 basis points below reported TTM, 44 basis points below the conservative full-allocation normalized reference, and only 57 basis points above FY2025's 35.43%. That is intentionally conservative relative to Q2: the $220B capex cycle increases future depreciation, memory costs are elevated, and AI infrastructure can have lower early-life utilization. At the same time, scale, software automation, and custom silicon prevent a structural margin collapse. A flat-to-slightly-lower normalized outcome is more defensible than assuming either peak margin or inevitable compression; absent post-2027 utilization recovery, 36.0% would not be supported.

The bear margin declines by more than 600 basis points because several adverse mechanisms reinforce one another. Capacity arrives late or in the wrong locations; memory and power remain expensive; rivals price aggressively; AWS passes efficiency gains to customers; and accelerator depreciation grows faster than managed-service profit. Thirty percent is still a substantial margin and recognizes AWS's installed base, but it would signal a meaningful deterioration in capital economics.

The bull margin rises 215 basis points from reported TTM and roughly 256 basis points from the normalized reference. That requires more than revenue growth. The installed fleet must fill rapidly, Trainium/Graviton must improve cost per useful workload, software must reduce operating friction, and AWS must retain some of the savings. The case is bounded below 40% because rivals are also deploying custom chips and improving inference efficiency.

Margin cadence and Operating income

Case	2027 margin / Operating income	2028 margin / Operating income	2029 margin / Operating income	2030 margin / Operating income	2031 margin / Operating income
Bear	34.5% / $61.439B	33.0% / $68.171B	32.0% / $74.699B	31.0% / $80.324B	30.0% / $84.729B
Base	35.5% / $66.908B	35.0% / $81.797B	35.0% / $98.157B	35.5% / $116.484B	36.0% / $134.662B
Bull	36.5% / $72.043B	37.0% / $94.939B	38.0% / $121.880B	38.5% / $149.416B	39.0% / $178.600B

The base cadence shows the capex/depreciation trough before utilization benefits emerge. It does not hide capital intensity by jumping directly from today's result to the terminal margin. The bear assumes no recovery; the bull assumes capacity is monetized quickly enough for operating leverage to appear throughout the horizon.

No product-level margin is shown because Amazon does not disclose product revenue or profit. Assigning an 80% Bedrock margin or a 20% compute margin would be invention. The segment margin is calculated directly on AWS total, consistent with the sealed bridge.

10. Segment rollup built bottoms-up

With only one disclosed financial line, the bottom-up rollup is the year-by-year AWS total cadence in Section 8 multiplied by the case-specific **Operating income** margin cadence in Section 9. There are no undisclosed component plugs, corporate allocations, or statutory bridge adjustments.

Case	TTM revenue anchor	Five annual growth rates	2031-06-30 revenue	2031 Operating income margin	2031 Operating income	Revenue tie-out	Profit tie-out
Bear	$148.404B	20% / 16% / 13% / 11% / 9%	$282.431B	30.00%	$84.729B	100.0%	$282.431B × 30.00%
Base	$148.404B	27% / 24% / 20% / 17% / 14%	$374.061B	36.00%	$134.662B	100.0%	$374.061B × 36.00%
Bull	$148.404B	33% / 30% / 25% / 21% / 18%	$457.950B	39.00%	$178.600B	100.0%	$457.950B × 39.00%

The revenue arithmetic is fully reconstructable. Bear: `$148.404B × 1.20 × 1.16 × 1.13 × 1.11 × 1.09 = $282.431B`. Base: `$148.404B × 1.27 × 1.24 × 1.20 × 1.17 × 1.14 = $374.061B`. Bull: `$148.404B × 1.33 × 1.30 × 1.25 × 1.21 × 1.18 = $457.950B`. All differences at displayed precision are rounding below 0.1%.

The base outcome more than doubles AWS revenue over five years and increases Operating income by approximately 146% from $54.681B to $134.662B. It is demanding despite the deceleration path. The bear still nearly doubles revenue but delivers only approximately 55% Operating income growth because margin compression offsets much of the scale. The bull requires more than tripling revenue and expanding margin, an outcome possible only if AI consumption, capacity execution, and custom-silicon economics all work together.

The scenario weights are fixed at Bear 25%, Base 55%, and Bull 20%. Their probability-weighted horizon revenue is approximately $367.931B, and probability-weighted AWS Operating income is approximately $130.966B. These weighted figures are an analytical expectation, not a fourth scenario and not a substitute for the full consolidated synthesis.

11. Key risks and wildcards

- **Capacity installation and power availability — Bear/Base.** Management expects insufficient capacity through 2027 even after approximately $220B of 2026 Amazon cash capex. Delays in data centers, networking, grid connections, or accelerators would cap revenue while financing and operating costs continue.
- **Memory and component inflation — Bear.** Higher memory pricing already contributed to the capex increase. If HBM, conventional memory, networking, or power equipment remains scarce, AWS may face both lower available capacity and higher depreciation.
- **Azure and Google share capture — Bear/Base.** Azure grew 43% in its latest disclosed quarter and Google Cloud 48% in Q4 2025. Both are investing at hyperscale and have first-party application/model distribution. AWS cannot assume that unmet demand waits for its capacity.
- **Inference price deflation — Bear/Base/Bull.** Rapid performance-per-dollar improvement is good for adoption but ambiguous for revenue. If effective prices fall faster than tokens and agent activity grow, workload growth will not translate into forecast dollars. The bull requires elastic volume and retained efficiency benefits.
- **Custom-silicon execution — Bear/Bull.** Trainium and Graviton can reduce costs and improve supply diversity, but software maturity, developer portability, and competing chips determine adoption. Chip run rates are not GAAP product revenue and cannot be used to bridge the forecast mechanically.
- **Model-layer disintermediation — Bear.** Customers may buy directly from model providers, use multiple clouds, or move inference on premises or on device. A portable model layer can reduce the stickiness of the underlying infrastructure.
- **Concentration and contract quality — Bear/Base.** The $496B backlog is large but has a 6.4-year weighted life. Amazon does not disclose customer concentration, margin, cancellation terms, or the full recognition schedule for AWS obligations. Backlog can support capacity planning without guaranteeing terminal economics.
- **Depreciation and useful-life assumptions — Bear/Base.** The physical fleet expands before revenue. If accelerator obsolescence is faster than accounting lives imply, economic depreciation can exceed reported expense; if equipment remains productive longer, the reverse is true.
- **Energy derivatives and quarterly noise — All cases.** Q2's approximately $0.6B favorable remeasurement, primarily in AWS, shows that reported quarterly margin can be distorted. The monitoring rule should use normalized multi-quarter margins and separately identify derivative effects.
- **Security, reliability, and regulation — Bear.** A major outage, security breach, export restriction, sovereignty rule, or antitrust remedy could damage trust, force duplicated regional capacity, or constrain service design. The installed-base moat depends on operational credibility.

- **Open-source and database substitution — Bear/Base.** Open-source databases, portable orchestration, and multi-cloud tooling can reduce proprietary service attachment. AWS's DuckLabs agreement may strengthen analytics capabilities, but DuckDB remains with an independent foundation [data_package §9, 2026-08-26 action].
- **Upside from production AI and agents — Bull.** Training is only the initial demand wave. Recurring inference, data retrieval, databases, security, and orchestration can multiply adjacent AWS consumption if applications reach scaled production and cost per outcome keeps falling.

Monitoring conditions

The base case should be revisited if AWS growth falls below 20% while backlog remains high, because that would indicate capacity or execution failure rather than demand normalization. A second trigger is normalized Operating income margin below 33% for two consecutive quarters without a clearly temporary capacity ramp. A third is sustained Azure or GCP growth more than ten percentage points above AWS after capacity constraints ease. Positive triggers are installed capacity coming online without margin deterioration, evidence that Trainium improves both customer cost and AWS economics, and continued backlog growth with a stable or shorter weighted life.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$282.431B	Operating income	30.00%	$84.729B	25%
Base	$374.061B	Operating income	36.00%	$134.662B	55%
Bull	$457.950B	Operating income	39.00%	$178.600B	20%

The appendix's central judgment is that AWS remains a durable, highly profitable hyperscale platform, but the current 37% growth and 39.4% reported quarterly margin are not five-year steady states. The $496B backlog and capacity shortage support strong near-term demand, while approximately $220B of 2026 cash capex, memory costs, depreciation, Azure/GCP investment, and rapid inference cost deflation constrain the terminal economics. The base case therefore uses a transparent deceleration to a 20.31% five-year revenue CAGR and a normalized 36.0% terminal Operating income margin.

Data gaps

- `[DATA GAP: Amazon does not disclose AWS revenue by compute, storage, database, AI, Bedrock, Trainium, or Graviton; the financial model remains at AWS segment total.]`
- `[DATA GAP: Amazon does not disclose segment cash capex, a complete AWS invested-capital bridge, or service-level cost of revenue; no AWS ROIC or product margin is fabricated.]`
- `[DATA GAP: AI services and chip run rates above $25B are not audited GAAP product series and are not used as additive revenue.]`
- `[DATA GAP: AWS backlog customer concentration, cancellation terms, profitability, and detailed recognition schedule are not disclosed.]`

Appendix S - Synthesis (Combined Earnings Model)

Amazon.com, Inc. — Synthesis (Combined Earnings Model)

Ticker: AMZN **Production ER2 date:** 2026-08-30 **Forecast anchor:** TTM ended 2026-06-30 **Exact horizon:** 2031-06-30, exactly 5.0 calendar years **Reporting and quote currency:** USD **Scenario weights:** Bear 25%; Base 55%; Bull 20% **Trade execution authorized:** No

This appendix mechanically consolidates the independently reviewed North America, International, and AWS segment models into statutory revenue, operating income, normalized net income, and diluted EPS. It does not choose an exit multiple or calculate shareholder IRRs; those decisions belong to the later Compounder Score stage. The principal accounting judgment is intentionally conservative: the TTM USD 81.754B non-operating line, dominated by volatile Anthropic fair-value gains, is not carried forward, smoothed, or capitalized. The model instead uses zero recurring other income, a small continuing equity-method loss, explicit net-interest assumptions, normalized cash-tax rates, and a gross dilution path tied to TTM stock compensation.

1. Anchors

- **Today:** 2026-08-30.
- **Fiscal year-end:** December 31.
- **TTM anchor:** 2026-06-30, composed of Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026. These are four non-overlapping standalone quarters.
- **Latest completed fiscal year:** FY2025, used only for historical reconciliation.
- **Horizon:** 2031-06-30, exactly five calendar years after the TTM anchor. No line compounds for six fiscal years and no line substitutes FY2025 for the TTM base.
- **Valuation price:** USD 266.43 per Amazon common share on XNAS:AMZN, a raw exchange close for the completed 2026-08-28 session. Raw-source SHA-256 is `f27f65054e364dd49c9297fea8f79643a851f7f67c8fc414a818be8df8a8b739`; QFR-sealed quote-packet SHA-256 is `7aab5cad4a8797709a68744cfede14319a3687b7b297a4d3f30e182c5f143750`. Actionability expiry is 2026-08-31T06:01:48+08:00.
- **Quote validation:** the strict contract validator returned `QUOTE_PACKET_VALID` at 2026-08-30T07:54:58+08:00 and independently reproduced the sealed packet hash.
- **Security unit:** Amazon.com, Inc. common stock, one common share per listed unit. The financial statement and quoted share classes are identical.
- **Split bridge:** 10,871.25M financial-statement diluted shares at 2026-06-30 × split factor 1 = 10,871.25M quote-basis diluted financial shares at the 2026-08-28 quote basis. The packet records no intervening split. Its split source is the SEC submissions record at the archived path in the packet, SHA-256 `73c9acc85b4e857b74c97a9fd316fbff5c5a4dedbdaf91e4c52dee3eaf72d68d`.
- **Listed-unit bridge:** depositary ratio 1 × share-class conversion factor 1 = one financial share per listed unit. Therefore 10,871.25M quote-basis diluted financial shares ÷ 1 = 10,871.25M listed-unit equivalents.
- **FX bridge:** quote currency per reporting currency is 1 because both are USD; source is the packet's `IDENTITY_SAME_CURRENCY` convention dated 2026-08-28.
- **Historical statutory bridge:** SHA-256 `6df5d1b7267e335b734806cec62fcbe8f47a4a5ae831c1da5a56da7843e66c41`. The installed validator returned `STATUTORY_BRIDGE_VALID`; the durable gate manifest contains QFR clearance and DR's `STATUTORY BRIDGE VERIFIED - CLEARED FOR FORECASTING` record.

The quote packet is the sole price and unit source. No second price, converted price, adjusted close, or ADR equivalent appears in this synthesis. The statutory bridge is likewise the sole authority for the common segment-profit metric and historical reconciliation. That metric is issuer-disclosed **Operating income** for all three segments, with no corporate or

unallocated adjustments and no operating bridge adjustments in either FY2025 or the TTM.

2. Segment-level forward assumptions

The following values are reproduced, not re-derived, from Sections 8–10 of the independently reviewed segment appendices. The North America appendix is sealed at SHA-256 `210ceba245a58028a73cfa0085465678f312efddde285830097a8adec4f49461`; International at `3f39168455552972a874b508b6fc08758f8d7e0f762c084e5000470618295be9`; and AWS at `e836d55b57ac59a88fb8fe833251293b039d0962e23602fa404261dd34b4b570`.

Segment	Exact profit metric	TTM revenue, USD B	Bear TTM+5y revenue	Base TTM+5y revenue	Bull TTM+5y revenue	Bear profit margin	Base profit margin	Bull profit margin
North America	Operating income	453.670	578.526	697.734	799.203	6.50%	9.00%	10.50%
International	Operating income	173.606	216.345	255.084	292.536	1.75%	4.50%	6.00%
AWS	Operating income	148.404	282.431	374.061	457.950	30.00%	36.00%	39.00%

North America is modeled as one disclosed financial revenue line because Amazon does not allocate consolidated product categories by geography. Its Bear, Base, and Bull annual revenue cadences are respectively 8.0% / 6.0% / 5.0% / 3.5% / 2.5%; 11.0% / 10.0% / 9.0% / 8.0% / 7.0%; and 14.0% / 13.0% / 12.0% / 11.0% / 10.0%. The corresponding five-year CAGRs are 4.98%, 8.99%, and 11.99%. Terminal margins reflect the balance between fulfillment density, advertising and marketplace mix, automation, grocery and same-day investment, shipping inflation, and price competition.

International is also one disclosed financial line. Its five-year revenue CAGRs are 4.5%, 8.0%, and 11.0%, with terminal margins of 1.75%, 4.50%, and 6.00%. The appendix explicitly separates local demand, price and mix, and FX translation as scenario drivers without inventing country-level revenue. The Base margin reaches only modestly above the latest quarterly proof point, while the Bear captures positive revenue growth with adverse operating leverage.

AWS uses annual Bear growth of 20% / 16% / 13% / 11% / 9%, Base growth of 27% / 24% / 20% / 17% / 14%, and Bull growth of 33% / 30% / 25% / 21% / 18%. Its terminal margins of 30%, 36%, and 39% deliberately do not extrapolate Q2 FY2026's 39.4% reported margin. The Base path allows backlog and capacity additions to support growth while increased depreciation, memory and power costs, competitive pricing, and early-life underutilization absorb much of the operating leverage.

3. Combined revenue build

Amazon's reportable segments sum directly to consolidated revenue. The sealed historical packet identifies no corporate eliminations, and none is introduced prospectively.

Line	Bear	Base	Bull
North America TTM+5y revenue, USD B	578.526	697.734	799.203
International TTM+5y revenue, USD B	216.345	255.084	292.536
AWS TTM+5y revenue, USD B	282.431	374.061	457.950
Sum of segment TTM+5y revenue, USD B	1,077.302	1,326.879	1,549.689
Corporate eliminations, USD B	0.000	0.000	0.000
Combined TTM+5y revenue, USD B	**1,077.302**	**1,326.879**	**1,549.689**
Implied TTM to TTM+5y CAGR	6.80%	11.33%	14.86%

The combined model begins with USD 775.680B of TTM revenue: North America USD 453.670B, International USD 173.606B, and AWS USD 148.404B. The Base endpoint implies an 11.33% five-year consolidated CAGR, but the mix changes materially. AWS rises from 19.1% of the TTM revenue base to 28.2% of Base terminal revenue, while North America remains the largest revenue segment but grows more slowly. This mix shift matters because AWS carries a much higher Operating income margin than the retail segments.

The Bear is not a recessionary collapse. It assumes North America and International remain relevant and grow, while AWS faces capacity, pricing, and competitive friction. The Bull is demanding: consolidated revenue approximately doubles, AWS more than triples, and North America compounds from an already vast base. These endpoints are direct sums of the reviewed

segment values; no top-down revenue target has been imposed.

4. Combined operating income build

The common segment-profit basis is Operating income. The statutory bridge has no historical corporate or unallocated adjustment and no operating bridge adjustment, so projecting either line as zero is a direct continuation of the sealed classification rather than a balancing plug.

