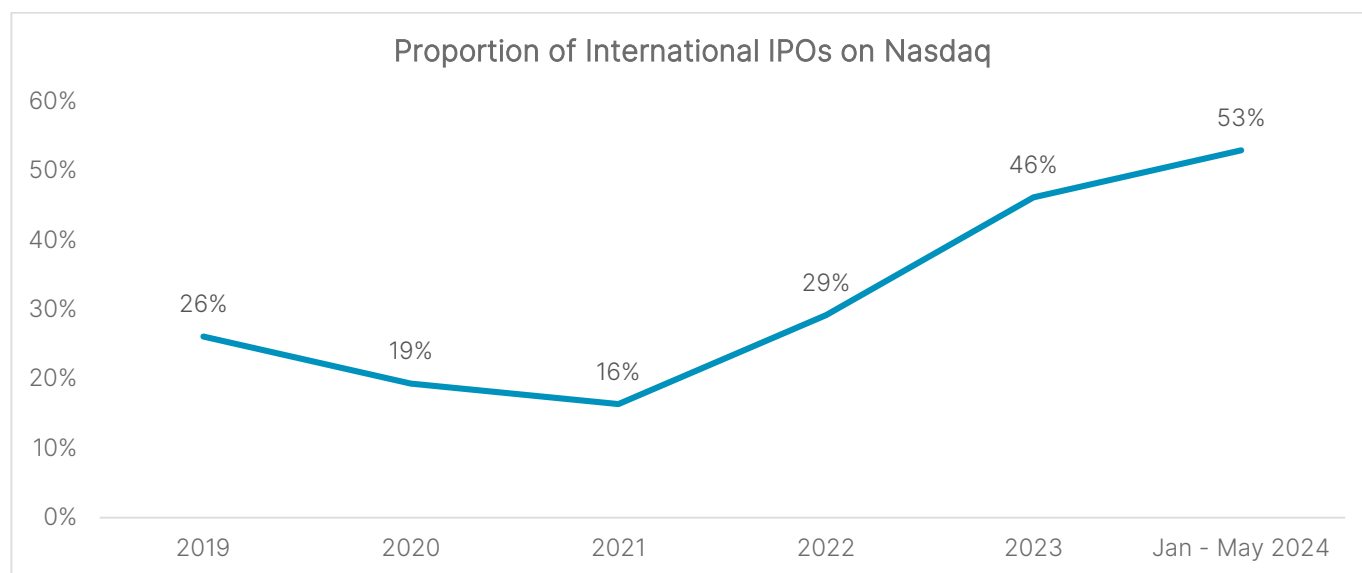


Accessing Global Innovation with the Nasdaq-100[®]

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With a deep pool of liquidity and a broad investor base, the Nasdaq Stock Market[®] is often the exchange of choice for both US and international companies entering the public markets. Nasdaq was the leading US exchange by the number of initial public offerings (IPOs) and proceeds raised for the fifth consecutive year in 2023, with a win rate of 86% in the US market. Nasdaq welcomed 130 IPOs last year, compared to only 19 IPOs on NYSE. In particular, Nasdaq maintained its strong track record in the technology, healthcare, and consumer sectors in 2023 with Nasdaq-eligible IPO win rates of 95%, 100%, and 79%, respectively. More and more international firms have leveraged an IPO on Nasdaq to signal their strategic focus on innovation to their investors, with the proportion of international IPOs increasing in recent years. In the first five months of 2024, 53% of new Nasdaq listings were from companies based outside the US, up from 16% in 2021.



Source: Nasdaq Global Indexes, Bloomberg. As of May 31, 2024.

Notable International Companies Listed on Nasdaq

Arm

Joining the Nasdaq-100 on June 24, 2024, Arm is a global leader in semiconductor technology as it licenses high-performance and energy-efficient central processing units (CPUs) and related technologies. The British company uses an asset-light, R&D-heavy business model with 61% of its net sales reinvested into research and development (R&D) in the last 12 months.¹ While Arm does not design or manufacture computer chips, it sells licenses for its chip architecture to companies that make CPUs and collects royalties on every chip shipped with

¹ Source: Bloomberg. As of May 29, 2024.

its technology. Arm's chip architecture was present in 99% of smartphones globally in 2022² and the firm's gross profit margin was almost 97% in the last two fiscal years.³ As Microsoft debuted a new category of personal computers (PCs) with artificial intelligence (AI) features in May 2024⁴, demand for the use of Arm's technology in PCs received a significant lift. The firm aims to capture more than 50% of the Windows PC market in five years. The automotive semiconductor market is also one of Arm's fastest-growing opportunities. The company introduced its first autonomous driving solutions based on its ARMv9 architecture in March 2024.⁵ The firm was dually listed in London and on Nasdaq for 18 years until it was acquired by SoftBank in 2016.⁶ Despite being engaged by the British government and the Financial Conduct Authority⁷, Arm decided to list on Nasdaq only in September 2023 with US\$5.2 billion raised, making it the largest IPO worldwide in 2023. The stock price of the British semiconductor designer has risen by 221% since its debut.⁸

