

ORBIS RESEARCH

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Growth, Divergence, and Disruption: A 10-Year Comparative Analysis of Leading U.S. Tech Firms.

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SUMMARY

Main Findings

- **AI Boom (Post-2020):** NVIDIA and Microsoft led asset and revenue growth, fueled by AI and cloud infrastructure.
- **Post-COVID acceleration (2020–2022):** Amazon, Meta, and Alphabet scaled rapidly with digital commerce and remote services.
- **Asset growth leaders:** Amazon grew assets 15x; Meta, Microsoft and Alphabet also grew their assets in double-digits over the long-term; However, NVIDIA surged from \$7.3B to \$111.6B in total assets over the last 10 years.
- **Mature players grow slowly:** Dell, IBM, Cisco, and Intel showed modest or cyclical asset growth during the same time-frame.
- **Revenue fluctuations:** NVIDIA doubled revenue from 2022–2024; Alphabet and Meta maintained double-digit CAGRs over the long-term; In contrast, IBM experienced a prolonged decline from 2013 through 2024, while Intel saw a downturn from 2021 to 2024.
- **Cost pressures:** COGS rose sharply for NVIDIA and Amazon, reflecting AI and logistics intensity; Microsoft and Apple preserved margins via high-margin services.
- **Workforce trends:** Sector-wide hiring slowed post-2022 (0.3% growth in 2023); NVIDIA and Apple led hiring; Microsoft and Meta restructured; Dell and IBM contracted.
- **Net profitability patterns:** Apple, Microsoft, and Alphabet maintained strong profitability; NVIDIA showed explosive recent gains; Intel and Dell faced a decline.

FOCUS ON U.S. TECHNOLOGY COMPANIES

We analyzed the 10 largest U.S. technology companies—Amazon, Apple, Alphabet, Microsoft, Meta, NVIDIA, Dell, IBM, Cisco, and Intel—using a comprehensive dataset spanning from 2013 to 2024. This analysis compared their annual, 5-year, and 10-year trends across key financial indicators such as total assets, operating revenue, profit before tax, cost of goods sold (COGS), cash flow, and employee count.

This comparative study reveals how asset growth and profitability have evolved among these tech giants, especially in the context of two major inflection points:

- The AI Boom (post-2020): Companies like NVIDIA and Microsoft have experienced exponential growth in revenue and profitability, driven by surging demand for AI infrastructure and cloud services.
- Post-COVID digital acceleration (2020–2022): Amazon, Meta, and Alphabet capitalized on the shift to digital commerce, remote work, and online services, resulting in significant spikes in assets, revenue, and workforce expansion.

DIVERGENT ASSET GROWTH AMONG TECH LEADERS

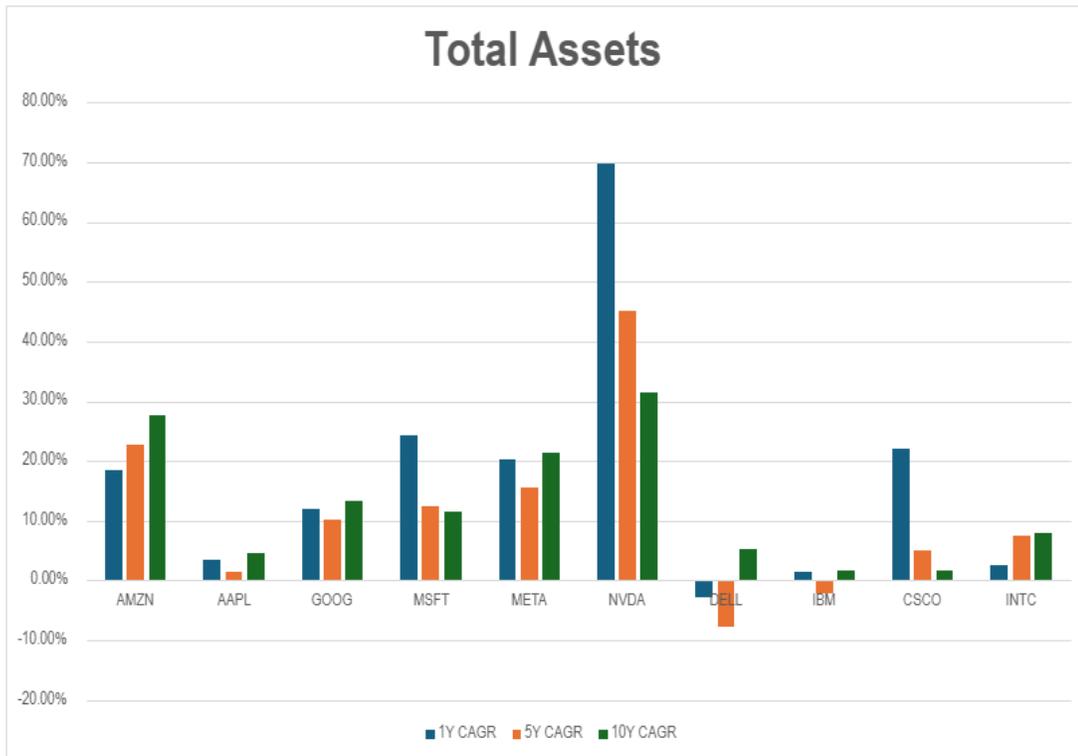
Over the past decade, leading U.S. tech companies have demonstrated significant divergence in total asset growth, ranging from steady single-digit increases to explosive triple-digit expansions. This variation reflects differences in business models, investment strategies, and innovation focus areas.