Line	Bear	Base	Bull
North America TTM+5y Operating income, USD B	37.604	62.796	83.916
International TTM+5y Operating income, USD B	3.786	11.479	17.552
AWS TTM+5y Operating income, USD B	84.729	134.662	178.600
Sum of segment TTM+5y profit on sealed metric, USD B	126.119	208.937	280.068
Corporate or unallocated adjustments, USD B	0.000	0.000	0.000
Consolidated TTM+5y segment-profit metric, USD B	126.119	208.937	280.068
Operating bridge adjustments, USD B	0.000	0.000	0.000
Combined statutory TTM+5y Operating income, USD B	**126.119**	**208.937**	**280.068**
Implied Operating income margin	11.71%	15.75%	18.07%

The forecast-driver ledger in data_package Section 3a assigns each segment's revenue and Operating income margin to its own reviewed appendix. It assigns total non-operating income, tax, and equity-method activity below Operating income; none is allocated into the segment results. This preserves the issuer's statutory geography and prevents the volatile Anthropic remeasurement from masquerading as AWS or retail profit.

In the Base case, AWS contributes USD 134.662B, or 64.5%, of combined Operating income despite producing 28.2% of revenue. North America contributes USD 62.796B, or 30.1%, and International contributes USD 11.479B, or 5.5%. The earnings thesis is therefore more concentrated in AWS than the revenue presentation suggests. In the Bear, AWS still provides roughly two-thirds of combined Operating income, but at a 30% terminal margin rather than the Base 36%.

The Base statutory Operating income of USD 208.937B is 2.23 times the USD 93.712B TTM anchor. The increase is produced entirely by disclosed segment revenue and margin paths. No restructuring credit, corporate cost release, accounting reclassification, or non-operating gain is included.

5. Net income and EPS build

The below-line build is deliberately normalized. TTM total non-operating income of USD 81.754B is set to zero in every scenario because the reviewed data package identifies volatile investment marks, especially Anthropic, as the dominant component and specifically warns against extrapolation. A small recurring equity-method loss remains because the reviewed statutory ledger shows negative USD 0.570B TTM and says cessation is not documented. Net interest expense is scenario-specific and tied to the current USD 223.232B gross-debt anchor, the funding-intensive capex cycle, and the explicit terminal capital-structure paths in Section 5a.

Line	Bear	Base	Bull
Combined TTM+5y Operating income, USD B	126.119	208.937	280.068
Net interest expense, USD B	(10.000)	(5.000)	(1.000)
Other income, USD B	0.000	0.000	0.000
Pre-tax income, USD B	116.119	203.937	279.068
Tax rate assumed	24.0%	22.0%	20.0%
Income tax provision, USD B	(27.869)	(44.866)	(55.814)

Line	Bear	Base	Bull
Equity-method investment activity, net of tax, USD B	(0.800)	(0.600)	(0.400)
Net income, USD B	**87.450**	**158.471**	**222.854**
Quote-basis diluted financial shares at TTM+5y, M	11,233.709	11,233.709	11,233.709
EPS in USD per quote-basis financial share	7.785	14.107	19.838
Financial shares per listed unit	1.000	1.000	1.000
EPS in USD per listed unit before FX	7.785	14.107	19.838
FX, quote USD per reporting USD	1.000	1.000	1.000
EPS in quote currency per listed unit at TTM+5y	**7.785**	**14.107**	**19.838**

The tax assumptions bracket the normalized 21% rate used in the reviewed analytical ROIC series and the recent statutory effective rates distorted by investment activity. Bear uses 24% to reflect less favorable geographic mix and fewer tax benefits. Base uses 22%, close to a normalized global cash-tax burden. Bull uses 20%, reflecting stronger taxable profit and efficient mix without assuming a tax holiday.

The exact unit arithmetic is:

`EPS_REPORTING_PER_QUOTE_BASIS_FINANCIAL_SHARE = NI_REPORTING ÷ QUOTE_BASIS_DILUTED_FINANCIAL_SHARES`

`EPS_QUOTE_PER_LISTED_UNIT = EPS_REPORTING_PER_QUOTE_BASIS_FINANCIAL_SHARE × FINANCIAL_SHARES_PER_LISTED_UNIT × FX_QUOTE_PER_REPORTING`

Thus Base EPS is USD 158.47086B ÷ 11.233709B shares = USD 14.106726 per financial share; multiplying by one financial share per listed unit and USD/USD FX of one leaves USD 14.106726 per listed common share. The same bridge is reproduced for Bear and Bull in Tie-out 2.

5a. Return-method input bridge

CS will choose the primary shareholder-return method. S provides inputs for both an EPS/P-E path and an EV/NOPAT diagnostic without choosing any exit multiple. Normalized NOPAT applies the same scenario tax rates directly to statutory Operating income. Terminal capital-structure values are explicit modeled endpoints from the current 2026-06-30 balance sheet; they are not residual plugs. Gross debt includes lease liabilities, and the lease row is a disclosed subset that must not be added again in an enterprise-value bridge.

Return-method input	Current anchor	Bear 2031-06-30	Base 2031-06-30	Bull 2031-06-30	Source and scenario path
Statutory Operating income, USD B	93.712	126.119	208.937	280.068	Current sealed TTM; terminal reviewed segment sum
Normalized cash tax rate	21.0% diagnostic	24.0%	22.0%	20.0%	Reviewed ROIC normalization bracketed by scenario
Normalized NOPAT, USD B	74.032	95.850	162.971	224.054	Operating income × one minus normalized tax rate
Cash, USD B	78.213	90.000	125.000	175.000	Current Q2 balance sheet; liquidity retained under all scenarios
Marketable securities, USD B	44.775	45.000	50.000	60.000	Current Q2 balance sheet; conservative liquid-asset path
Gross debt including leases, USD B	223.232	300.000	260.000	220.000	Current Q2 anchor; capex funding stress / partial normalization / repayment
Lease liabilities, USD B, included in gross debt	94.338	130.000	110.000	100.000	Current Q2 subset; scales with fulfillment and infrastructure intensity
Net debt less cash and securities, USD B	100.244	165.000	85.000	(15.000)	Gross debt minus cash minus marketable securities
Preferred equity, USD B	0.000	0.000	0.000	0.000	No material preferred claim in reviewed balance-sheet perimeter

Return-method input	Current anchor	Bear 2031-06-30	Base 2031-06-30	Bull 2031-06-30	Source and scenario path
Minority interest, USD B	0.000	0.000	0.000	0.000	No material minority claim identified in reviewed package
Other senior claims, USD B	0.000	0.000	0.000	0.000	None separately identified beyond debt and leases
Separately valued non-operating assets, USD B	0.000	0.000	0.000	0.000	Anthropic and other marks receive no separate terminal value in S
Diluted listed-equivalent shares, M	10,871.250	11,233.709	11,233.709	11,233.709	Sealed packet plus explicit five-year SBC path

The capital-structure paths are intentionally conservative and source-bound to the reviewed Q2 balance sheet and the current funding cycle. Bear assumes prolonged negative or weak free-cash conversion forces additional financing: gross debt rises USD 76.768B while cash and securities remain a substantial USD 135B liquidity reserve. Base assumes the 2026–2027 capacity program continues to require funding, but improving earnings permit net debt less liquid assets to decline from USD 100.244B to USD 85B. Bull assumes monetization and cash conversion allow modest gross-debt repayment and build USD 235B of cash and securities, producing USD 15B of net cash. These are scenario inputs, not a claim that management has guided to the terminal balances.

Net interest expense of USD 10B / USD 5B / USD 1B follows the direction of these capital structures and remains a conservative below-line charge. S does not infer a precise coupon stack, capitalize interest, or add a gain on the Anthropic position. Because the EPS/P-E route is fully reconciled, CS may use it even if it concludes the terminal balance-sheet paths are too uncertain for EV/NOPAT to control.

5b. P&C insurer lane

NOT TRIGGERED — issuer is not a P&C insurer or reinsurer. Amazon is classified in the reviewed package as internet and direct marketing retail, cloud infrastructure and platform services, and digital advertising. No insurer return bridge is created.

6. Share count path

The starting point is the sealed quote-basis diluted share count of 10,871.25M, not the 10,903M point-in-time Q2 share figure. TTM stock-based compensation is USD 19.314B, the sum of USD 4.847B, USD 4.397B, USD 4.032B, and USD 6.038B in the four component quarters. Dividing that expense by the sealed USD 266.43 quote produces a disclosed gross-equivalent SBC issuance estimate of 72.491837M shares per year. No buyback is modeled because the reviewed TTM cash-flow rows show zero repurchases and negative USD 11.625B of free cash flow.

Year ending	Starting quote-basis financial shares, M	Buyback, USD B	Average price, USD	Shares retired, M	SBC issuance, M	Ending quote-basis financial shares, M
2027-06-30	10,871.250	0.000	266.43	0.000	72.492	10,943.742
2028-06-30	10,943.742	0.000	266.43	0.000	72.492	11,016.234
2029-06-30	11,016.234	0.000	266.43	0.000	72.492	11,088.726
2030-06-30	11,088.726	0.000	266.43	0.000	72.492	11,161.217
2031-06-30	11,161.217	0.000	266.43	0.000	72.492	11,233.709

The exact ending share count is 10,871.25M + five × 72.4918365M = 11,233.7091825M. This is 3.33% cumulative dilution, or approximately 0.66% annually. It is conservative relative to the observed increase from 10,845M diluted shares in Q3 FY2025 to 10,903M in Q2 FY2026, but the comparison is not exact because reported diluted denominators reflect option dilution, issuance timing, vesting, and period weighting. The model does not assume that rising market value automatically offsets dilution, and it gives no credit for a repurchase program that has not occurred.

The same share path is used in all scenarios to isolate operating differences. CS may later stress it, but it may not relabel this gross-equivalent path as management guidance. If repurchases resume, both cash and shares must move; a share reduction without the matching capital cost would be invalid.

7. P/E 15 test

Required EPS at the immutable USD 266.43 quote-packet price is USD 17.762 per listed unit, calculated as USD 266.43 ÷ 15. The Base case, not Bull, controls the gate.

Case	EPS in USD per listed unit at TTM+5y	EPS × 15	Quote-packet price per listed unit	Cushion	Pass?
Bear	7.785	116.770	266.430	(56.17%)	FAIL
Base	14.107	211.601	266.430	(20.58%)	FAIL
Bull	19.838	297.570	266.430	11.69%	PASS

`Cushion = (EPS × 15 − quote-packet price) ÷ quote-packet price.`

P/E 15 gate: FAIL — cushion -20.58%. Base EPS of USD 14.106726 multiplied by 15 equals USD 211.600893, which is USD 54.829107 below the USD 266.43 quote. Only the Bull clears the entry-price bar. The operating franchise can therefore be durable and the security can still fail this demanding valuation test.

The gate is an entry-price discipline, not an exit-multiple selection. S makes no claim that Amazon should trade at 15 times terminal EPS, and it does not calculate an IRR. CS must independently select and justify the permitted primary return method and terminal valuation assumptions after reviewing this reconciled earnings base.

8. Reflexivity check

The historical statutory packet reproduces both FY2025 and the TTM without corporate or operating bridge adjustments.

Historical reconciliation	Segment sum, USD B	Consolidated statutory value, USD B	Residual, USD B	Residual percent	Result
FY2025 revenue	716.924	716.924	0.000	0.00%	PASS
FY2025 Operating income	79.975	79.975	0.000	0.00%	PASS
TTM revenue	775.680	775.680	0.000	0.00%	PASS
TTM Operating income	93.712	93.712	0.000	0.00%	PASS

FY2025 revenue arithmetic is USD 426.305B + USD 161.894B + USD 128.725B = USD 716.924B. FY2025 Operating income is USD 29.619B + USD 4.750B + USD 45.606B = USD 79.975B. TTM revenue is USD 453.670B + USD 173.606B + USD 148.404B = USD 775.680B. TTM Operating income is USD 33.651B + USD 5.380B + USD 54.681B = USD 93.712B. Each is an exact 100% reconstruction at displayed precision and well inside the 2% requirement and sealed packet tolerance.

The Base first-forward-year segment sum is USD 503.574B + USD 187.494B + USD 188.473B = USD 879.541B, 13.39% above the TTM run-rate. This exceeds the ordinary 10% recency band, but the reviewed appendices provide quantified primary-source evidence for the step change: the latest quarterly North America, International, and AWS revenue growth rates were 16%, 15%, and 37%; Q3 FY2026 company guidance was 9%–12% despite Prime Day timing reducing growth by nearly 400 basis points; and AWS backlog reached USD 496B while management said capacity remained insufficient through 2027. The model's first-year mix therefore represents a supported near-term acceleration, not an unsupported starting plug.

9. Latest interim bridge reconciliation

NOT TRIGGERED — four non-overlapping quarters used: Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026. The TTM build does not combine a cumulative half-year, a standalone quarter, and an overlapping YTD period. Revenue, Operating income, pre-tax income, net income, and diluted shares are reproduced in the sealed QF TTM build and statutory bridge.

The equal-quarter weighted TTM diluted denominator is 10,871.25M. TTM diluted EPS is not the sum of quarterly EPS; the historical identity is USD 135.281B reported net income ÷ 10.87125B weighted diluted shares = USD 12.443923. That reported EPS is not used as the normalized forecast base because its numerator includes the USD 81.754B non-operating line.

10. Sensitivity — which variables matter most

Each sensitivity holds all other Base assumptions fixed. AWS revenue CAGR is moved 200 basis points around its 20.31% equivalent five-year rate while its 36% terminal margin remains fixed. North America terminal margin is moved 200 basis points around 9%. Share count is moved 5% around 11,233.709M. Tax is moved 300 basis points around 22%.

Sensitivity	Downside input	Downside EPS	Base EPS	Upside input	Upside EPS	EPS range versus Base
AWS revenue CAGR ±200 bps	18.31%; terminal revenue USD 343.986B	13.355	14.107	22.31%; terminal revenue USD 406.204B	14.910	(0.752) to +0.803
North America terminal margin ±200 bps	7.00%	13.138	14.107	11.00%	15.076	(0.969) to +0.969
Terminal diluted shares ±5%	11,795.395M	13.435	14.107	10,672.024M	14.849	(0.672) to +0.742
Tax rate ±300 bps	25.0%	13.562	14.107	19.0%	14.651	(0.545) to +0.545

North America terminal margin is the largest single tested EPS swing, slightly exceeding the AWS CAGR sensitivity at these increments. This is economically intuitive: two points of margin apply to nearly USD 698B of Base North America revenue. AWS growth remains comparably important because each incremental revenue dollar carries a 36% terminal Operating income margin. Share dilution is the next-order per-share variable, while reasonable tax-rate variation changes the verdict least.

The P/E 15 gate remains failed across the individual downside and upside sensitivities except for combinations not shown here. For example, a stronger North America margin alone raises EPS to about USD 15.08, still below the required USD 17.762. Closing the gap would require several favorable operating and below-line variables to occur together or a different terminal valuation framework chosen and justified later by CS.

11. Combined earnings summary

Case	Revenue, USD B	Operating income, USD B	OI margin	Net income, USD B	EPS, USD per listed unit	Probability	EPS × 15	Versus USD 266.43 per listed unit
Bear	1,077.302	126.119	11.71%	87.450	7.785	25%	116.770	(56.17%)
Base	1,326.879	208.937	15.75%	158.471	14.107	55%	211.601	(20.58%)
Bull	1,549.689	280.068	18.07%	222.854	19.838	20%	297.570	11.69%
Probability-weighted diagnostic	1,309.047	202.459	15.47%	153.592	13.672	100%	205.087	(23.02%)

The 25% / 55% / 20% weights are not uniform. The Base receives the majority because AWS demand, backlog, retail delivery improvement, advertising growth, and International normalization are observable, while the Management gate remains YELLOW due to unproved returns on the USD 220B 2026 capex program, negative TTM free cash flow, dilution, and limited capital-return guardrails. Bear carries 25% because capex, depreciation, competition, power and memory availability, regulatory pressure, and retail cost inflation can combine. Bull is capped at 20% because it requires both strong revenue execution and favorable terminal margins across all three segments.

Probability-weighted EPS is the arithmetic expectation of the discrete earnings scenarios: 25% × USD 7.784645 + 55% × USD 14.106726 + 20% × USD 19.838007 = USD 13.672462. This is a diagnostic, not a fourth operating case, and it is not a probability-weighted IRR. The later return stage must probability-weight terminal shareholder wealth and then calculate the CAGR of that wealth.

12. Tie-out checks

1. Reported-financial and statutory-bridge tie-out — PASS

FY2025 segment revenue sums to USD 716.924B and equals consolidated revenue exactly. FY2025 segment Operating income sums to USD 79.975B and equals statutory Operating income exactly. TTM segment revenue sums to USD 775.680B and TTM segment Operating income sums to USD 93.712B; both equal the consolidated statutory anchors exactly. Corporate, unallocated, and operating bridge adjustments are all zero in the sealed packet. Residuals are zero and inside the packet tolerances of USD 48.6555M for FY2025 and USD 87.733M for the TTM. Source: `statutory_bridge.json` and data_package Sections 2 and 3a.

2. NI / shares / listed-unit / FX = EPS — PASS

Bear: USD 87.45044B ÷ 11.2337091825B shares = USD 7.784645 per quote-basis financial share; × one financial share per listed unit × 1 USD/USD = USD 7.784645. Base: USD 158.47086B ÷ 11.2337091825B = USD 14.106726; × 1 × 1 = USD 14.106726. Bull: USD 222.8544B ÷ 11.2337091825B = USD 19.838007; × 1 × 1 = USD 19.838007. Source: Section 5,

Section 6, and the sealed quote packet.

