ACA INVESTOR INSIGHTS REPORT 2023

ANGEL CAPITAL ASSOCIATION

INDEX

A LETTER TO OUR COMMUNITY

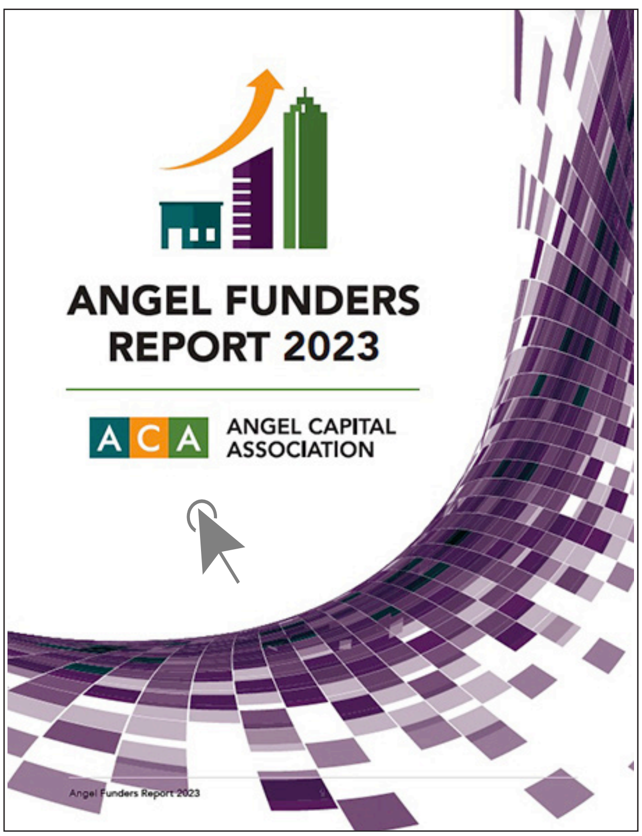
For approximately the last three and half years the ACA has collected once a month key learnings that angel groups have seen from collecting and analyzing data around angel investments. These insights from ACA angel groups and funds are shared on a monthly basis in order to help individual angels and angel groups learn more about key trends in our industry and improve outcomes.

The Angel Capital Association believes that data will make us better investors. ACA is committed to helping angels make informed decisions that will improve investment outcomes. The is why the ACA started the ACA Data initiative several years ago.

This annual summary conveniently consolidates our monthly data learnings. Please enjoy reading these data insights. If you'd like to receive the monthly emails and read them as they are freshly published, you can subscribe here.

Thank you,

Rick Timmins
ACA Data Analytics Chair



ADDITIONAL INFORMATION AVAILABLE

Go online to get your copy of the Angel Funders Report. The Angel Capital Association publishes the Angel Funders Report annually to increase awareness about angel investor activity and build a deeper understanding of the investing environment. The report provides context for seemingly disparate data points, identifies trends, and highlights innovative ways that ACA members are working together to fuel the entrepreneurial ecosystem.

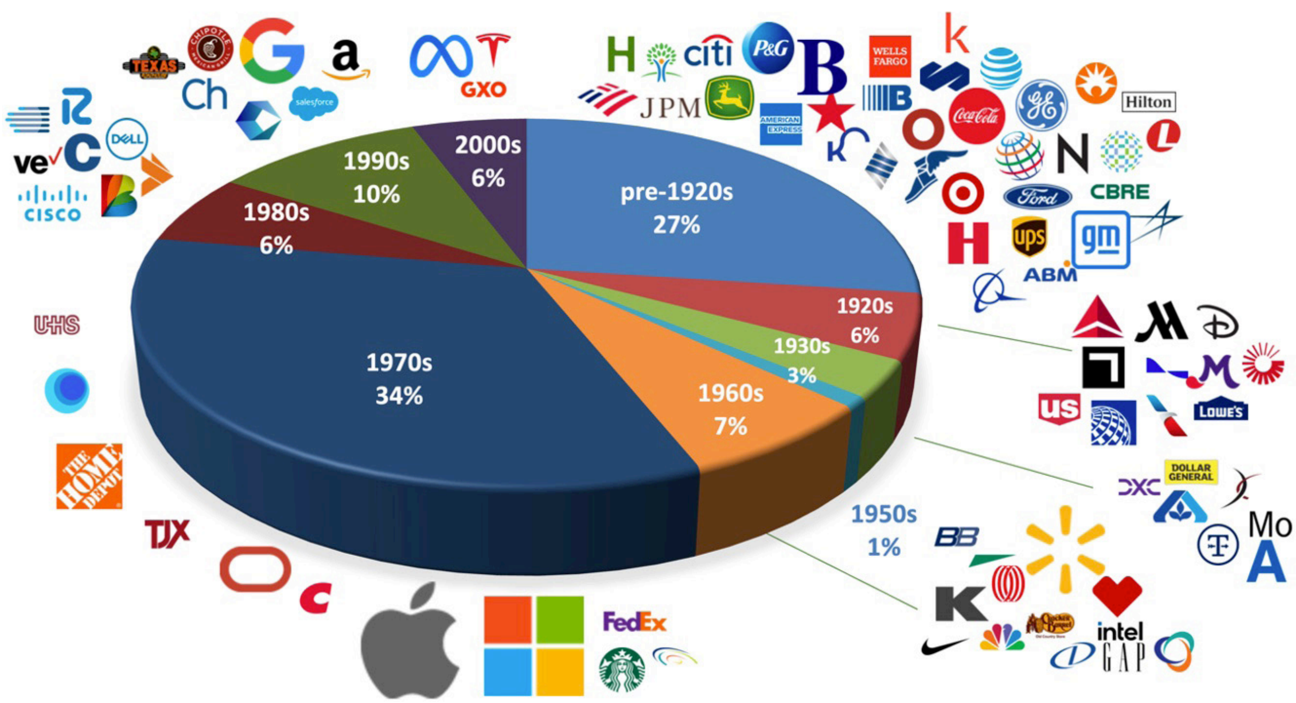
EARLY STAGE INVESTING CRITICAL TO LONG-TERM GROWTH IN US ECONOMY

We all collectively dodged a bullet after the collapse of Silicon Valley Bank which threatened to destroy a whole generation of startups. Had the US Treasury and Federal Reserve Bank not intervened quickly, many companies would have lost their hard-won deposits and the market collapse would have made it extremely difficult for them to access new financing. Many more companies in and outside the tech sector would have struggled as their products and services stopped working because of reliance on these newly defunct tech companies' products. While the short-term impact would have been dramatic for our entire economy, the long-term impact would have been far greater because it would have likely resulted in an unparalleled mass extinction event covering a whole generation of companies.

To understand the importance of that dynamic, this article explores the 100 largest employers in the US today and breaks them into decades since their founding to reveal insights on the long-term impact of losing a generation of startups.

In terms of profit generation, 56% of profits in the top 100 companies today were from companies founded after the dawn of the era of venture capital and angel investing in the 1970s, and losing companies from any one decade would have wiped out between 6% and 34% of profit in the economy. That would have been hugely detrimental to the Government's corporate tax base.