ASML

Netherlands-based ASML holds an unrivaled monopoly over the fabrication of extreme ultraviolet (EUV) lithography machines, which are essential for manufacturing cutting-edge processor chips. No competitor has matched ASML's technological leadership yet, not to mention the enormous switching costs and intangible assets required to displace its machines. Growth in semiconductor end markets and increasing lithography intensity are driving demand for its products and services. The company maintained an average gross margin of 51% in the last four quarters.⁹ More EUV tools will be required as the ramp of the upcoming 2nm chip manufacturing process could be faster than that of the 3nm node, driven by the leading-edge logic chip demand from data centers. Its latest High NA¹⁰ EUV lithography system costs US\$380 million and is able to imprint semiconductors with lines that are just 8 nanometers thick, 1.7 times smaller than the previous generation. Intel already received its first shipment in December 2023, with TSMC following later this year.¹¹ The company was listed primarily in Amsterdam and offered its New York Registry Shares on Nasdaq in 1995.¹² ASML's Nasdaq-listed shares delivered a total return of 42% in the past 12 months.¹³

AstraZeneca

Formed through the merger of Astra and Zeneca in 1999, AstraZeneca has a portfolio of well-established medications, including Farxiga for Type 2 diabetes and Tagrisso for lung cancer. These two products generated US\$6.0 billion and US\$5.8 billion in revenues last year, respectively. A decade ago, the Anglo-Swedish pharmaceutical company targeted to have strong and consistent revenue growth from 2017 and generate annual sales of over US\$45 billion by 2023¹⁴. The goal was achieved as its revenue reached US\$45.8 billion last year, more than doubling the sales in 2017. The firm delivered an impressive compound annual growth rate (CAGR) in revenue, averaging nearly 16% over the past five years. In May 2024, AstraZeneca announced its ambitious target of almost doubling sales to US\$80 billion by the end of the decade. It is on track to achieve its goal of launching 20 new molecular entity (NME) drugs by 2030, with 6 NMEs already launched. Many of the new drugs will potentially generate more than US\$5 billion in peak-year revenues.¹⁵ AstraZeneca has been expanding its global R&D footprint and has R&D centers in the US, UK, Sweden, and China. The drugmaker is investing US\$1.5 billion in a manufacturing facility in Singapore, which will be its first facility to cover the full manufacturing process for antibody-drug conjugates (ADCs). ADCs are a growing class of therapies that deliver highly potent cancer-killing

² https://www.sec.gov/Archives/edgar/data/1973239/000119312523228059/d393891df1a.htm#rom393891_10

³ <https://investors.arm.com/static-files/4f2fc46b-34a5-4bc5-94af-f13fbc348f0e>

⁴ <https://blogs.microsoft.com/blog/2024/05/20/introducing-copilot-pcs>

⁵ <https://newsroom.arm.com/news/new-automotive-technologies-2024>

⁶ <https://group.softbank/en/news/press/20160905>

⁷ <https://www.reuters.com/markets/deals/softbanks-arm-pursue-us-only-listing-this-year-2023-03-03/>

⁸ Source: Bloomberg. As of June 28, 2024.

⁹ <https://edge.sitecorecloud.io/asmlnetherlaaea-asmlcom-prd-5369/media/project/asmlcom/asmlcom/asml/files/investors/financial-results/q-results/2024/q1/presentation-investor-relations-q1-2024-r3t11w.pdf>

¹⁰ "NA" refers to numerical aperture – a measure of the ability of an optical system to collect and focus light.

¹¹ <https://www.bloomberg.com/news/articles/2024-06-05/asml-to-ship-its-380-million-machine-to-tsmc-samsung-this-year>