3. Segment sum tie-out at horizon — PASS

Bear combined revenue is USD 578.526B + USD 216.345B + USD 282.431B = USD 1,077.302B; combined divided by the segment sum is 100.00%. Base is USD 697.734B + USD 255.084B + USD 374.061B = USD 1,326.879B, also 100.00%. Bull is USD 799.203B + USD 292.536B + USD 457.950B = USD 1,549.689B, also 100.00%. There are no corporate eliminations.

4. Product-to-segment rollup — PASS

Each reviewed appendix uses exactly one issuer-disclosed financial line because Amazon does not disclose additive product revenue within any reportable segment. North America total, International total, and AWS total each reconcile 100% to their segment endpoint. Product and service discussions are expressly non-additive qualitative driver overlays. Source: each reviewed appendix Section 10.

5. Weighted margin check — PASS, conditional not triggered

No segment has more than one modeled financial product line, so a revenue-weighted product margin would require fabricated weights. The applicable check is that the single disclosed segment total multiplied by its terminal margin reproduces terminal Operating income. Bear North America USD 578.526B × 6.50% = USD 37.604B; International USD 216.345B × 1.75% = USD 3.786B; AWS USD 282.431B × 30.00% = USD 84.729B, with rounding. Base and Bull reproduce in the same way. Source: reviewed appendices Sections 9 and 10.

6. Share count and security-unit path — PASS

Starting financial-statement diluted shares of 10,871.25M × split factor one = 10,871.25M quote-basis diluted financial shares. Dividing by depositary ratio one × class factor one gives 10,871.25M listed-unit equivalents. Five years of 72.4918365M gross-equivalent SBC issuance and zero retirements yield 10,871.25M + 362.4591825M = 11,233.7091825M. The path is in financial common shares, not ADRs, and the exact ending count feeds every scenario's EPS.

7. Growth plausibility — PASS

North America Base CAGR of 8.99% is below 1.2 × its 9.9% FY2023–FY2025 historical CAGR, or 11.88%. International Base CAGR of 8.0% is below 1.2 × its 11.1% historical CAGR, or 13.32%. AWS Base CAGR of 20.31% is just below 1.2 × its exact FY2022–FY2025 CAGR of 17.13%, or 20.56%; the reviewed appendix also documents Azure growth of 43% and Google Cloud growth of 48% at smaller scale and AWS backlog of USD 496B. Every Base path therefore meets the framework threshold without relying on the Bull case.

8. Historical arithmetic and five-year compounding — PASS

North America: USD 453.670B × 1.11 × 1.10 × 1.09 × 1.08 × 1.07 = USD 697.734B in Base, with the Bear and Bull endpoints reproduced by their stated annual sequences. International: USD 173.606B × 1.08^5 = USD 255.084B in Base; 4.5% and 11.0% produce the reviewed Bear and Bull endpoints within rounding. AWS: USD 148.404B × 1.27 × 1.24 × 1.20 × 1.17 × 1.14 = USD 374.061B in Base, with the Bear and Bull annual sequences similarly reproducing USD 282.431B and USD 457.950B. Every line compounds from 2026-06-30 to 2031-06-30 for exactly five periods and is within 1%.

9. Recency anchor — PASS with quantified primary-source exception

Base first-forward-year revenue is USD 879.541B versus the USD 775.680B TTM anchor, a 13.39% increase. That is outside the ordinary 10% band, but it is supported by quantified primary-source evidence in the reviewed appendices: latest quarterly segment growth of 16% North America, 15% International, and 37% AWS; Q3 FY2026 company sales guidance of 9%–12% despite nearly 400 basis points of adverse Prime Day timing; and USD 496B of AWS backlog with capacity constrained through 2027. The first-year path does not exceed the latest segment trends and subsequently decelerates. Source: data_package Sections 5–6 and each segment appendix Section 8.

10. Period and horizon integrity — PASS

The TTM uses four non-overlapping standalone quarters ending 2026-06-30. No cumulative YTD bridge is triggered. Every segment appendix displays annual growth steps from 2026-06-30 through 2031-06-30. The horizon date is exactly five calendar years after the TTM anchor; no forecast begins from FY2025, compounds six times, or substitutes a fiscal year-end terminal date.

11. Valuation, unit bridge, packet hash, and probability arithmetic — PASS

The exact quote-packet bytes reproduce SHA-256 `7aab5cad4a8797709a68744cfede14319a3687b7b297a4d3f30e182c5f143750`; the exact statutory-bridge bytes reproduce SHA-256 `6df5d1b7267e335b734806cec62fcbe8f47a4a5ae831c1da5a56da7843e66c41`. Listing XNAS:AMZN, price USD 266.43, common-share basis, split factor one, depositary and class factors one, and USD/USD FX one all reproduce. EPS × 15 equals USD 116.769678 Bear, USD 211.600893 Base, and USD 297.570103 Bull. Cushions against USD 266.43 are -56.17%, -20.58%, and +11.69%. Probabilities sum to exactly 100%. Probability-weighted EPS of USD 13.672462 equals the sum of scenario EPS times 25%, 55%, and 20%. The Base controls the binary P/E 15 result.

Synthesis gate

All historical anchors, segment endpoints, unit bridges, below-line assumptions, dilution arithmetic, probability arithmetic, and valuation-entry checks are internally consistent and source-bound to the reviewed Production ER2 package. The non-operating gain normalization is intentionally restrictive, and no portfolio, trade, ranking, sizing, exit-multiple, or IRR conclusion is made here.

SYNTHESIS CLEARED — 11/11 TIE-OUTS PASSED

P/E 15 gate: FAIL — cushion -20.58%

Appendix CS - Compounder Score

Amazon.com, Inc. (AMZN) - Compounder Score and Security-Return Underwriting

Analysis date: 2026-08-30 **Exchange / security:** XNAS:AMZN common stock; one financial common share per listed unit **Reporting and valuation currency:** USD **TTM anchor:** 2026-06-30 **Exact return horizon:** 2026-06-30 to 2031-06-30, exactly 5.0 years **Current price:** USD 266.43, completed 2026-08-28 exchange session **Primary valuation method: P/E Valuation preflight:** `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\valuation_preflight.json`, SHA-256 `bf1d372b3539bf15a666011b1d03675ae69fb2c1b662ea42704099eed2f3e0fa`; validator result `VALUATION_PREFLIGHT_VALID`; all five foundations passed and blockers were empty. **Authority:** research only. Trade execution is not authorized. Portfolio mutation is not authorized.

1. Executive Verdict

Compounder Score: 64 / 100. Business Quality Score: 59 / 80. Valuation / 20% Return Underwriting Score: 5 / 20. Score-implied classification: Reject under this diagnostic rubric. The classification is deliberately stricter than a general statement about business quality. Amazon has a durable, still-growing profit engine in AWS and valuable commerce, advertising, logistics, and Prime networks. The reviewed moat and 2046 gates are PASS. But the current security does not underwrite to the rubric's 20% annualized hurdle, the probability-weighted gross USD return is only 7.98%, and the probability-weighted net-SGD diagnostic is only 7.80%.

The Base terminal EPS of USD 14.106726 at the VP-frozen 28x exit P/E produces USD 394.988328 of terminal value and an 8.19% gross USD IRR. The Bear terminal EPS of USD 7.784645 at 20x produces USD 155.692900 and a negative 10.19% gross USD IRR. Only the 20%-probability Bull, at USD 19.838007 of EPS and 34x, produces a 20.41% gross USD IRR. The weighted return is calculated from USD 391.065253 of probability-weighted terminal wealth, not by averaging scenario IRRs.

Amazon's current normalized comparable P/E is 38.8717518992479x, versus the non-comparable raw reported P/E of 21.4104503773627x inflated by Anthropic-related and other volatile non-operating gains. The frozen 20x / 28x / 34x exits are all below the normalized comparable anchor and were selected by VP before returns. This clears denominator and multiple integrity. It does not make the return adequate: earnings growth, dilution, and the starting price still leave Base and probability-weighted returns well below 20%.

The business-quality score is capped by the evidence. Five-year analytical ROIC has a 9.9% median across FY2021-FY2025, while simplified change-in-invested-capital ROIIC is approximately 24.77% over three years but 14.56% over five years. TTM free cash flow is negative USD 11.625B despite USD 135.281B of reported net income, because cash capex reached USD 173.028B. Stock-based compensation was USD 19.314B, and no TTM repurchases offset dilution. Management is YELLOW because the roughly USD 220B 2026 cash-capex program is not yet supported by project-level return evidence, a defined free-cash-flow guardrail, or incentive hurdles tied to ROIC or per-share value.

For CIO actionability, direct AMZN does not currently improve the governed portfolio proposition. Pershing Square Holdings is 19.2% of NAV and already supplies approximately 1.9% AMZN look-through. PSH's governed Base expected return is 15.0%, materially above AMZN's 7.60% Base net-SGD IRR and 7.80% probability-weighted net-SGD IRR. Direct AMZN has a less severe modeled Bear than PSH's -20.0% Bear, but that single attribute does not offset the lower central return and duplicated exposure. The evidence supports no direct-position proposal, no displacement of PSH, and a null sizing ceiling. Any later action requires explicit approval.

2. Data Source Map

Evidence need	Controlling source	Period / basis	Use and limitation
Price and listed unit	`quote_packet.json`, sealed SHA `7aab5cad4a8797709a68744cfede14319a3687b7b297a4d3f30e182c5f143750`	USD 266.43, XNAS close 2026-08-28	One common share per listed unit; no ADR or split conversion
Market capitalization / enterprise value	Price times QFR-sealed 10,871.25M diluted shares; Q2 balance-sheet bridge	USD 2,896.427B diluted market cap; USD 2,996.671B EV diagnostic	EV adds net debt less cash and securities of USD 100.244B once

Evidence need	Controlling source	Period / basis	Use and limitation
Income statement and EPS	`quant_foundation.md`, `statutory_bridge.json`, `appendix_synthesis.md`	FY2021-FY2025 and TTM ended 2026-06-30	Official SEC statements control; reported TTM net income is normalized for return comparability
Balance sheet and capital structure	Q2 FY2026 10-Q through `quant_foundation.md` and `data_package.md`	2026-06-30	Cash USD 78.213B; securities USD 44.775B; debt including leases USD 223.232B
Cash flow	`quant_foundation.md` P6 and `data_package.md`	FY2021-FY2025 and TTM	FCF equals operating cash flow less capex; TTM FCF is negative USD 11.625B
Diluted shares and SBC	QFR-sealed quote basis; synthesis share bridge	10,871.25M TTM to 11,233.7091825M terminal	Five years of gross-equivalent issuance; zero buybacks assumed
Segment economics	Reviewed North America, International, and AWS appendices	TTM and 2031-06-30	Exact profit basis is Operating income; segment SHAs are bound in VP
Management and allocation	`appendix_management.md`	Evidence through 2026-08-30	Management gate YELLOW; capex cohort returns and customer concentration remain undisclosed
Moat and runway	`appendix_moat.md` plus reviewed segment appendices	Five-year and 2046 tests	Moat PASS and 2046 PASS, with explicit competition and commoditization risks
Valuation method and exits	`valuation_preflight.json`	Frozen before CS returns	P/E selected; 20x / 28x / 34x exits; alternatives do not control
Portfolio comparison	Pulse action context supplied to Stage CS	Current governed context	PSH 19.2% NAV, approximately 1.9% AMZN look-through; PSH Base 15.0%, Bear -20.0%

The archived annual FMP package covers FY2020-FY2025, not a complete ten-year span. Ten-year growth, ROIC, ROIIC, and share-count figures are therefore marked insufficient rather than extrapolated. FMP technology-and-infrastructure expense is only an R&D proxy, not pure research and development; no false precision is added through R&D capitalization.

3. Key Financial and Quality Metrics

Metric	1-year	3-year	5-year	10-year	Interpretation
Revenue CAGR through FY2025	12.38%	11.73%	13.18%	Insufficient evidence	FY2020-FY2025 archive supports the five-year calculation
NOPAT CAGR, 21% normalized tax	16.59%	86.91%	28.42%	Insufficient evidence	Three-year rate begins at depressed FY2022 Operating income and is not steady-state
FCF CAGR	Not meaningful	Not meaningful	Not meaningful	Insufficient evidence	Sign changes in 2021, 2022, and TTM make CAGR economically invalid
Analytical ROIC	14.7% FY2025	9.9%-15.8% FY2023-FY2025	9.9% median FY2021-FY2025	Insufficient evidence	NOPAT over average provider invested capital; leases included through debt classification
Simplified ROIIC	14.7% one-year change diagnostic	24.77%	14.56%	Insufficient evidence	Change in normalized NOPAT divided by change in provider invested capital
Acquisition-inclusive ROIIC	Not used at one year	22.99% conservative diagnostic	13.39% conservative diagnostic	Insufficient evidence	Adds cash acquisition spend to the denominator; intentionally conservative and not a substitute for cohort returns
FCF conversion to NOPAT	-15.70% TTM	49.69% cumulative FY2023-FY2025	23.42% cumulative FY2021-FY2025	Insufficient evidence	Current capex cycle is the dominant quality constraint
Operating margin	11.16% FY2025	6.41%-11.16%	2.38%-11.16%	Insufficient evidence	TTM margin is 12.08%; AWS mix increasingly controls profit
Diluted share CAGR	0.99% FY2025	2.03% FY2022-FY2025	1.20% FY2020-FY2025	Insufficient evidence	Terminal model adds 0.66% annually with no buyback
SBC / revenue	2.50% TTM	3.45% FY2023-FY2025 average	3.38% FY2021-FY2025 average	Insufficient evidence	SBC remains an economic cost and dilution source
SBC / operating cash flow	11.97% TTM	20.41% FY2023-FY2025	26.15% FY2021-FY2025	Insufficient evidence	Material even though ratio is improving

Metric	1-year	3-year	5-year	10-year	Interpretation
Net debt / EBITDA	0.40x FY2025 vendor diagnostic	-	-	-	Q2 net debt less cash and securities rose to USD 100.244B
Current EV / normalized NOPAT	40.48x TTM	-	-	-	Diagnostic only; P/E is the controlling return method
FCF yield	-0.40% TTM	-	-	-	Negative using USD 2,896.427B diluted market capitalization
Dividend yield / net buyback yield	0.00% / 0.00% TTM	-	-	-	No cash-return contribution to underwriting

The historical ROIC calculations do not prove that current investment earns high incremental returns. FY2025 NOPAT is USD 63.180B using the 21% normalized rate, versus USD 18.090B in FY2020. Provider invested capital rose from USD 177.013B to USD 486.627B. The five-year simplified ROIIC is therefore `(63.180 - 18.090) / (486.627 - 177.013) = 14.56%`. Over three years it is `(63.180 - 9.676) / (486.627 - 270.621) = 24.77%`. Adding USD 27.063B of FY2021-FY2025 cash acquisitions to the five-year denominator lowers the diagnostic to 13.39%. This conservative acquisition-inclusive form may double-count acquired assets already captured in invested capital, so it is a score cap rather than a precise claim.

4. Rubric Scorecard

Category	Score	Maximum	Evidence-based conclusion
Incremental Returns on Capital	15	25	ROIC recovery and 3-year ROIIC are credible, but the five-year ROIIC is only 14.56%, R&D capitalization is not supportable from the proxy, and current FCF conversion is negative
Reinvestment Runway	18	20	AWS demand, USD 496B backlog, advertising, marketplace services, delivery density, and International normalization provide scale runway; capital intensity and terminal scale constrain certainty
Durability of Moat	13	15	Moat PASS and 2046 PASS; switching costs, logistics density, seller/advertiser networks, and purchase-intent data are real, but cloud price deflation and customer multi-homing matter
Accounting and Financial Quality	7	10	Statutory data reconciles cleanly and liquidity is ample; Anthropic marks distort reported earnings, FCF is negative, and SBC is material
Capital Allocation Discipline	6	10	The 2022-2025 reset is strong evidence, but USD 220B capex, new debt, zero capital returns, time-based incentives, and undisclosed project IRRs prevent a higher score
Price and 20% Return Underwriting	5	20	Exits are independently justified below normalized current P/E, but Base/PW returns are about 8%, Bear is negative, and zero distributions provide no support
Total	**64**	**100**	**Reject under the strict diagnostic rubric; a materially lower entry price is required for 20% underwriting**

Subcategory scoring is skeptical. Incremental returns receive 1/5 for the five-year median analytical ROIC, 4/8 for mixed 3-year and 5-year ROIIC, 2/3 for trend, 3/3 for unit economics, 2/3 for cash conversion, and 3/3 for non-artifact treatment. Runway receives 5/5 for opportunity, 5/5 for reinvestment at scale, 4/4 for organic growth, 2/3 for repeatability, 2/2 for structure, and 0/1 for proof that current growth will avoid ROIC compression. Moat receives 4/4, 2/3, 3/3, 2/2, 2/2, and 0/1 because disruption risk is not low. Accounting receives 1/2, 1/2, 1/2, 2/2, 1/1, and 1/1. Capital allocation receives 2/2, 1/2, 0/2, 1/2, 1/1, and 1/1.

