

The number of publicly traded companies in the US has decreased dramatically over the past three decades. In 1997, there were over 6,500 publicly traded companies and today there are just 4,700.¹ This has ramifications for investors, as well as financial markets more broadly. In his 2023 annual letter to shareholders, Jamie Dimon, CEO and Chairman of JP Morgan, called attention to what he considered the troubling trend of the “diminishing role of publicly traded companies in the American financial system.”² Meanwhile, rather than pursuing the path of going public, some of the world’s largest and most valuable companies are remaining private, including ByteDance, OpenAI, Stripe, and SpaceX.³

In this note, we examine the drivers behind the decline in the number of publicly traded stocks. Our analysis reviews IPOs and delistings, regulatory burdens, the growth and availability of private capital, and the role of mergers and acquisitions. We also consider factors like the rise of propriety technology and intellectual property. Finally, we explore the implications of this change for institutional investors.

Key takeaways

- **Decline in public companies:** The dramatic decline (of 40-50%) in the number of publicly traded stocks in the US is due to a number of factors that have simultaneously improved investor rights and corporate transparency, while at the same time supporting more robust, though fewer, publicly traded companies.
- **Regulatory burdens:** Increased regulatory requirements, such as those from Sarbanes-Oxley, have raised the costs of being a public company.
- **Rise of private capital:** The availability of private capital has provided companies with alternatives to going public.
- **Mergers and acquisitions:** Many companies are delisting due to mergers and acquisitions, often with public companies acquiring other public companies.
- **Intangible assets:** Companies with significant intangible assets may prefer to stay private to protect proprietary information.
- **Market concentration:** The US stock market has become more concentrated, with the top 10 stocks accounting for a significant portion of market capitalization.
- **Accessing growth potential:** Private equity may serve as an avenue for many investors to fill the void left by the decreasing number of companies in terms of providing access to the growth of a broader swath of companies and industries.

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¹ Source: CRSP as of August 2024.

² Source: JP Morgan, Jamie Dimon, “Chairman and CEO Letter to Shareholders,” in the 2023 Annual Report, April 8, 2024.

³ Source: The Economist, “Why the Stock Market is Disappearing,” April 18, 2024.

Decreasing number of public stocks

Throughout most of US market history, the number of publicly listed companies grew. This trend peaked in 1997, when there were more than 6,500 listed companies (see Figure 1).⁴ The number of public companies experienced a decrease of over 40% between 1997 and 2012, when it reached a nadir of just 3,800 publicly traded companies. Since then, the number of listed companies has rebounded, with a net gain of 900 companies over the next 12 years. Market capitalization was relatively unaffected by these changes, with total market cap increasing by nearly 6x from \$10.5 trillion in 1997 to \$60 trillion in June 2024.

⁴ Note that estimates of the total number of listed stocks vary. For example, data from the World Bank shows a peak of just over 8,000 stocks, while data from CRSP US Stocks Databases shows it peaking at 7,300.

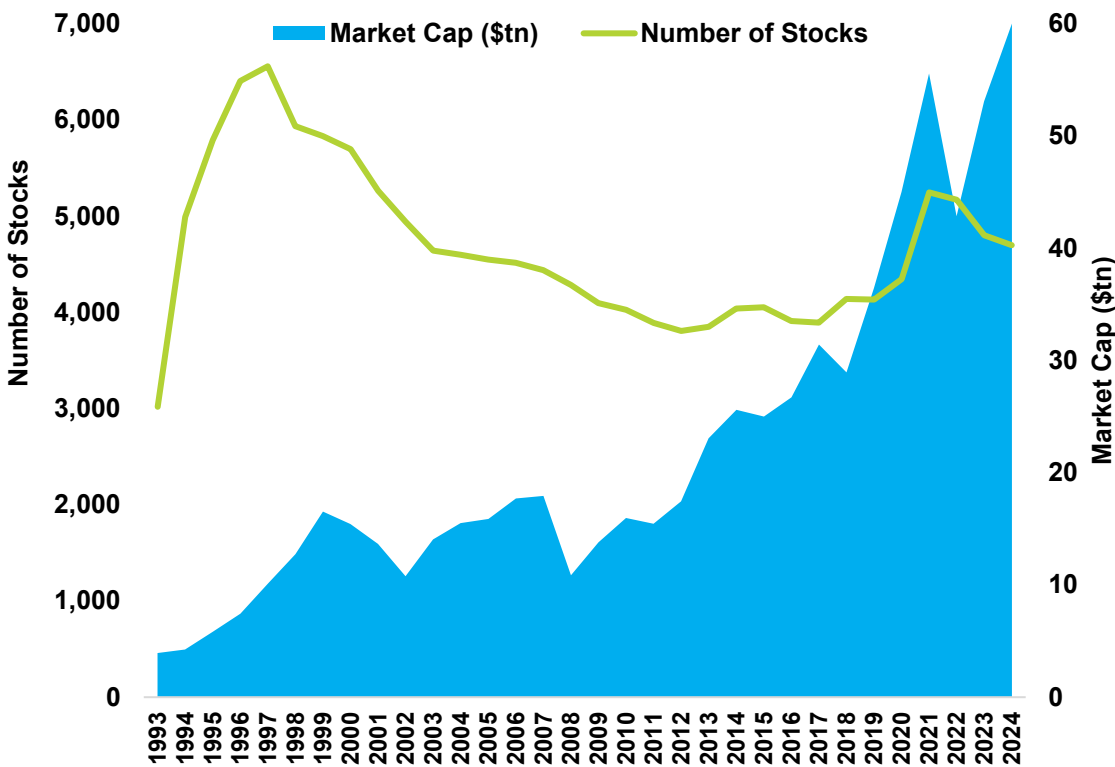


FIGURE 1
Number and Market Cap of US Listed Companies 1980 – June 2024

Source: Bloomberg. Stock count from NASDAQ, New York Stock Exchange (NYSE), and New York Stock Exchange American.

In part, this phenomenon is not limited to the US alone. For example, in the early 1960s, the London Stock Exchange (LSE) boasted 4,400 publicly traded stocks, but over the decades that number has fallen to just 1,200 companies.⁵ However, the opposite trend is happening in certain parts of the world, such as China. For example, the Shanghai Stock Exchange is now the third largest exchange in the world in terms of market capitalization with 1,690 listed companies.⁶

⁵ Source: London Stock Exchange as of June 2024.

⁶ Source: Shanghai Stock Exchange as of August 16, 2024. The exchange includes 1,690 a-share companies.

Figure 2 takes a closer look at the dramatic increase in US public companies that started in the early nineties, followed by an even more dramatic decrease starting in 1997 that lasted until around 2002.⁷ At the same time, the number of initial public offerings also declined.

⁷ As is the case with most finance and time series data, Meketa Investment Group recommends looking at as many periods as possible in order to mitigate Endpoint or in this case Starting Point, Bias. For more information, please refer to Meketa Investment Group's Endpoint Bias White Paper.