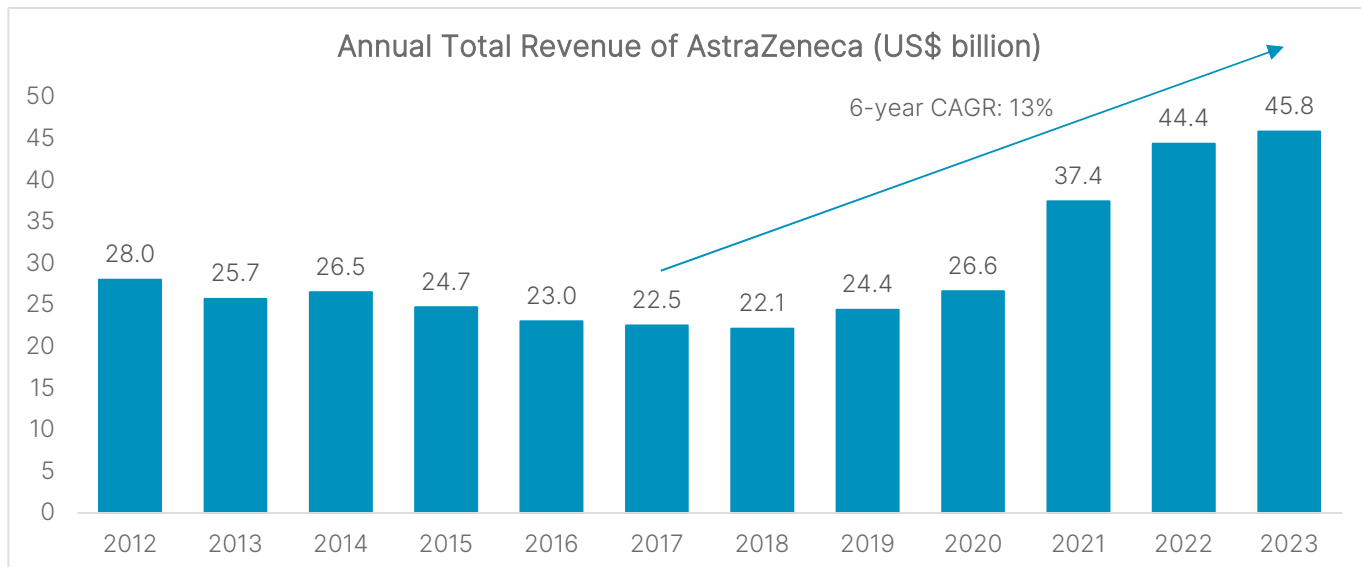
¹² <https://edge.sitecorecloud.io/asmlnetherlaaea-asmlcom-prd-5369/media/project/asmlcom/asmlcom/asml/files/investors/financial-results/a-results/1995/annual-report-1995.pdf>

¹³ Source: Bloomberg. As of June 28, 2024.

¹⁴ <https://www.astrazeneca.com/media-centre/press-releases/2014/astrazeneca-updated-strategy-value-for-shareholders-06052014.html#>

¹⁵ <https://www.astrazeneca.com/media-centre/press-releases/2024/astrazeneca-to-deliver-80bn-revenue-by-2030.html>

agents directly to cancer cells through a targeted antibody.¹⁶ AstraZeneca has a primary listing in London and a secondary listing on Nasdaq Stockholm in Sweden. The firm transferred the listing of its American Depositary Receipts (ADRs) from NYSE to Nasdaq in September 2020.¹⁷ AstraZeneca's Nasdaq-listed ADRs had a 3-year total return of 39%.¹⁸



Source: AstraZeneca. As of June 6, 2024.

Atlassian

Founded in 2002 and headquartered in Sydney, Atlassian provides software that helps teams work together more effectively and efficiently. 80% of Fortune 500 companies are using its products.¹⁹ With an average gross margin of 84% in the last four quarters²⁰, the company's offerings include Jira (an issue tracking and project management tool) and Confluence (a collaboration tool). It recently launched Rovo, a product powered by generative AI that helps users access and utilize data dispersed among different Atlassian and third-party apps. Atlassian is currently a cloud-majority company. Almost 60% of its revenue was generated by its cloud offerings, and over 300,000 customers are using its cloud products.²¹ The company was listed primarily on Nasdaq in 2015 and has had a return of 742% since its listing.²²

Nasdaq-100® - Capturing Global Innovation Powerhouses

Launched on January 31, 1985, the Nasdaq-100® (NDX®) tracks 100 of the largest, domestic and international, non-financial companies listed on Nasdaq. The Nasdaq-100's disproportionate focus on innovation-driven, forward-thinking companies is tied to Nasdaq's history as the world's first fully electronic stock exchange in 1971. The index has more exposure to the rapidly expanding "new economy" sectors, such as technology, consumer discretionary, and health care, which experienced much faster growth compared to other industries over the past decade-plus. As of the end of June 2024, Nasdaq-100's sector allocations were heavily weighted towards technology (61%), consumer discretionary (18%), and health care (6%), according to the ICB Industry classification. The combined exposure to these "new economy" sectors was 85%, compared to only 63% for the S&P 500.