Key Observations:

- Amazon led the group with a remarkable increase in total assets from \$40 billion in 2013 to over \$624 billion in 2024 - more than a 15x expansion. This growth was driven by aggressive investments in logistics, cloud infrastructure (AWS), and global retail operations.
- NVIDIA showed exponential growth, with assets rising from just \$7 billion in 2013 to \$111 billion in 2024 - driven by its leadership in AI chips and data center acceleration.
- Meta Platforms (formerly Facebook) saw its assets grow from \$17 billion to \$276 billion, reflecting heavy investments in AI, data centers, and immersive technologies.
- Microsoft followed closely, growing its asset base from \$142 billion to \$512 billion, reflecting its transformation into a cloud-first, AI-integrated enterprise software leader.
- Alphabet (Google's parent company) expanded its assets from \$110 billion to \$450 billion, fueled by its dominance in digital advertising, cloud services, and AI research.
- Apple maintained a consistently high asset base, growing from \$207 billion in 2013 to \$365 billion in 2024, supported by strong hardware sales and a rapidly expanding services ecosystem.
- Dell Technologies, IBM, Cisco, and Intel showed more modest or cyclical asset growth, reflecting their mature market positions and focus on enterprise infrastructure.

This divergence is also reflected in total asset growth over the past decade, as shown in the exhibit below:

FIGURE 1: Total Assets growth rates (2013–2024): Top U.S. Tech firms.



WHO ARE LONG-TERM GROWTH CHAMPIONS?

Amazon and Alphabet (Google) have emerged as 5-year growth leaders, driven by:

- Amazon Web Services (AWS), which has become a cornerstone of global cloud infrastructure.
- NVIDIA’s dominance in AI and accelerated computing, fueling exponential demand across data centers, gaming, and autonomous systems.

These companies have scaled rapidly in the post-COVID digital economy, leveraging their platforms to capture new demand in cloud, e-commerce, and AI-driven innovation.

In comparison, more hardware-oriented tech giants like Microsoft and Apple have delivered strong but steady 10-year compound annual growth rates (CAGR) in both revenue and total assets. Their growth is underpinned by:

- Microsoft’s expansion in enterprise software, cloud (Azure), and productivity tools.
- Apple’s dominance in consumer hardware and services, including the App Store, iCloud, and Apple Music, which ensure high-margin, recurring revenues.

- These companies exemplify resilient long-term growth through diversified offerings and entrenched market leadership.

AI as a Growth Catalyst

- A unifying theme among the top asset gainers in 2024 was their early and aggressive investment in artificial intelligence (AI). This strategic focus translated into substantial infrastructure expansion and R&D spending.
- NVIDIA emerged as the biggest beneficiary, scaling its asset base rapidly to meet surging demand for AI computing power.
- Microsoft integrated AI deeply into its Azure and Office ecosystems, driving sustained infrastructure and platform investments.
- Meta Platforms recommitted to AI-driven ad targeting and recommenced infrastructure buildouts to support its AI and metaverse ambitions.
- Even traditionally enterprise-focused firms like IBM and Dell began embedding AI into their platforms to enhance automation, analytics, and customer engagement- reflected in their evolving asset profiles.

