# From IPO to M&A: Analyzing the Strategic Shift in VC Exit Dynamics (2021–2022)

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## Abstract

The U.S. venture-backed IPO market experienced a dramatic shift between 2015 and 2024, peaking in 2021 and declining in 2022 due to Federal Reserve interest-rate increases. The research uses Pearson correlations to analyze the relationship between IPO activity and four market elements including SPAC issuance, the M&A share of exits, interest rates, and stock-market volatility through a ten-year data collection period. The data indicates that IPOs increased with SPAC market activity ($r \approx +0.88$) but decreased when acquisitions became the primary exit method ($r = –0.96$) because founders view these channels as interchangeable. The study shows interest rates have a moderate negative relationship with IPOs ($r \approx –0.54$) yet equity market volatility provides minimal explanatory power ($r \approx +0.20$). The research demonstrates that companies need to keep both IPO and M&A options available while regulatory clarity affects SPAC market performance. This study demonstrates exit market flexibility through its annual data analysis, yet further research using higher-frequency and cross-country data is needed.

## Keywords

*Venture Capital; Initial Public Offering (IPO); Merger & Acquisition (M&A); Special Purpose Acquisition Company (SPAC); Exit Dynamics*

## Introduction

Venture capital investors achieve their returns through portfolio company liquidity events which primarily occur through initial public offerings (IPOs) and merger and acquisition (M&A) deals. The process of going public through an IPO provides large financial gains and fresh investment but requires substantial time and money and depends heavily on market performance. M&A deals provide faster and more reliable exit opportunities but usually result in lower valuation outcomes. The

process of choosing between exit options requires investors to weigh the potential for higher returns against the certainty of successful deal completion.

The years 2021 and 2022 presented investors with a clear demonstration of how exit strategies must balance potential gains against the certainty of successful completion. The market conditions during 2021 created ideal conditions for IPOs because interest rates remained at zero and technology valuations reached new heights while special purpose acquisition companies (SPACs) enabled faster public market access. The National Venture Capital Association reported that U.S. venture exits reached 1000+ in 2021 with a total worth of 770 billion dollars which focused mainly on software and fintech and biotech listings (NVCA, 2022). The market environment underwent a complete transformation during the following year. The Federal Reserve rapidly increased interest rates, which compressed growth multiples while the NASDAQ stock price dropped by more than thirty percent and SPACs faced increased regulatory challenges. IPOs virtually disappeared for private firms. The approaching fund maturity dates forced Limited Partners to push General Partners toward conducting private company sales. The percentage of U.S. venture exits through acquisitions reached 74% during 2022 while IPOs accounted for less than 4% of total exits according to PitchBook (2025). The market also relied on secondary share transactions as an additional method to achieve liquidity.

This dramatic one-year swing raises an important research question: why did exit preferences shift so abruptly from IPOs to M&A? This study seeks to answer that question by examining the macroeconomic shocks, regulatory changes, and fund-level pressures that redirected liquidity channels. Drawing on industry datasets and public reports, we employ Pearson correlation analysis to test which market forces align most closely with IPO volume over the past decade.

The remainder of this paper is organized as follows. Section 2 reviews the literature on venture exit theory and historical patterns. Section 3 outlines the methodology, data sources, and variables employed. Section 4 presents the empirical results, while Section 5 discusses their implications in light of qualitative insights. Section 6 concludes with limitations, policy implications, and directions for future research.

## Literature Review

### Conceptual Foundations

For venture investors, an exit converts illiquid equity into real money. Two avenues dominate practice and theory. An initial public offering lists the firm on a stock exchange, giving early backers a chance to sell shares at what is often a generous multiple and raising fresh capital for the business. That upside is offset by months

of expensive preparation, strict disclosure rules, and exposure to whatever mood the market happens to be in on pricing day. A sale to a strategic or financial buyer, by contrast, closes far more quickly, involves less public scrutiny, and delivers a firm cash figure at signing, although usually at a discount to the top-of-cycle IPO valuation. Founders and investors constantly weigh that higher potential price

**against faster, more certain liquidity.**

## Historical Exit Trends Before 2021

From 2015 through 2020 the public route sat at the top of the wish list whenever markets were friendly. The National Venture Capital Association reports that the typical United States venture backed company reached an IPO roughly five to six years after its first institutional check, a duration that fits comfortably inside a standard 10-year fund life (NVCA, 2022). Listing activity tended to swell during bullish periods such as 2018 to 2020 when investors paid rich revenue multiples for growth stories. Even then, advisers reminded founders that going public meant lock-up periods, investor relations budgets, and the ever present risk of macro whiplash, points that Bain and Company, as well as McKinsey, flag as perennial drawbacks.