Valuation receives 0/6 for Base IRR below 10%; 3/4 because all exits are below the comparable normalized current P/E and independently supported, though they do not clear 20%; 0/3 for an unacceptable Bear; 0/3 because the method-matched required EPS CAGR is not met in Base; 2/2 because the frozen multiples compress rather than price perfection at the horizon; and 0/2 because dividends and buybacks are zero.

5. ROIIC and Reinvestment Analysis

Amazon's returns need two separate readings. First, the operating reset was highly productive. Operating income rose from USD 12.248B in FY2022 to USD 79.975B in FY2025, while North America and International moved from losses to meaningful profit. This supports the proposition that network regionalization, improved delivery density, workforce reduction, and AWS mix created real operating leverage. Second, the historical record cannot validate the current investment cycle. TTM capex of USD 173.028B exceeds operating cash flow of USD 161.403B, and management expects approximately USD 220B of 2026 cash capex. Depreciation, utilization, component inflation, power availability, and financing costs will reveal the economic return with a lag.

The five-year change-in-invested-capital ROIIC of 14.56% is above a reasonable cost of capital but far below the rubric's dream-compounder threshold. The 24.77% three-year figure is better, yet begins at the FY2022 operating trough and therefore receives only 4/8. Acquisition-inclusive diagnostics are not worse enough to suggest serial M&A destruction; cash acquisition outlays were USD 27.063B over five years. However, exact acquired-cohort earnings are unavailable, and the pending USD 10.9B Globalstar transaction includes undisclosed mixed cash and stock consideration. The evidence supports conservative credit, not precision.

FCF conversion is the principal veto watch. Cumulative FY2021-FY2025 FCF was USD 41.171B against cumulative normalized NOPAT of USD 175.811B, or 23.42%. FY2023-FY2025 conversion was stronger at 49.69%, but TTM conversion is negative 15.70%. This may be a temporary capacity-build trough, not structural earnings fiction, because AWS revenue accelerated and backlog expanded. It still prevents treating accounting earnings as cash available to shareholders.

6. Runway Analysis

The evidence supports a large remaining opportunity without relying on a single management TAM. AWS has observable demand in compute, storage, databases, security, analytics, AI training, and inference. The USD 496B remaining performance obligation balance supports multi-year demand, but its 6.4-year weighted life means it cannot be converted directly into near-term revenue. North America can compound through e-commerce penetration, marketplace services, advertising, subscriptions, grocery frequency, faster delivery, and automation. International can improve density and profitability selectively, though local competition and currency translation remain material.

The central problem is not opportunity; it is the price and capital required to capture it. The Base scenario assumes consolidated revenue reaches USD 1,326.879B at an 11.33% CAGR and Operating income margin rises to 15.75%. AWS contributes 64.5% of Base Operating income. That concentration increases sensitivity to hyperscaler competition, custom silicon execution, power and memory costs, and inference price deflation. North America Base margin rises to 9.0%, a modest-looking percentage but applied to nearly USD 698B of revenue. The synthesis sensitivity shows a 200-basis-point North America margin change moves EPS by about USD 0.97, more than the tested AWS growth variation.

7. Moat Analysis

The moat can be stated plainly. Enterprises tolerate significant cost and risk to move production data, identity, security, observability, and operational workflows away from AWS. Consumers, sellers, and advertisers benefit from Amazon's combined selection, traffic, fulfillment network, Prime membership, delivery density, and closed-loop purchase measurement. Each system becomes more useful as participation and accumulated operating data increase.

The reviewed Moat gate and 2046 gate are PASS, but neither implies invariant margins. Azure and Google Cloud have scale, capital, and distribution. AI workloads may become portable, specialized infrastructure may win frontier training, and the effective price of inference may fall rapidly. Retail customers multi-home easily, Walmart and local platforms can match delivery and marketplace capabilities, and regulators can restrict seller rules, data use, subscriptions, advertising, or cross-service attachment. The score gives high durability credit while reserving two points for these structural threats.

8. Accounting and Capital Allocation Analysis

The statutory foundation is unusually well reconciled: FY2025 and TTM segment revenue and Operating income tie exactly to consolidated values, and TTM uses four non-overlapping quarters. The crucial normalization is below operating income.

Reported TTM net income of USD 135.281B includes USD 81.754B of non-operating income dominated by volatile Anthropic fair-value gains. VP replaces this with normalized statutory net income of USD 74.51239B and EPS of USD 6.85407749798781. That denominator is comparable with terminal EPS because all forward cases use zero recurring other income.

SBC is not added back as free value. TTM SBC of USD 19.314B equals 2.50% of revenue and 11.97% of operating cash flow. The return model assumes gross-equivalent annual issuance of 72.4918365M shares and no repurchase, increasing diluted listed-equivalent shares from 10,871.25M to 11,233.7091825M. This 3.33% cumulative dilution is embedded in every terminal EPS.

Management's YELLOW gate is preserved. Jassy's team deserves credit for the post-pandemic reset and for comparatively specific AWS capacity commentary. It does not yet deserve PASS because the current capital program is larger, funding has shifted toward debt while FCF is negative, project-level utilization and customer concentration are undisclosed, no dividend or repurchase offsets dilution, and compensation lacks ROIC or FCF hurdles. The dual-class/founder influence and related-party policy limitations reinforce the cap.

9. 20% Return Underwriting

9.1 Frozen valuation bridge

Primary valuation method: P/E. The PE method is used for Bear, Base, Bull, probability weighting, the 20% reverse-return diagnostic, and net-SGD. No cash, securities, debt, lease, or Anthropic value is added after terminal EPS times exit P/E. Current balance-sheet figures are displayed for transparency, not double-counted: cash USD 78.213B; marketable securities USD 44.775B; gross debt including leases USD 223.232B; lease liabilities included in debt USD 94.338B; net debt less cash and securities USD 100.244B. Terminal diluted shares are 11,233.7091825M in every scenario.

Denominator item	Exact value	Comparability conclusion
Reported TTM diluted EPS	USD 12.4439231919053	Non-comparable because reported net income includes volatile non-operating marks
Raw reported current P/E	21.4104503773627x	Shown diagnostically; not used as an exit cap
Normalized current diluted EPS	USD 6.85407749798781	Comparable with normalized terminal statutory diluted EPS
Normalized current P/E	38.8717518992479x	Correct current comparator
Bear / Base / Bull exits	20x / 28x / 34x	Independently frozen before returns; all below normalized current P/E

The excessive-optimism challenge passes because even Bull compresses from 38.87x to 34x despite a demanding operating outcome. The excessive-bearishness challenge passes because Bear retains a positive 20x value for a still-growing, durable franchise rather than assigning distress or liquidation economics. VP's independently justified ranges were 18x-24x Bear, 25x-32x Base, and 30x-38x Bull. **RETURN_MODEL_OBJECTION_STATUS: MATERIAL_RESOLVED.** Stage RT found no method, denominator, double-count, terminal-wealth, or probability-arithmetic defect. Its evidence-bound sensitivities show Base at 25x would produce a 5.77% gross IRR and Bear at 24x would produce a negative 6.85% gross IRR; neither changes the no-direct-position CIO actionability conclusion. The controlling 20x / 28x / 34x scenario values and returns remain unchanged. RT is bound at `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\appendix_red_team.md`, SHA-256 `15e349a01e5339b28c8e3bfdff57a82aa00b56336aca8cfbf8f899694f63ff43`.

9.2 Gross USD shareholder returns

Scenario	Probability	Terminal EPS	Exit P/E	Terminal equity value/share	Distributions/share	Terminal wealth/share	Gross USD IRR
Bear	25%	USD 7.784645	20x	USD 155.692900	USD 0.000000	USD 155.692900	**-10.19%**
Base	55%	USD 14.106726	28x	USD 394.988328	USD 0.000000	USD 394.988328	**8.19%**
Bull	20%	USD 19.838007	34x	USD 674.492238	USD 0.000000	USD 674.492238	**20.41%**
Probability weighted	100%	Not a fourth EPS case	Same PE method	USD 391.065253 expected wealth	USD 0.000000	USD 391.065253	**7.98%**

The formulas are exact. Scenario value is `terminal EPS x frozen exit P/E`; gross IRR is `(terminal wealth / 266.43)^(1/5) - 1`. Expected wealth is `25% x 155.692900 + 55% x 394.988328 + 20% x 674.492238 = 391.065253`. Probability-weighted gross IRR is `(391.065253 / 266.43)^(1/5) - 1 = 7.977488297372237%`. It is

not the arithmetic average of scenario IRRs.

Zero cumulative distributions are a clearly labeled diagnostic tied to the governed terminal values. Amazon pays no dividend, no dividend is forecast, and the reviewed TTM cash-flow rows show no repurchase. This assumption is conservative and method-consistent.

9.3 Net-SGD diagnostic

The identical P/E terminal values are translated using entry USD/SGD 1.28, 0.20% entry cost, 0.20% exit cost, and terminal USD/SGD of 1.15 Bear, 1.25 Base, and 1.35 Bull. There are no distributions and therefore no dividend-withholding effect. Initial SGD outlay per share is `266.43 x 1.28 x 1.002 = SGD 341.71246080000003`.

Scenario	Terminal USD wealth	Exit USD/SGD	Net terminal SGD wealth after 0.20% exit cost	Net-SGD IRR
Bear	USD 155.692900	1.15	SGD 178.688741330000	**-12.16%**
Base	USD 394.988328	1.25	SGD 492.747939180000	**7.60%**
Bull	USD 674.492238	1.35	SGD 908.743392257400	**21.61%**
Probability weighted	Same PE method	Scenario-specific	SGD 497.432230332980 expected wealth	**7.80%**

Each scenario net-SGD IRR is `(net terminal SGD wealth / 341.7124608)^(1/5) - 1`. Probability-weighted net terminal wealth is `25% x 178.68874133 + 55% x 492.74793918 + 20% x 908.7433922574 = SGD 497.43223033298`. The probability-weighted net-SGD IRR is `(497.43223033298 / 341.7124608)^(1/5) - 1 = 7.798972431944406%`. Again, scenario IRRs are not averaged.

9.4 Reverse-return hurdle and maximum entry price

A 20% five-year return from USD 266.43 requires terminal wealth of `266.43 x 1.20^5 = USD 662.9630976`. At the Base 28x exit P/E, required terminal EPS is USD 23.67725348571428, versus modeled Base EPS of USD 14.106726. Required EPS CAGR from normalized current EPS is 28.13756375521863%, materially above the Base modeled EPS CAGR. The method-matched maximum entry price for 20% gross IRR is USD 62.56948463220166 Bear, USD 158.73695023148153 Base, and USD 271.06330295138895 Bull. Base therefore indicates that the price would need to be approximately 40.42% below USD 266.43 to meet the 20% hurdle with unchanged operating and exit assumptions.

The separate P/E-at-or-below-15 entry gate also fails: Base terminal EPS of USD 14.106726 times 15 is USD 211.600893, 20.58% below the current price. That gate does not select the exit multiple and is not substituted into the return model.

9.5 CIO actionability - research only

Test	AMZN result	Governed comparison	Research conclusion
Base net-SGD annualized return	7.60%	10% minimum diagnostic; PSH Base 15.0%	Fails both thresholds
Probability-weighted net-SGD return	7.80%	10% minimum diagnostic	Fails
Bear net-SGD return	-12.16%	PSH Bear -20.0%	Better isolated downside, but not enough to offset lower central return and overlap
Existing exposure	Approximately 1.9% AMZN look-through via PSH	PSH is 19.2% of NAV	Direct AMZN duplicates an existing governed exposure
Direct-position / displacement case	Not supported	Must add incremental value versus PSH	No direct position, no displacement, no sizing proposal

`approval_required = true`, `trade_execution_authorized = false`, and `sizing_ceiling_pct_nav = null`. This is not a ranking and not a portfolio instruction. The monitorable path to reconsideration is a materially lower price, stronger evidence that capex cohorts generate durable FCF and ROIC, lower dilution, or terminal EPS above the current Base without increasing the frozen multiple. None is assumed today.

10. Hard Veto Checklist

Hard veto	Status	Evidence
ROIIC below cost of capital with no improvement path	Watch	Five-year ROIIC 14.56% and three-year 24.77% are positive, but current capex returns remain unproved
High ROIC only from artificially tiny or negative capital	Pass	Invested capital is large and rising; the reported return is not a denominator artifact
Growth requires persistent external financing	Watch	Liquidity is ample, but 2026 debt issuance and negative TTM FCF fund the capacity cycle
Material share rise without per-share value proof	Watch	3.33% modeled dilution, no buyback, and material SBC
Large acquisition record without disclosed returns	Watch	M&A is not dominant, but Globalstar and embedded prior deals lack clean return disclosure
FCF consistently lags earnings structurally	Watch	Five-year conversion is low and TTM negative; temporary-versus-structural outcome is unresolved
Concentration, regulation, dependency, cyclicality, or leverage can impair equity	Watch	AWS profit concentration, hyperscaler competition, regulation, and capital intensity are material
20% case requires multiple expansion	Pass	All exits are below comparable normalized current P/E; raw reported P/E is not used as cap
Flawless execution needed to justify price	Fail / hard valuation veto	Base produces only 8.19%; only Bull clears 20%
Moat cannot be explained clearly	Pass	AWS switching costs and commerce/logistics/advertising flywheels are specific and evidenced
Accounting or governance impairs trust	Watch	Statutory accounting ties, but non-operating marks and YELLOW governance require normalization
Balance-sheet risk can wipe out equity in downturn	Pass	Net debt is material but liquidity and positive Bear earnings do not indicate wipeout risk

The binding diagnostic veto is valuation, not solvency. The score does not claim Amazon's equity is worthless or the franchise is weak. It states that a high-quality enterprise bought at this price does not satisfy a 20% annualized return mandate under the frozen, independently justified assumptions.

11. Final Decision

Score-implied classification: Reject under this rubric. Amazon is a durable, high-quality platform with a long runway, but it is not a dream investment at USD 266.43 under the required 20% return test. A Base 20% gross return would require approximately USD 158.74 or substantially higher terminal EPS than the reviewed Base supports. The portfolio already owns indirect AMZN exposure through PSH, whose governed central return is higher.

Compounder Score note: 64/100; durable platform economics are outweighed by unproved capital returns and inadequate security returns at the current price. **Business Quality Score note:** 59/80; AWS and commerce moats support runway, while negative TTM FCF, dilution, and a YELLOW capital-allocation gate cap quality. **20% Return UW Score note:** 5/20; Base and probability-weighted returns are about 8%, Bear is negative, and only Bull clears 20%.

12. Machine-Readable JSON

The sibling artifact `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\compounder_score.json` contains full-precision scenario, probability-weighted, net-SGD, score, hard-veto, and CIO-actionability fields. It binds the exact VP SHA and preserves all inapplicable EV/NOPAT and P/B-ROE fields as null. The JSON uses the same PE method in all scenarios and does not add net cash or debt after EPS times P/E.

Appendix CSA - Scoring Audit

Amazon.com, Inc. (AMZN) — Independent Scoring Audit

Analysis date: 2026-08-30 **Price:** USD 266.43 at the 2026-08-28 XNAS session **Exact horizon:** 2026-06-30 to 2031-06-30, 5.0 years **Audit handoff: SCORING AUDIT CLEARED — CLEARED FOR RED TEAM**

1. Original vs Audited Scores

The final source CompounderScorer Markdown is 28,523 bytes and 4,252 words with SHA-256 `1566245a2ed5c7562ead99261da7227dc7c46b5c2a54623a064b5a96514d9d1b`; its 21,345-byte JSON has SHA-256 `38f2621d857575852f717714ecb5a6cd87b57042a003e46dedec08119ea2c301`. The two final source artifacts agree on every published score, scenario weight, terminal value, gross-local return, net-SGD return, classification, final Red-Team status, and authority flag. I independently rebuilt the rubric rather than accepting the total.

Item	Original	Audited	Notes
Business Quality Score / 80	59	58	Governance point removed because the evidence explicitly contains governance red flags
Valuation / 20% Return UW Score / 20	5	3	Price-perfection points removed because only Bull clears 20% and Base returns only 8.19%
Total Score / 100	64	61	Still below the 70-point Reject threshold
Classification	Reject	Reject	The score, hard-veto 9, and 20% hurdle all independently imply Reject

The original 64/100 was not arithmetically wrong, but two subcategory judgments were internally inconsistent with the scorer's own evidence. This score is reduced because a company with a YELLOW governance gate cannot receive the point for “no governance/accounting red flags,” and a security whose current price produces only an 8.19% Base return cannot receive full credit for not pricing perfection. These reductions do not alter the moat PASS or 2046 PASS and do not mechanically determine the ER2 verdict.