TECH SECTOR REVENUE GROWTH: A MIXED PICTURE

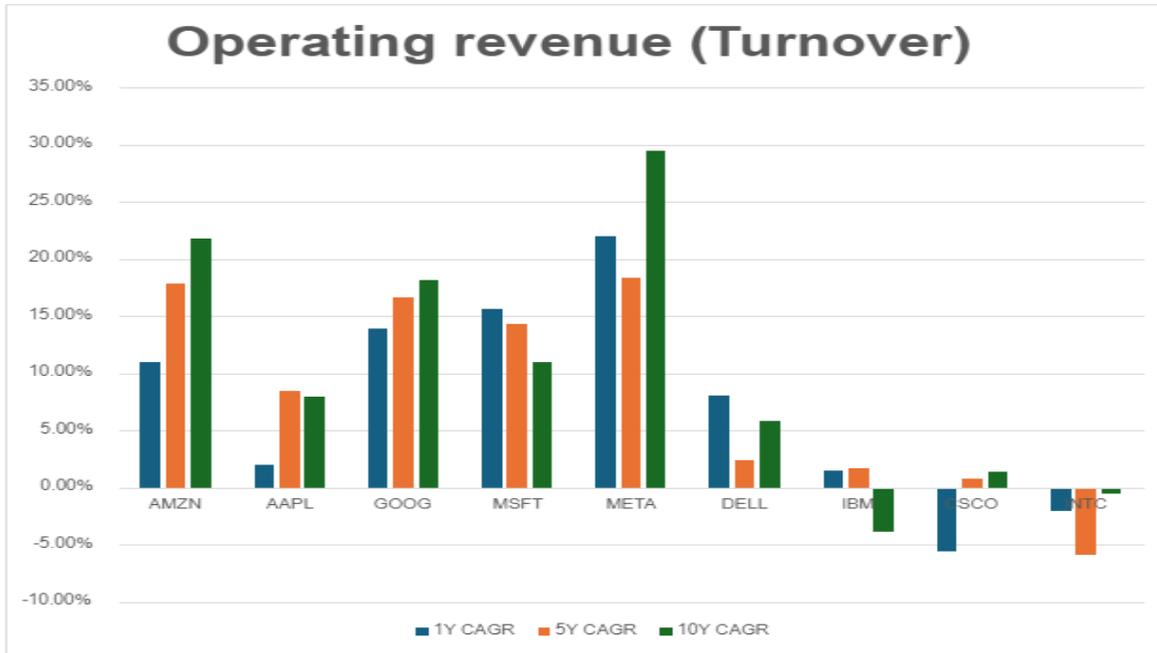
While U.S. technology companies continue to lead in innovation and digital transformation, their revenue growth has become increasingly uneven—particularly in the post-pandemic era. The combination of macroeconomic uncertainty, cautious enterprise spending, and maturing markets has led to a noticeable slowdown in top-line expansion across much of the sector.

Over the past three years, average annual revenue growth across major tech firms has moderated, with some companies even experiencing contraction.

Key Observations:

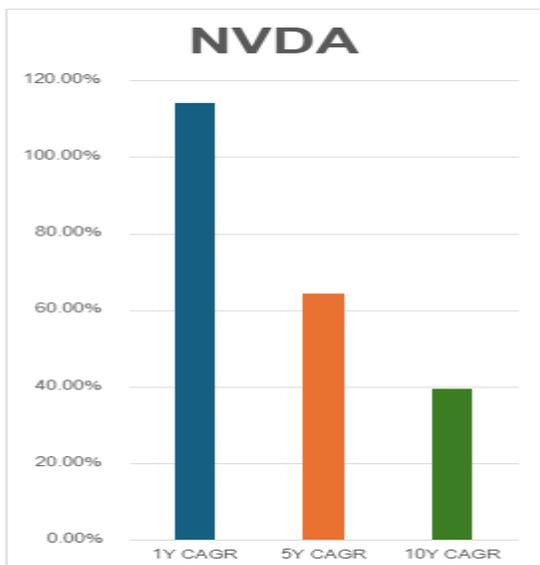
- Meta Platforms and Intel have reported either single-digit or negative growth. Intel, for example, declined from a 2021 peak of ~\$79B to ~\$53B in 2024, reflecting manufacturing delays and intensifying competition.
- Alphabet (Google) posted strong operating revenue trends, with a ~14% CAGR over 1 year period, driven by strong performance in advertising, cloud services, and YouTube.
- Apple and Dell, key players in the hardware segment, have exhibited subdued growth. Apple's revenue has largely stabilized since its 2022 peak, with a 1-year CAGR of 2.02%. Dell has shown similar trends, recording a 1-year CAGR of 1.44%.
- IBM continues its long-term decline, falling from ~\$98B in 2013 to ~\$62B in 2024, underscoring the challenges of transitioning from legacy systems to cloud and AI.

FIGURE 2: Operating Revenue growth rates (2013–2024): Top U.S. Tech firms



However, **NVIDIA** has emerged as a clear outlier. The company has more than doubled its revenue from ~\$61B in 2022 to ~\$130B in 2024, reflecting explosive demand for AI infrastructure, GPUs, and data center solutions. Its growth trajectory sharply contrasts with the broader sector’s deceleration.