¹⁶ <https://www.astrazeneca.com/media-centre/press-releases/2024/astrazeneca-to-manufacture-adcs-in-singapore.html>

¹⁷ <https://www.astrazeneca.com/media-centre/press-releases/2020/astrazeneca-to-list-us-adr-equity-and-all-us-debt-securities-on-nasdaq.html#>

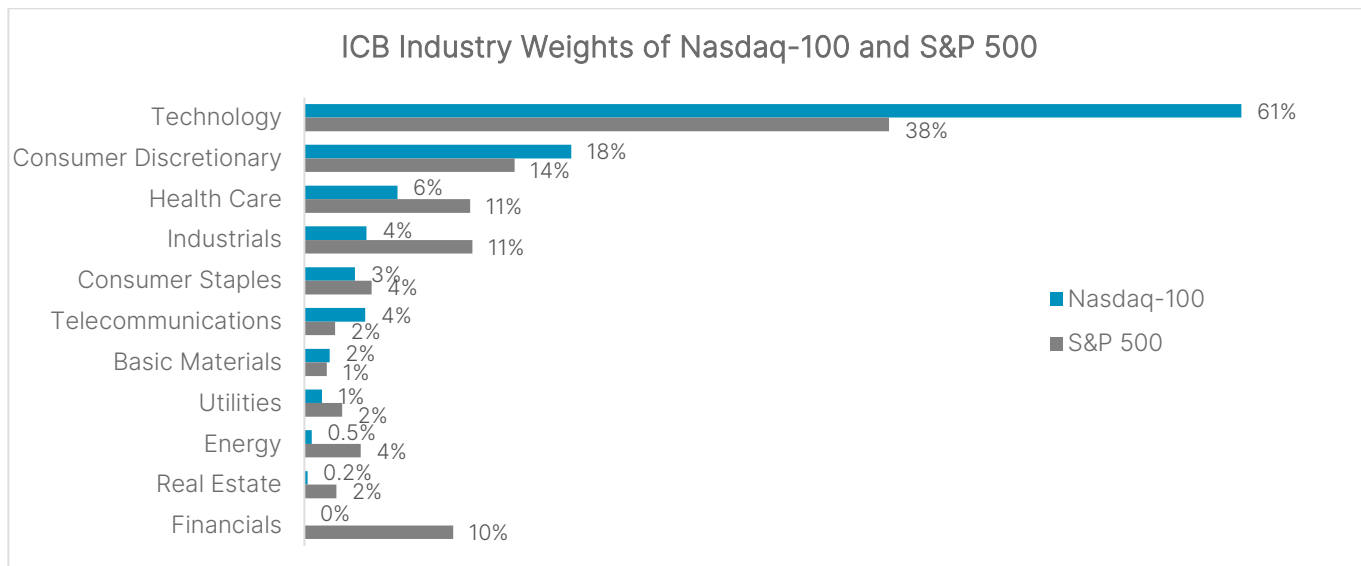
¹⁸ Source: Bloomberg. As of June 28, 2024.

¹⁹ <https://www.atlassian.com/customers>

²⁰ https://s28.q4cdn.com/541786762/files/doc_financials/2024/q3/TEAM-Q3-2024-IR-Data-Sheet.pdf

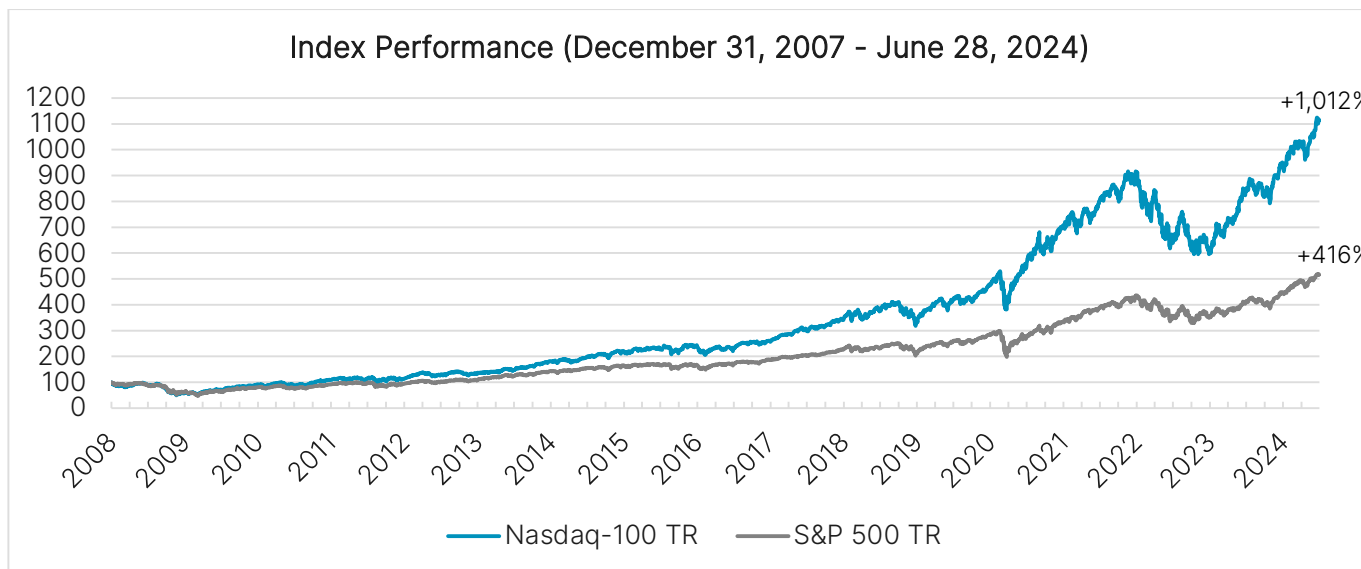
²¹ https://s28.q4cdn.com/541786762/files/doc_financials/2024/q3/TEAM-Q3-2024-Shareholder-Letter.pdf

²² Source: Bloomberg. As of June 28, 2024.