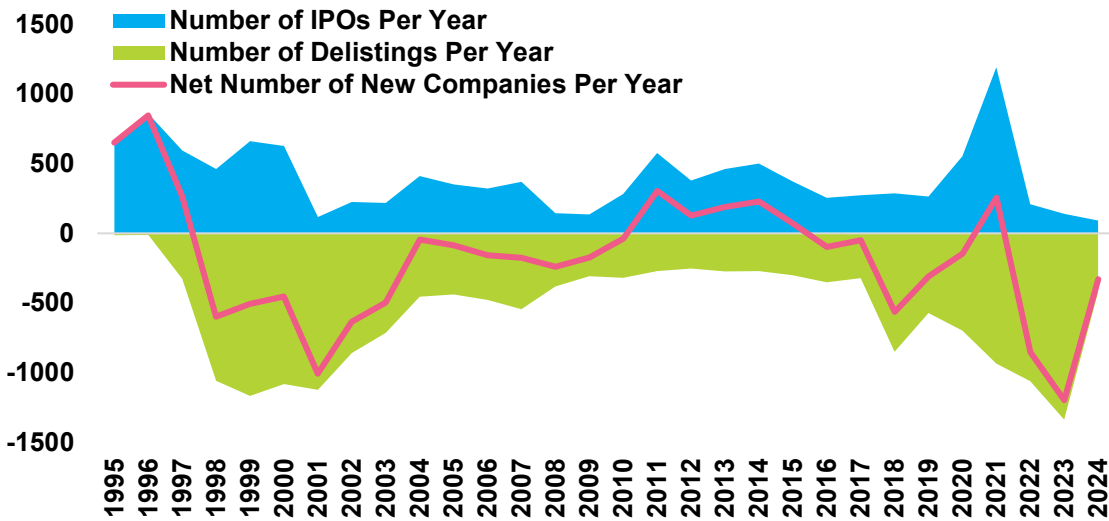


FIGURE 2
Net Changes to Number of US Listed Companies (IPOs – Delistings)
Annual Figures: January 1996 – June 2024

Source: Bloomberg data for delisting from NASDAQ, NYSE and NYSE American as of June 2024. IPOs Data accounts only for “Primary Share Offerings,” excludes “Secondary Share Offerings” and “Best Efforts.” Delistings are based on delistings from NYSE and NASDAQ. “Other” reasons for delisting include reorganization, bankruptcy, liquidation, and not available.

For a company to “go public” (i.e., become listed on an exchange via an initial public offering), it has met a series of minimum economic and regulatory requirements. Its continued ability to be traded on that exchange likewise depends on the company’s ability to continue to meet these minimum financial and legal requirements.

Listed companies can either delist voluntarily or be forced to delist by the exchange for failure to meet its requirements. Voluntary delisting may be driven by a desire to save costs, a decision to merge with another company, or a wish to increase control by the majority owner(s). If a company delists, shareholders may be bought out or offered new shares.⁸ Figure 4 (below) shows that delistings due to M&A activity has been driven by public companies more than private companies taking public companies private. While M&A activity decreases the number of stocks, when public companies acquire other public companies, public market investors continue to have access to the growth and revenues of the acquired companies through the merged entity.

⁸ Source: Bloomberg data as of June 2024 for NASDAQ, NYSE and NYSE American exchanges.

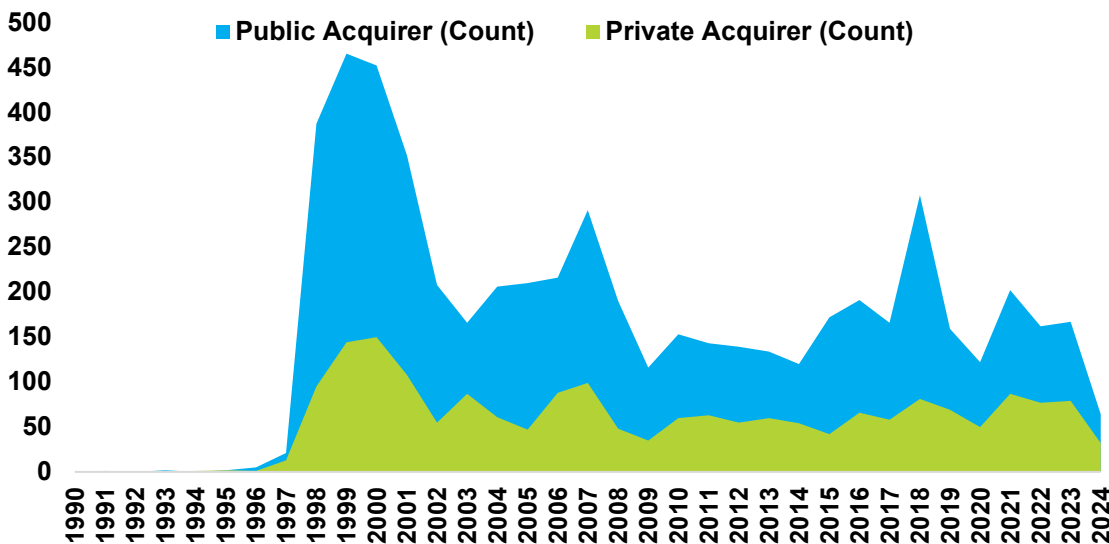


FIGURE 3
Delistings due to Private & Public Acquisitions
Annual Figures: January 1990 – June 2024

Source: Bloomberg data as of June 2024 for NASDAQ, NYSE and NYSE American exchanges.

Exchanges may delist a company for many reasons including some of the following: the stock's price being too low, and the company not making its required filings with the exchange on a timely basis, too few shares being traded and too few shareholders.⁹ Involuntary delisting may signal financial troubles for a company. In these situations, an investor may still be able to trade shares in the over-the-counter market.

⁹ Source: NBER Market Microstructure Meetings 2002, J. Macey et. Al., "Down and Out in the Stock Market: The Law and Economics of the Delisting Process," 2002 and updated in February 2005.

Figure 3 shows that between 1990 and 2023, voluntary delisting through mergers and acquisitions was the most commonly cited explanation for companies delisting.