FIGURE 1: NET INCOME FOR TOP 100 EMPLOYERS BY DECADE FOUNDED

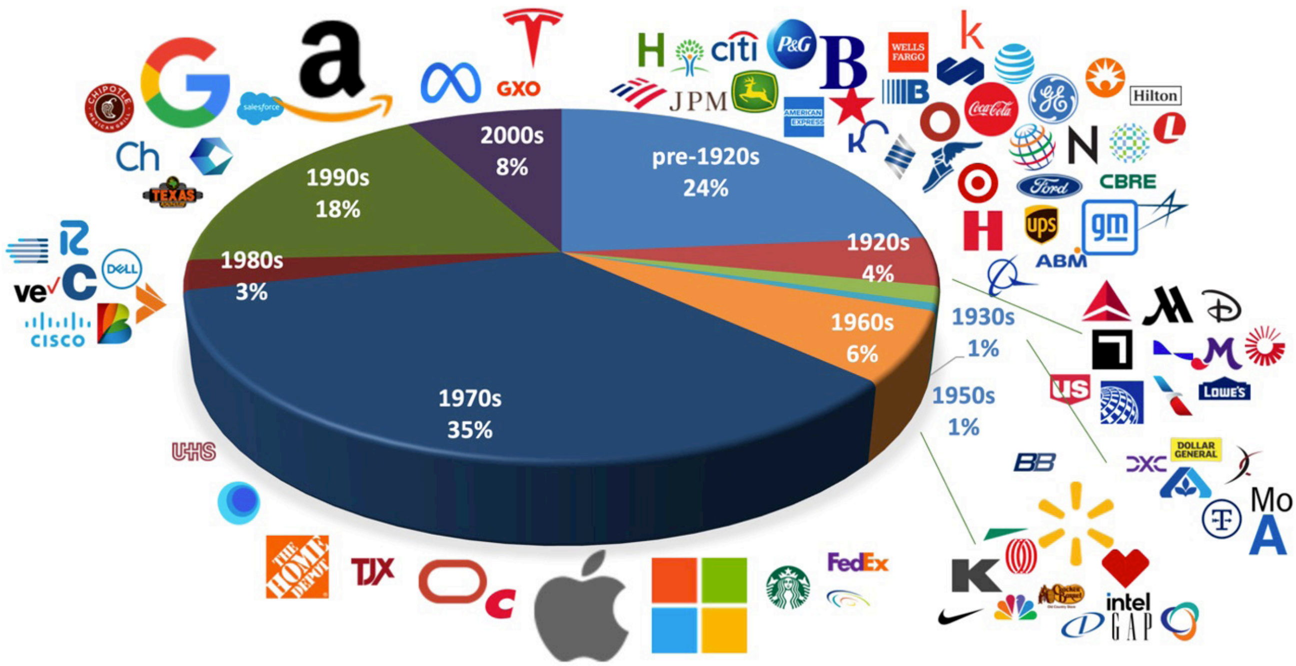


Source: Yahoo Finance for 2022 net income from continuing operations; Google search for year founded.

In terms of market cap, **64% of market cap** of the top 100 companies were companies founded since 1970. That has generated enormous wealth and taxes through capital gains.

EARLY STAGE INVESTING CRITICAL TO LONG-TERM GROWTH IN US ECONOMY

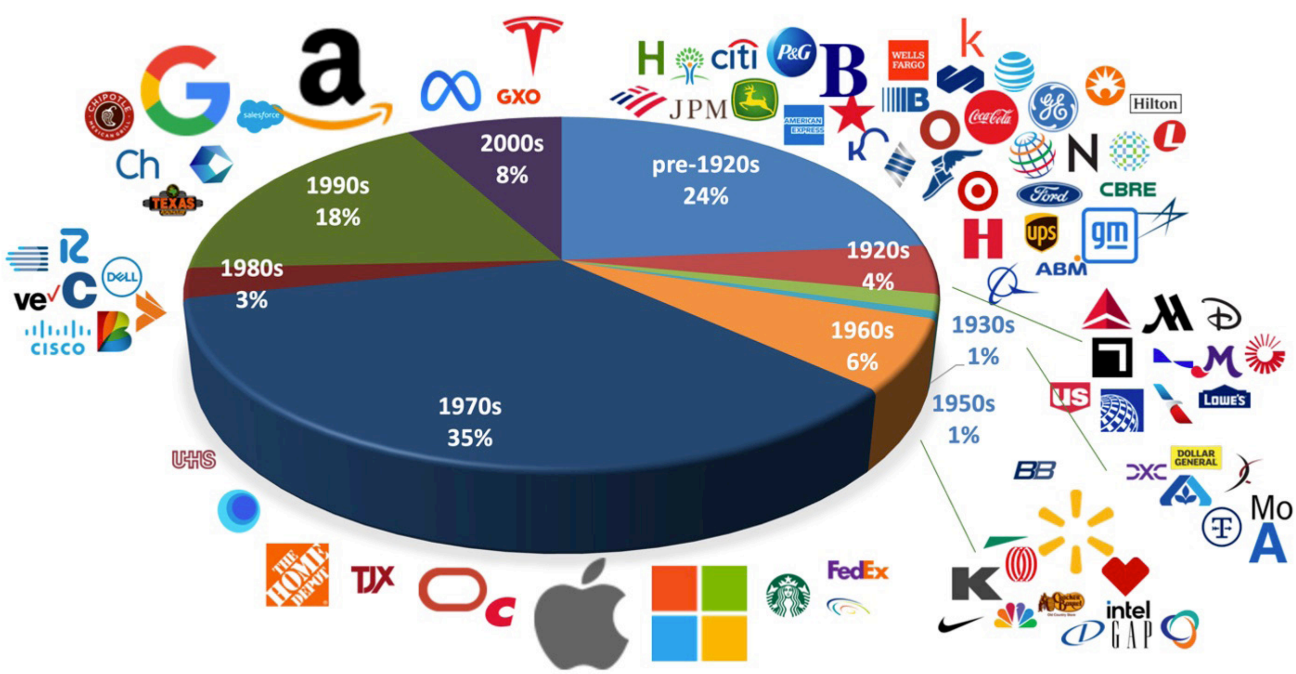
FIGURE 2: MARKET CAP FOR TOP 100 EMPLOYERS BY DECADE FOUNDED



Source: Yahoo Finance for market cap as of 6/6/23; Google search for year founded

Finally, in terms of employment, early-stage investing is the engine of growth in national employment. A full 34% of employment at the top 100 companies comes from companies founded since 1970. Without them our economy would be **a third smaller**.

FIGURE 3: EMPLOYEES FOR TOP 100 EMPLOYERS BY DECADE FOUNDED



Source: *Google search for year founded.*

EARLY STAGE INVESTING CRITICAL TO LONG-TERM GROWTH IN US ECONOMY

The impact of this startup ecosystem goes well beyond the jobs created at each company. For instance, Apple now has 164,000 employees but the total number of jobs created in the U.S. throughout its supply chain is **well over 2 million** including 450,000 jobs through U.S. based suppliers and 1,530,000 jobs attributed to the Apple App Store. And beyond Apple's $385 billion in annual revenue, the Apple App Store ecosystem facilitated **$1.1 trillion** in developer billings and sales in 2022, comprised of $910 billion in total billings and sales from the sale of physical goods and services, $109 billion from in-app advertising, and $104 billion for digital goods and services. Additionally, new analysis from the Progressive Policy Institute found the iOS app economy now supports more than 4.8 million jobs across the U.S. and Europe, with approximately 2.4 million in each region.[1]

Comparing the top 100 companies on the 1960 Fortune 500 list to the list in 2020, only 17 made both lists. Change and churn is constant in our economy, and new companies are the lifeblood of the renewal process. Our investments are the catalyst and essential for bright future.

[1] Per Apple Press release May 31, 2023

THE TAKEAWAY

Beyond their contributions to societal improvements through innovation, the investments we are making today in early-stage companies will drive both near-term and long-term growth in employment, profits, and stock market gains for our economy, and tax revenue for the Government. Our economy would truly stagnate, and even decline, without that engine for growth.

AUTHOR: *John Harbison, Chairman Emeritus of TCA Venture Group (formerly Tech Coast Angels)*

PUBLICATION DATE: *June 2023*

CURRENT STATE OF ANGELS AND BOARDS OF DIRECTORS

Angels often make their first real impact post-investment by helping a portfolio company develop a "real" Board, by insisting on documented processes, key metrics and measures and a more rigorous approach to corporate oversight and accountability. In these ways, better governance can lead to better outcomes, particularly during periods of the earliest stages of company growth, where funding is harder to raise. As the experience of one leading angel group powerfully illustrates, the difference in returns for portfolio companies having a Central Texas Angel Network (CTAN) member on the Board was 7x higher than lacking a CTAN Board member.[1] Other groups, including Boston's Launchpad, have also confirmed the positive impact on returns from Launchpad members participating on Boards. In the latter case, returns improved by 20%.