Acquisitions filled in when the public window narrowed. Young firms without IPO scale or those that missed the cycle often found a home inside a larger corporation or a private-equity platform. These deals delivered cash quickly and kept portfolios moving, although only the occasional blockbuster returned an entire fund. The working rhythm was clear: chase an IPO in good times, fall back on a buyer when sentiment turned.

## The 2021 Boom and 2022 Reversal

The year 2021 broke the chart. Rock bottom interest rates, a flood of pandemic era liquidity, and soaring tech valuations combined to produce the busiest exit market on record. (NVCA, 2022) counted more than more than 1,000 U.S. venture-backed exits worth about $770 billion Traditional IPOs flourished, and blank-check SPAC vehicles multiplied, offering a quicker leap to public status. (PitchBook, 2022b) notes that late-stage SaaS, fintech, and biotech companies raised the bar on deal size and valuation.

The party ended quickly. In early 2022 the Federal Reserve moved rates sharply higher to fight inflation. Growth multiples compressed almost overnight. The Nasdaq dropped by more than thirty percent from its peak. Regulators sharpened their focus on SPAC projections and incentives, and many companies that had merged with SPACs traded below their offer price (Harvard Law School Forum on Corporate Governance, 2022). Underwriting desks pulled back, leaving the IPO

pipeline empty. By year end IPOs represented less than four percent of venture exits while mergers and acquisitions captured nearly three quarters (PitchBook, 2022b). Total exit value fell hard, and secondary share sales became a relief valve for insiders who still needed liquidity.

### Key Drivers of the 2021–2022 Exit Shift

Industry reports converge on seven forces that together flipped the market from a record IPO wave to an M&A slog inside twelve months.

- **Monetary tightening:** The jump in policy rates raised discount rates and clipped valuations for companies that were heavy on growth and light on profit (*Bain & Company*, 2022).

- **Equity volatility:** A deep sell-off in public tech shares made it nearly impossible to price new issues with confidence. Wilmington Trust characterised the environment as one in which bankers advised clients to wait (*Wilmington Trust*, 2022).

- **The SPAC retreat:** Stricter Securities and Exchange Commission guidance, plus disappointing post-deal returns, drained enthusiasm for blank-check listings, removing the quickest route to the public market (*Harvard Law School Forum on Corporate Governance*, 2022).

- **Valuation reset:** PitchBook data show median late stage revenue multiples dropping from roughly twenty times in 2021 to mid single digits by mid-2022, undercutting IPO targets and making private offers more attractive (*PitchBook*, 2022b).

- **Limited partner pressure:** Funds raised in the early 2010s were nearing the end of their lifespan, and investors desired cash payouts. General partners leaned for exits that may close within months rather than waiting for the public window to reopen (*PitchBook*, 2024).

- **Cash rich buyers:** Corporate strategics and private equity firms continued to have substantial capital reserves. (*PitchBook*, 2025) reports that more than one-third of 2022 venture-backed acquisitions were made by other venture-backed enterprises, indicating consolidation in subsectors such as cloud computing and digital health.

- **Growth in secondaries:** With primary exits scarce, secondary sales of fund stakes or company shares provided partial liquidity, easing pressure without fully replacing IPO or M&A outcomes (*McKinsey & Company*, 2023)

Most commentary addresses these factors one at a time. Few studies test them together or consider how mid-sized funds juggle several constraints at once. The

present work fills that gap by placing all seven drivers in a single framework and asking which ones line up best with the dramatic pivot from an IPO heavy 2021 to an M&A dominated 2022.

## Methodology

This study sets out to link movements in the U.S. venture-backed IPO market to a handful of macro-level forces. The work rests on a yearly panel that spans 2015 through 2024. Within that ten-year window we track one dependent series, the annual count of venture-backed IPOs, and four independent series that theory and interviews flag as likely drivers. Three other factors (limited-partner liquidity, venture-secondary volumes, and valuation multiples) appear in the literature but did not make the cut because no reliable, continuous data exist for the full decade.