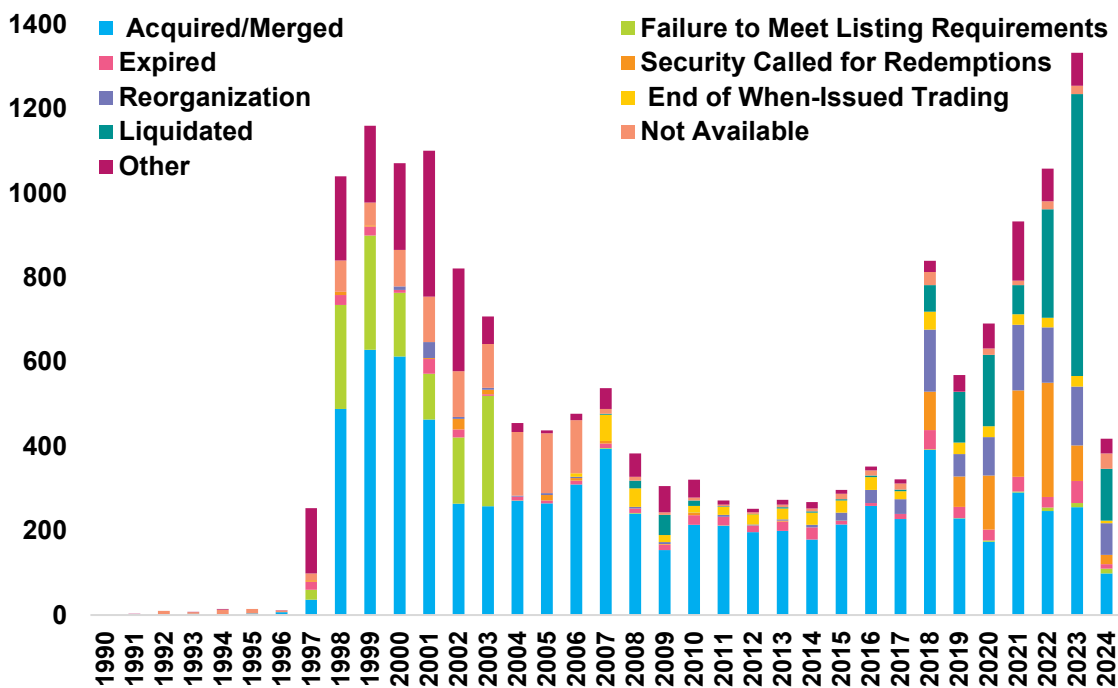


FIGURE 4
Delistings by Reason
January 1990 – June
2024

Source: Bloomberg as of June 2024 IPOs Data accounts only for "Primary Share Offerings," excludes "Secondary Share Offerings" and "Best Efforts." Delistings are based on delistings from NYSE, NYSE American and NASDAQ. Figure 3 does not include all of the reasons cited for delisting but focuses on the most often cited reasons.

In the case of involuntary delistings, failure to meet exchange listing requirements was more frequently cited in the late 1990s and early 2000s. In 1996, NASDAQ increased its minimum market cap and share price requirements. As a result between 1996 and 2002 more than 7,350 stocks delisted from US exchanges with half of them being forced to delist for not meeting minimum asset, volume, and shareholder minimums.¹⁰ Then, in 2002, with the passage of Sarbanes-Oxley ("SOX") regulation, all US exchanges including the NASDAQ amended their listing standards to include additional corporate governance requirements such as independent audits.¹¹ After 2003, the number of publicly traded companies that failed to meet exchange minimums declined precipitously (see Figure 3). Much of the increase in delistings since 2018 is due to the stocks being acquired, liquidated, reorganized, or called for redemption. In 2022 and 2023, there were over 1,000 delistings each year. High profile SPAC failures and buyouts may have contributed to redemptions, buyouts, and liquidations in these years.

¹⁰ Source: NBER Market Microstructure Meetings 2002, J. Macey et. Al., "Down and Out in the Stock Market: The Law and Economics of the Delisting Process," 2002 and updated in February 2005. Preliminary findings show that involuntary delisting increased the bid-ask spreads by 25% and share price volatility doubled when a company moved from an exchange to the pink sheets.

¹¹ Source: Doidge, Karolyi, and Stulz, "The US listing gap," July 2015. Doidge, et al, claim that the decline seen after 1996 cannot be explained only by new listing requirements as NASDAQ changes in 1996 may have also generated new listings, and listing changes related to SOX regulation became fully effective in 2004, well after the main wave of delisting had occurred.

Note: When a company calls shares for redemption, the shareholder must sell back the shares at the call price. Companies can only trigger a redemption call for shares that were issued as callable shares. When a publicly traded company is acquired its shares are sold to the purchasing company including shares held by investors. In case of a publicly traded company purchasing another publicly traded company, the acquired company shares may be converted to the purchaser's shares. Liquidation of shares occur when a company is insolvent or bankrupt where the shareholder may not receive compensation as trading of shares is halted and presumed worthless.

Increasing regulatory burdens

A number of regulatory and market dynamics have shaped the cost-benefit analysis for private companies pursuing an initial public offering. But these legal and financial changes have also impacted a public company's decision to delist, go private, or merge with another company. The regulatory costs of listing and maintaining financial, legal, and audit requirements may partially explain why publicly traded companies have either stayed private or elected to delist from major exchanges.

Several factors may help explain the decline in the number of listed companies. In 1990, regulatory efforts to separate "penny stocks" from more valuable shares traded on the NASDAQ resulted in the creation of the Over-the-Counter Bulletin Board (OTCBB).¹² That same year, the Penny Stock Reform Act empowered the SEC to delist companies for audit, reporting, and revenue reasons. "The Securities Enforcement Remedies and Penny Stock Reform Act authorized the US Securities and Exchange Commission to seek monetary penalties in federal court against corporations and individuals violating provisions of the federal securities laws."¹³ Between 1990 and 1998, the number of penny stocks declined from 6,000 to 4,000 companies.¹⁴ In 1998, NASDAQ further tightened its listing and reporting requirements, thereby increasing regulatory costs for listed companies.¹⁵

In 1999, the SEC approved the Eligibility Rule. Previously, the SEC had not enforced compliance with the 1934 Act for OTCBB stocks with assets below \$10 million in value and/or fewer than 500 owners and who had not registered with the SEC. Prior to 1999, the OTCBB had 3,600 unregistered companies. Of these firms, 76% did not comply with the SEC's Eligibility Rule. After the SEC implemented their new regulatory regime, 2,600 OTCBB companies preferred to be removed from the more liquid OTCBB to be traded as pink sheets. A 2004 analysis of the impact of the Eligibility Rule found that higher regulatory standards tended to benefit companies who were already profitable and in compliance with the 1934 Act regulations.¹⁶ Those companies that remained on the OTCBB enjoyed higher share prices, more trading volumes, and tended to be profitable. Companies that chose to move to the pink sheets had lower trading volumes and wider bid/ask spreads.

In the wake of a series of scandals at publicly traded company such as Enron, WorldCom, Global Crossing, Adelphia, and Tyco, Congress enacted the Sarbanes-Oxley Act on July 30, 2002.¹⁸ SOX was intended to increase regulatory oversight of public companies and thereby protect investors from the possibility of these companies engaging in fraudulent activities. This Act imposed numerous compliance requirements in areas like revenue recognition, audit, internal controls, record keeping, and others. SOX prohibited an accounting firm from providing audit work for a public company while contemporaneously providing a host of other services. In addition to requiring an independent outside audit, SOX required each public firm

¹² A penny stock is typically a small company's stock that trades for less than \$5 per share. Today, these stocks are often traded over-the-counter (OTC) rather than on major stock exchanges. Penny stocks are generally considered higher-risk investments due to their lack of liquidity and limited disclosure requirements. As of September 2024, there are over 12,000 US and foreign stocks traded on the OTCBB exchange.

¹³ Source: Securities Exchange Commission Historical Society Time Line, August 2024. <https://www.sechistorical.org/museum/timeline/1990-timeline.php>

¹⁴ Source: Bloomberg, B. Lipschultz, "End of Scorched Earth' Year for US IPOs Hinges on Lower Rates," April 26, 2024.

¹⁵ Ibid. In 2013, there were over 11,000 stocks listed on pink-sheets. SEC, "Microcap Guide For Investors" September 2013.

¹⁶ Source: Federal Reserve of Atlanta, B. Bushee et al., "Economic Consequences of SEC Disclosure Regulation: Evidence from the OTCBB" January 2004.

¹⁷ Ibid. Analysis by the Federal Reserve Board of Atlanta revealed that non-compliance companies were the most profitable and had the lowest leverage while the 24% that complied with the new rules were less profitable and had higher leverage. Moreover, the post-rule performance of the non-compliant and newly compliant firms lagged those firms on the OTCBB who had already registered with the SEC.