FIGURE 2.1: Operating Revenue Growth Rates for NVIDIA Corporation (2013–2024)



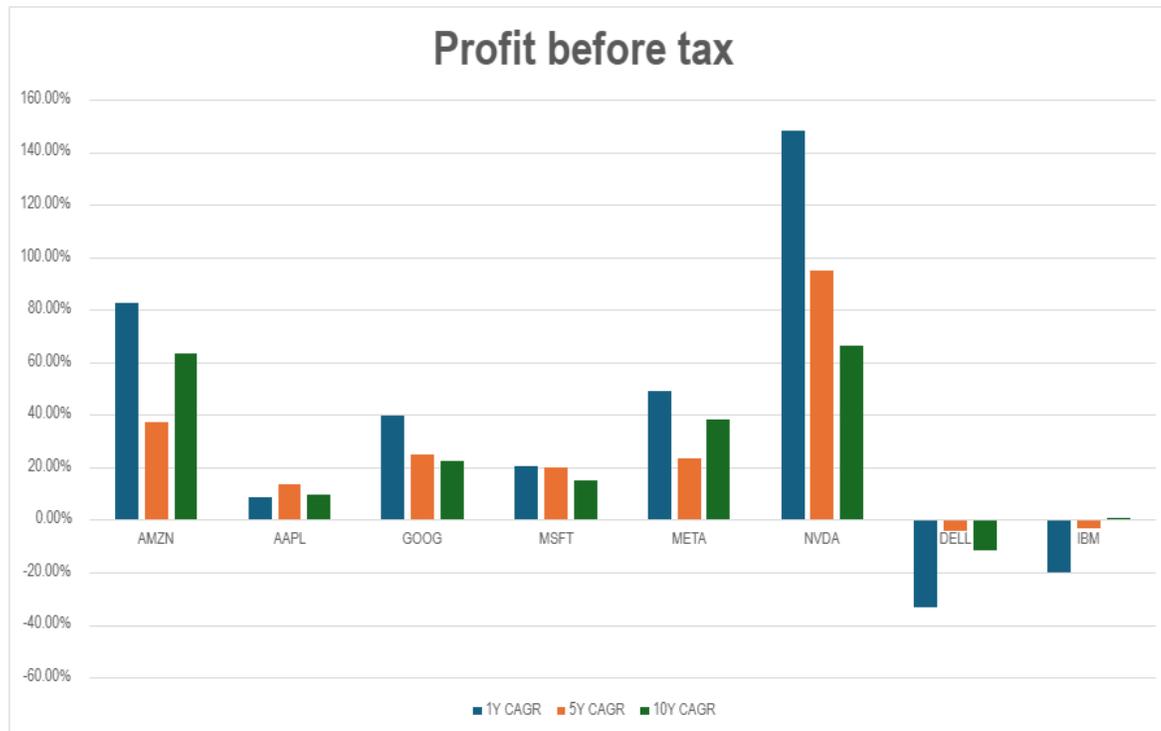
TRACKING PROFITABILITY ACROSS THE TECH SECTOR

Over the past decade, U.S. technology companies have undergone significant transformations- driven by innovation, market shifts, and macroeconomic forces. Profit Before Tax (PBT), a key indicator of operational efficiency and financial health, reveals compelling trends across the sector.

Key Observations:

- Meta Platforms and Amazon have shown strong recent rebounds, with Meta recovering from earlier dips and Amazon scaling massively over the decade.
- Apple, Microsoft, and Alphabet consistently lead in revenue and profitability across all timeframes, showing strong and stable growth trajectories.
- Nvidia stands out with explosive 1-year growth, reflecting the AI boom, despite being a relatively smaller player a decade ago.
- Intel and Dell show significant decline or volatility, with Intel posting a major loss in the most recent year after strong historical performance.
- IBM and Cisco reflect the maturity of legacy tech firms in stable but with slower growth compared to newer players.