## Research Design

Each observation equals one calendar year. Annual frequency matches how most industry groups report exit data and avoids the noise that often comes with trying to splice together sparse quarterly figures. Once the data were in place, we ran simple Pearson correlations to gauge how strongly, and in what direction, each factor moved with IPO volume. The aim is descriptive: to see broad patterns rather than to build a predictive model.

## Data Sources

### VC-backed IPO exits (dependent variable)

Counts of traditional IPOs by venture-backed firms come from the NVCA PitchBook Yearbook (NVCA, 2022). The series excludes SPAC mergers, direct listings, and purely secondary offerings, so it serves as a clean proxy for full liquidity events delivered through a conventional listing.

Table 1. Independent variables and their proxies

| Factor of interest | Proxy used | Why this proxy works |
|---|---|---|
| **Monetary tightening** | Calendar-year average of the effective Federal Funds Rate (FRED code: FEDFUNDS) (*FRED*, 2025) | Higher policy rates raise the cost of capital and usually cool demand for new issues. |
| **Equity-market volatility** | Calendar-year average of the CBOE VIX close (FRED code: VIXCLS) (*VIX Index Historical Data*, n.d.) | The VIX captures investor fear; spikes tend to shut IPO windows. |

| | | |
|---|---|---|
| **SPAC boom or bust** | Count of U.S. SPAC IPOs per year (SPAC Analytics) (*SPAC Analytics*, n.d.) | A surge or slide in blank-check activity signals whether founders see SPACs, and by extension public markets, as open. |
| **Corporate and PE buyer activity** | Share of total VC exits completed through M&A, calculated from NVCA counts (*NVCA*, 2022) | A higher M&A percentage points to an acquisition-friendly environment that can siphon deals away from public markets. |

The M&A-share series was complete except for 2015, and we filled that gap by averaging the values from 2016 to 2018, a period when exit structures were relatively stable.

Table 2. Summary Statistics of Variables

| Variable | Observation | Mean | Variance | Max | Min |
|---|---|---|---|---|---|
| **IPO Count (VC-backed)** | 10 | 81.4 | 2,450 | 193 | 40 |
| **SPAC IPO Count** | 10 | 120.7 | 3,600 | 613 | 13 |
| **M&A Share of VC Exits (%)** | 10 | 63.5 | 110.2 | 74.0 | 52.0 |
| **Federal Funds Rate (%)** | 10 | 1.75 | 1.82 | 4.50 | 0.05 |
| **VIX (Annual Average)** | 10 | 21.3 | 36.1 | 33.4 | 12.1 |

In addition to variable definitions, we provide descriptive statistics to summarize the distribution of each factor. Table 2 reports the number of observations, mean, variance, maximum, and minimum for all variables used in the correlation analysis. This summary highlights the wide dispersion in IPO counts and SPAC issuance compared with relatively stable annual averages for volatility and interest rates

## Collection and processing

NVCA Yearbooks supplied annual counts for IPOs, total exits, and M&A exits (NVCA,2022). We calculated the M&A share in a given year by dividing M&A exits by total exits. The Federal Reserve's FRED portal provided daily observations for the funds rate (FRED, 2025) and VIX (VIX Index Historical Data, n.d.); we converted these to simple calendar averages. The SPAC counts were taken directly from the year-by-year table on SPAC Analytics (SPAC Analytics. n.d.). All

raw figures were double-checked against press releases and industry briefings for consistency.