¹⁸ Source: Securities Exchange Commission Historical Society Timeline, August 2024. <https://www.sechistorical.org/museum/timeline/1990-timeline.php>

to have an audit committee composed of independent directors, and it prohibited company loans to certain executives and directors.

In 2009, the SEC found that the “cost of complying with the requirements in section 404 of the [SOX] Act had been generally viewed as unexpectedly high.”¹⁹ PricewaterhouseCoopers estimated that, on average, companies incur more than \$1 million of annually recurring costs by being public instead of private.²⁰ The management consulting company Protiviti similarly estimated that average annual SOX internal compliance costs range between \$600,000 and \$1.6 million per year between 2002 and 2018, excluding external audit-related fees.²¹ “Staying private also lets a business avoid hiring lawyers and accountants to make the required disclosures and regulatory filings with the SEC.”²² In summary, SOX is commonly cited as a regulatory change that meaningfully increased compliance costs for public companies.

Congress attempted to reduce the regulatory barriers to entry for companies to go public with provisions in the 2012 “Jumpstart our Business Startups Act” (JOBS Act). The intent was to lower listing costs for companies with revenues below one billion dollars. Instead of providing three years of audited financials and five years of select financial data, these firms could opt for a lower burden of just two years of audited financials. A decade after the law came into effect, over 80% of IPOs with less than one billion in revenues opted for this lower level of disclosure.

The rise of private capital

The decision to list or stay private may well be linked to the relative cost and availability of capital. In October 1996, the National Securities Markets Improvement Act (NSMIA) “made it easier for both private start-ups and private equity funds investing in them to raise private capital.”²³ When examining pre- and post-NSMIA capital raising of late stage start-ups, there appears to be an notable impact on the size and geographic raising of funds after 1996.²⁴ Also, after the passage of NSMIA, private equity firms were able to raise larger funds with a larger number of investors (see figure 4).²⁵

¹⁹ Source: SEC, “Study of the Sarbanes-Oxley Act of 2002 Section 404 Internal Control over Financial Reporting Requirement,” Office of Economic Analysis 2009, based on the OTCBB exchange.

²⁰ Source: PriceWaterHouse Coopers, “Considering an IPO to Fuel Your Company’s Future” Insights into the Costs of Going Public & Being Private,” November 2017. PWC’s report includes IPO data from 2015 and 2017.

²¹ Source: “Benchmarking SOX Costs, Hours and Controls” Protiviti, 2018.

²² Source: Stanford Business, L. Lec, “The Decline of the IPO: With Fewer Companies Going Public, Corporate Transparency Gets Murkier,” April 18, 2023.

²³ Source: NBER, M. Ewens et al., “The Development of the Private Equity Markets and the Decline in IPOs,” Working Paper No. 26317, December 2019

²⁴ Ibid.

²⁵ Ibid. Under the Investment Company Act – very large private equity funds are required to register with the SEC and regularly disclose their investment portfolio.

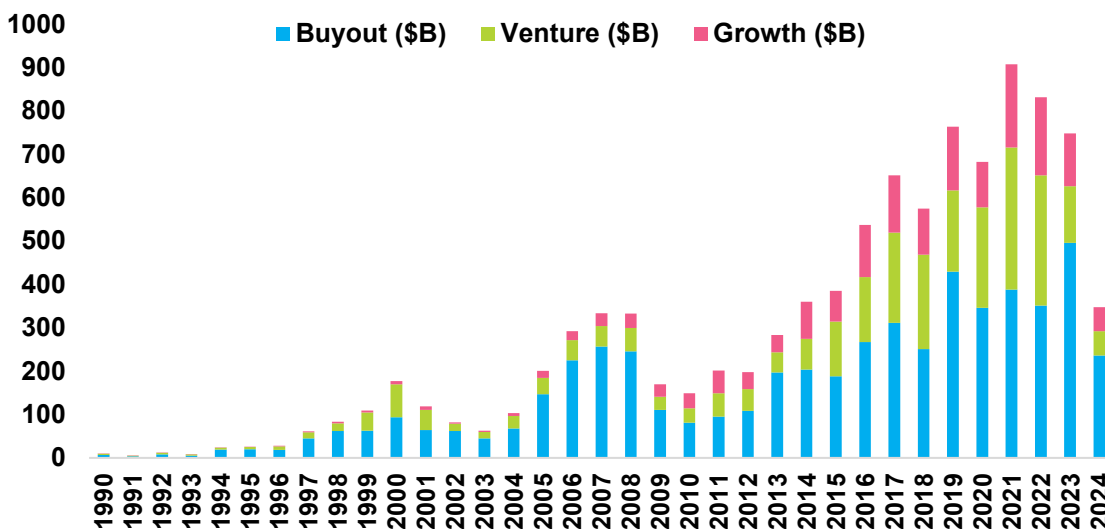


FIGURE 5
Private Equity Fund Raising 1990-June 2024 (USD Mil)

Source: Prequin, data as of June 2024.

The Global Financial Crisis (“GFC”) and the dramatic regulatory changes that followed opened the door to alternative sources of capital. In an effort to de-risk systemically important banks and promote financial stability, Congress passed the Dodd-Frank Act in 2010. As a result of Dodd-Frank, many banks reduced the amount of riskier loans on their balance sheets and took a more conservative approach to lending. As companies found themselves unable to secure loans from banks, into the void stepped hedge funds, private credit funds, and other lenders, ultimately resulting in the rise of the “shadow banking” system. For example, private credit’s assets under management rose from \$300 billion in 2010 to over \$1.5 trillion at the end of 2022 (see Figure 6).²⁶ In addition, the high yield bond and leveraged loan markets have grown significantly. The availability of these alternative avenues for raising capital may have provided many companies that would have gone public a generation earlier with an alternative growth path.

²⁶ Source: Bloomberg, P. Seligson, “Private Credit’s Quiet Unstoppable Rise Comes with Unknown Risk,” June 16, 2023.