FIGURE 3: Profit before Tax growth rates (2013–2024): Top U.S. Tech firms



RIISING PRODUCTION COSTS IN U.S. TECH COMPANIES

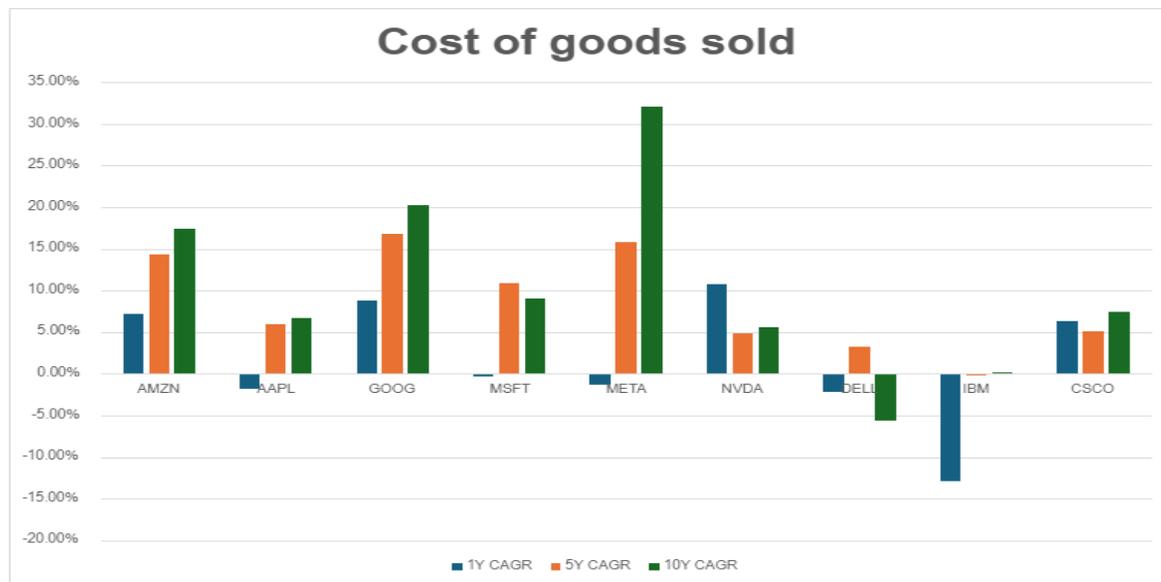
Over the past decade, U.S. technology companies have faced steadily rising production costs, as reflected in the growth of Cost of Goods Sold (COGS). This trend underscores the increasing expenses associated with hardware manufacturing, cloud infrastructure, logistics, and semiconductor development.

Key Observations:

- NVIDIA leads with the highest COGS growth across all timeframes, with a 10-year CAGR exceeding 30%, driven by surging demand for AI chips and data center hardware.
- Amazon also shows significant COGS growth, with a 10-year CAGR of over 17%, reflecting its massive logistics network and AWS infrastructure investments.
- Meta Platforms and Alphabet have seen sharp increases in recent years, as they scale AI infrastructure and expand hardware capabilities (e.g., VR headsets, data centers).
- Apple and Microsoft show moderate COGS growth, consistent with their focus on high-margin services and software.
- IBM and Cisco exhibit relatively flat or declining COGS trends, indicating a shift toward service-oriented models or operational streamlining.

These rising costs highlight the capital-intensive nature of modern tech operations, especially in AI, cloud, and hardware segments. As companies continue to innovate, managing production efficiency and supply chain resilience will be critical to sustaining profitability.