2. Score Reductions and Reasons

Subcategory	Original	Audited	Evidence status	Audit decision
1A Normalized ROIC	1/5	1/5	Supported	Five-year median analytical ROIC is 9.9%, exactly matching one point
1B ROIIC	4/8	4/8	Supported with limitation	24.77% three-year and 14.56% five-year; trough sensitivity prevents more credit
1C ROIIC trend	2/3	2/3	Partly supported	Recovery is real, but the current capex cohort is not seasoned
1D Unit economics	3/3	3/3	Supported	Segment margins, AWS backlog, and stores density provide operating evidence
1E Cash conversion	2/3	2/3	Supported	Five-year conversion is 23.42% and TTM is negative, so credit is already capped
1F Not an artifact	3/3	3/3	Supported	Anthropic marks are explicitly removed and statutory earnings reconcile
2A Market opportunity	5/5	5/5	Supported	Multiple observable demand pools, not a single management TAM, support runway
2B Reinvestment at scale	5/5	5/5	Supported with limitation	Historical AWS and logistics scaling is proven; 2F separately captures current uncertainty

Subcategory	Original	Audited	Evidence status	Audit decision
2C Organic growth	4/4	4/4	Supported	AWS, ads, services, subscriptions, and density are primarily organic
2D Repeatable expansion	2/3	2/3	Partly supported	Post-reset record is short and International economics vary by market
2E Market structure	2/2	2/2	Supported	Scale, switching costs, and logistics density support long-duration participation
2F No ROIC collapse	0/1	0/1	Missing proof	USD 220B cash capex has no disclosed project-level return evidence
3A Clear advantage	4/4	4/4	Supported	AWS control-plane embedding and the commerce/logistics flywheel are identifiable
3B Pricing power	2/3	2/3	Partly supported	Retention and mix matter more than unbounded price increases
3C Competitive evidence	3/3	3/3	Supported	AWS profit, post-reset stores margins, seller participation, and backlog are observable
3D Customer stickiness	2/2	2/2	Supported	Enterprise migration cost and Prime/seller network effects are concrete
3E Stress resilience	2/2	2/2	Supported	The 2022 trough was followed by a documented operating recovery
3F Low disruption risk	0/1	0/1	Unsupported	AI portability, hyperscaler rivalry, retail multi-homing, and regulation remain material
4A Clean earnings	1/2	1/2	Partly supported	Statutory tie-outs pass, but USD 81.754B of non-operating income distorts reported net income
4B Cash support	1/2	1/2	Partly supported	Multi-year cash generation exists, but TTM FCF is negative USD 11.625B
4C SBC/dilution	1/2	1/2	Supported	SBC is treated as cost and 3.33% modeled dilution is included, but no buyback offsets it
4D Balance sheet	2/2	2/2	Supported	Liquidity and 0.40x FY2025 vendor net-debt/EBITDA offset the higher debt burden
4E Disclosure	1/1	1/1	Supported with limitation	Statutory and segment disclosure is strong; project-level capex returns remain absent
4F No governance red flags	1/1	0/1	Contradicted	Founder-chair influence, no written related-person policy, and material related-party dealings are explicit flags
5A Reinvestment priority	2/2	2/2	Supported with limitation	AWS capacity is strategically coherent, though returns remain unproved
5B Acquisition discipline	1/2	1/2	Partly supported	M&A is not dominant, but cohort economics and Globalstar stock consideration are unavailable
5C Buyback discipline	0/2	0/2	Supported	There is no TTM buyback while SBC dilutes owners
5D Incentive alignment	1/2	1/2	Partly supported	Long vesting helps, but awards lack ROIC, FCF, or relative-TSR hurdles

Subcategory	Original	Audited	Evidence status	Audit decision
5E Owner mentality	1/1	1/1	Supported with limitation	Bezos's 8.8% stake and long-duration posture support one point despite governance tension
5F Past decisions	1/1	1/1	Supported	The 2022–2025 operating reset is credible evidence of corrective action
6A Base IRR	0/6	0/6	Supported	Base gross IRR is 8.1933%, below the 10% minimum for any point
6B Exit multiple	3/4	3/4	Supported	Multiples were selected in VP before returns and sit below normalized current P/E
6C Bear case	0/3	0/3	Supported	Bear gross IRR is negative 10.1874%
6D Reverse return	0/3	0/3	Supported	Required Base EPS CAGR is 28.14%, well above the modeled path
6E Price perfection	2/2	0/2	Contradicted	Only Bull clears 20%, Base P/E-15 fails, and hard-veto 9 is FAIL
6F Cash returns	0/2	0/2	Supported	Zero distributions and zero buybacks provide no return support

Audited category totals are 15/25 incremental returns, 18/20 runway, 13/15 moat, 6/10 accounting and financial quality, 6/10 capital allocation, and 3/20 valuation underwriting. Business Quality is therefore 58/80 and the total is 61/100.

3. Unsupported Claims

The evidence does not support the scorer's phrase “dual-class/founder influence.” Amazon has one common class with one vote per share according to the reviewed management appendix. Founder influence is still a valid governance concern because Jeff Bezos is non-independent Executive Chair and the board rejected a mandatory independent-chair structure, but dual-class control is not present. This wording error does not change the audited score beyond removing 4F.

The evidence also does not support calling the current USD 220B capex cycle proven. AWS backlog of USD 496B is strong demand evidence, but its 6.4-year weighted life, undisclosed customer concentration, component inflation exposure, and absence of project-level IRRs prevent treating backlog as near-term cash conversion. The scorer already assigns 2F zero and caps ROIIC/cash conversion, so no additional duplicate deduction is taken.

No complete ten-year financial series, R&D-capitalized ROIC, segment FCF, segment invested capital, acquisition-cohort earnings, or exact Globalstar equity consideration is available. The source scorer properly marks those fields insufficient or null; I found no fabricated metric.

4. Calculation Errors

Operating quality calculations

The 21% normalized tax convention is consistently applied. FY2025 NOPAT is USD 79.975B × 79% = USD 63.18025B. Five-year simplified ROIIC replays as `(63.180 - 18.090) / (486.627 - 177.013) = 14.56%`; the three-year form replays as `(63.180 - 9.676) / (486.627 - 270.621) = 24.77%`. Adding USD 27.063B of five-year acquisition spend to the denominator produces approximately 13.39%, matching the acquisition-inclusive diagnostic. The five-year analytical ROIC median of 9.9%, FY2025 ROIC including goodwill of 14.7%, and excluding-goodwill/intangibles diagnostic of 15.9064% are internally consistent with the archived calculation set. The acquisition-inclusive form may double-count acquired assets already embedded in provider invested capital; the scorer labels that limitation and does not award precision credit.

FCF conversion replays to negative 15.70% TTM, 49.69% over FY2023–FY2025, and 23.42% over FY2021–FY2025. FCF CAGR is correctly withheld because the series changes sign. TTM SBC is USD 19.314B, 2.49% of revenue and 11.97% of operating cash flow. Gross-equivalent issuance of 72.4918365M shares annually for five years takes diluted shares from 10,871.25M to exactly 11,233.7091825M. This is a conservative, transparent dilution proxy rather than a claim about exact

award settlement.

Valuation preflight and denominator audit

The exact valuation-preflight SHA-256 is `bf1d372b3539bf15a666011b1d03675ae69fb2c1b662ea42704099eed2f3e0fa`. The repository validator with `--check-evidence-files` returned `VALUATION_PREFLIGHT_VALID`; all five foundations are passed, status is CLEARED, and blockers are empty. CS copies the VP path, hash, PE method, normalized denominator, 11,233.7091825M terminal shares, and 20x/28x/34x scenario exits exactly.

Reported current P/E independently replays as `266.43 / 12.4439231919053 = 21.4104503773627x`. Normalized current P/E replays as `266.43 / 6.85407749798781 = 38.8717518992479x`. The raw denominator includes volatile Anthropic-linked fair-value marks and coexists with negative TTM FCF, so it is economically non-comparable and was not used as a cap. The normalized current denominator and terminal statutory diluted EPS share the same listed unit, currency, claim perimeter, zero recurring other income treatment, and diluted-share basis. No provider ratio was relabeled and no row-level P/B conversion was required.

The 20x Bear, 28x Base, and 34x Bull exits were selected in the sealed VP before IRR calculation. Bear preserves material franchise value rather than disguising liquidation; Bull remains below the 38.8718x normalized current P/E despite strong operating assumptions. Historical native GAAP P/E observations are used only as range checks. Both excessive-optimism and excessive-bearishness challenges pass. Final material-objection status is `MATERIAL_RESOLVED`. The Red-Team appendix at `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\appendix_red_team.md`, SHA-256 `15e349a01e5339b28c8e3bfdff57a82aa00b56336aca8cfbf8f899694f63ff43`, found no method, denominator, double-count, terminal-wealth, or probability-arithmetic defect. Its evidence-bound Base 25x sensitivity produces a 5.77% gross IRR and its Bear 24x sensitivity produces a negative 6.85% gross IRR. These are decision-useful bounds, not corrections to the VP-locked 20x/28x/34x cases; neither changes the audited 61/100 score, Reject classification, or no-direct-position CIO actionability.

Independent return replay

One frozen P/E method controls every scenario, probability weighting, reverse-return diagnostic, and net-SGD overlay. Terminal values are exactly EPS × exit P/E with zero distributions and no second cash/debt adjustment.

Scenario	Weight	Terminal EPS	Exit P/E	Terminal wealth USD	Gross USD IRR	Net-SGD IRR
Bear	25%	7.784645	20x	155.692900	-10.187427375928337%	-12.161021879070455%
Base	55%	14.106726	28x	394.988328	8.193265149943096%	7.595175959203093%
Bull	20%	19.838007	34x	674.492238	20.414494345687695%	21.606304255800836%

Probability-weighted terminal USD wealth is `0.25 × 155.692900 + 0.55 × 394.988328 + 0.20 × 674.492238 = 391.0652530000001`. Its five-year CAGR from USD 266.43 is 7.977488297372237%. The arithmetic average of scenario IRRs would be only 6.042337857624158% and is not used.

For the net-SGD replay, entry USD/SGD is 1.28, entry and exit costs are each 0.20%, and scenario exit rates are 1.15/1.25/1.35. Initial cost is SGD 341.71246080000003. Net terminal wealth is SGD 178.68874133/492.74793918/908.7433922574002. Probability-weighted net terminal wealth is SGD 497.43223033298005 and its five-year CAGR is 7.798972431944406%. No distributions create withholding tax, no net debt is added after EPS × P/E, and no arithmetic-average return is used.

5. Missing Data

The most important missing evidence is project-level return and utilization data for the USD 220B 2026 cash-capex program. Segment-level FCF and invested capital would make ROIIC attribution much stronger. A complete ten-year financial series would improve cycle testing. Acquisition-cohort earnings and exact Globalstar consideration would improve acquisition-inclusive ROIIC and dilution precision. These gaps lower confidence to Medium but do not break the sealed P/E return bridge.

6. Hard-Veto and Threshold Test Audit

Hard veto 9 remains FAIL: only Bull clears 20% and the current price requires a demanding combination of earnings and valuation. Vetoes 1, 3, 4, 5, 6, 7, and 11 remain Watch; vetoes 2, 8, 10, and 12 pass. The score is below 70, Business Quality

is below 65/80, Valuation is below 15/20, Base IRR is below 20%, Bear IRR is negative, and at least one hard veto fails. Reject is therefore the only valid score-implied classification.

The P/E-at-15 gate separately fails: Base terminal EPS USD 14.106726 × 15 = USD 211.600893 versus USD 266.43, a negative 20.58% cushion. The P/E-15 test does not set the 28x Base exit and does not change the frozen valuation method.

7. Final 20% Hurdle Pass/Fail

FAIL. Base gross USD IRR is 8.19%, probability-weighted gross USD IRR is 7.98%, Base net-SGD is 7.60%, and probability-weighted net-SGD is 7.80%. The 20% case requires USD 662.9630976 of terminal wealth, Base terminal EPS of USD 23.67725348571428 at 28x, or a Base entry price of USD 158.73695023148153. None is supported at the sealed USD 266.43 price.

8. Dream Business / Dream Investment Classification

Neither under this strict rubric. Amazon has exceptional durable assets, a moat PASS, and a 2046 PASS, but 58/80 Business Quality is below the 65-point dream-business threshold because long-cycle ROIIC, cash conversion, governance, dilution, and per-share capital discipline remain unproved. It is not a dream investment because the Base and probability-weighted returns are near 8%, not 20%. The single biggest disqualifier is the entry valuation relative to supportable normalized terminal earnings.

The CIO comparison reinforces but does not set the score. PSH is 19.2% of NAV and supplies approximately 1.9% AMZN look-through; its governed Base return is 15% and Bear is negative 20%. AMZN's Base net-SGD 7.60% and probability-weighted 7.80% fail the 10% diagnostic and trail PSH's Base. Better isolated Bear downside does not justify duplicate exposure. This audit authorizes no direct position, no displacement, no ranking, no sizing, no trade, and no portfolio mutation.

9. Stage 7 Scorecard Notes

- **Compounder Score note:** 61/100 audited; durable platform assets do not offset unproved current capital returns and inadequate returns at USD 266.43.
- **Business Quality Score note:** 58/80 audited; moat and runway are strong, while negative TTM FCF, dilution, governance flags, and the unseasoned capex cycle cap quality.
- **20% Return UW Score note:** 3/20 audited; Base and probability-weighted returns are near 8%, Bear is negative, and only Bull clears 20%.

10. Auditor JSON

The sibling `compounder_score_audit.json` preserves the full-precision replay, input hashes, audited subcategory scores, CIO research-only conclusion, and false authority flags. Markdown and JSON agree. **SCORING AUDIT CLEARED — CLEARED FOR RED TEAM.**

Appendix RT - Red Team

Amazon.com, Inc. (AMZN) — Adversarial Red Team

Analysis date: 2026-08-30 **Price:** USD 266.43 at the 2026-08-28 XNAS session **Exact horizon:** 2026-06-30 to 2031-06-30, 5.0 years **Authority:** Research only; no trade, ranking, sizing, or portfolio mutation authority

Locked evidence and independent replay

Before challenging the thesis, I reproduced the exact SHA-256 bindings: valuation preflight `bf1d372b3539bf15a666011b1d03675ae69fb2c1b662ea42704099eed2f3e0fa`; Compounder Score Markdown/JSON `1566245a2ed5c7562ead99261da7227dc7c46b5c2a54623a064b5a96514d9d1b` and `38f2621d857575852f717714ecb5a6cd87b57042a003e46dedec08119ea2c301`; scoring-audit Markdown/JSON `e05dd9b81fc41c3fc63a834d048f5dba71fcd03fee8223043820bcb2c3bee9e1` and `54611f1127e6bcf438dead40790c949da700d078414f4d7136b92b8b7569bb77`. All match the handoff. The audited score is 61/100, comprising 58/80 Business Quality and 3/20 return underwriting, classified **Reject**.

The P/E method is consistently applied. Terminal wealth exactly replays as terminal statutory diluted EPS multiplied by 20x/28x/34x, with zero distributions and no second cash/debt adjustment: USD 155.692900 / USD 394.988328 / USD 674.492238 per share. From USD 266.43 these produce gross USD IRRs of -10.187427% / 8.193265% / 20.414494%. Weighting terminal wealth at 25% / 55% / 20% gives USD 391.065253 and a 7.977488% five-year CAGR, not the 6.042338% arithmetic average of scenario IRRs. The net-SGD replay also matches: -12.161022% / 7.595176% / 21.606304%, with probability-weighted terminal wealth of SGD 497.432230 and a 7.798972% CAGR. There is no arithmetic defect to exploit.

1. The most fragile assumption

The most fragile assumption is the **AWS Base operating path**, specifically USD 374.061B of 2031-06-30 revenue at a 20.31% five-year CAGR and a 36.0% terminal Operating income margin. It is fragile because the two variables are not independent. Amazon must install an extraordinary volume of accelerator, memory, networking, power, and data-center capacity while utilization is initially low; customers must then consume enough capacity to overcome inference price deflation; and AWS must retain custom-silicon savings rather than pass them to customers or surrender them to Azure and Google Cloud. The same USD 220B capex cycle that enables revenue therefore threatens depreciation, price, and utilization simultaneously.

The model's own sensitivity provides the cleanest attack. Cutting AWS CAGR by 200 basis points lowers Base EPS from USD 14.106726 to about USD 13.355 and terminal wealth at 28x from USD 394.988 to USD 373.940; gross IRR falls from 8.19% to 7.01%. Holding growth but lowering terminal AWS margin from 36% to 33% removes about USD 11.22B of operating income, lowers EPS to about USD 13.328, and lowers IRR to 6.97%. Neither shock alone crosses the two-point materiality threshold, but they are economically correlated. Combining those two AWS shocks with North America margin at 7% rather than 9% lowers EPS to roughly USD 11.607 and terminal wealth to USD 324.993, producing only a 4.05% gross IRR. This is a non-controlling stress, not a revision of audited results; it shows where the operating thesis can break.

2. Most-likely-to-be-optimistic Stage 5 number

The single Stage 5 number most likely to be revised down is **Base North America terminal Operating income margin of 9.0%**. It applies to nearly USD 698B of revenue and is more consequential per tested increment than any other single variable: a 200-basis-point reduction to 7% cuts Base EPS by USD 0.969 and IRR from 8.19% to 6.66%. The 9% assumption leans on fulfillment regionalization, automation, delivery density, advertising, marketplace mix, and grocery basket expansion. Yet the 7.84% normalized starting floor already benefits from the completed post-pandemic network reset; the next gains must absorb grocery cold-chain costs, same-day underutilization, shipping inflation, price competition, regulation, and recurring physical-store mistakes. Walmart's 24% U.S. e-commerce growth, marketplace growth above 50%, and Walmart Connect growth of 43% demonstrate that Amazon's high-margin layers are contested, not simply mix tailwinds.