Source: Nasdaq Global Indexes, FactSet. As of June 28, 2024.

From December 31, 2007 to June 28, 2024, the Nasdaq-100 delivered an impressive total return of 1,012%, more than doubling the total return of 416% from the S&P 500. On an annualized basis, this translates to more than 500 bps of outperformance each year (15.7% vs 10.5%). The Nasdaq-100 has outperformed the S&P 500 in 12 out of the last 16 calendar years, including by approximately 30% each in 2009, 2020 and 2023.

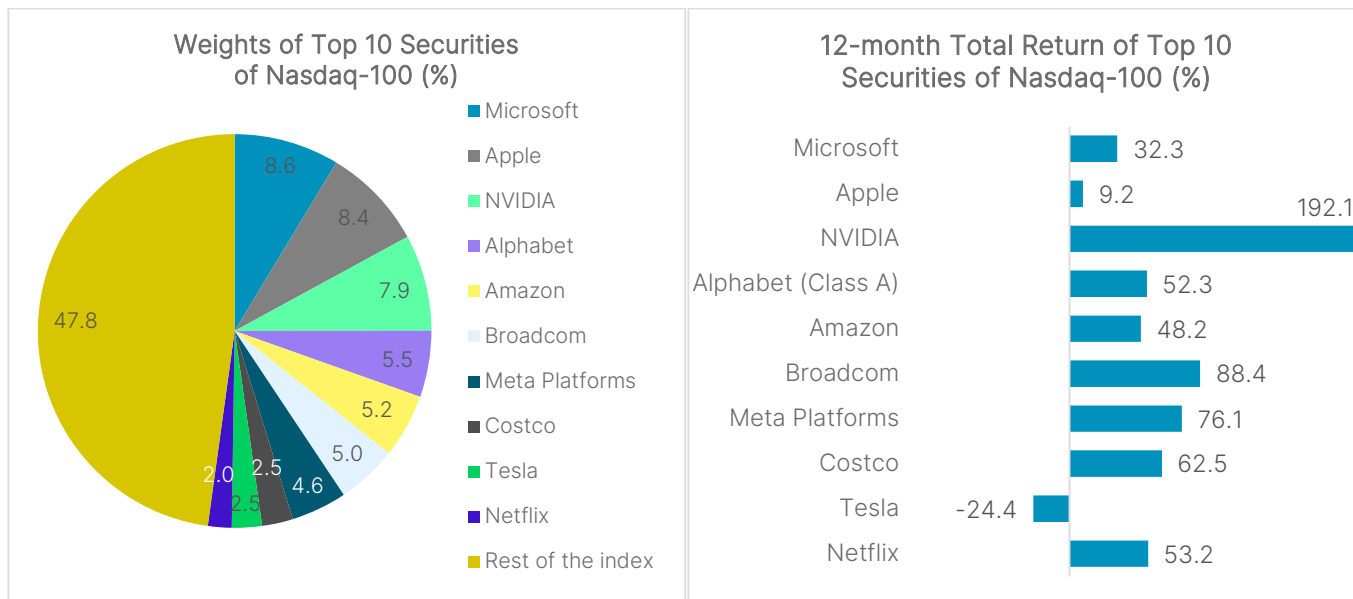


Source: Nasdaq Global Indexes, FactSet. As of June 28, 2024.

The Nasdaq-100 is a modified market capitalization-weighted index that is rebalanced quarterly in March, June, September, and December. 8 of the 10 largest US companies and 6 of the 10 largest global firms are included in the index.²³ As of the end of June 2024, the 10 largest securities accounted for 52.2% of the index weight and delivered a 12-month total return of 59.0% on average. 6 of them delivered a total return of more than 50%.²⁴