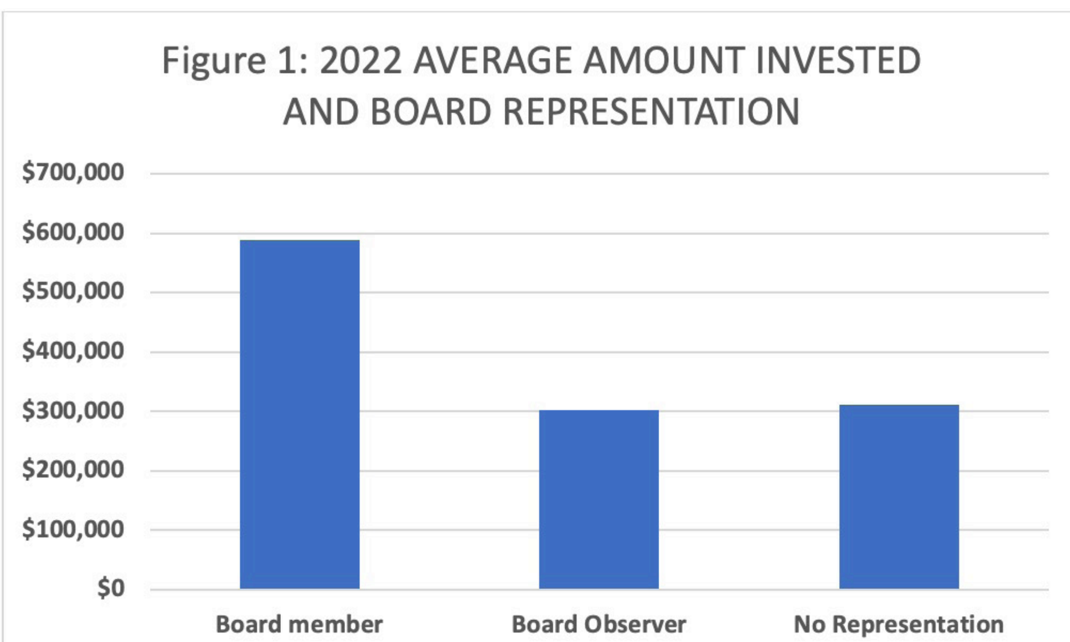
In 2022, the typical angel group reporting AFR data had Directors for approximately 20% of the companies it funded. The median number of Director seats held by angel groups for their 2022 investments was 4.5, with an average of 5.7 Director seats. Overall, 40% of financing rounds had an angel representative of some sort (Director or Observer) at the close of the round and 70% of angel groups had at least one Board or Observer seat among their portfolios of 2022 deals. What are the implications of these data for angel groups' role in governance and the sustainability of angel Directors over the startup journey?

Investor Organizations Writing the Largest Checks Are Preferred for Directorships

As Figure 1 suggests[2], larger rather than smaller round investors are typically awarded Board seats. In return, investors providing larger amounts of capital are in a preferential position when the decision is made to award Board seats to round investors. As Figure 1 indicates, in 2022 angel groups qualifying for a Board seat invested 2x the capital compared to those groups having no Directorships. Groups granted a Board Observer seat, on the other hand, which have no governance or voting rights or fiduciary role, made no greater investment than those groups lacking any Board representation.

Groups investing at those higher levels usually required to qualify for a Board seat can become better informed, make better follow-on investing decisions and can offer a much deeper level of mentoring than investments for which the angel group is a less-involved investor.3 The added capital needed to obtain a Board seat may well be justified by the better returns Board seats can help generate.

Figure 1: 2022 Average Amount Invested and Board Representation



Source: Angel Funder's Report Database, 2023

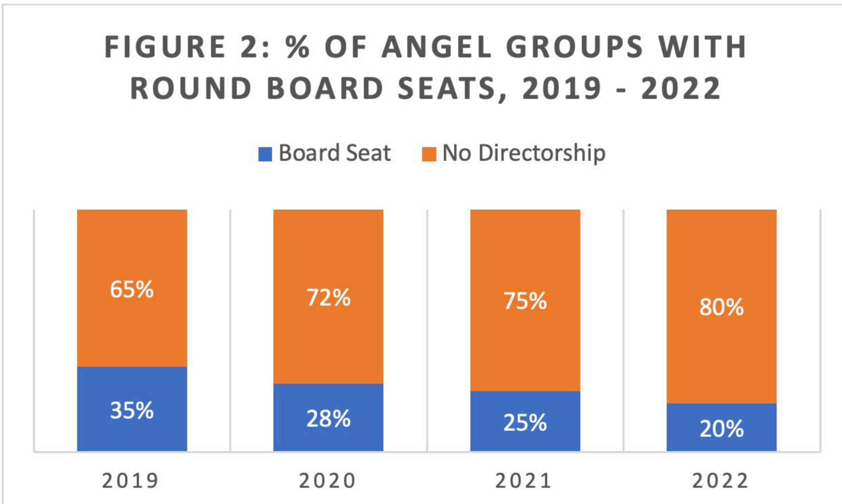
CURRENT STATE OF ANGELS AND BOARDS OF DIRECTORS

Angel Group Directorships Have Been Declining for the Past Four Years

Figure 2 analyzes Board Director status over the past four years across all reporting angel groups. It is concerning to note that the percentage of deals having an angel group member with a fiduciary, governance Board seat has been declining for the past several years from 35% in 2019 to 20% in 2022.

In 2022, 20% of deals had a Board Director from the reporting angel group. 17% of deals had a Board Observer (a much more passive role). In some cases, angel groups had both a Director and an Observer seat for the same company.

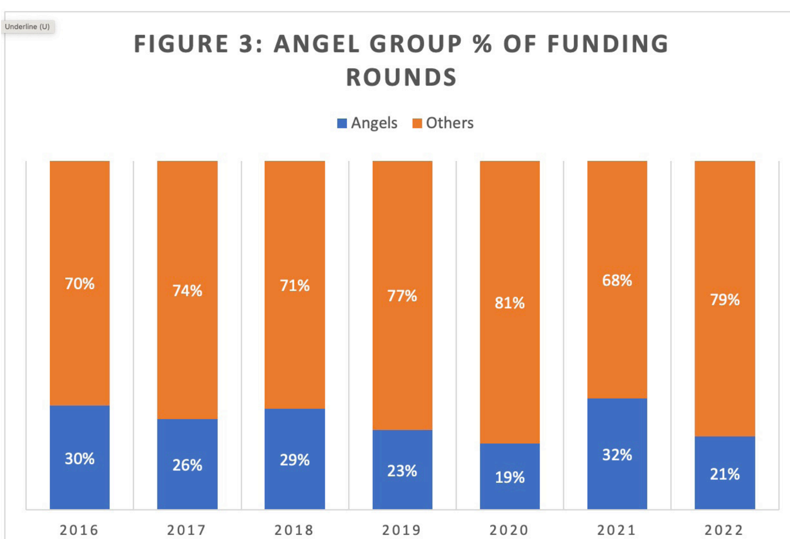
FIGURE 2: % of Angel Groups with Round Board Seats, 2019-2022



Source: Angel Funder's Report Database, 2023

Directorships for angel groups in 2022 deals declined 20% from 2021 (35% of deals) and 43% (35% of deals) since 2019. This is the third consecutive yearly decline in angel Directorships.

Figure 3: Angels Are Contributing Less and Less to Financing Rounds, Limiting Their Influence



Source: Angel Funder's Report Database, 2023

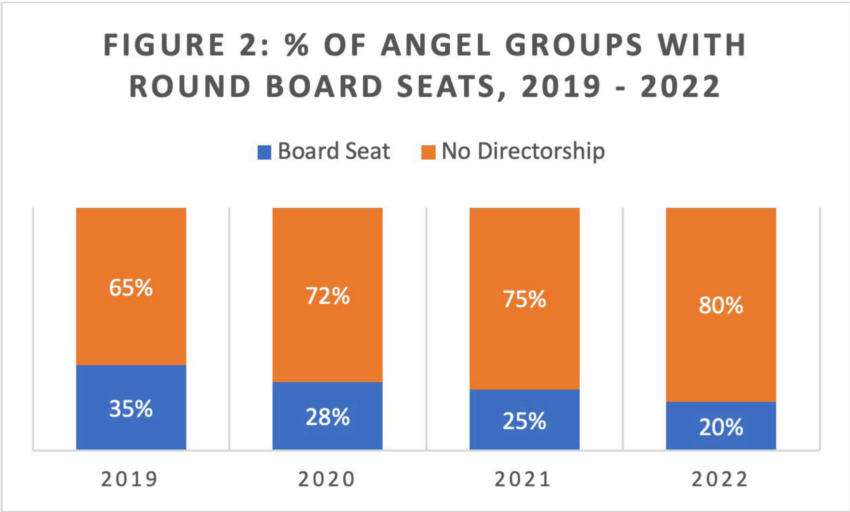
CURRENT STATE OF ANGELS AND BOARDS OF DIRECTORS

One possible reason for this decline in directorships is that the percentage of a round funded by reporting angel groups has dropped into the low 20%s of the round's invested capital in three of the past four years, as Figure 3 indicates. Apart from the anomalous year 2021 of "funding exuberance," angel group contributions to funding rounds have seen an ongoing decline.