3. Strongest bear case

Amazon is converting a high-return cloud franchise into a capital-hungry AI utility precisely as competitors add parallel capacity and workload portability improves. The USD 496B AWS backlog is demand evidence, but its 6.4-year weighted life, undisclosed concentration, fixed-price legacy contracts, and capacity installation risk make it a weak proxy for near-term cash

returns. Within two years, low utilization, memory and power inflation, faster accelerator obsolescence, and inference price deflation can push AWS growth below 20% and normalized margin below 30%, while AI shopping agents divert discovery and sponsored-ad economics from the stores flywheel. Because AWS supplies 64.5% of Base terminal Operating income, the result is not merely slower growth: it is lower EPS, a lower justified multiple, continuing negative free cash flow, and debt-funded dilution.

The observable anchor is a two-quarter combination after the 2026–2027 capacity build enters service: normalized AWS margin below 30% and revenue growth below 20%, alongside trailing-twelve-month FCF still negative. That pattern would show that capital entered service without producing the modeled profit pool.

4. Cross-examination of management commentary

- On the Q1 FY2026 call, Andy Jassy said he had **“high confidence this will be monetized well”** regarding AWS capex installed in future years. Confidence is not a cohort return bridge. Amazon does not disclose utilization, contract margin, customer concentration, useful economic lives, or project IRRs. The first contrary evidence would be depreciation growing faster than AWS gross profit, normalized AWS margin below 33%, or backlog duration lengthening while current revenue conversion slows.

- On the Q2 FY2026 call, Jassy said Amazon **“will still not have enough capacity”** in 2026 and likely 2027. Scarcity supports revenue but is not necessarily good economics: capacity shortages allow Azure and Google Cloud to capture workloads, while old contract prices remain fixed as memory and infrastructure costs rise. Recent reviewed peer evidence—Azure growth of 43% and Google Cloud growth of 48%—confirms category demand but also confirms that rivals have distribution and capital. The earliest failure signal is rival growth exceeding AWS by more than ten points for two quarters after supply improves.

- On the Q2 FY2026 call, Brian Olsavsky cited **“meaningful opportunities to further enhance productivity”** in global fulfillment. International's Base 4.5% margin and North America's Base 9% margin require that productivity to exceed shipping inflation, grocery cost, wage pressure, and regulatory friction. Worldwide shipping-cost growth of 19% already exceeded paid-unit growth of 17% in Q2. If that gap persists for two quarters while normalized stores margins stop improving, the promised density benefit is not arriving.

Management deserves credit for warning that AWS margins fluctuate and for identifying memory inflation. The skeptical conclusion is not that management is hiding the cycle; it is that the disclosures still cannot prove the per-dollar return on the largest investment program in Amazon's history.

5. Stage 5 tie-out reverification

The recency anchor is valid: Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026 are four non-overlapping quarters ending 2026-06-30. The 13.39% Base first-year revenue step is above the ordinary 10% recency band but is supported by recent 16% / 15% / 36.8% segment growth and company guidance. The red-team concern is not stale data; it is that current supply-constrained AWS acceleration is being treated as the opening year of a five-year economic path even though capacity economics are unseasoned.

The terminal share path also ties: 10,871.25M plus five years of 72.4918365M gross-equivalent issuance equals 11,233.7091825M, or 3.33% cumulative dilution. This assumes no buybacks, which is appropriately conservative given negative TTM FCF. It may still understate gross issuance if SBC grows with the larger revenue and workforce base, and it uses the same path in Bear and Bull despite different equity values. The maximum all-stock equivalent for the USD 10.9B Globalstar consideration is only 40.91M shares. Adding all of it would take Base shares to about 11,274.62M, EPS to USD 14.056, and gross IRR to 8.11%, a 0.08-point effect. The missing exact stock mix is therefore real but immaterial to actionability.

No Base product CAGR violates the framework threshold. AWS is the edge case: 20.31% sits just below 1.2 times its 17.13% FY2022–FY2025 CAGR, with backlog and current growth as named structural reasons. The problem is not a formal tie-out breach. It is that backlog supports demand, not simultaneously utilization, pricing, depreciation, and free-cash conversion.

6. Score-derived 20% claim

The audited score does **not** say a 20% return is plausible; the red team agrees. Only Bull clears 20%, and it has a 20% probability. At the frozen 28x Base exit, a 20% gross return requires USD 23.677 of terminal EPS versus USD 14.107 modeled, and a 28.14% EPS CAGR from normalized current earnings. Alternatively, the Base max entry price is USD 158.737, far below USD 266.43. The first assumption to break any optimistic 20% narrative is not the exit multiple but FCF conversion: TTM FCF is negative USD 11.625B, five-year FCF conversion is only 23.42%, and the USD 220B capex cohort has no disclosed return evidence. A shareholder cannot receive a compounding claim merely because accounting NOPAT grows while cash is absorbed and dilution continues.

7. Two-sided valuation challenge

Strongest reason the audited model may be too optimistic. The 28x Base P/E is defensible within the preflight's 25x–32x evidence range, but it prices a mature USD 1.327T revenue company as a premium compounder before the cash economics of the capex cycle are proven. Using the preflight's lower Base bound of 25x—not a method switch—reduces terminal wealth from USD 394.988 to USD 352.668 and gross IRR from 8.19% to 5.77%, a 2.42-point reduction. I do not identify evidence that makes 25x the uniquely correct controlling multiple; this is a material sensitivity already bounded by VP, not an arithmetic or foundational defect. More importantly, even the audited 28x outcome already fails ER2 and CIO actionability.

Strongest reason the audited model may be too bearish. Bear applies 20x, near the low end of VP's 18x–24x range, to a company still growing consolidated revenue at 6.8%, with positive EPS and durable AWS, commerce, logistics, Prime, and advertising assets. At the evidence-bound 24x upper range, Bear terminal wealth rises from USD 155.693 to USD 186.831 and IRR improves from -10.19% to -6.85%. If AWS margin were 33% rather than 30% while retaining the 24x sensitivity, terminal wealth would be about USD 200.589 and IRR -5.52%. Bear therefore may stack severe margin compression and severe multiple compression. It remains a bad return even after this rebuttal.

Zero distributions and zero separately valued Anthropic value are additionally conservative. However, Amazon has no current dividend or buyback, FCF is negative, and no source-bound terminal value for the Anthropic stake is available. Adding either would be speculation and could double count P/E equity value. The correct red-team conclusion is that the bridge is conservative on optionality but not defective.

RETURN_MODEL_OBJECTION_STATUS: MATERIAL_RESOLVED. The operating and multiple sensitivities can exceed two points, but they are not supportable corrections to a broken locked input. VP independently selected the P/E method and 20x/28x/34x exits before IRR, CS and CSA replayed the exact inputs, the score already rejects the security, and the Bear/Base/Bull range already incorporates capex, margin, dilution, and multiple risk. No method, denominator, double-count, terminal-wealth, or probability arithmetic defect remains to route upstream.

8. P&C insurer lane

Not triggered. Amazon is not a P&C insurer, reinsurer, specialty carrier, or balance-sheet-led risk-bearing financial business. No insurer return bridge is required, and no P/B-ROE or retained-versus-managed underwriting cross-examination is applicable.

9. Exit and downgrade signals

Signal	Numeric threshold and window	Why it matters
Force-exit signal	After substantial 2026–2027 capacity has entered service, normalized AWS Operating income margin below 30% for two consecutive quarters while AWS growth is below 20%	Invalidates both Base AWS utilization economics and the profit concentration supporting the equity multiple
Capital-cycle downgrade	TTM FCF remains negative through FY2028 and gross debt is at or above USD 300B	Converts a temporary capex trough into evidence of debt-funded, ROIC-destructive capacity
Commerce downgrade	North America normalized margin below 7% for three quarters while growth trails U.S. e-commerce	Shows AI discovery, Walmart, grocery, shipping, or regulation is breaking the stores flywheel
Backlog-quality downgrade	AWS backlog declines more than 10% year over year or weighted life rises above 7 years while current growth slows	Shows commitments are not converting into timely revenue and may be low-quality or delayed

The force-exit signal is the first row. It is deliberately stricter than a one-quarter fluctuation and normalized for derivative effects. AWS generates most modeled profit; two quarters below both thresholds after capacity arrives would invalidate the thesis rather than merely lower a forecast.

10. Conviction after red team

Thesis does not survive as a direct investment at USD 266.43. The business moat survives: AWS's control plane and Amazon's physical commerce system remain formidable, and the 2046 durability case is credible. The security thesis does not. Base and probability-weighted gross returns are near 8%, net-SGD returns are also near 8%, Bear loses money, and the audited score is Reject even before applying harsher red-team sensitivities. The narrative should be rewritten around a strong franchise whose current price already capitalizes successful AI-capacity monetization and commerce-margin execution while shareholders receive no distribution support.

The strongest rebuttal is that Bear may be excessively punitive because 20x is low for a still-growing platform and the model gives no value to Anthropic optionality or future distributions. That rebuttal improves Bear but does not make the security actionable. The central monitoring task is therefore proof of capex returns: AWS growth, normalized margin, FCF, debt, and dilution as capacity enters service. Until those metrics prove that USD 220B is building high-return earnings rather than merely high reported revenue, the audited Reject remains the defensible conclusion.

Appendix D - Data Package (Reviewed Historicals)

Amazon.com, Inc. (AMZN) — Production ER2 Data Package

Run ID: `pulse-cio-20260830T060148+0800` **Information cutoff:** `2026-08-30T06:01:48+08:00` **Fiscal year-end:** December 31 **Latest completed quarter:** Q2 FY2026 ended 2026-06-30 **TTM anchor:** Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending 2026-06-30 **Forward horizon:** 2031-06-30, exactly five calendar years after the TTM anchor **Currency and scale:** USD billions except per-share data, percentages, and Section 3a, which reproduces the sealed packet in USD millions **Authority:** Research only; `trade_execution_authorized=false`

This package uses the QFR-sealed `quant_foundation.md` and `statutory_bridge.json` as the controlling financial foundation. Current releases, filings, and management statements were independently fetched live in this D run from FMP `/stable/`, SEC EDGAR, and Amazon Investor Relations. No July package, prior report, or local data-warehouse cache was used as evidence.

0a. Industry classification and disclosure inventory

Amazon is a diversified cloud-computing, e-commerce marketplace and retailer, digital-advertising platform, subscription, logistics, media, devices, grocery, and satellite-network company under U.S. GAAP and SEC domestic-issuer reporting. The controlling official source set is the 2025 Form 10-K, Q2 FY2026 Form 10-Q, four SEC-filed earnings exhibits, and Amazon IR's current results and events pages. FMP's annual and quarterly product endpoints are unusually complete for Amazon's seven revenue categories, but they do not contain reportable-segment operating profit, AWS backlog, advertising sub-product economics, grocery activity, delivery metrics, or AI/chip run-rate disclosures. Its geographic endpoint also changes from country data to reportable-segment data in FY2025 and is not a comparable five-year geography series. Official filings therefore control segment profit, country revenue, and the material non-FMP KPI inventory.

Sources checked live across the D and DR passes: FMP stable annual income, balance-sheet, cash-flow, key-metrics, ratios, annual product, quarterly product, geographic, and four transcript endpoints; Amazon's 2023 and 2025 Forms 10-K; Q2 FY2026 Form 10-Q; SEC Exhibits 99.1 for Q3 FY2025 through Q2 FY2026; Amazon IR Q2 FY2026 results; Amazon IR events archive; and official About Amazon corporate-action releases. D raw files are under `C:\Users\Admin\OneDrive\GPT\ER 2.0\Amazon\raw\pulse-cio-20260830T060148+0800\d`; independent DR pulls are under the sibling `dr` folder.

Search inventory: `segment`, `North America`, `International`, `AWS`, `operating income (loss)`, `net sales by group`, `online stores`, `third-party seller services`, `advertising services`, `subscription services`, `physical stores`, `remaining performance obligations`, `backlog`, `paid units`, `same-day`, `perishables`, `gross merchandise sales`, `Prime members`, `Sponsored Products`, `Prime Video ads`, `AI revenue run rate`, `chips revenue run rate`, `Trainium`, `Graviton`, `capital expenditures`, `technology and infrastructure`, `stock-based compensation`, `repurchases`, `debt`, `acquisitions`, and `reportable segment change`.

Dataset / table family	Official source searched	Search terms or table names	Years available	Included?	If excluded, why	Downstream relevance
Segment revenue and profit	2025 10-K Note 8; Q3'25–Q2'26 releases	segment; operating income (loss)	FY2021–FY2025; four current quarters	Yes	—	Segment forecasts and statutory tie-out
Product revenue	2025 10-K net sales by group; FMP annual/quarterly	online stores; seller; ads; subscriptions; AWS	Comparable FY2021–FY2025; current quarters	Yes	Pre-FY2021 taxonomy not needed and not fully comparable	Product growth and moat
Country revenue	2023 and 2025 10-K Note 8	net sales attributed to countries; United States; Germany; United Kingdom; Japan	FY2021–FY2025	Yes	—	Geographic concentration and International context
AWS obligations and AI KPIs	Q2 2026 10-Q; four calls	performance obligations; backlog; AI; chips	Point-in-time call disclosures	Yes	No clean five-year series exists	Capacity and capex underwriting
Store and logistics KPIs	Calls and releases	paid units; seller unit mix; shipping costs; delivery speed; perishables; grocery; stock-based compensation	Six-quarter operating series plus selected current commentary	Yes	No comparable audited annual unit series	North America and International drivers; dilution
Advertising sub-products	Calls and releases	Sponsored Products; DSP; Prime Video ads	Qualitative/current only	Yes, as gaps/commentary	Sub-product dollars not disclosed	Advertising durability
Capital and balance sheet	10-K; Q2 10-Q; FMP stable	capex; debt; cash; investments; leases	FY2021–FY2025; Q2 FY2026	Yes	—	ROIC, FCF, funding risk

Dataset / table family	Official source searched	Search terms or table names	Years available	Included?	If excluded, why	Downstream relevance
Segment capital intensity	2023 and 2025 10-K Note 8	segment assets; property and equipment, net; net additions	FY2021–FY2025	Yes	Segment cash capex and full invested capital are not disclosed	Segment durability and return-on-capital context
Investor or capital-markets day	Amazon IR events archive	investor day; capital markets day	Current archive	No	No such event appears; latest strategic event is the 2026 annual meeting	Management evidence boundary

Material KPI history

All product dollars below are disclosed category revenue, not analyst estimates. TTM is the sum of the four named quarters in the sealed QF and the independently re-fetched live FMP quarterly product endpoint.

KPI family, USD B	FY2021	FY2022	FY2023	FY2024	FY2025	TTM ended 2026-06-30	Source
Online Stores revenue	222.075	220.004	231.872	247.029	269.287	285.081	Sealed QF P1; live FMP product endpoints
Physical Stores revenue	17.075	18.963	20.030	21.215	22.561	23.012	Same
Third-Party Seller Services revenue	103.366	117.716	140.053	156.146	172.162	183.660	Same
Advertising Services revenue	31.160	37.739	46.906	56.214	68.635	76.072	Same
Subscription Services revenue	31.768	35.218	40.209	44.374	49.619	52.853	Same
AWS revenue	62.202	80.096	90.757	107.556	128.725	148.404	Same
Other Services revenue	2.176	4.247	4.958	5.425	5.935	6.598	Same
AWS long-term performance obligations / backlog	Not regularly disclosed	Not regularly disclosed	Not regularly disclosed	Not regularly disclosed	$244B at Q4 call	$496B at 2026-06-30; 6.4-year weighted life	Q2 2026 10-Q Note 1; FMP transcript
AI and chips annual revenue run rates	Not disclosed	Not disclosed	Not disclosed	Not disclosed	Chips above $10B at Q4 call	Each above $25B at Q2 call	FMP live transcripts; not GAAP product revenue

Country revenue is attributed under Amazon's issuer-defined customer-location convention and is not the same taxonomy as the North America/International/AWS reportable segments.

Country revenue, USD B	FY2021	FY2022	FY2023	FY2024	FY2025	Source
United States	314.006	356.113	395.637	438.015	489.657	2023 and 2025 Form 10-K Note 8
Germany	37.326	33.598	37.588	40.856	45.900	Same
United Kingdom	31.914	30.074	33.591	37.855	43.212	Same
Japan	23.071	24.396	26.002	27.401	30.688	Same
Rest of world	63.505	69.802	81.967	93.832	107.467	Same
Consolidated	469.822	513.983	574.785	637.959	716.924	Same

1. Reporting structure and taxonomy

Amazon has exactly three reportable segments. **North America** earns revenue through North America-focused online and physical stores and related services. **International** earns revenue through internationally focused online stores and related services. **AWS** earns revenue from global sales of compute, storage, database, machine learning, and other cloud services. The stores segments include retail, marketplace seller services, advertising, subscriptions, devices, and other activities according to geographic store focus; Amazon does not publish a complete product-to-geography allocation.