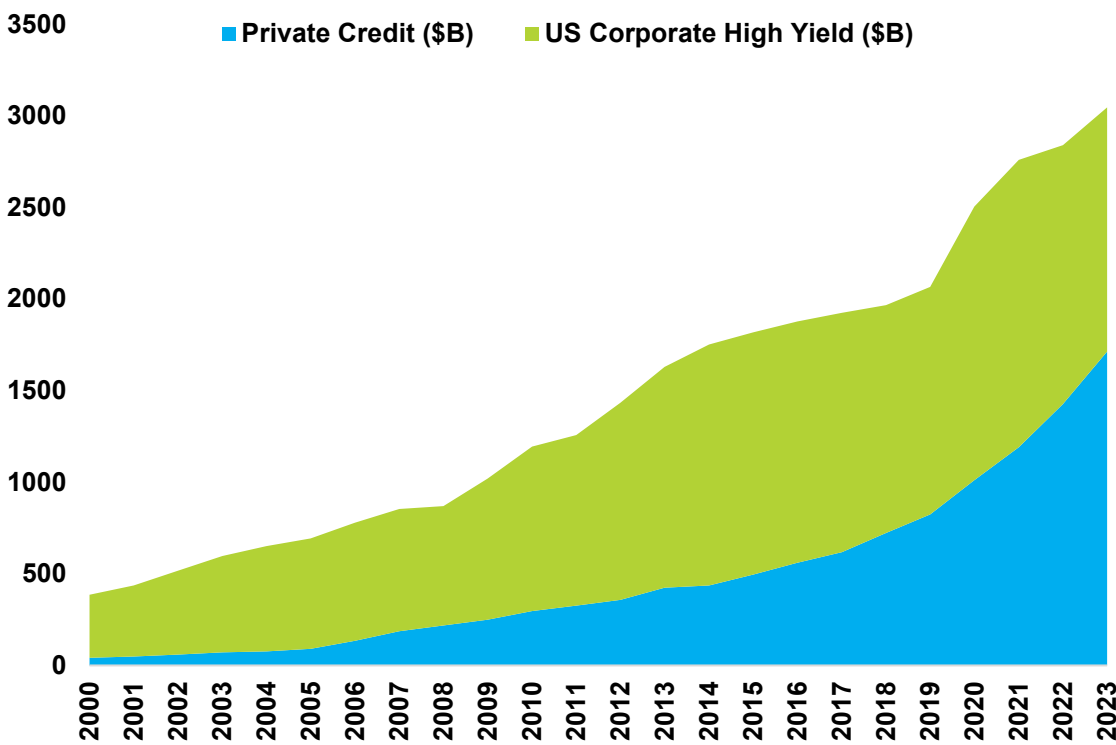


FIGURE 6
Growth in Private Credit & High Yield Assets Under Management (\$B)

Source: Prequin private credit assets under management as of December 2023. Barclays Live high yield amount outstanding as of December 2023.

The 2012 JOBS Act raised the number of investors that could privately provide capital to a company. Under the previous limit, companies with over \$10 million in assets and 500 individual investors were required by the SEC to comply with reporting requirements similar to those of public companies. However, the higher investor limit of 2,000 provides private companies with more flexibility to access private capital without the burden (and costs) of compliance reporting or becoming public. Figure 6 shows that these costs are not trivial, companies need to deal with multiple expenses for accounting, legal, underwriting, and other services. Further, the smaller the company, the greater the proportion the IPO costs would be of their revenues and presumably of their value.

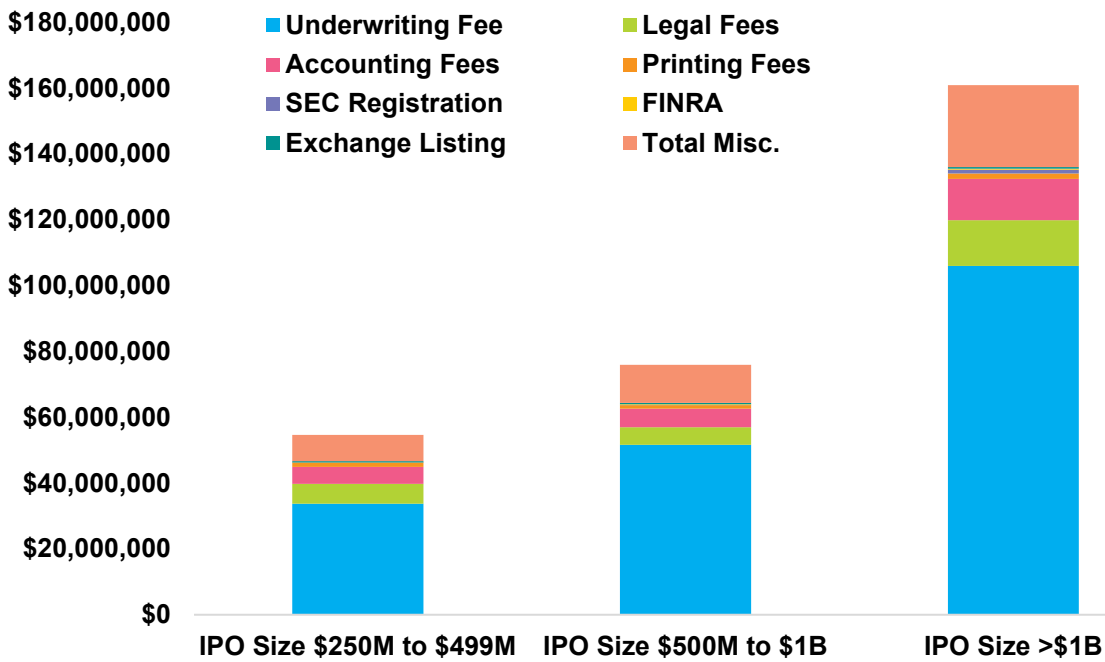


FIGURE 7
One-time IPO Costs

Source: PriceWaterHouse Coopers "Considering an IPO to fuel your company's future?" as of September 2024.

The IPO has traditionally been regarded as the ultimate avenue for companies to access capital to support expansion, as well as a way for owners to substantially monetize their stake in the firm. Despite this, the number of IPOs has been much lower over the past two decades than it was in the 1990s (see Figure 8). Between 1980 and 2000, approximately 300 companies IPO'd each year, but for the subsequent decade, the annual average number of IPOs fell to just over 100. Upon closer examination, the decline in the number of IPOs appears to have been concentrated among small companies.²⁷

²⁷ Source: SEC, X. Gao et al., "Where Have All the IPO's Gone?" April 3, 2024.

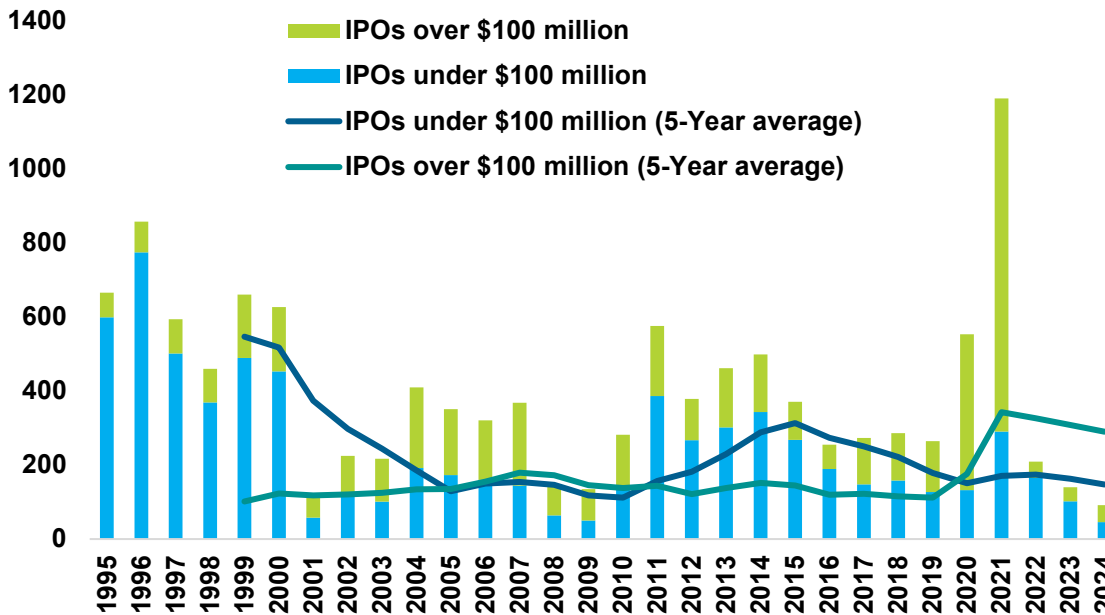


FIGURE 8
Number of Initial Public Offerings (IPO) by size
Annual Figures: 1995 – June 2024

Source: Bloomberg. Data as of June 30, 2024 for NYSE, NASDAQ and NYSE American.