FIGURE 4: COGS growth rates (2013–2024): Top U.S. Tech firms



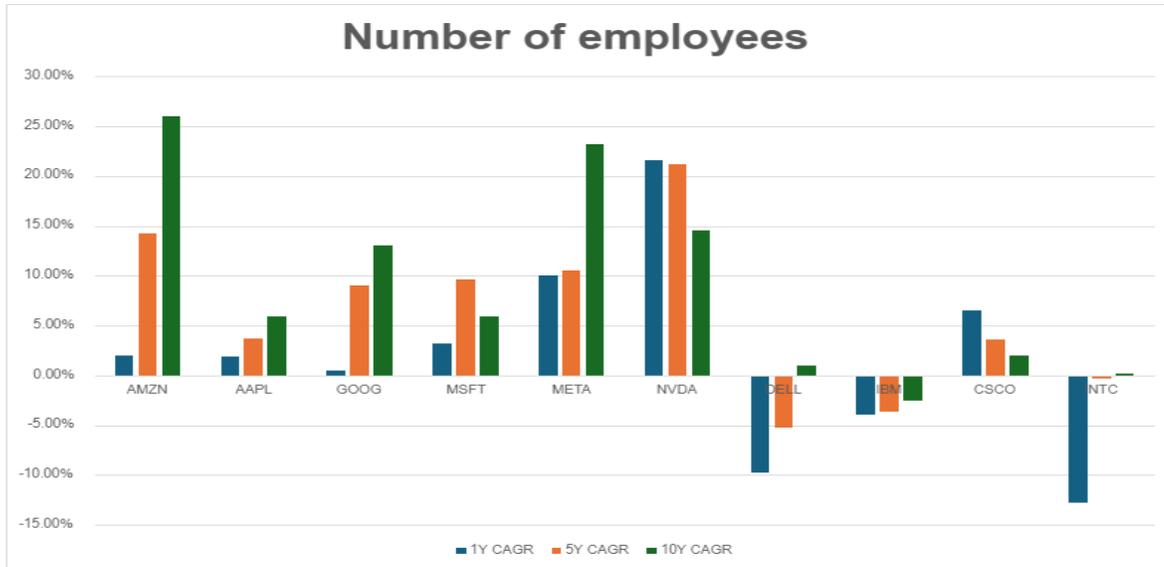
CONSTRAINED EMPLOYMENT GROWTH RATE

Most major U.S. technology companies have reported slower employment growth in recent years, reflecting a broader trend of cautious expansion following the pandemic-era hiring surge. Over the past decade, the CAGR of employee numbers for many tech firms has remained below 5%, despite very strong asset growth.

Key Observations:

- Apple demonstrated steady workforce growth from roughly 80,000 employees in 2013 to 164,000 in 2024, plateauing between 2022 and 2024 indicating a period of employment stability.
- NVIDIA reported the highest employment growth among the listed companies, with a 1-year CAGR of ~20%, driven by strategic hiring in high-skill areas, such as AI and semiconductor engineering.
- Microsoft experienced strong workforce growth from approximately 99,000 employees in 2013 to 228,000 in 2024, with a notable surge of 40,000 hires between 2021 and 2022. Meta saw a rapid rise from around 6,000 in 2013 to 86,000 in 2022, followed by a correction to 67,000 in 2023 and a rebound to 74,000 in 2024.
- IBM reported a consistent workforce decline from approximately 431,000 employees in 2013 to 293,000 in 2024, reflecting ongoing downsizing driven by automation and long-term restructuring.
- Dell also exhibited declining employment, with its least negative CAGR at ~-7%, underscoring ongoing transformation and efficiency-driven workforce adjustments.
- Between 2013 and 2024, the tech sector saw significant employment expansion led by companies like Amazon, Microsoft, Meta Platforms, and NVIDIA, while firms such as IBM and Dell experienced long-term workforce declines due to restructuring and automation. Overall, the sector reflects a shift toward high-skill roles in AI, cloud, and platform services, with varied hiring strategies shaped by innovation and operational efficiency.

Figure 5: Employment growth rates (2013–2024): Top U.S. Tech firms



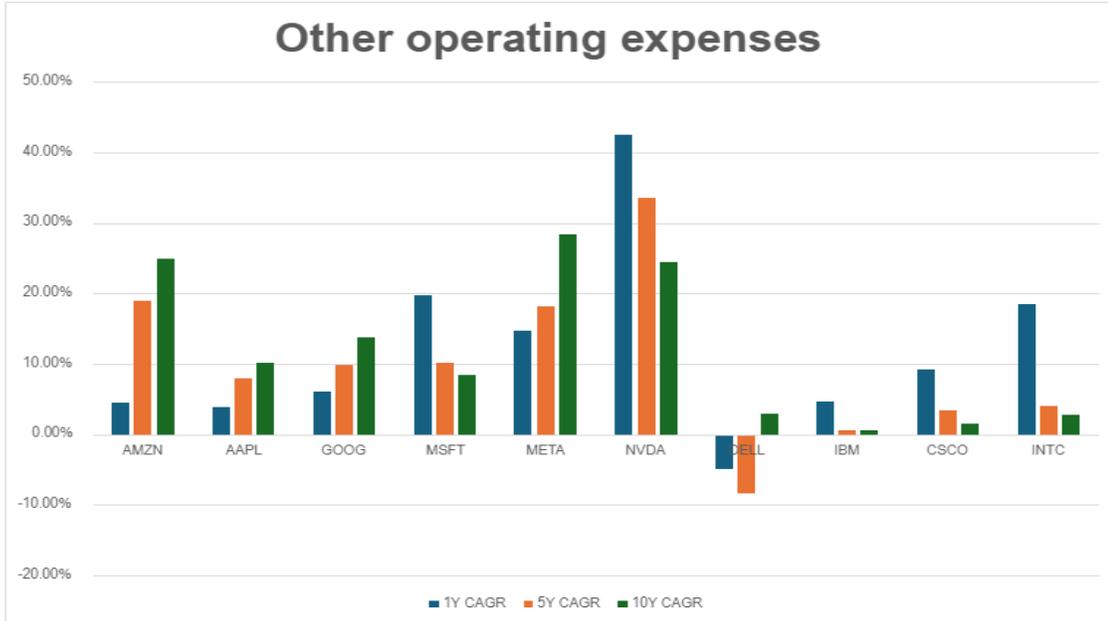
INFLATIONARY PRESSURE ON OPERATING EXPENSES