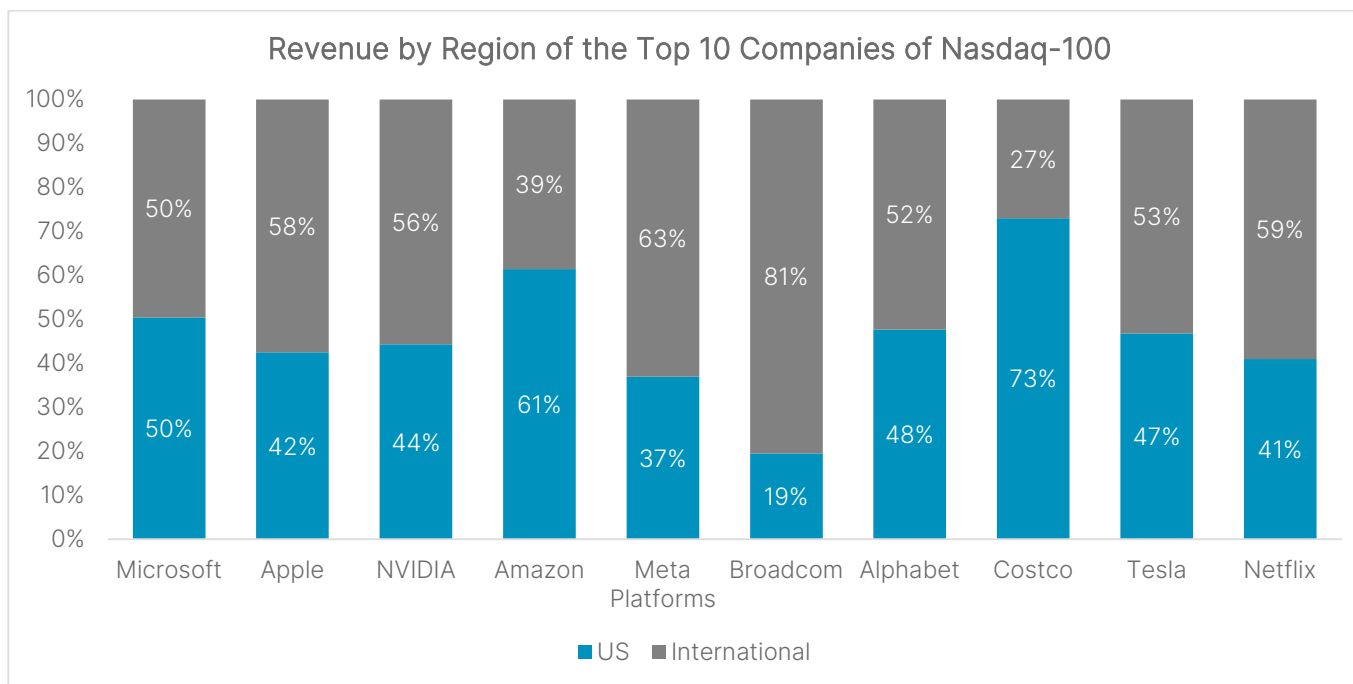
²³ Source: Nasdaq Global Indexes, Bloomberg. As of June 28, 2024.

²⁴ Source: Nasdaq Global Indexes, FactSet. As of June 28, 2024.



Source: Nasdaq Global Indexes, FactSet. As of June 28, 2024. The weights of Class A and C shares of Alphabet are combined.

Companies in the Nasdaq-100 generate their income from all over the world. 49% of the revenues of Nasdaq-100 companies were generated outside the US on a weighted average basis, compared to only 42% for the S&P 500. 7 of the top 10 Nasdaq-100 companies by weight derived over half of their sales from international markets. Costco is the outlier among these companies as it generated over 70% of its revenue from the US. Yet, the company is not a typical innovation-centric Nasdaq-listed firm since it adopts a cost leadership strategy with efficient inventory management and warehouse design.



Source: Nasdaq Global Indexes, FactSet, companies' latest annual reports. As of June 6, 2024.

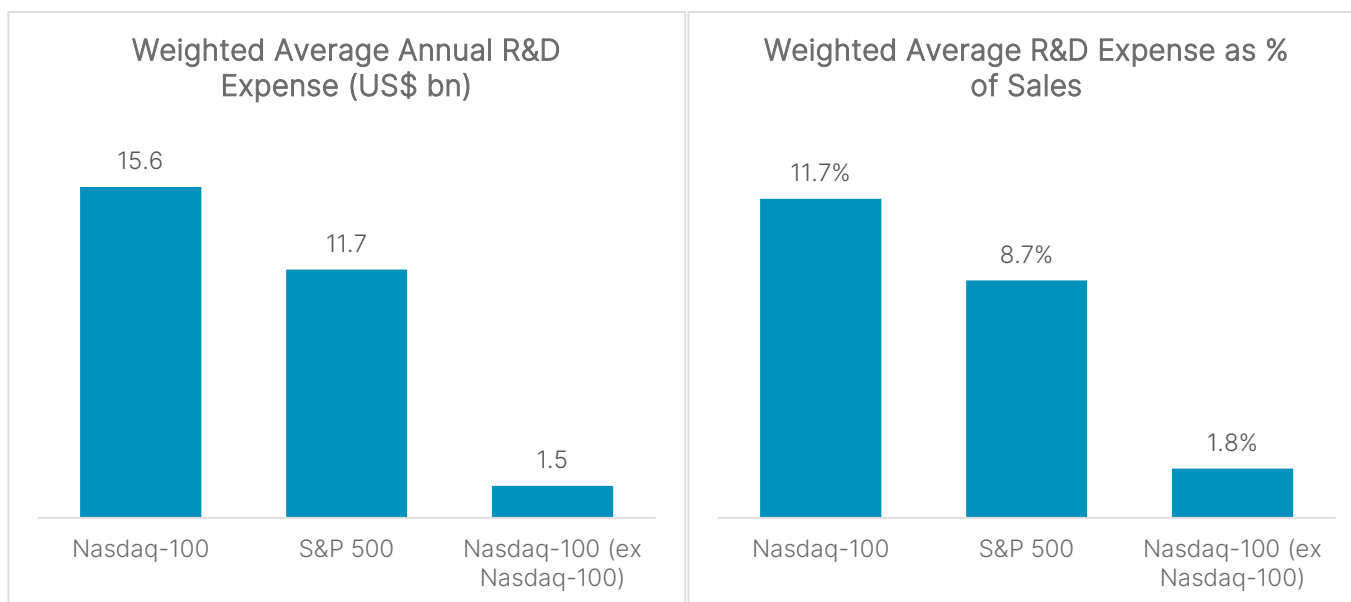
Meta generated 63% of its revenue from overseas in 2023, up from 57% five years ago. Average revenue per user (ARPU) had a 21% year-over-year growth in Europe last year, which was the highest among all markets. The company expects to see higher user growth in regions outside North America and Europe in the future. Even though none of Meta's platforms are available in mainland China, Meta's online commerce and gaming verticals