The role of the venture capital sector also has meaningful implications for IPO activity. In the past, venture capital financing was often seen as an important but intermediary step on a company's journey to going public. In recent years, however, companies are waiting longer, on average, to go public. For example, the average age of a venture-backed IPO has doubled in recent years.²⁸ Moreover, some of the most successful IPOs over the past decade were cashflow positive companies with an initial valuation of over \$1 billion dollars – the so-called unicorns. Since 2014, there have been 340 unicorns listed in the US.²⁹ There are currently 1,242 unicorns around the world waiting to be listed, of which 954 are in North America. 534 of these are technology stocks that are estimated to be worth approximately \$3.2 trillion in aggregate.³⁰ On average, these companies have been private for nine years prior to listing.³¹ But these companies are mature companies that warrant a market capitalization IPO price of a billion dollars or more.³² They are quite different than the speculative and newly minted dot.com companies of the 1990s.

²⁸ Source: HBS, W. Janeway et al., "Venture Capital Booms and Start-Up Financing," 2021.

²⁹ Source: Pitchbook, P. Mathur, "The Meteoric Rise of US Unicorns in 2021," January 5, 2024.

³⁰ Source: Pitchbook, J. Rubio "Unicorn Companies Tracker," September 18, 2024.

³¹ Source: Capital IQ, January 2022.

³² Source: Hamilton Lane, "Private Wealth: Staying Private for Longer Leads to Opportunity," April 2022.

Other factors may also have played a part in the decline in IPOs. In some instances, small private companies may have found the pressure to grow at scale more achievable through being acquired than by going public.³³ "From a company's standpoint, staying private and obtaining capital through private markets may be similar and more desirable than going public."³⁴

³³ Source: SEC, X. Gao et al., "Where Have All the IPO's Gone?" April 3, 2024.

³⁴ Source: Stanford Business, L. Lec, "The Decline of the IPO: With Fewer Companies Going Public, Corporate Transparency Gets Murkier," April 18, 2023.

Owner arbitrage: list or don't list?

In a recent letter to shareholders, Jamie Dimon, CEO and Chairman of JP Morgan, highlighted some of the factors that may be incentivizing private company owners to stay private. Some of these reasons make sense from the C-suite but perhaps may be less compelling from an investor's point of view. Firstly, Dimon argues that the pressure for quarterly earnings updates may distort long-term planning and goals in favor of producing stable short-term numbers to support the share-price. Dimon also noted that issue-specific interest groups may "highjack" annual shareholder meetings to the detriment of a discussion of company fundamentals and prospects. And he pointed to the rise of proxy-voting advisors who apply cookie-cutter governance rules regardless of company context, qualifications, talent, or situations.

But perhaps most importantly, Dimon noted that "companies can stay private longer if they raise more and different types of capital without going public."³⁵ "The disappearing stock market is a side effect of something more persistent for company founders: they simply have more options."³⁶ That is, owners of private companies have more ways to finance their companies and motives to stay private to keep control.

³⁵ Source: JP Morgan Chase, Jaime Diamon "Annual Shareholder Letter 2023," 2024.

³⁶ Source: The Economist, "Why The Stock Market Is Disappearing," April 18, 2024.

Meanwhile, business owners have increasingly valued the inherent benefits of staying private. They can focus on long-term strategic objectives without potentially being distracted by reporting quarter-to-quarter performance results. Remaining private gives executives greater control and flexibility over their decisions and business development as they grow.

Intangible assets

The increasing importance of intangible corporate assets, also known as intangible capital, may also be a factor in a company’s decision to stay private or go public. “Familiar and important examples include patents, software and databases, trademarks, customer lists, franchise agreements, and organization capital and firm-specific human capital.”³⁷ “However, it can also be difficult to establish and enforce exclusive property rights to an intangible; unlike a physical piece of capital, an intangible can be readily copied or imitated, simply by copying software or by learning information, for example.”³⁸

Since 1996, the global value of intangible assets has risen from less than ten trillion dollars to over sixty trillion dollars at the end of 2023 (see Figure 9).³⁹ Companies heavily investing in intangibles may prefer to stay private and work with private equity investors to grow rather than risk proprietary information being divulged to competitors via regulatory disclosures.⁴⁰ “When it comes to ideas, research, and other intangibles, the less rival firms know the better.”⁴¹

³⁷ Source: Journal of Economic Perspectives, N. Crouzet et. Al., “The Economics of Intangible Capital,” Summer 2022.

³⁸ Ibid.

³⁹ Source: United Nations, World Intellectual Property Organization (WIPO), A. Brown et. Al., “Global Intangible Assets Grew to USD \$61.9 Trillion in 2023,” February 28, 2024

⁴⁰ Source: OECD, “Bridging the Gap in Financing of Intangibles to Support Productivity: Background Paper,” 2021. The OECD study found that companies with higher intangibles were also associated with productivity gains.

⁴¹ Source: The Economist, “Why the Stock Market Is Disappearing,” April 18, 2024. Quoting Professor Rene Stolz of Ohio University.

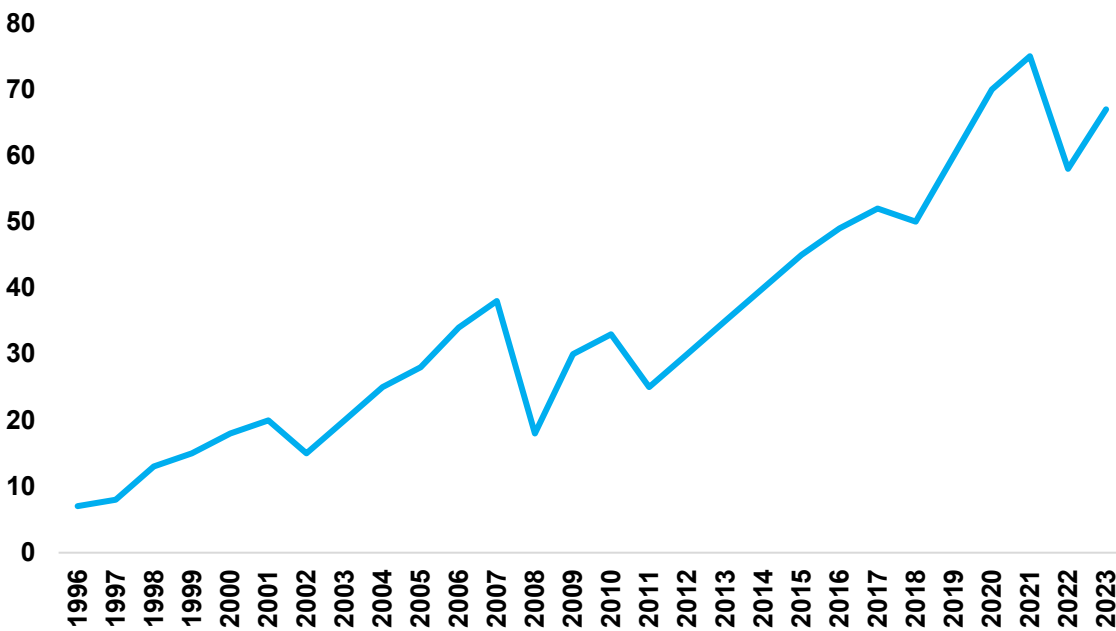


FIGURE 9
Global Market Value of Intangible Assets (USD T)

Source: Brand Finance Global Intangible Finance Tracker (GIFT) as of December 2023.