Over the past decade, U.S. tech companies have experienced mounting inflationary pressure on their operating expenses (excluding COGS). This trend is driven by a combination of rising labor costs, increased investment in AI and cloud infrastructure, global expansion, and the need to maintain competitive innovation cycles. As companies scale, their fixed and variable costs - particularly in R&D, talent acquisition, and data infrastructure- have grown significantly. Analyzing the Compound Annual Growth Rate (CAGR) of these expenses over 1-year, 5-year, and 10-year periods reveals how different firms are navigating this inflationary environment- some aggressively expanding, others optimizing efficiency.

Key Observations:

- NVIDIA leads with a 1-year CAGR of 42.5%, driven by AI, data centers, and R&D.
- Meta Platforms and Amazon show strong long-term growth, fueled by AI, infrastructure, and cloud expansion.
- Alphabet and Apple maintain steady growth through core innovation and operational efficiency.
- Microsoft shows a recent surge (19.7% 1-year CAGR) due to AI and cloud investments.
- Dell and IBM show negative or flat trends, reflecting restructuring and legacy transitions.
- Cisco and Intel exhibit minimal expansion, with 10-year CAGRs of 1.4% and 3.0%, respectively.
- High-growth firms are capitalizing on AI and infrastructure, while others focus on stability, cost control, or transformation.

Figure 6: Other operating expenses (excluding COGS) growth trends (2013–2024): Top U.S. Tech firms



DIVERGENT DEBT REPAYMENT CAPACITY METRICS OF TOP U.S. TECH COMPANIES

Metrics Overview:

The following financial indicators were used to assess the fiscal health and operational efficiency of leading U.S. tech companies:

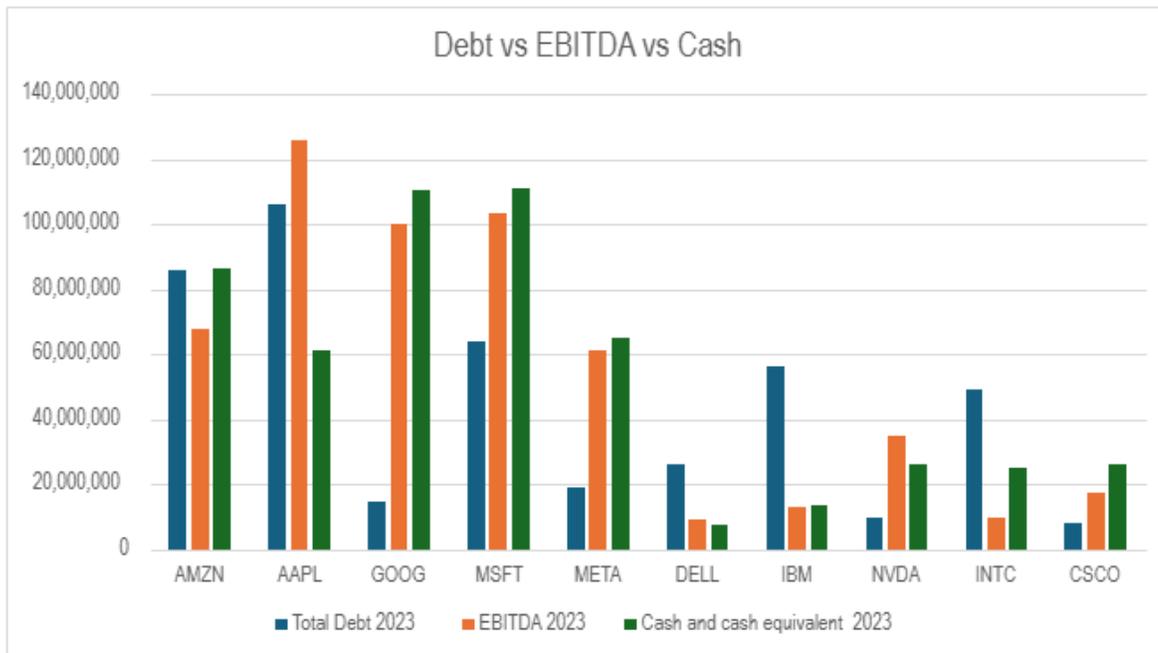
- Total Debt: Represents the cumulative financial obligations incurred by each firm, providing insight into leverage and capital structure.
- EBITDA: Serves as a proxy for core profitability, excluding the effects of financing and non-cash accounting items.
- Cash and Cash Equivalents: Reflects the liquidity position and short-term solvency of each company.
- Operating Cash to Debt Ratio: Evaluates the firm’s ability to service its debt using internally generated cash flows.