### Interviews for Qualitative Cross-Check

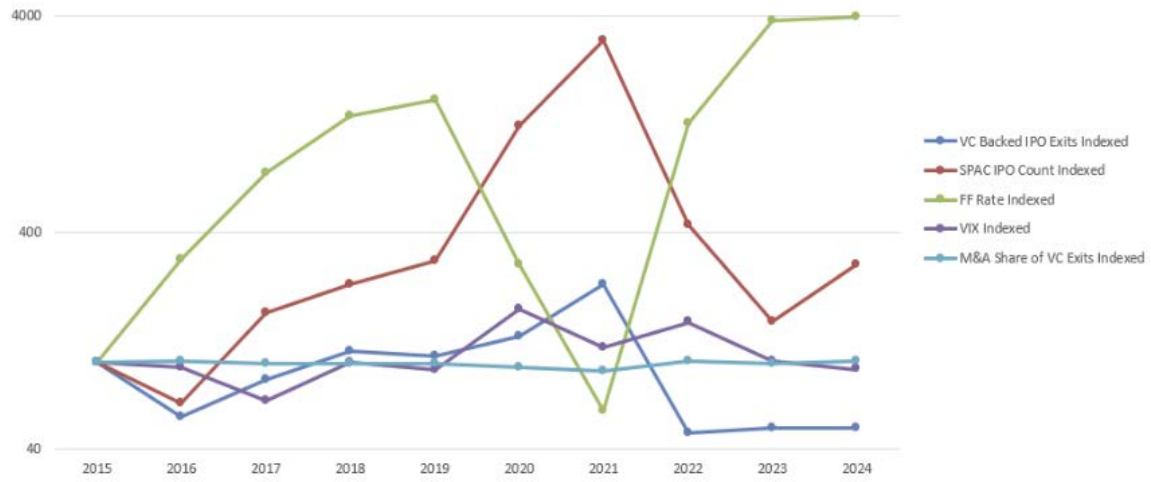
To make sure our quantitative shortlist had face validity, we spoke with three practitioners in July 2025: a partner at an early-stage fund, the head of a corporate venture arm, and a principal at a seed accelerator. Each call lasted about twenty minutes and followed the same script, asking which forces, in their view, drove the swing from IPOs to M&A in 2021–22. All three cited the same core themes the literature highlights. Valuation compression topped the list, followed by tighter monetary policy and higher volatility. Interviewees stressed that tougher SPAC rules and abundant buyer capital also tilted the field toward takeovers. No novel factors emerged (J.Heo & S.Kim, personal communication, February 5, 2025). These conversations did not feed directly into the statistical tests but gave confidence that the four quantitative variables capture what market participants see on the ground.

### Analytical Approach

We used Pearson's r to capture the linear tie between IPO counts and each factor across the ten observations. The coefficient ranges from plus one to minus one. Positive values indicate that the two series rise together, negative values mean they move in opposite directions, and values near zero suggest little linear connection. Given the small sample size, we did not run formal significance tests or multivariate regressions. Instead, we read the sign and magnitude of each r for directional insight—for example, whether more SPAC activity lines up with more IPOs, or whether higher rates coincide with fewer. All calculations were carried out in Microsoft Excel, and we visualized the correlation matrix as a heat-map and scatter plots to make the patterns easier to see.

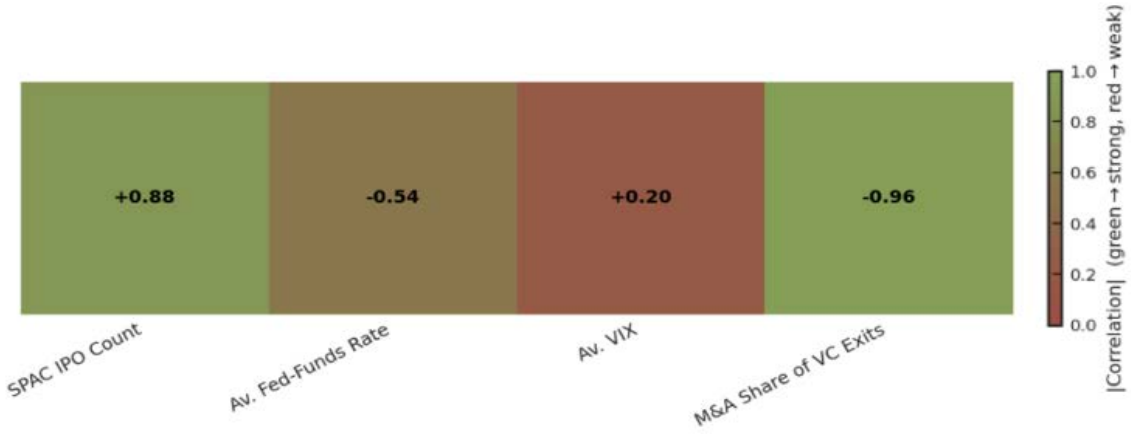
### Results & Findings

Figure 1. Indexed Growth of VC-Backed IPO Exits and Market Factors, 2015-2024 (log scale, 2015 = 100)




The chart fixes 2015 at 100 (log scale) and follows five yearly lines: venture-backed IPO counts in blue, SPAC IPO totals in red, the average federal-funds rate in green, the average VIX in purple, and the M&A share of VC exits in orange. Through 2019 IPO activity edged higher even as policy rates crept up, so a gentle tightening cycle did not shut the window. In 2020 rates fell to the floor and volatility spiked, yet IPOs ticked up only slightly. The picture shifted dramatically in 2021: near-zero borrowing costs and a rush of SPAC listings sent the blue curve well above trend. Once the Fed began raising rates in 2022, SPAC issuance collapsed, IPO counts slid back toward their starting point, and the orange line climbed, showing that private buyers were stepping in while public markets cooled.