When angel groups contribute less to a round, their influence on corporate governance is less since Board seats are usually reserved for the largest investors. Given the critical importance of Boards in creating good governance and protecting shareholders, this decline in influence is troubling. Among the ways to counteract this trend is greater syndication and pooling of money creating a greater pool of influence.
Board Seats Are Primarily the Result of Priced Equity Rounds

Figure 4 examines the relationship between type of round and Board representation. Two thirds of Board members were awarded seats via priced equity rounds, another 27% via convertible debt rounds. Only six percent of Board members achieved their directorships from SAFE note deals, as relatively few angel deals used SAFEs and the standard vanilla SAFEs usually exclude new round participants from governance roles. Board Observer roles were almost equally part of priced equity or convertible note deals.

Figure 4: 2022 Deal Type & Board Representation



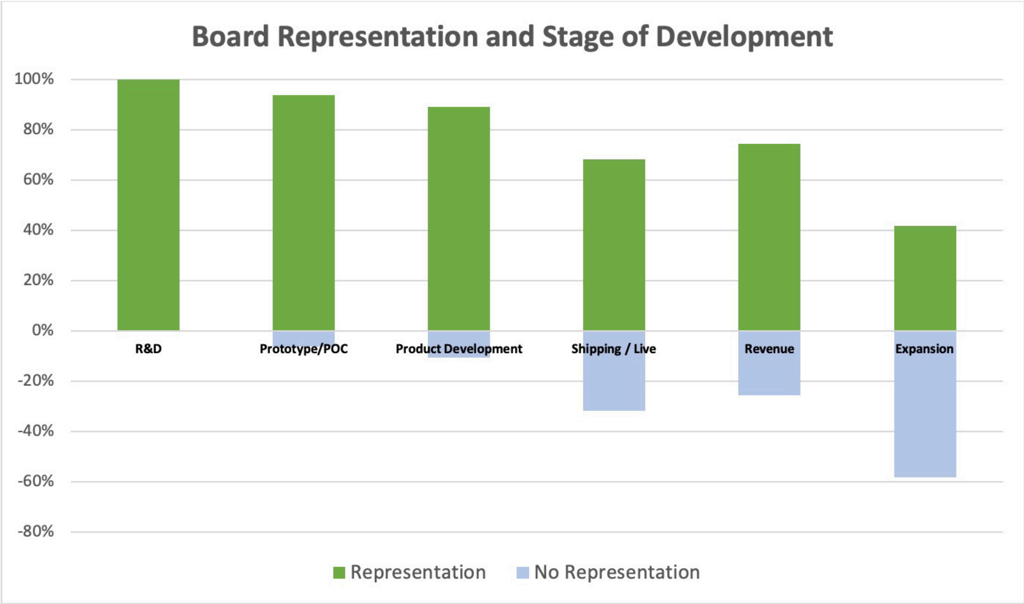
Source: Angel Funder's Report Database, 2023

Angels Are Most Frequently Directors During Product Development and Less Active During Business Expansion Stages

Angels are often the first "professional" investors on startup Boards. But angel Board seats can be short-lasting, particularly when follow-on round VCs impose their view of corporate governance and reallocate Board seats from founders and early angel Directors to VCs or VC Director nominees. To maintain a Board seat over multiple financing rounds, angels need to demonstrate either continued financial contributions to funding or strong, value-added contributions to the growth of the company and the mentoring of management well beyond product development.

Figure 5 examines the relationship between the stages of company growth and the continued presence of angel Board members.

Figure 5: Board Representation and Stage of Development



Source: Angel Funder's Report Database, 2023

100% of companies at the R&D stage had a Board Director from the reporting angel group, and 85% or more at the prototype and product development stages. The percentage of angel groups having an angel group Director fell sharply when products entered the market, falling to 40% by expansion stage. Angels were of most value during the initial innovation and product development stages and were of less relevance as companies developed their sales machines and follow-on business expansion strategies. And, of course, it is during those latter stages that VCs are most likely to have become investors, often replacing angel Board members unless they anticipated significant angel Director contributions to future company growth.

CURRENT STATE OF ANGELS AND BOARDS OF DIRECTORS

KEY TAKEAWAYS

- One leading angel group (CTAN) reports that Director participation increased returns 7x, another (Launchpad) by 20%.
- Board seats increase an angel group's information and its ability to contribute to positive outcomes.
- To gain a Board seat, angel groups need to be among the larger investors in a round. On average, angel groups receiving Board seats invested twice the investment of angel groups lacking Board seats.
- Priced equity rounds are the most frequent source of angel group Board seats. Angel groups have the greatest chance of active participation in governance by financing equity rounds and the least chance by participating in SAFEs.
- To keep a Board seat as a company matures, investors need to keep adding value beyond the product development stage of startup growth.

AUTHOR: *Ronald Weissman, Band of Angels and Chair, Angel Capital Association*

PUBLICATION DATE: *December 2023*

[1] On the relationship between Board seats and investment outcomes, see the experience of Central Texas Angel Network, linked above: Rick Timmins, "Angel Involvement on Boards Improves Returns," Angel Insights Blog, Angel Capital Association, July 12. 2023.

[2] All data in this note are drawn from the 2022 Angel Funder's Report database (tracking CY 2022 transactions). This data insight note required additional data analysis beyond that provided in the 2022 Angel Funders Report. While conclusions are similar, the numbers differ slightly from the 2022 AFR given a specially constructed Boards of Directors data set used in this analysis.

[3] Launchpad also reports significantly greater returns when its members are active in other ways, including writing term sheets and leading a thorough diligence process.

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

This is Part 2 of a two-part examination of the state of the startup capital market during the past two years. For Part 1 on The Equity Seller's Bubble of 2021, click here to access the ACA Data Insights Archive.

In 2022 war, inflation, rising interest rates and a tougher economic environment–one not buoyed by historically low interest rates–brought an end to the long-term bull market in assets (the "everything bubble"), including startup capital. From an investor's perspective, 2022 witnessed a sudden market reversal from an extreme equity seller's market to an equity buyer's market, causing dislocations throughout angel, VC, and startup ecosystems. This transformation has already led to an increased number of startup failures, a growing venture capital reset[2] and 210,000 tech sector layoffs since the start of 2022.

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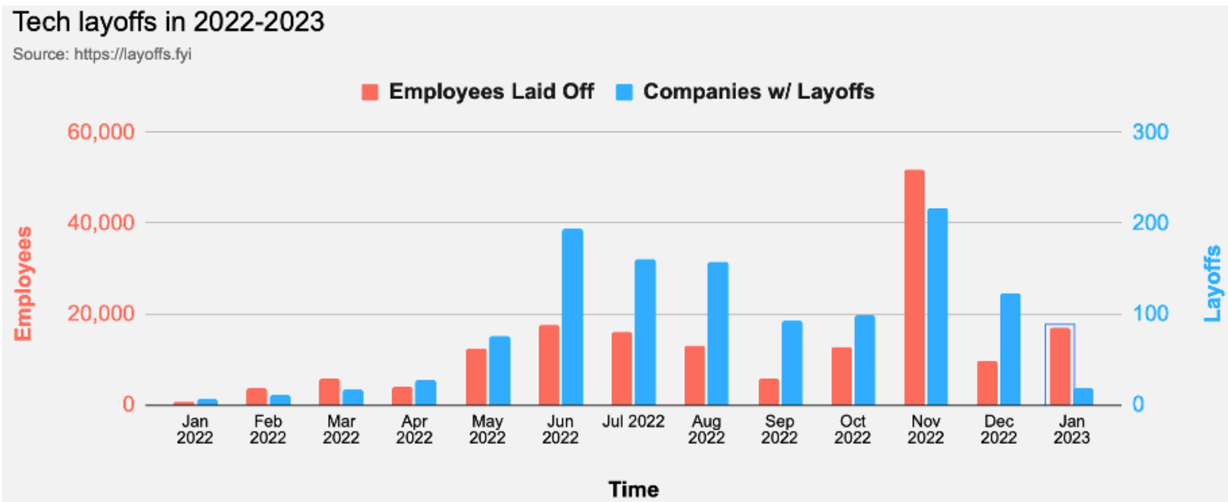
[2]A (temporary) venture capital reset? Major capital market disruptions often bring a "VC Reset," as venture firms rethink fundamentals, often pressured to do so by limited partners. As many angel funds are modelled on standard venture practice and as VCs are often the "next check" after ours, we need to be alert to these issues:

- Tougher terms from limited partners for all but the historically best performing top 30 funds and a much tougher fundraising climate for new VCs. Some limited Partners have requested lower fees (1.5% rather than 2%), elimination of bubble economics (like 25%+ carried interest for some top funds) and other LP-friendly terms. It is unclear if VCs will agree to these terms, but LPs believe they now have more leverage. In 2022 VC fundraising remained strong but a greater share of dollars went to a smaller number of firms.
- Greater governance role for limited partner Boards of Advisors.
- A growing awareness that VCs need staff having a broader range of experience and backgrounds.
- An awareness that diligence needs to be tougher and less trusting, particularly after the FTX debacle. A much contested University of Chicago report suggested that contemporary diligence practices are flawed and that 50% of VC bets are "predictably bad."
- A shift from late-stage pre-IPO investing to renewed emphasis on early stage. On the one hand, there will be more investors to write follow-on checks for our deals; on the other hand, top-tier VCs are launching $400M – $500M seed funds accompanied by larger value-added portfolio support staff, providing more deal competition.
- From VCs to Investment Advisors… and back again? Several top-tier funds recently redefined themselves as "investment advisors," enabling them to place long-term bets by holding rather than distributing IPO shares. The rapid decline of public market valuations right after VCs made this shift may dent the enthusiasm for this trend.
- Higher litigation risks. The SEC is considering rules making it easier for limited partners to sue venture firms for negligence and weak diligence. All asset managers, not just VCs, would be subject to this greater risk. But this will be especially hard to deal with for early-stage investors, given that we expect most of our investments to fail to return capital. Will normal and inescapable business risks now be subject to greater liability?
- Smaller VC fundraises? For the near future, investors in venture funds will likely see fewer and less valuable exits. A reduction in returns might lead investors in all but the top funds to reduce their commitment to future funds at least until a broad market recovery. This could reduce the supply of startup capital near term.

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

VC resets are often short-lived. After the Great Recession, the Kauffman Foundation issued a blistering report on the state of venture "We Have Met the Enemy And He Is Us: Lessons from Twenty Years of the Kauffman Foundation's Investments in Venture Capital Funds and the Triumph of Hope Over Experience," Kauffman Foundation, 2012. Within five years, with the return of an active IPO market, the practices of which the Kauffman Foundation complained had returned in force as hope, again, triumphed over experience.

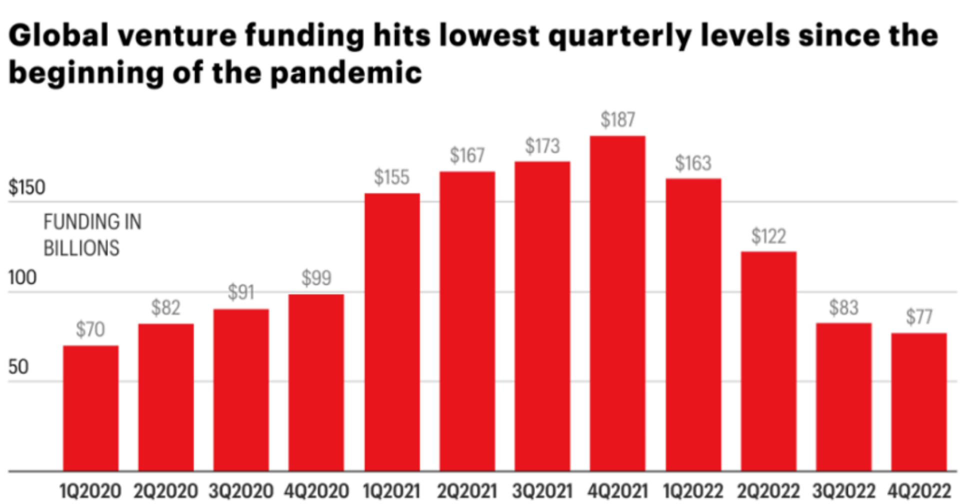
FIGURE 10: US TECH LAYOFFS SINCE 1/1/2022



Source: layoffs.fyi

Global venture investing fell 35% between 2021 and 2022. The decline was especially steep during the second half of the year as economic deterioration worsened. During Q4 negative trends accelerated, and by the end of Q4, venture dollars had fallen 59% compared to Q4 of 2021.

FIGURE 11: QUARTERLY GLOBAL VC INVESTMENTS, Q1 2021 – Q4 2022



Source:Forture Magazine, Citing Crunchbase

The 2022 decline in funding hit almost every geography:

FIGURE 12: 2021 VS. 2022 GLOBAL FUNDING

Geography	2021	2022	Change
United States	$315.3B	$198.4B	-37%
Canada	$11.3B	$8.9B	-21%
Asia	$185.0B	$111.4B	-40%
India	$30.5B	$20.7B	-32%
China	$96.2B	$46.6B	-52%
Israel	$10.6B	$8.8B	-17%
Japan	$6.1B	$4.4BB	-28%
Europe	$98.1B	$81.0B	-17%
UK	$30.3B	$26B	-14%
Germany	$17.8B	$10.0B	-44%
France	$12.2B	$12.6B	3%
LATAM	$20.6B	$7.9B	-62%
Mexico	$3.8B	$1.2B	-67%
Brazil	$11.4B	$3.6B	-68%
Africa	$2.3B	$3.1B	35%

Source: CB Insights Data Aggregated By R. Weissman

In the US, public market valuations dropped by 50% or more in virtually all industry sectors, affecting the comparables generally used by angels and VCs to value revenue-stage companies:

FIGURE 13: Q3 2022 VS. Q3 2021 PUBLIC MARKET MULTIPLES FOR SAAS SECTORS

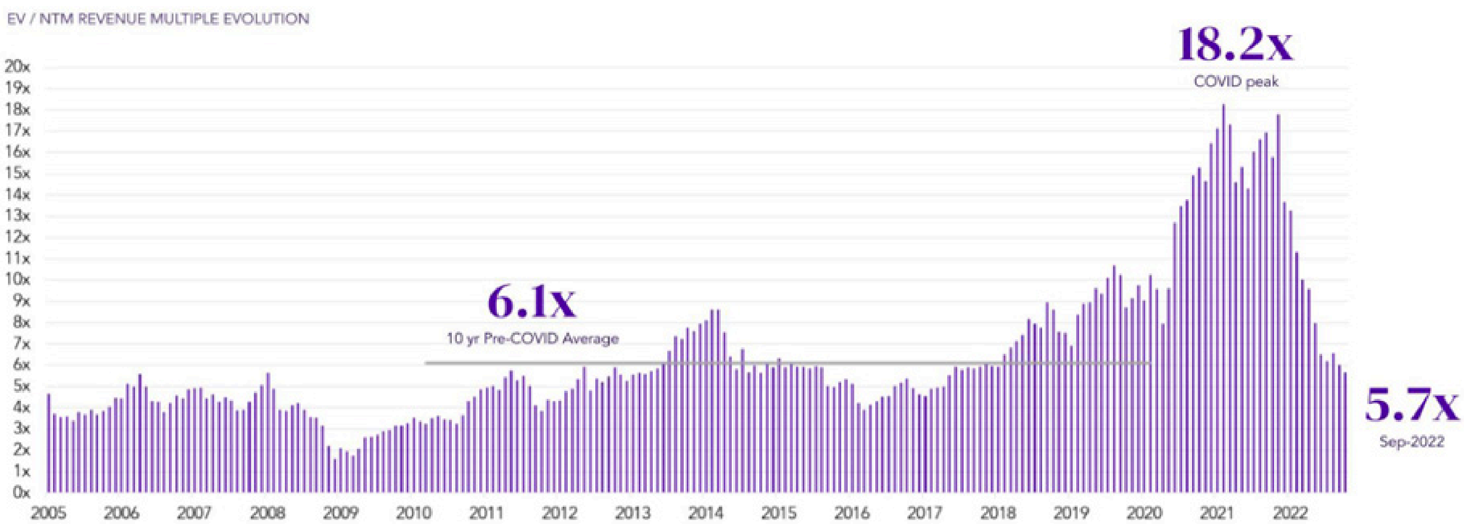
	Q4'20	Q4'21	Q4'22	2021 - 2022 Change
BI/Analytics	8.5x	10.3x	4.8x	- 54%
Communications & Collaboration	17.6x	16.5x	3.8x	- 77%
DevOps & IT	23.7x	23.3x	7.0x	- 70%
ERP & Supply Chain	14.2x	13.9x	8.8x	- 37%
Financial Applications	15.0x	14.5x	5.4x	- 72%
Human Capital Management	12.5x	16.8x	9.6x	- 43%
Sales & Marketing	13.0x	19.2x	4.9x	- 74%
Security	8.8x	14.1x	7.3x	- 49%
Vertical Market	7.2x	9.5x	5.0x	- 47%

Source: Software Equity Group Q3 Saas Public Market Update, 10/22

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

Globally, by 2021 median revenue multiples (US, EU, Israel combined) had grown three times the previous ten year period of relatively stable values from 6.1x to 18.2x. In a sharp reversal of 2021 values, 2022 SaaS multiples declined by more than two-thirds, returning to their 2019 levels.