benefited from the strong demand from Chinese advertisers aiming to reach their potential customers in other markets.²⁵

With almost 60% of its revenue generated outside the US in 2023, Netflix's global growth significantly contributes to the company's success. While Netflix was available only in the US before 2010, it now operates in over 190 countries, and almost 70% of its 260 million subscribers were outside the US at the end of 2023. With more than two people per household on average, the company has an audience of over half a billion people.²⁶ Netflix has strategically partnered with local firms to establish mutually beneficial relationships. In certain instances, it collaborates with cell phone and cable operators, integrating its content into their existing video-on-demand services. The company's commitment to producing local content has significantly fueled its worldwide reach. Netflix's international content spending is expected to exceed North American spending this year.²⁷ Series like Squid Game, Money Heist, and Lupin have risen to be among Netflix's most popular titles.²⁸

Innovation Drives Growth in Today's Economy

Over the past two decades, the Nasdaq-100 has exhibited a remarkable CAGR in earnings of 19.5%, significantly outpacing the S&P 500's growth of 9.0%. The Nasdaq-100's revenues have surged at a CAGR of 12.0% during the same period, dwarfing the S&P 500's modest 5.1% revenue growth.²⁹ Innovation serves as a crucial catalyst for the Nasdaq-100's rapid fundamental growth, which ultimately leads to its exceptional performance. A straightforward approach to gauge this innovation is through the analysis of R&D expenses, which provides a clear, quantifiable measure of the commitment to innovation by these leading companies. The Nasdaq-100's weighted average annual R&D expense recently stood at US\$15.6 billion, which was 1.3 times the amount of the S&P 500. However, compared to the portion of the S&P 500 that does not overlap with the Nasdaq-100, Nasdaq-100 companies spent approximately 10.4 times as much on average. The gap is still vast when R&D expense is viewed as a percentage of company sales – Nasdaq-100 companies reinvested around 6.5x as much of their topline revenues back into R&D in the last four quarters (11.7%), compared with the remaining companies in the S&P 500 that do not overlap with the Nasdaq-100 (1.8%).



Source: Nasdaq Global Indexes, FactSet. As of March 31, 2024.

The 10 largest R&D spenders in the Nasdaq-100 allocated nearly 18% of their net sales from the past year to R&D on average. For instance, Qualcomm's success in 5G technology stems from its focus on innovation and continuous investments. The San Diego-based company spent almost 24% of its net sales on R&D in the last 12

²⁵ <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/c7318154-f6ae-4866-89fa-f0c589f2ee3d.pdf>