Figure 2. Pearson Correlations with VC-Backed IPO Exits (2015-24)




This heatmap provides a summary of the correlation coefficients, with color shading indicating the strength of correlation (green = strong, red = weak; numeric values shown in each cell with sign). It confirms the patterns discussed: SPAC IPO count has a very high positive correlation with VC-backed IPO exit count (r = +0.88),

and M&A share of exits has a very high negative correlation (r = –0.96) with IPO count. The Federal Funds Rate shows a moderate negative correlation with IPO exits (r = –0.54), consistent with higher interest rates coinciding with somewhat fewer IPOs. The VIX (volatility) has the weakest correlation (r = +0.20, a slight positive), suggesting almost no linear relationship with IPO exit volume in this sample. These coefficients align with the visual impressions from Figures 2a–2d: the data indicate that alternative exit routes and financing conditions mattered more for IPO activity than general market volatility during 2015–2024."

## Discussion

Our results point to a clear pattern: venture-backed IPOs flourished when rival exit routes were scarce and dried up as soon as easier choices appeared. The contrast between 2021 and 2022 makes the point. In 2021, SPAC deals were everywhere and trade sale activity was muted, so founders piled into the public market. One year later, acquisitions dominated the landscape and SPAC issuance collapsed; IPOs all but vanished.

Policy rates played a part, though the link was weaker. Climbing interest rates trimmed valuations and made investors think twice, which nudged IPO numbers lower. Daily market turbulence, captured by the VIX, mattered least. Short-lived volatility spikes, like the one early in the pandemic, can pause listings for a quarter, yet the rebound in 2021 shows that fear alone does not dictate annual totals.

## Limitations

The research has several limitations that warrant acknowledgment. The research depends on limited annual data points, which create restrictions for statistical analysis and hide the changes that occur between quarters. The 2015 M&A share data point remains missing from the study so researchers used an average of surrounding years to estimate its value which could lead to biased results. The study uses a correlational approach with limited US focus and basic bivariate analysis without control variables, which restrict its ability to detect sector-specific booms and fund vintage effects and valuation cycle impacts on IPO activity. The qualitative section depends on three industry interviews for validation but these findings do not replace the need for a comprehensive market participant survey. The research findings demonstrate specific relationships for the studied time period but they do not establish universal causal principles.

## Implications

The implications of this study extend to multiple stakeholders. Founders together with their early investors need to keep their IPO readiness active while building acquisition potential because rising interest rates and stricter regulations might block public market access thus making private sales their only liquidity option.

Fund managers should distribute their exit plans throughout different time periods and start discussions with potential buyers before their portfolio reaches its expiration date to protect themselves from unfavorable public market conditions. The public market accessibility depends on policymakers who need to create transparent listing procedures and establish specific rules for IPOs and SPACs to minimize market uncertainty.

## Future Research

Future research can be advanced in several directions. The use of quarterly or monthly data instead of annual data will enable researchers to detect brief market disturbances and reveal the timing patterns between SPAC activity and IPO frequency. The study's results would gain more precision through the addition of revenue multiples and secondary-market volumes as alternative valuation and liquidity metrics to test the relationship between SPAC activity and IPO frequency across different market conditions. The analysis of European and Asian markets would reveal if the IPO-versus-M&A trade-off maintains its consistency between different institutional settings. The analysis of individual companies through hazard or logit models that combine firm-level characteristics with economic indicators would produce more detailed understanding of exit route determinants. The combination of quantitative data analysis with participant surveys would enable researchers to identify sentiment and network effects which current numerical data cannot detect.

## Conclusion

The swing from an IPO rush in 2021 to an M&A wave in 2022 shows that capital hunts for the path of least resistance. When rates were low and SPAC money was abundant, startups rushed to list. When borrowing costs rose and SPACs faded, the same firms chose private buyers or secondary deals. Volatility alone did not decide the outcome; the menu of exits and the price of money did. The practical message is flexibility. Entrepreneurs and investors who keep both public and private options open can shift gears as conditions change. Watching signals like rate moves, rule changes and buyer cash levels will help them choose the right door when the time comes.