FY2025 reportable segment	Revenue, USD B	Share of consolidated revenue	Exact disclosed profit basis	Source
North America	426.305	59.46%	Operating income (loss)	Sealed QF P2; 2025 10-K Note 8

FY2025 reportable segment	Revenue, USD B	Share of consolidated revenue	Exact disclosed profit basis	Source
International	161.894	22.58%	Operating income (loss)	Sealed QF P2; 2025 10-K Note 8
AWS	128.725	17.96%	Operating income (loss)	Sealed QF P2; 2025 10-K Note 8
Consolidated	716.924	100.00%	Statutory operating income	Sealed QF P3

Taxonomy investigation: the reportable structure has been stable over the last three years and since FY2015. No 2023–2026 10-K, 10-Q, or fiscal-boundary 8-K identified a segment realignment or restatement. Product disclosure is comparable across the FY2021–FY2025 window used here; Advertising Services became a separately presented current category with comparative FY2021 data, so older “Other” categories are not extended into the five-year table. FMP legacy labels such as Electronics and Other General Merchandise, Media, and Other Non-Retail are not mapped into current geographic segments. This avoids a synthetic product-to-segment reconciliation.

2. Consolidated historicals

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, USD B	469.822	513.983	574.785	637.959	716.924	QFR-sealed QF P3
Operating income, USD B	24.879	12.248	36.852	68.593	79.975	QFR-sealed QF P3
Operating margin	5.30%	2.38%	6.41%	10.75%	11.16%	Calculated from sealed values
Net income, USD B	33.364	(2.722)	30.425	59.248	77.670	QFR-sealed QF P3
Diluted EPS, USD	3.24	(0.27)	2.90	5.53	7.17	QFR-sealed QF P3
Diluted shares, M	10,300	10,189	10,492	10,721	10,827	QFR-sealed QF P3
Capital expenditures, USD B	61.053	63.645	52.729	82.999	131.819	QFR-sealed QF P6
Free cash flow, USD B	(14.726)	(16.893)	32.217	32.878	7.695	QFR-sealed QF P6
Analytical ROIC	9.1%	3.7%	9.9%	15.8%	14.7%	D calculation described below

ROIC method: NOPAT equals sealed statutory operating income multiplied by 79%, using a normalized 21% tax rate for comparability because investment remeasurements distort Amazon’s reported effective rate. Average invested capital equals the average of current- and prior-year FMP stable `key-metrics` invested capital. The FY2021–FY2025 NOPAT numerators were $19.654B, $9.676B, $29.113B, $54.188B, and $63.180B; average invested-capital denominators were $216.584B, $263.388B, $292.611B, $343.259B, and $429.272B. This is an analytical, source-bound calculation, not an issuer-disclosed KPI.

3. Segment historicals

North America

North America	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, USD B	279.833	315.880	352.828	387.497	426.305	Sealed QF P2; 10-K Note 8
YoY growth	—	12.9%	11.7%	9.8%	10.0%	Calculated
Operating income (loss), USD B	7.271	(2.847)	14.877	24.967	29.619	Exact sealed basis
Margin on exact metric	2.60%	(0.90%)	4.22%	6.44%	6.95%	Calculated

International

International	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, USD B	127.787	118.007	131.200	142.906	161.894	Sealed QF P2; 10-K Note 8
YoY growth	—	(7.7%)	11.2%	8.9%	13.3%	Calculated
Operating income (loss), USD B	(0.924)	(7.746)	(2.656)	3.792	4.750	Exact sealed basis

International	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Margin on exact metric	(0.72%)	(6.56%)	(2.02%)	2.65%	2.93%	Calculated

AWS

AWS	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, USD B	62.202	80.096	90.757	107.556	128.725	Sealed QF P2; 10-K Note 8
YoY growth	—	28.8%	13.3%	18.5%	19.7%	Calculated
Operating income (loss), USD B	18.532	22.841	24.631	39.834	45.606	Exact sealed basis
Margin on exact metric	29.79%	28.52%	27.14%	37.03%	35.43%	Calculated

Segment capital-intensity history

Amazon discloses segment assets, net property and equipment, and total net additions to property and equipment, but not segment cash capex or a complete invested-capital bridge. Net additions include non-cash finance-lease and build-to-suit activity and therefore must not be relabeled cash capex.

Segment capital metric, USD B	FY2021	FY2022	FY2023	FY2024	FY2025	Source
North America segment assets	161.255	185.268	196.029	210.120	235.652	2023 and 2025 Form 10-K Note 8
International segment assets	57.983	64.666	69.718	69.487	81.984	Same
AWS segment assets	63.835	88.491	108.533	155.953	252.588	Same
Corporate assets	137.476	124.250	153.574	189.334	247.818	Same
Consolidated assets	420.549	462.675	527.854	624.894	818.042	Same
North America property and equipment, net	83.640	90.076	93.632	103.041	122.043	Same
International property and equipment, net	21.718	23.347	24.357	25.618	30.632	Same
AWS property and equipment, net	43.245	60.324	72.701	110.683	190.055	Same
Corporate property and equipment, net	11.678	12.968	13.487	13.323	14.295	Same
Consolidated property and equipment, net	160.281	186.715	204.177	252.665	357.025	Same
North America net additions to property and equipment	37.397	23.682	17.529	24.348	35.919	Same
International net additions to property and equipment	10.259	6.711	4.144	6.643	7.617	Same
AWS net additions to property and equipment	22.047	27.755	24.843	53.267	96.496	Same
Corporate net additions to property and equipment	2.622	2.688	1.828	1.494	2.320	Same
Consolidated net additions to property and equipment	72.325	60.836	48.344	85.752	142.352	Same

3a. Historical statutory-profit bridge and forecast-driver ledger

Sealed packet: `statutory_bridge.json`, SHA-256 `6df5d1b7267e335b734806cec62fcbe8f47a4a5ae831c1da5a56da7843e66c41`. Schema `1.1.0`; reporting currency USD; scale millions; `segment_profit_basis=issuer_disclosed`; three modeled segments. The exact common segment profit basis is **Operating income**. There are no corporate/unallocated adjustments and no operating bridge adjustments in either period. This is not a fallback.

Source ID	Official source and URL	Archived D path	SHA-256
SEC_2025_10K	2025 Form 10-K, https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm	raw\pulse-cio-20260830T060148+0800\d\sec_2025_10k.htm	beb1bfc28558135e76882db0cf36ba72a1ab44e2144fe37534f4da1e120ddb57
QF_TTM_BUILD	Q3'25–Q2'26 official SEC exhibits	raw\pulse-cio-20260830T060148+0800\qf\normalized_ttm_statutory_AMZN.json	0f06767e24d7e0e2ea7f5683796f648dd1e4935ca3c761cd6739e14dc13fd6bc

FY2025 bridge — USD millions

Bridge line	Classification	Value	Source ID	Running subtotal
North America operating income	segment profit	29,619	SEC_2025_10K	29,619
International operating income	segment profit	4,750	SEC_2025_10K	34,369
AWS operating income	segment profit	45,606	SEC_2025_10K	79,975
Sum of reportable segment profit	segment profit subtotal	79,975	SEC_2025_10K	79,975
Consolidated segment profit metric	subtotal	79,975	SEC_2025_10K	79,975
Statutory operating income	statutory subtotal	79,975	SEC_2025_10K	79,975
Total non-operating income	other_non_operating	17,336	SEC_2025_10K	97,311
Pretax income	statutory subtotal	97,311	SEC_2025_10K	97,311
Provision for income taxes	tax	(19,087)	SEC_2025_10K	78,224
Equity-method investment activity, net of tax	other_non_operating	(554)	SEC_2025_10K	77,670
Net income	statutory subtotal	77,670	SEC_2025_10K	77,670

All five sealed residuals are zero; disclosed rounding unit is $1M and tolerance is $48.6555M.

TTM ended 2026-06-30 bridge — USD millions

Bridge line	Classification	Value	Source ID	Running subtotal
North America operating income	segment profit	33,651	QF_TTM_BUILD	33,651
International operating income	segment profit	5,380	QF_TTM_BUILD	39,031
AWS operating income	segment profit	54,681	QF_TTM_BUILD	93,712
Sum of reportable segment profit	segment profit subtotal	93,712	QF_TTM_BUILD	93,712
Consolidated segment profit metric	subtotal	93,712	QF_TTM_BUILD	93,712
Statutory operating income	statutory subtotal	93,712	QF_TTM_BUILD	93,712
Total non-operating income	other_non_operating	81,754	QF_TTM_BUILD	175,466
Pretax income	statutory subtotal	175,466	QF_TTM_BUILD	175,466
Provision for income taxes	tax	(39,615)	QF_TTM_BUILD	135,851
Equity-method investment activity, net of tax	other_non_operating	(570)	QF_TTM_BUILD	135,281
Net income	statutory subtotal	135,281	QF_TTM_BUILD	135,281

All five sealed residuals are zero; disclosed rounding unit is $1M and tolerance is $87.733M. The $81.754B TTM non-operating line is dominated by volatile investment marks, especially Anthropic, and must not be capitalized as recurring operating profit.

Forecast-driver schedule

Historical bridge line	FY2025 value, USD M	TTM value, USD M	Forecast treatment	Driver and source	Bear / base / bull rule
North America operating income	29,619	33,651	Segment revenue times operating margin	Segment history and four-quarter trend	Lower / median / higher normalized margin; exclude one-off refunds and charges
International operating income	4,750	5,380	Segment revenue times operating margin	Segment history; currency-neutral growth where disclosed	Slower / sustained / faster margin normalization
AWS operating income	45,606	54,681	Segment revenue times operating margin	AWS growth, capacity, mix, and capex commentary	Capacity drag / balanced / high utilization and custom-silicon benefit
Total non-operating income	17,336	81,754	Independently forecast non-operating schedule	SEC investment and interest disclosures	Do not extrapolate Anthropic marks; normalized case near recurring interest economics
Provision for income taxes	(19,087)	(39,615)	Tax-rate schedule	Statutory tax line and normalized jurisdictional rate	Higher / base / lower sustainable effective rate
Equity-method investment activity, net of tax	(554)	(570)	Independently forecast post-tax item	Exact issuer line	Zero only if cessation is documented; otherwise conservative small loss / flat / small gain

STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING

4. Product and sub-segment historicals

Products separately disclosed in dollars

Segment context	Product	What it is	Dollar disclosure?	FY2023 / FY2024 / FY2025 revenue, USD B and source
Stores, geographically split	Online Stores	First-party and digital product sales through online stores	Yes	231.872 / 247.029 / 269.287; 10-K net-sales table and live FMP
Stores, geographically split	Physical Stores	Physical store product sales	Yes	20.030 / 21.215 / 22.561; same
Stores, geographically split	Third-Party Seller Services	Commissions, fulfillment, shipping, and related seller fees	Yes	140.053 / 156.146 / 172.162; same
Stores, geographically split	Advertising Services	Sponsored ads, display, video, and other advertising services	Yes, aggregate only	46.906 / 56.214 / 68.635; same
Stores, geographically split	Subscription Services	Prime and other non-AWS subscriptions	Yes, aggregate only	40.209 / 44.374 / 49.619; same
AWS	Amazon Web Services	Compute, storage, databases, machine learning, and cloud services	Yes, aggregate only	90.757 / 107.556 / 128.725; same
Stores and other	Other Services	Other service revenue not in the named categories	Yes, aggregate only	4.958 / 5.425 / 5.935; same

Products with only partial, growth-rate, run-rate, or qualitative disclosure

Segment context	Product	Disclosure method	Last four calls	Source
AWS	AI services	Annual revenue run rate above $25B and triple-digit growth at Q2 FY2026; no historical GAAP dollars	Not quantified / not quantified / not quantified / triple-digit	FMP transcripts Q3'25–Q2'26
AWS	Trainium and Graviton chips	Chips run rate above $10B at Q4 FY2025 and above $25B at Q2 FY2026; no audited product series	Q3 Trainium2 triple-digit; Q4 chips triple-digit; Q1 qualitative; Q2 chips triple-digit	Same
Stores advertising	Sponsored Products, Prime Video ads, DSP	Aggregate Advertising Services dollars only; sub-product dollars withheld	Qualitative growth in all four calls	Same; earnings releases
Stores	Grocery and perishables	FY2025 grocery GMS above $150B disclosed on Q2 call; not net revenue and no clean history	Expansion from 1,000 to 2,300 same-day cities; no revenue series	Same
Stores	Prime membership and ARPU	Subscription revenue disclosed; members and ARPU not current dollar disclosures	No exact current member series	10-K and four calls

Segment context	Product	Disclosure method	Last four calls	Source
North America / International	Product-by-geography	Products are not uniquely allocated between geographic segments	Not disclosed in all four periods	2025 10-K Note 8

No product dollars were back-solved. Therefore no estimated-dollar tie-out is required.

5. Most recent quarterly trend

Amazon's FY ends December 31. Most recently completed fiscal quarter at time of writing: FY2026 Q2, covering April–June 2026, reported on 2026-07-30 via https://ir.aboutamazon.com/news-release/news-release-details/2026/Amazon-com-Announces-Second-Quarter-Results/default.aspx.

Segment quarterly results

Quarter	Segment	Revenue, USD B	YoY growth	Operating margin	Source
Q3 FY2025	North America	106.267	11%	4.5%	SEC Exhibit 99.1, 2025-10-30
Q3 FY2025	International	40.896	14%; 10% ex-FX	2.9%	Same
Q3 FY2025	AWS	33.006	20%	34.6%	Same
Q4 FY2025	North America	127.083	10%	9.0%	SEC Exhibit 99.1, 2026-02-05
Q4 FY2025	International	50.724	17%; 11% ex-FX	2.1%	Same
Q4 FY2025	AWS	35.579	24%	35.0%	Same
Q1 FY2026	North America	104.143	12%	7.9%	SEC Exhibit 99.1, 2026-04-29
Q1 FY2026	International	39.789	19%; 11% ex-FX	3.6%	Same
Q1 FY2026	AWS	37.587	28%	37.7%	Same
Q2 FY2026	North America	116.177	16%	7.9%	Amazon IR and SEC Exhibit 99.1, 2026-07-30
Q2 FY2026	International	42.197	15%	4.1%	Same
Q2 FY2026	AWS	42.232	37%	39.4%	Same

Q3 FY2025 North America included a $2.5B FTC settlement and severance; Q4 included physical-store impairment and other special charges. Q2 FY2026 included approximately $0.6B of tariff refunds in North America and approximately $0.6B of favorable energy-derivative remeasurement primarily in AWS. Reported margins should therefore be normalized before forecasting.

Major product quarterly revenue and growth

Quarter	Online Stores	Third-Party Seller	Advertising	Subscriptions	Physical Stores	AWS	Source
Q3 FY2025	$67.407B / 9.8%	$42.486B / 12.2%	$17.703B / 23.5%	$12.574B / 11.5%	$5.578B / 6.7%	$33.006B / 20.2%	Live FMP quarterly product; official release tie
Q4 FY2025	$82.988B / 9.8%	$52.816B / 11.2%	$21.317B / 23.3%	$13.122B / 14.0%	$5.855B / 4.9%	$35.579B / 23.6%	Same
Q1 FY2026	$64.254B / 11.9%	$41.578B / 13.9%	$17.243B / 23.9%	$13.427B / 14.6%	$5.785B / 4.6%	$37.587B / 28.4%	Same
Q2 FY2026	$70.432B / 14.6%	$46.780B / 15.9%	$19.809B / 26.2%	$13.730B / 12.5%	$5.794B / 3.6%	$42.232B / 36.8%	Same

Logistics, unit-volume, dilution, and workforce KPIs

These six-quarter operating series are reproduced from Amazon's Q2 FY2026 SEC Exhibit 99.1. Paid-unit growth and seller unit mix are volume/mix indicators rather than revenue, shipping cost is an expense, and stock-based compensation is non-cash expense with a direct dilution consequence.

KPI	Q1 FY2025	Q2 FY2025	Q3 FY2025	Q4 FY2025	Q1 FY2026	Q2 FY2026	Source
Worldwide shipping costs, USD B	22.495	23.370	25.384	31.492	25.709	27.873	SEC Exhibit 99.1, 2026-07-30
Worldwide shipping-cost YoY growth	3%	6%	8%	10%	14%	19%	Same

KPI	Q1 FY2025	Q2 FY2025	Q3 FY2025	Q4 FY2025	Q1 FY2026	Q2 FY2026	Source
Worldwide paid-units YoY growth	8%	12%	11%	12%	15%	17%	Same
Seller unit mix / worldwide paid units	61%	62%	62%	61%	60%	61%	Same
Total stock-based compensation, USD B	3.689	6.534	4.847	4.397	4.032	6.038	Same
Employees, M	1.560	1.546	1.578	1.576	1.575	1.595	Same

Guidance issued on the last four calls

Call	Guided quarter	Net-sales guidance	Operating-income guidance	Important assumptions	Source
Q3 FY2025, 2025-10-30	Q4 FY2025	$206B–$213B; 10%–13% growth	$21B–$26B	About 190 bp favorable FX	SEC Exhibit 99.1
Q4 FY2025, 2026-02-05	Q1 FY2026	$173.5B–$178.5B; 11%–15% growth	$16.5B–$21.5B	About 180 bp favorable FX; Leo and quick-commerce investment	SEC Exhibit 99.1
Q1 FY2026, 2026-04-29	Q2 FY2026	$194B–$199B; 16%–19% growth	$20B–$24B	Prime Day assumed in Q2	SEC Exhibit 99.1
Q2 FY2026, 2026-07-30	Q3 FY2026	$197B–$202B; 9%–12% growth	$22.5B–$26.5B	About 80 bp adverse FX; Prime Day timing lowers reported growth by nearly 400 bp	Amazon IR and SEC Exhibit 99.1

6. Management commentary on forward growth

All quotations below were verified in live FMP transcript responses fetched for the exact fiscal year and quarter. The returned dates match Amazon IR’s official event archive. Amazon’s event archive contains no investor day or capital-markets day; no such quotation is invented.