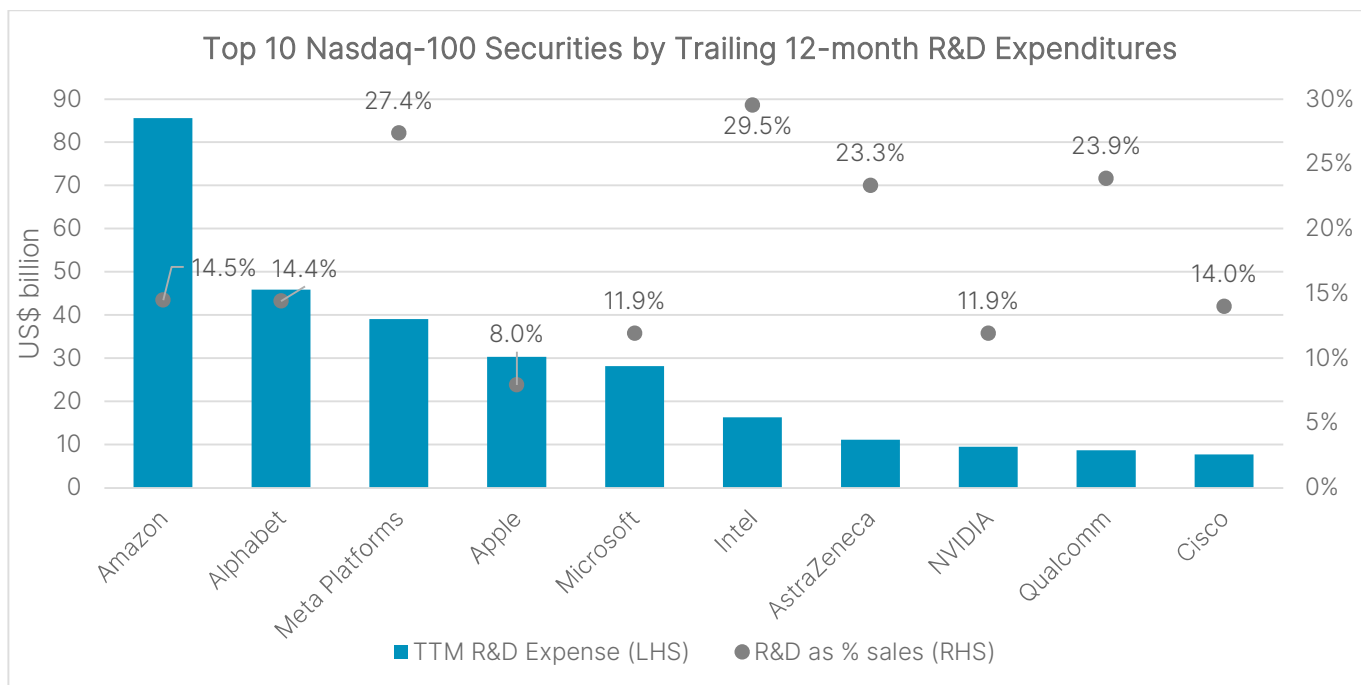
²⁶ https://s22.q4cdn.com/959853165/files/doc_financials/2024/q1/FINAL-Q1-24-Shareholder-Letter.pdf

²⁷ <https://www.ampereanalysis.com/insight/more-than-half-of-netflixs-content-spending-now-outside-of-north-america>

²⁸ <https://www.netflix.com/tudum/top10/most-popular/tv-non-english>

²⁹ Source: Nasdaq Global Indexes, FactSet, Bloomberg. As of December 31, 2023.

months. Qualcomm has even surpassed leading patent filers like IBM and Alphabet to rank second by the number of US patents granted last year, securing over 10 patents per day on average.³⁰ As a pioneer in connectivity, approximately three-quarters of Qualcomm’s patents concentrate on 5G, 5G-advanced, and 6G technologies.³¹ Furthermore, the company is well-positioned to capitalize on the broader adoption of AI across multiple end markets, including smartphones, PCs, automobiles, and Internet of Things (IoT). For more than a decade, Qualcomm has been trying to reduce the PC sector’s dependence on Intel and introducing key components based on Arm’s technology. Microsoft unveiled its new breed of Copilot+ PCs with AI features in May 2024. These Windows laptops, powered by Qualcomm’s Snapdragon X Elite systems, will have as much as twice the battery life of traditional counterparts.



Source: Nasdaq Global Indexes, Bloomberg. As of June 13, 2024.

Conclusion

With an 86%-win rate of Nasdaq-eligible IPOs in the US market, Nasdaq is the preferred exchange for both US and international companies entering the public markets. While UK-based Arm was listed on Nasdaq as the largest IPO in 2023, other prominent examples of international companies listing on Nasdaq include ASML, AstraZeneca, and Atlassian.

Nasdaq-100 companies generated nearly half of their revenues outside the US on a weighted average basis, with 7 of the top 10 Nasdaq-100 companies by weight garnering more sales from international markets than the US market. The index has grown its revenues and earnings at a rate more than double the S&P 500 over the past two decades. Firms within the Nasdaq-100 typically prioritize innovation in their business strategies, with the 10 largest R&D spenders of the index allocating almost one-fifth of their net sales to R&D on average. This outsized focus on innovation-driven, global growth differentiates the Nasdaq-100 from other US large cap and growth benchmarks, and helps explain the extended outperformance of the index – more than doubling the return of the S&P 500 over the last 16-plus years.

³⁰ <https://www.ificlaims.com/rankings-top-50-2023.htm>

³¹ <https://www.qualcomm.com/news/onq/2024/02/rooted-in-tomorrow-qualcomm-and-its-inventors-are-focused-on-the-future>

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