FIGURE 14: EU/US/ISRAELI SAAS MULTIPLES



Source: Accel Analysis, Capital IQ Data

It would be too extreme to call today's private risk capital market a "collapse." The 210,000 layoffs noted in the past year, for example, represent less than 2% of the US technology workforce. Similarly, risk capital market changes appear (so far) to be a correction, not a collapse, having returned to pre-bubble "normal" investment levels.

As we have seen, later stage valuations increased the most and early stage, the least during 2020-2021. The 2022 correction has followed the same path. The faster the rise, the harder the fall. The most inflated 2021 valuations and deal volumes (late-stage) saw the sharpest declines in 2022. As in previous bubble deflations, the malaise began with public market declines–a sharp Q1'22 fall in the S&P 500 -- and successively impacted unicorns and other pre-IPO companies, then late/growth stage and finally early-stage and seed-stage/angel investing.

FIGURE 15: 2021 VS. 2022 US STARTUP FUNDING BY STAGE ($B)

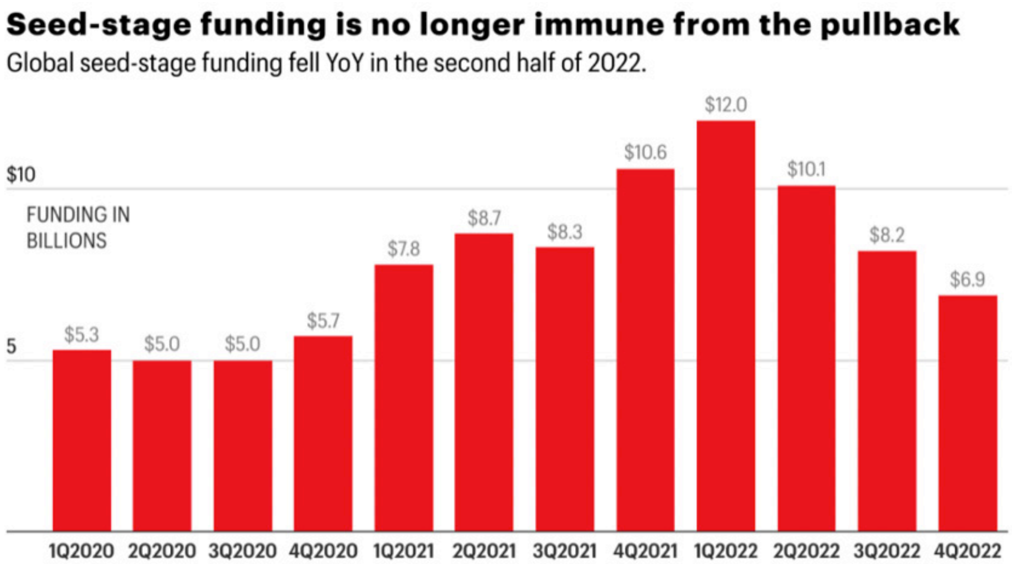
	2021 ($B)	2022 ($B)	Q3'22 - Q4'22 Change	Q4'21 - Q4'22 Change	2021 - 2022 change
Seed Stage	16.3	17.0	-18%	-37%	4%
Early Stage	117.9	84.0	-16%	-59%	-29%
Late Stage	217.8	124.6	-3%	-67%	-43%
All Stages	352.0	225.6	-10%	-63%	-36%

Source: R Weissman Aggregated Crunchbase Data

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

Overall, annual venture funding fell by 36% between 2021 and 2022. Early and late-stage funding had already decreased by mid-year, followed by further but modest decreases from Q3 to Q4. Seed stage remained the most resilient at the beginning of 2022 but later in the year saw a funding decline, culminating in Q4 with a 37% US decrease (compared to Q4'21) and a 35% decline globally. Nevertheless, seed stage funding remained more resilient than other stages.

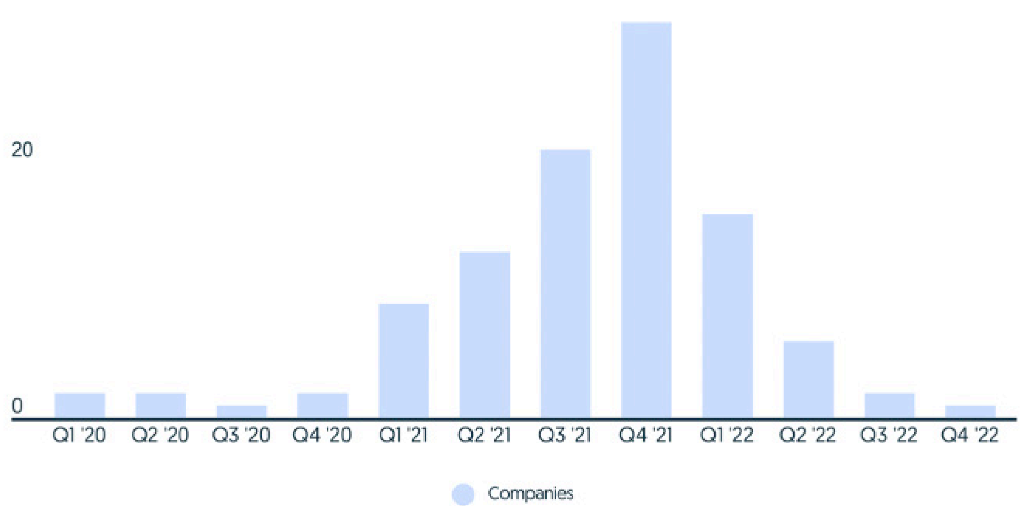
FIGURE 16: GLOBAL SEED STAGE FUNDING, Q1 2020 – Q4 2022)



Source: Fortune Magazine, Citing Crunchbase

Funding is becoming harder to find at all stages. The outlook for Series Seed startups raising Series A is tougher than it has been but is still stronger than for companies raising later stage capital. Even more than a "Series A Crunch," investors should be concerned about a potential Series B Crunch, too.

FIGURE 17: NUMBER OF COMPANIES ANNOUNCING NEW FINANCING ROUNDS

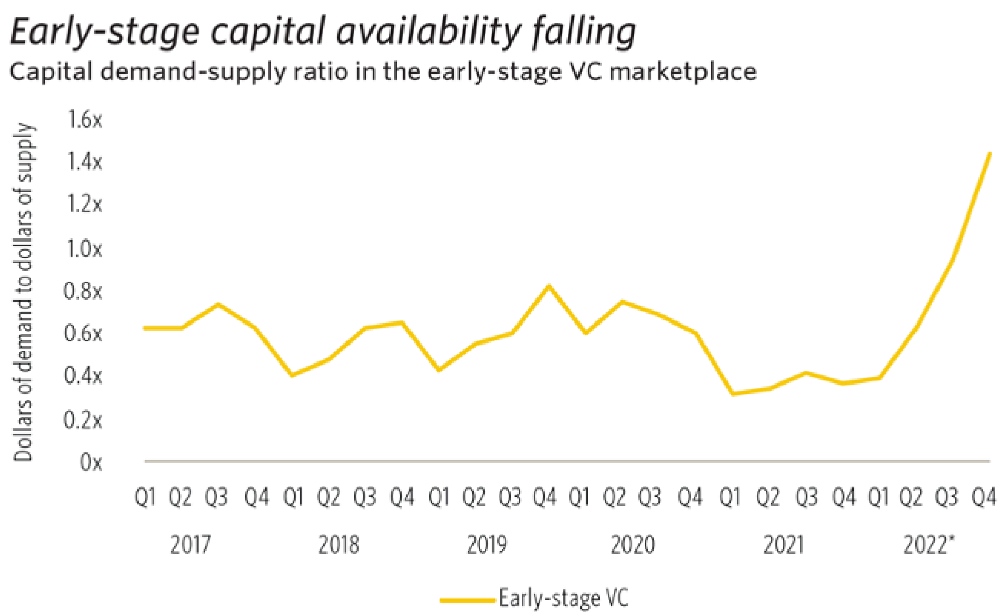


Source: Crunchbase

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

In 2022 the demand for capital outstripped the supply and this gap worsened as the year progressed. By Q4, for every dollar of available capital there were 1.4x dollars sought by startups, a rapid reversal of the 2021 ratio of capital supply to capital demand, a funding gap not seen since the "Series A Crunch" of 2013.