Key Observations:

- Amazon has demonstrated a consistent increase in debt levels, which has been accompanied by proportional growth in EBITDA and liquidity, particularly in the post-2020 period.
- Apple continues to exhibit strong financial fundamentals, with high EBITDA and cash reserves, and relatively high but stable debt borrowings.
- Alphabet (Google) maintains a low-debt structure and robust EBITDA, resulting in a high operating cash to debt ratio, indicative of superior financial resilience.

- Microsoft shows steady upward trends in both profitability and liquidity, with debt levels remaining within manageable bounds.
- Meta Platforms operated with minimal debt until recent years and has experienced a significant rise in EBITDA and cash holdings since 2018.
- Dell and IBM exhibit higher leverage, with debt levels exceeding or closely matching their EBITDA and cash positions, suggesting a more aggressive capital structure.
- NVIDIA has experienced rapid financial growth since 2020, marked by a surge in EBITDA and cash, while maintaining relatively low debt exposure.
- Intel presents a more volatile financial profile, with fluctuating EBITDA and liquidity, and moderate debt levels.
- Cisco has strategically reduced its debt burden over time while preserving strong cash reserves, reflecting prudent financial management.

Figure 7: Debt, Cash, and EBITDA (2013–2024): Top U.S. Tech firms



SUMMARY: STRATEGIC DIVERGENCE IN A DECADE OF TRANSFORMATION

Over the past twelve years, the U.S. technology sector has undergone profound structural shifts, marked by aggressive asset expansion, uneven revenue trajectories, and intensifying cost pressures. While total assets across the top ten firms surged- led by Amazon’s 15x growth and NVIDIA’s meteoric rise- revenue growth painted a more complex picture. Companies like Alphabet, Amazon and Meta sustained strong top-line momentum, whereas others such as IBM and Intel faced stagnation or decline.

This divergence reflects the sector's bifurcation between innovation-driven growth and legacy operational constraints. While the AI boom post-2020 reshaped competitive dynamics for companies like NVIDIA, Microsoft, and Meta Platforms, inflationary pressures on operating expenses—particularly in hardware and logistics-intensive firms—have strained margins and challenged profitability.

Workforce trends further underscore this strategic recalibration. Hiring slowed dramatically post-2022, with restructuring and automation tempering expansion. Apple stood out with robust employment growth, while others like Dell and IBM contracted.

Despite these headwinds, select firms (e.g. Meta, Amazon) achieved strong profit-before-tax (PBT) performance in recent years, driven by operational efficiency and high-margin services. Yet for others (e.g. Intel, Dell), PBT remained below long-term averages, reflecting the cost of transformation and market volatility.

In summary, the decade-long analysis reveals a sector in flux—where asset growth and innovation intensity are not uniformly matched by revenue and profit performance. As U.S. tech firms navigate the next wave of AI, cloud, and platform evolution, strategic agility and cost discipline will be critical to sustaining competitive advantage.

RESEARCH METHODOLOGY AND SCOPE

Using Orbis search steps we analyzed the annual growth of financial factors: total assets, operating revenue, profit before tax, cost of goods sold (COGS), cash flow, and employee count for 10 top U.S. tech firms—Amazon, Apple, Alphabet, Microsoft, Meta Platforms, NVIDIA, Dell, IBM, Cisco, and Intel—across 12 years (2013–2024) using key financial and operational metrics from Moody's Orbis database.

We compared the 10 CAGR, 5-year CAGR and last year growth to analyse technology performance in different countries. We did not give preference to geographic location or reporting standards. All these entities had full financial statements available for the respective years.

PRINCIPAL RATIO DEFINITIONS

For more detailed definitions refer to Orbis Data and Ratio Definitions in the Help section of Popular Guides, Financial Data.

LIST OF THE ENTITIES

Company name		BvD ID number
Latin alphabet		
NAME		BVD_ID_NUMBER
AMAZON.COM, INC.		US911646860
APPLE INC.		US942404110
ALPHABET INC.		US611767919
MICROSOFT CORPORATION		US911144442
META PLATFORMS, INC.		US201665019
NVIDIA CORPORATION		US943177549
DELL TECHNOLOGIES INC.		US800890963
INTERNATIONAL BUSINESS MACHINES CORP		US130871985
CISCO SYSTEMS INC		US770059951
INTEL CORP		US941672743

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