Foreign listings

US markets have long attracted overseas companies that wanted to raise capital. Between 1980 and 2023, 1,173 foreign companies listed on US exchanges, with new entrants from overseas helping to offset delisting companies.⁴²

Even as the SEC and exchanges have raised reporting standards and oversight, the number of foreign listed stocks on US exchanges has grown (see Figure 10). This amplifies the fact that the decrease in the number of listed companies most likely due to US-based companies making the decision to remain (or return to being) private or being acquired.

⁴² Source: European Central Bank, Z. Gati et al., “Examining the Causes and Consequences of the Recent Listing Gap Between the United States and Europe,” 2024. Foreign stocks listed on US exchanges includes both the NYSE and NASDAQ. According to Statista, over 530 foreign companies are listed on NYSE and over 800 are listed on NASDAQ as of the end of 2023.

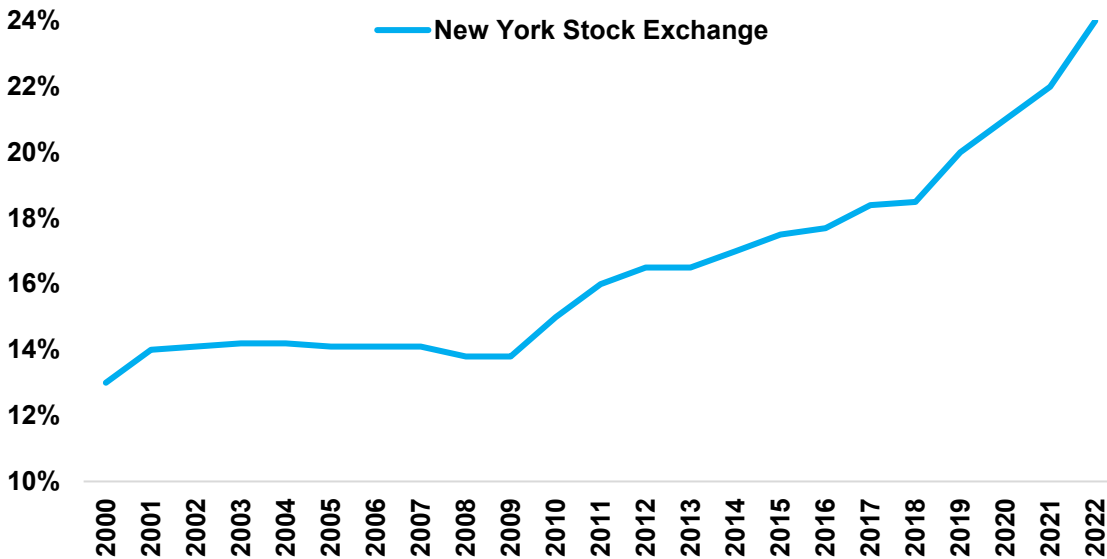


FIGURE 10
Percentage of Foreign Listed Companies in US (by Count)

Source: European Central Bank, Z. Gati et al., "Examining the Causes and Consequences of the Recent Listing Gap Between the United States and Europe," 2024. Foreign stocks listed on US exchanges includes both the NYSE and NASDAQ. According to Statista, over 530 foreign companies are listed on NYSE and over 800 are listed on NASDAQ as of the end of 2023.

Investor considerations

The change in the number of public US companies has potential ramifications for investors. These include an increased level of concentration in public markets, and a broader opportunity set in private markets.

Market concentration

Some investors worry that one potential consequence of the decreasing number of stocks is market concentration. It would be reasonable to expect markets to be more concentrated if there are less stocks available. Figure 11 shows that while the US stock market has been a competitive (i.e., not highly concentrated) marketplace over the long run, it recently reached a peak level of concentration (for the past thirty years).

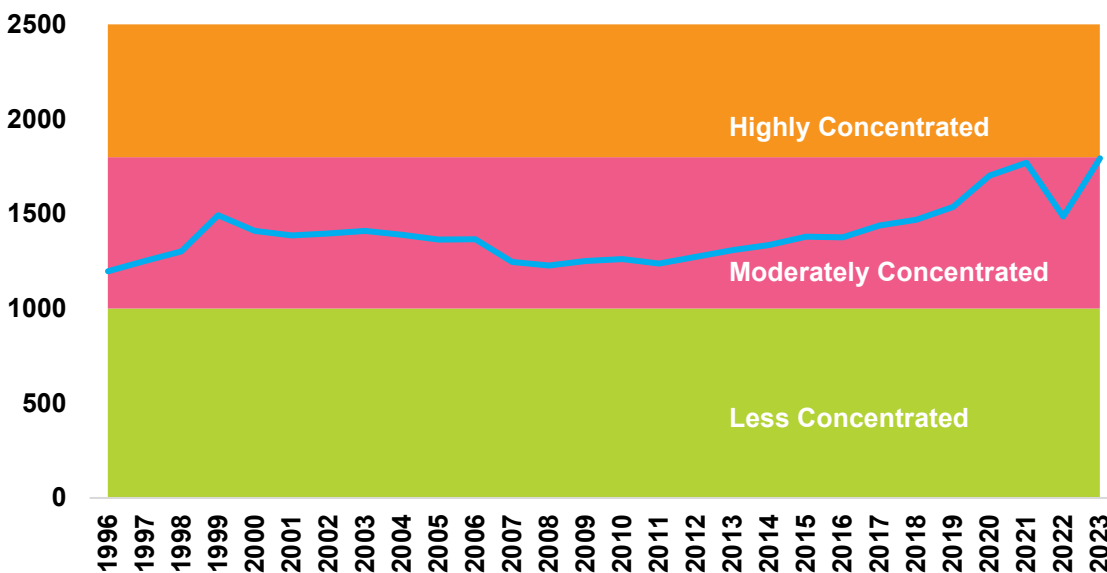


FIGURE 11
US Stock Market Concentration based on HHI | Annual Figures: 1996 – June 2024

Source: Bloomberg and MSCI data as of June 2024. Based on the MSCI USA Index and GICS sector weights. Mechanics of the calculation make the result hold at the stock level as well. HHI refers to the Herfindahl-Hirschman Index, a widely used measure of market concentration. The metric calculates the sum of the squared market shares (or weights) for each member of the sample, and the higher the total, the more concentrated a market is. At the extreme, a market with only one company, or a monopoly, would be the most concentrated, with a HHI index of 10,000 (100²).

As of June 2024, the top ten stocks accounted for 29.6% of the broad US market, well above the tech-bubble peak of 20.9%. Likewise, the top 100 stocks are around 62% of total market capitalization, just above the 2000 peak of 61%. (see figure 12).