FIGURE 18: SUPPLY VS. DEMAND FOR EARLY-STAGE CAPITAL



Source: Pitchbook/NVCA Monitor

Funding has dropped in most industry sectors year over year by as much as 30% to 60%, and the number of deals has declined, typically, in the range of 24% to 60%, depending on sector. Edtech has fallen the most; Healthcare, the least according to Pitchbook.

Private company valuations are influenced by public trading, IPO and M&A valuations, which offer a guide (however imperfect) to possible returns investors can expect. And as we've seen, public market valuations have declined over the course of 2022. High sector valuations used to justify funding in 2021 were followed in 2022 by public market valuations now 50% of those recent funding valuations.

50% drops in today's public market valuations do not bode well for companies who raised funds at 2021's inflated values. Those companies are now trying to justify or "grow" into their bubble valuations. Many of these companies have delayed raising capital in 2022 hoping for a market recovery in 2023. Many of the companies who raised funding in 2020/21 at abnormally high valuations are unlikely to see a return anytime soon to their bubble valuations of 2021.

A return to higher valuations is usually triggered by a stronger IPO market. When will today's moribund IPO market recover? The 1987 downturn took three years to recover. The recovery following the Internet bubble collapse of 2000 similarly took three years. Recovery from the 2008 Great Recession took two years and was relatively weak. Few analysts are near-term optimistic about public markets, meaning that exit valuations may remain at 50% of recent values through 2023 or beyond, keeping comparables low, affecting every stage of fundraising and exit planning.

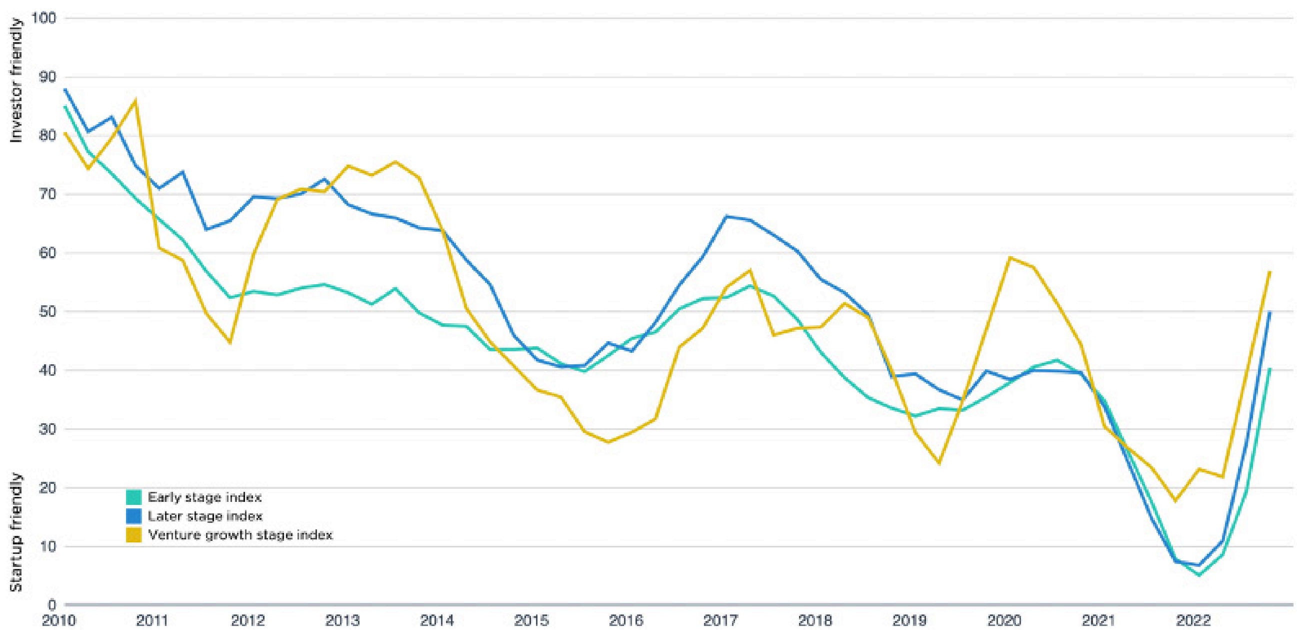
THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

Capital market attorneys report that the IPO window remains closed for the most popular startup sectors. Companies who have filed to go public in 2023 are not emerging companies with tech metrics, but more mature companies in traditional industries with solid revenue growth and traditional business metrics: Oil and Gas, Industrial, Retail and Restaurants. (Law360, January 2, 2023). Attorneys also expect hundreds of SPAC failures as deadlines to find targets expire in early 2023.

Gone is the equity seller's market of 2021. The deal balance of power has shifted towards investors. For 2023, we can expect longer deal cycles due to more extensive diligence, deals with more balanced founder/investor terms and more protective provisions, including higher liquidation preferences and stronger Board governance.

Illustrative here is Pitchbook's VC Dealmaking Index, based on valuations, the relative supply and demand of private capital, the demand (or not) for board rights and related deal and environmental factors. Figure 19 (Pitchbook, January 4, 2023) charts the ebb and flow of founder vs. investor deal negotiating power. Pitchbook's metric saw a sudden and sharp reversal from extreme founder-friendly (downward slope) to more investor-friendly (upward slope) deal climate in 2022.

FIGURE 19: VC DEALMAKING INDICATOR: FOUNDER FRIENDLY VS. INVESTOR FRIENDLY DEAL CLIMATE INDEX



Source: Pitchbook

The reversal of this index tracks similar reversals in deal volumes, dollars funded, and valuation trends. Today, all stages and most sectors are moving from equity seller to equity buyer markets. At the end of 2022, seed and early-stage deals (which had been relatively healthy during the first half of the year) began to decline, as well.

From investors to entrepreneurs and our ecosystem partners, the experience of the abnormal last several years is causing a global private capital reset, no longer business as usual, as we search for a "new normal." But as with most crises, opportunities for experienced investors who have learned from prior down cycles are still plentiful.

THE EQUITY SELLER'S BUBBLE OF 2021 PART 2: 2022 FROM A STARTUP EQUITY SELLER'S TO AN EQUITY BUYER'S MARKET

SUMMARY

1. 2021 saw the height of startup funding at the end of the longest bull market in recent history. 2021 Startup funding broke records for capital invested and for high valuations. It also saw the continued growth of SAFEs, the ultimate unbalanced, founder friendly and investor-hostile deal instrument.
2. 2021 was an anomalous year, fueled by record recent exits, inexperienced early-stage investors and FOMO-fueled market tourists who contributed larger cashflows to startups directly and via investment in venture funds than any time in recent memory.
3. Global political and economic crises deflated the 2021 funding bubble with increasing force over the course of 2022, reaching a low (so far) during the second half of the year. Overall, funding fell 35% annually, and nearly 60% comparing Q4'21 and Q4'22. In many markets, valuations declined by 50% or more, returning to pre-bubble (2016 - 2019) levels.
4. Deal power is now shifting from founders to investors, returning to pre-bubble levels of more balanced investor/founder terms.
5. 2022 was a correction, not a collapse. Valuations aside, 2022 was still a year in which venture and angel funding were comparatively high, compared to most years except 2021. At the same time, the correction is still happening: most indicators—a closed IPO window, increased fire sale M&A, SPAC failures, pay to play rounds, tech sector layoffs, plummeting public market valuations and falling funding levels in the US and globally—are still trending negative.