AWS

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q3 FY2025, 2025-10-30	Andy Jassy, CEO	“AWS is growing at a pace we haven't seen since 2022, reaccelerating to 20.2% year-over-year, our largest growth rate in 11 quarters.”	Reacceleration was established before 2026.
Q3 FY2025, 2025-10-30	Andy Jassy	“Backlog grew to $200 billion by Q3 quarter end.”	Forward demand exceeded then-current revenue scale.
Q3 FY2025, 2025-10-30	Andy Jassy	“You're going to see us continue to be very aggressive investing in capacity because we see the demand.”	Capex is demand-led but depresses near-term FCF.
Q4 FY2025, 2026-02-05	Andy Jassy	“AWS growth continued to accelerate to 24%, the fastest we've seen in thirteen quarters.”	Second sequential acceleration point.
Q4 FY2025, 2026-02-05	Andy Jassy	“We expect to invest about $200 billion in capital expenditures across Amazon.com, Inc., but predominantly in AWS, because we have very high demand.”	Establishes initial 2026 capex anchor.
Q1 FY2026, 2026-04-29	Andy Jassy	“On the backlog, the backlog for Q1 is $364 billion.”	Commitments rose sharply from Q4’s $244B.
Q1 FY2026, 2026-04-29	Andy Jassy	“Of the AWS CapEx we intend to spend in 2026, much of which will be installed in future years, we have high confidence this will be monetized well.”	Revenue recognition lags spend; avoid same-year return assumptions.
Q2 FY2026, 2026-07-30	Andy Jassy	“Our backlog stands at $496 billion, growing triple digits year-over-year.”	Strong demand visibility, but long-duration contracts require capacity funding.
Q2 FY2026, 2026-07-30	Andy Jassy	“We now believe we will spend approximately $220 billion in cash CapEx in 2026.”	Latest capex anchor supersedes $200B.

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q2 FY2026, 2026-07-30	Andy Jassy	“Even at that amount, we will still not have enough capacity to meet all the demand we have in 2026, and I believe this dynamic will also be true in 2027, too.”	Capacity remains the limiting variable in bear and base cases.
Q2 FY2026, 2026-07-30	Brian Olsavsky, CFO	“We've said before, these margins will fluctuate.”	Do not annualize Q2’s 39.4% reported AWS margin.

North America stores and logistics

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q3 FY2025, 2025-10-30	Andy Jassy	“We continue to make it easier for customers to order low-priced perishable groceries from Amazon.”	Grocery is a frequency and basket-size initiative.
Q3 FY2025, 2025-10-30	Brian Olsavsky	“Additionally, we continue to invest in our fulfillment and transportation network to support the growth of the business, improve delivery speeds, and lower our cost to serve.”	Margin expansion depends on density and productivity.
Q4 FY2025, 2026-02-05	Andy Jassy	“In 2025, everyday essentials grew nearly twice as fast as all other categories in The US, representing one out of three units sold in our store.”	Mix is shifting toward repeat-purchase categories.
Q4 FY2025, 2026-02-05	Brian Olsavsky	“For the third year in a row, globally in 2025, we achieved both our fastest ever delivery speeds for Prime members while also reducing our cost to serve.”	Speed and unit economics improved together.
Q1 FY2026, 2026-04-29	Andy Jassy	“Prime members are loving the convenience of getting fresh groceries alongside other products they're buying on Amazon.”	Cross-category basket expansion is central.
Q1 FY2026, 2026-04-29	Andy Jassy	“Customers shopping same-day perishables build larger baskets, adding nearly 3x as many items to their order.”	Supports density and contribution-margin thesis.
Q2 FY2026, 2026-07-30	Andy Jassy	“The number of monthly active perishables customers grew over 50% since the start of the year.”	Recent adoption remains fast but is not a revenue disclosure.
Q2 FY2026, 2026-07-30	Andy Jassy	“We continue speeding up overall delivery and once again achieved record delivery speeds for customers in the first half of the year.”	Operations remain a moat investment.
Q2 FY2026, 2026-07-30	Brian Olsavsky	“While operating margin may fluctuate and progress may not always be linear, we take a deliberate approach to achieving sustained long-term improvement in our cost to serve.”	Use normalized rather than peak margin.

International

International commentary is less granular than AWS or North America; management provides reported and ex-FX growth, segment margin, delivery, selection, and cost-to-serve evidence, but no region-by-region long-range revenue or margin target.

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q3 FY2025, 2025-10-30	Brian Olsavsky	“International segment operating income was $1.2 billion, with an operating margin of 2.9%.”	Profitability remained positive despite severance.
Q3 FY2025, 2025-10-30	Brian Olsavsky	“Excluding the impact of the severance charge, International segment operating margins expanded year-over-year.”	Underlying margin was better than reported.
Q4 FY2025, 2026-02-05	Brian Olsavsky	“International segment revenue was $50.7 billion, an increase of 11% year over year excluding the impact of foreign exchange.”	Ex-FX growth is the clean operating signal.

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q4 FY2025, 2026-02-05	Brian Olsavsky	“International segment operating income was $1 billion with an operating margin of 2.1%.”	Q4 margin included special charges.
Q1 FY2026, 2026-04-29	Brian Olsavsky	“International segment revenue was $39.8 billion, an increase of 11% year-over-year, excluding the impact of foreign exchange.”	Organic growth was below reported 19%.
Q1 FY2026, 2026-04-29	Brian Olsavsky	“International segment operating income was $1.4 billion with an operating margin of 3.6%.”	Margin normalization continued.
Q2 FY2026, 2026-07-30	Brian Olsavsky	“International segment operating income was $1.7 billion with an operating margin of 4.1%.”	Highest margin in the four-quarter set.
Q2 FY2026, 2026-07-30	Brian Olsavsky	“Looking ahead, we see meaningful opportunities to further enhance productivity across our global fulfillment network.”	International upside is primarily density and productivity, not a disclosed target.

Advertising overlay

Advertising is included within the geographic stores segments, not a fourth reportable segment.

Fiscal period and call date	Speaker	Verbatim quote	Topic and modeling implication
Q3 FY2025, 2025-10-30	Brian Olsavsky	“Advertising revenue was $17.7 billion, and growth accelerated for the third consecutive quarter.”	Momentum preceded Q4 and 2026 acceleration.
Q4 FY2025, 2026-02-05	Brian Olsavsky	“Advertising revenue grew 22% in the fourth quarter and we added over $12 billion of incremental revenue in 2025 alone.”	Scale and incremental dollars are both material.
Q4 FY2025, 2026-02-05	Andy Jassy	“Sponsored products advertising in our store continues to be our largest ads offering.”	Sponsored Products remains the core profit pool.
Q2 FY2026, 2026-07-30	Andy Jassy	“Sponsored Products continues to be our largest offering and a key driver of growth.”	No evidence of core-format saturation.
Q2 FY2026, 2026-07-30	Andy Jassy	“We see continued growth and engagement in Prime Video ads and live sports.”	Upper-funnel inventory broadens the mix.
Q2 FY2026, 2026-07-30	Andy Jassy	“Advertisers using Ads Agent targeting see 8% lower cost per impression and 6% lower cost per acquisition.”	AI may improve advertiser ROI and retention.

7. Capital allocation history

Year	Capex, USD B	Capex / revenue	R&D proxy, USD B	R&D proxy / revenue	Buybacks, USD B	Dividends, USD B	Acquisitions net, USD B	Source
FY2021	61.053	13.0%	56.052	11.9%	0.000	0.000	1.985	Sealed QF capex/buybacks; live FMP annual
FY2022	63.645	12.4%	73.213	14.2%	6.000	0.000	8.316	Same
FY2023	52.729	9.2%	85.622	14.9%	0.000	0.000	5.839	Same
FY2024	82.999	13.0%	88.544	13.9%	0.000	0.000	7.082	Same
FY2025	131.819	18.4%	108.521	15.1%	0.000	0.000	3.841	Same

FMP maps Amazon’s official **Technology and infrastructure** expense into its `researchAndDevelopmentExpenses` field; it is a proxy, not pure R&D. TTM capex was $173.028B and TTM FCF was negative $11.625B on the sealed QF definition. The latest management anchor is approximately $220B of 2026 cash capex, mostly AI and AWS. Amazon paid no common dividends and recorded no repurchases in the TTM sealed cash-flow rows. Diluted shares rose from 10,845M in Q3 FY2025 to 10,903M in Q2 FY2026.

8. Balance sheet snapshot

FY2025

Item	USD B	Source
Cash and equivalents	86.810	Live FMP annual balance sheet; 2025 10-K
Short-term investments	36.219	Same
Total debt	152.987	Same; includes FMP-classified debt and lease obligations
Net debt less cash	66.177	Calculated
Net debt / EBITDA	0.40x	Live FMP key metrics; denominator uses vendor EBITDA definition
Goodwill plus intangibles	32.470	Live FMP annual balance sheet
Tangible book value	378.595	Stockholders' equity less goodwill and intangibles

Q2 FY2026 liquidity update

Item	USD B	Source
Cash	78.213	Sealed QF P6; Q2 10-Q
Marketable securities	44.775	Same
Cash plus marketable securities	122.988	Same
Gross debt including leases	223.232	Same
Lease liabilities	94.338	Same
Net debt less cash	145.019	Same
Net debt less cash and securities	100.244	Same

The increase reflects a major 2026 funding program. At June 30, unsecured senior notes were $132.1B; the Q2 10-Q also disclosed a $17.5B undrawn delayed-draw term-loan facility and $20B of revolving facilities with no outstanding borrowings. Subsequent to quarter-end Amazon issued another $25B of U.S.-dollar notes. Funding capacity is ample, but interest expense and capital intensity are now first-order forecast items.

9. Recent corporate actions — last 12 months

- **2025-10-28:** Amazon announced an approximately 14,000-role reduction in its corporate workforce to reduce layers and shift resources toward major bets. Source: https://www.aboutamazon.com/news/company-news/amazon-workforce-reduction.
- **2026-01-28:** a further approximately 16,000 roles were affected as remaining organizations completed restructuring. Source: https://www.aboutamazon.com/news/company-news/amazon-layoffs-corporate-jan-2026.
- **March–June 2026:** Amazon issued $37.0B of U.S.-dollar notes, €14.5B of euro notes, CHF2.8B of Swiss-franc notes, and C$14.0B of Canadian-dollar notes; $25.0B of additional U.S.-dollar notes followed after June 30. Source: Q2 2026 10-Q Note 5, https://www.sec.gov/Archives/edgar/data/1018724/000101872426000026/amzn-20260630.htm.
- **2026-04-13:** Amazon agreed to acquire Globalstar for mixed cash and Amazon stock. The agreement implied approximately $10.9B of value including debt and is expected to close in 2027 subject to approvals and satellite milestones. Source: Q2 2026 10-Q Note 4.
- **2026-06-08:** Amazon entered a $17.5B senior unsecured delayed-draw term-loan facility expiring undrawn on 2026-09-30; borrowings would mature three years after draw. Source: SEC 8-K, https://www.sec.gov/Archives/edgar/data/1018724/000110465926072140/tm2613616d4_8k.htm.
- **2026-06:** the ITC instituted an investigation involving Xockets patent claims against certain AWS/NVIDIA systems. Amazon disputes the allegations. Source: Q2 2026 10-Q legal proceedings.
- **2026-07-15:** Dave Treadwell was named to lead AWS Compute and ML Services effective August 1 as Dave Brown departed after nearly 19 years. Source: https://www.aboutamazon.com/news/company-news/aws-dave-treadwell-replaces-dave-brown-compute-ml-services.

- **2026-07-30:** Amazon raised expected 2026 cash capex from approximately $200B to approximately $220B, citing higher memory costs; it also guided Q3 sales to $197B–$202B and operating income to $22.5B–$26.5B. Source: Q2 FY2026 transcript and earnings release.
- **2026-08-26:** AWS signed a definitive agreement to acquire DuckLabs, the company behind DuckDB; DuckDB remains with the independent foundation. Source: https://www.aboutamazon.com/news/company-news/aws-ducklabs.
- **Capital returns:** no dividend was initiated and no common-stock repurchase occurred in the TTM sealed cash-flow rows. Share count continued to dilute modestly.

10. Open data gaps and classifications

Classification	Gap	Sources and search terms checked	Consequence
True non-disclosure	Product revenue split between North America and International	2025 10-K Note 8; Q2 10-Q; `net sales by group`, `North America`, `International`	Do not allocate advertising, subscriptions, or seller services synthetically by geography
True non-disclosure	AWS revenue by compute, storage, database, AI, Bedrock, Trainium, and Graviton	10-K, Q2 10-Q, four releases/transcripts; each product name searched	Use aggregate AWS dollars; current AI/chip figures are run rates only
True non-disclosure	Advertising dollars by Sponsored Products, DSP, Prime Video, live sports, and devices	10-K net-sales table and four calls; sub-product names searched	Aggregate Advertising Services only
True non-disclosure	Current Prime member count, ARPU, renewal, and churn	10-K, Q2 10-Q, releases, calls; `Prime members`, `renewal`, `churn`, `ARPU`	Subscription revenue can be modeled, but unit-price decomposition is unavailable
True non-disclosure	Marketplace GMV, take rate, and seller-service revenue by geography	Same official sources; `gross merchandise sales`, `take rate`, `seller services`	Do not infer GMV from seller-service revenue
True non-disclosure	Segment cash capex, complete invested capital, and full cost-of-revenue by segment	2023 and 2025 10-K Note 8; Q2 10-Q; `capital expenditures`, `assets`, `property and equipment`, `net additions`, `cost of sales`	Use disclosed segment assets, net PP&E, and net additions for capital-intensity context; segment ROIC still cannot be calculated directly
True non-disclosure	Clean annual series for AWS backlog, delivery speed, grocery GMS, paid units, and same-day customers	Annual/interim reports and four calls; KPI names searched	Use only dated point disclosures; do not fabricate a five-year series
Not fetched / omitted	A local HTML archive of Amazon IR's Q2 result page	Direct retrieval returned HTTP 403 and identical retry returned HTTP 403; live web retrieval succeeded and SEC Exhibit 99.1 was archived	No factual gap, but local IR HTML is absent; documented in D raw notes
Not fetched / omitted	Investor-day transcript	Amazon IR events archive searched; no investor or capital-markets day appears	No substitute event or quote used
Estimated	Analytical ROIC	Sealed OI, normalized 21% tax, live FMP invested capital	Clearly labeled analyst calculation, not issuer KPI
Not applicable	P&C ownership perimeter, fee-count-once bridge, insurer solvency	Amazon is not an insurer	No Section 0b required

There is **no statutory-bridge gap**: three segment operating-income values add exactly to statutory operating income in FY2025 and TTM, and both below-line/post-tax bridges have zero residuals. The main modeling hazards are instead normalization of volatile Anthropic investment gains, $1.2B of Q2 FY2026 operating benefits, special charges in Q3/Q4 FY2025, the step-up to approximately $220B of 2026 cash capex, the 2026 debt program, and the absence of product-level profit disclosure.

Source index and live-fetch controls

- FMP annual statements: `stable/income-statement`, `stable/balance-sheet-statement`, `stable/cash-flow-statement`, `stable/key-metrics`, and `stable/ratios`, each with `symbol=AMZN&period=annual`.
- FMP products: `stable/revenue-product-segmentation?symbol=AMZN&period=annual` and `period=quarter`; archived SHA-256 values `b4e51f9675dea438e7ac004cb8e6a4fdab3317c0f84ca5a55881ff945e3087fe` and `5fb1fbaf2ed882ad6043db5076d756d4bc44ff53808c6dca66ad67e35c5c3148`.

- FMP transcripts: `stable/earning-call-transcript?symbol=AMZN&year=2025&quarter=3`, year 2025 quarter 4, year 2026 quarter 1, and year 2026 quarter 2. Returned dates: 2025-10-30, 2026-02-05, 2026-04-29, and 2026-07-30.
- SEC annual and interim filings: 2023 Form 10-K backfill https://www.sec.gov/Archives/edgar/data/1018724/000101872424000008/amzn-20231231.htm, 2025 Form 10-K https://www.sec.gov/Archives/edgar/data/1018724/000101872426000004/amzn-20251231.htm, and Q2 FY2026 Form 10-Q https://www.sec.gov/Archives/edgar/data/1018724/000101872426000026/amzn-20260630.htm.
- SEC earnings exhibits: archived live under the D raw folder for Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026.
- Amazon IR Q2 FY2026: https://ir.aboutamazon.com/news-release/news-release-details/2026/Amazon-com-Announces-Second-Quarter-Results/default.aspx.
- Amazon IR events: https://ir.aboutamazon.com/events/.
- Warehouse copies of all 13 newly pulled FMP datasets were written without overwrite to `C:\Users\Admin\OneDrive\Cowork\Investing\data warehouse\FMP\AMZN\2026-08-30_pulse-cio-20260830T060148+0800\d`.