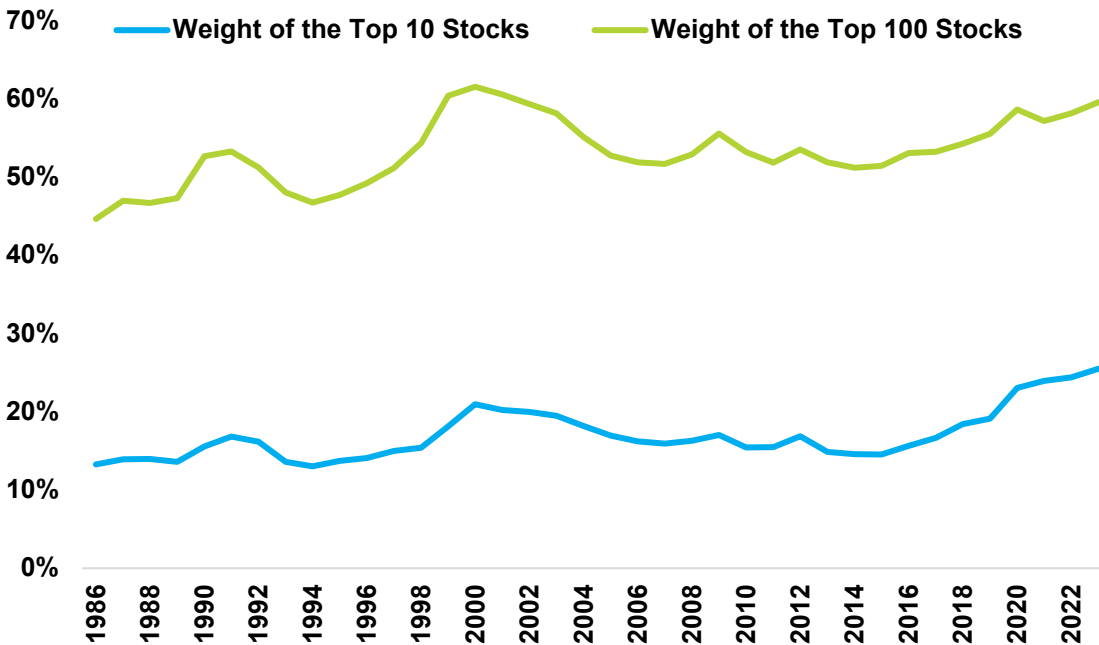


FIGURE 12
Weights of US Stock Market Largest Stocks
Annual Figures: 1987 – June 2024

Source: Bloomberg and MSCI. Based on MSCI USA Index as of December 2023

The shift to private markets

Another consideration is that if investors want to access the growth of a broader swath of companies, they may want to consider investing more in private equity. More than 85% of companies with annual revenues over \$100 million are private companies.⁴³ Some recent analysis suggests that the return on investment for firms backed by venture capital and private equity are notably higher than those of the companies in the S&P 500.⁴⁴

Many of the businesses in today's private markets tend to be small but profitable, with a solid track record of providing core products or services. They are often the same kind of companies that would have gone public in a previous generation. They typically reflect the broader economy more so than the largest public companies (e.g., the "Magnificent Seven") that comprise an increasing share of the US stock market, as noted above. And there appears to be a greater alignment of interests than was once the case, with private investment markets becoming long-term oriented while public markets fixate on short-term earnings.

Private markets investors appear to have noticed, and due to these trends along with other factors (e.g., the higher historical long-term returns of private equity relative to public equity), they have committed an increasing amount of capital to private equity, the AUM for which now represents more than one-third of GDP (see Figure 13).

⁴³ Source: Bain & Company, using data from S&P Capital IQ as of December 2022 and Statistics of US Businesses as of 2017.

⁴⁴ Source: NBER, B. Jovanovic et al., "Private Equity and Growth" October 2020. The authors' analysis suggest that venture and buyout equity investment of approximately 5% to 7% may contribute to growth between 14% and 21% between 2001 and 2019. See also, NBER, N. Garleau et al., "Finance in a Time of Disruptive Growth," March 2024.

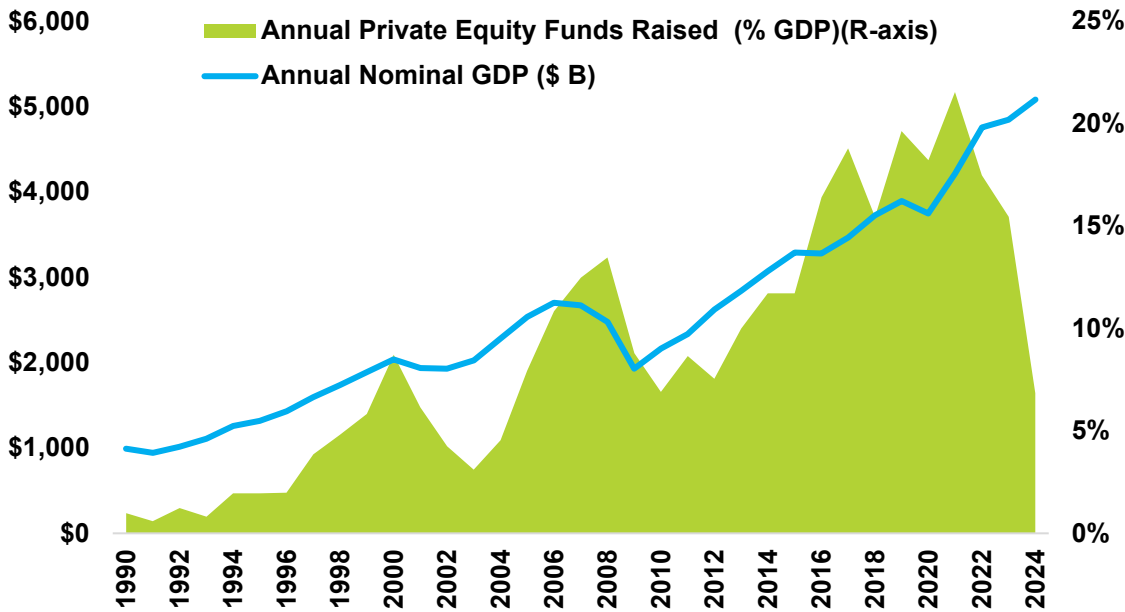


FIGURE 13
Private Equity Funds Raised as a % of US GDP
 Source: FRED nominal GDP as of June 30, 2024. Prequin annual private equity fund raising as of June 30, 2024. Private equity funds raised includes venture, buyouts and growth equity.

Conclusion

Depending on how it is measured, the number of publicly traded companies in the US has decreased by 40-50% since its peak in 1996. The decline may be explained by a variety of developments, including fewer companies going public, rising regulatory burdens from exchanges and federal legislation, the growth and availability of private capital, and increased mergers and acquisitions. The rise of propriety technology and intellectual property in the form of intangibles may also discourage companies from going public.

We find that the decline of the number of publicly traded companies is not just a story of undue regulatory burdens. It is a more nuanced picture that has simultaneously improved investor rights and corporate transparency, while at the same time supporting more robust - though fewer - publicly traded companies. Importantly, the concurrent rise of private equity and changing bank regulations transformed how and when companies elect to go public.

One possible side effect is a higher level of market concentration. While there may be other fundamental reasons for a higher level of concentration in the US stock market, a smaller number of companies implies a greater possibility for it. On the bright side, the large and growing number of companies backed by private equity provides an avenue for institutional investors to invest in many of the same type of companies that would have been public a generation ago. Institutional investors must navigate the opportunity costs between an increasingly concentrated public equity market and allocating funds to private markets to gain exposure to newly formed and privately held companies.

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