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## Appendix A

### Interview Questions & Responses Transcript

**Name:** Zann Ali

**Job:** 2048 Ventures

**Position:** Partner

1. **Are you familiar with the sharp shift from VC-backed IPO exits to M&A exits in the United States during 2021-2022?**
   "Yes, very aware. I think the future may look a bit more optimistic, especially after Figma's highly successful IPO. But there certainly was a meaningful drop in IPO volume over the last few years, which isn't particularly surprising to most of us in the industry. The shift felt inevitable, given how far valuations had stretched and how rapidly the macro environment changed…"

2. **What do you consider the single most important factor behind that shift?**
   "There are a lot of different reasons, but if I were to distill it down to one, it would be valuation compression.

   Late-stage private companies were simply overvalued, and there was no chance many of those IPOs would have been successful in an era of high interest rates and a public market that had lost its appetite for aggressive growth stories. Add to that a graveyard of SPACs that didn't live up to their promise + overall investor sentiment that became cautious - the public markets just weren't an option for most.

   And if I'm not mistaken, M&A volume stayed roughly consistent during those years. M&A didn't necessarily become more attractive, it just became the more realistic option. Remember, VC funds had a LOT of capital tied up into these companies and operate as 10 year vehicles typically. So funds need liquidity, and if IPOs are not possible, then M&A becomes the default mechanism to create liquidity for LPs."

3. **Which other factor do you believe played a significant role?**
   Somewhat answered above, but 1) interest rates and inflation shock, 2) general market volatility, 3) regulatory scrutiny (read through Figma's saga if you haven't already — they had an offer from Adobe for M&A, but regulators broke it up!)

4. **Is there a third, perhaps less obvious, factor you think also contributed?**
   Internal fund dynamics! Also somewhat referenced above, but VCs need liquidity to justify their existence, it's literally *why* we do the job. And when it's not easy to get it, they'll manufacture it, especially for companies that aren't "hot" like Figma. After 10 years, if you're sitting on a company that is doing well but not destined for a blockbuster IPO, you steer towards M&A.

5. **May we quote your insights in our study and list your name, company, and position?**

No direct quotes if that's okay, we have a policy around this stuff at work. However, you're welcome to use my name / company / position as someone you spoke to generally.

**Name:** Jun-nyeong Heo

**Job:** GS Ventures

**Position:** CEO & Founding Representative

1. **Are you familiar with the sharp shift from VC-backed IPO exits to M&A exits in the United States during 2021-2022?**
   “Yes, our team closely tracked the dramatic pivot from IPOs to trade sales once the public window slammed shut after Q2 2021.”

2. **What do you consider the single most important factor behind that shift?**
   “The fastest tightening cycle in 40 years compressed growth-stock valuations and made IPO pricing untenable.” (Surging US Federal Funds Rate)

3. **Which other factor do you believe played a significant role?**
   “Volatility premiums jumped; bankers told us book-building became impossible when the VIX held above 30, forcing many crossover investors to sit on the sidelines.” (Spike in VIX)

4. **Is there a third, perhaps less obvious, factor you think also contributed?**
   “Strategics and PE sponsors had record dry powder and were willing to pay reasonable multiples; founders preferred certainty of cash over a weak IPO pop.” (High M&A share of VC exits)

5. **May we quote your insights in our study and list your name, company, and position?**
   “Yes.”

**Name:** Siwan Kim

**Job:** Preferred Not To Be Directly Mentioned

**Position:** Preferred Not To Be Directly Mentioned

1. **Are you familiar with the sharp shift from VC-backed IPO exits to M&A exits in the United States during 2021-2022?**
   “Yes, I’m well aware of the sharp transition in the United States between 2021 and 2022, when exit routes for VC-backed companies swung from IPOs toward M&A transactions.”

2. **What do you consider the single most important factor behind that shift?**
   “In my view, the single most important driver of that shift was valuation compression—public-market multiples fell so dramatically that IPO pricing became unattractive.”

3. **Which other factor do you believe played a significant role?**
   “A second key factor was tightening or more burdensome legal and regulatory restrictions, which increased friction for bringing companies public.”

4. **Is there a third, perhaps less obvious, factor you think also contributed?**
   “I would also point to broader stock-market contraction; the overall decline in equity indices reduced investor appetite for new issues and pushed founders toward strategic sales instead.”

5. **May we quote your insights in our study and list your name, company, and position?**
   “You can use my name, but you may not directly state the name of my company due to corporate policies.”