KEY TAKEAWAYS

1. Burn the 2021 deal playbook. It was an anomalous year and should not be used by angels as the basis for valuation, market comparables or deal terms. In evaluating a company's valuation ask, ensure that the data used are not weighted by 2021 comparables.
2. Diligence and Governance Matter More than Ever. Capital raised and valuations are only two elements of an overall deal. If anything, the past few years highlight the need for strong corporate governance and real diligence. Don't let FOMO persuade investors to abandon angel diligence best practices. And don't execute deals that deliberately exclude angels from startup governance. Real corporate governance is needed to manage tough financings, predatory investors, company restructuring and inevitable M&A market consolidations.
3. The Malaise is Winding Its Way Through the Private Capital Value Chain. The decline in deal volumes and valuations first hit unicorns, then pre-IPO and late-stage companies and is working through the venture ecosystem. First to rise, first to fall. At present, angel/seed stage has only recently begun to be affected and not as sharply as other stages (so far). It is unclear if late 2022 declines in angel and seed funding will stabilize or decline further.
4. High Deal Valuations Depend on Expectations of High Returns. High valuations are only justified if investors believe that high exit multiples will remain the norm several years from now. But these multiples have already declined sharply. Valuations have returned to "normal" (2016-2019) ranges. Unless we enter another explosive bull market, it is doubtful that valuations will "recover" anytime soon to 2021 bubble levels. The exit markets fueling higher valuations are essentially closed. And valuation analysis has also become more sophisticated. The investor exit calculus increasingly includes expectations about exit sustainability. Why? Most 2020/21 IPO and SPAC exits did not hold their value in the months after the exit, leading to increased caution among investors who buy IPO shares.
5. We Warned You! Experienced angels cautioned CEOs in 2020-2021 that sky-high valuations would cause fundraising pain if bubble markets deflated. As predicted, CEOs who closed rounds in 2020/2021 at outsized valuations are finding fundraising difficult.
6. A Flood of Companies Will Try to Raise Capital in 2023. A recent startup survey cited by Bloomberg indicated that 80% of US and UK startups lack capital to last for a year. 2023 will be a very competitive year for startups seeking funding.

7. CEOs Face Tough Choices: Take a down round now and suffer near-term pain or accept a structured financing deal with higher liquidation preferences and other terms which distort capital structures long-term. Or they can seek venture debt with its covenant-based downsides.
8. Triage! For investors, it is triage time, focusing capital and support on those most likely to survive and thrive during this downturn. And triage will apply to deal flow, not just existing portfolio companies. It is a good bet that investors will fund fewer undifferentiated "me-too's" versus startups solving critical problems using deeper tech and more hard science.
9. Stronger Survivors. 2023 will likely be a year of company failures for some and restructuring for others. The survivors will place greater focus on core products, services, more efficient processes and strategies to gain market share even in tougher times. Those who do this well will emerge stronger and more competitive. In 2023, average valuations for the smaller number of companies who successfully raise funds are likely to rise as those who pass muster will likely be more solid companies who have demonstrated stronger performance and better metrics during a tougher diligence cycle.
10. But it is Still a Great Time to Be an Angel. Even In today's market, seed and early stage remain attractive for prudent, value-added investors. Angel stage has been the most resilient, the least subject to wild swings in valuation or invested capital. And a recent ACA survey of angel groups indicated that most are staying the course and continuing to invest both in their existing portfolio and in new deals. Despite near-term crises, investors who have experienced earlier down markets know that today's environment offers great opportunities to invest long term and to increase the odds of success by adding the kind of follow-on cash and "mentor-capital" in which angel groups excel, particularly for companies with sustainable value who are solving real problems that matter.

AUTHOR: *Ronald Weissman*, *Band of Angels* *and Chair, Angel Capital Association*

PUBLICATION DATE: *February 2023*

"HOME RUNS" ARE AS INSTRUMENTAL TO SUCCESS IN ANGEL INVESTING AS THEY ARE IN PUBLIC MARKET INVESTING

We have all heard the importance of having one or more of our angel investments noted as a "home run" In terms of a return exit. What is a "home run"? Generally speaking we can define a home run for an angel investor as a company having a very successful return multiple at the time of their exit, generally with a return multiple of 10.0x or more. Why is this important? In round numbers approximately 50% of angel investments go out of business or shutdown, another 25% to 30% will return less than 1x to 4x and finally approximately 20% to 25% of angel investments will be greater than 4x. The "home runs" I believe, fall into the 10x or greater return multiple.

Based on this knowledge it is very important for angel investors to build a portfolio of angel investments to potentially increase the likelihood of having a "home run" in the portfolio. How many investments are required to build a potentially successful angel investing portfolio? Irvine Ebert of Purple Angels in Ottawa performed a Monte Carlo simulation of the 2007 Rob Wiltbank study of angel investing and noted that 22-24 investments were necessary to have a 90% probability of a 2.6x return. That internal rate of return is approximately 27%. Monte Carlo studies of the TCA Venture Group (formerly Tech Coast Angels) portfolio done by John Harbison have also confirmed this figure of 22 to 24 investments in a portfolio necessary to achieve a 2.5x to 2.6x return multiple or an internal rate of return 22% to 26%.

Now let's look at the Central Texas Angel Network (CTAN) portfolio. CTAN is a very active angel group formed in 2006 and operating through 2022 in Austin and has invested in a total of 208 companies and a total of $125.2M. In 17 years of investing by CTAN members, the total portfolio has had 64 company shutdowns/companies out of business, 51 companies with an exit and 93 companies still active. The 115 companies with outcomes (64 shutdowns and 51 exits) have an overall internal rate of return of 31%. As shown on the chart below that 31% IRR compares very favorably to the 5 year and 10 year returns of several public market indices also noted on this same chart.

FIGURE 1: CTAN RETURNS VS. PUBLIC MARKET RETURNS

Central Texas Angel Network Returns Compared to Public Market Investments [1]

	5 Yr. Return	10 Yr. Return
DJIA	9.9%	11.8%
NASDAQ	14.0%	15.8%
SP500	11.8%	13.0%
Russell 2000	6.9%	9.9%
Emerging Mkt.Index	0.9%	3.2%
Bloomberg VC Index [3]	21.1%	16.4%
CTAN Life of the Group 17 Years [2]	**31.0%**	

[1] Source – JP Morgan
[2] Source - 115 Outcomes of 64 shutdowns and 51 exits
[3] 66% of all VC funds yield <10% (CB Insights)

CENTRAL TEXAS ANGEL NETWORK

Source: Bloomberg and JP Morgan

"HOME RUNS" ARE AS INSTRUMENTAL TO SUCCESS IN ANGEL INVESTING AS THEY ARE IN PUBLIC MARKET INVESTING

In order to better understand the potential impact of "home runs" in public markets, I focused on the public market indices which are the Dow Jones Industrial Average (DJIA), the S&P 500 and the NASDAQ 100. These three indices are snapshots of the equities markets that can provide investors with an idea as to how the overall stock market is performing. The chart below shows us the cumulative weighted average total returns over a 5 Year and 10 Year period. I have been provided this data by JP Morgan associates using the Bloomberg data base. On the chart below the weighted average total return is a calculation of the return of these respective portfolios according to the market capital weights of each stock in their corresponding index. These index weightings are pulled using the Bloomberg index member weightings. The weighted average total return is the cumulative return on the various indexes, in this case five and ten year cumulative returns.

FIGURE 2: CENTRAL TEXAS ANGEL NETWORK RETURNS VS. PUBLIC MARKET RETURNS

CTAN Returns Vs. Public Market Returns (1)

	5 Year	10 Year
Source	**Cumulative Weighted Avg Total Return**	**Cumulative Weighted Avg Total Return**
DJIA	137%	612%
DJIA (Excluding Top 2 performing)	57% (58%)	242% (60%)
S&P 500	152%	804%
S&P 500 (Excluding Top 10)	104% (32%)	417% (48%)
NASDAQ 100	231%	1359%
NASDAQ 100 (Excluding Top 10)	148% (36%)	618% (55%)
CTAN IRR – 17 years	31%	
CTAN IRR (Excluding Top 4 exits)	12% (61%)	

Note: Number in parentheses is the % decrease in returns vs the baseline.

(1) Source: Bloomberg and JP Morgan

CENTRAL TEXAS ANGEL NETWORK

Source: Bloomberg and JP Morgan

With this background in mind we can now look at the three public market indices noted above. To gauge the importance of "home runs" in public markets, I have excluded the top two performing stocks in the DJIA. In the S&P 500 I have excluded the top 10 performing stocks, and finally in the NASDAQ 100 I also excluded the top 10 performing stocks. The difference in returns over the five year and ten year periods are dramatic as seen on the chart.

In reviewing the DJIA figures, the impact of excluding the top two performing stocks is very dramatic in terms of overall returns. The DJIA cumulative return over five years is 137%, however that return drops to 57% when excluding the top two performing companies. This is a 58% drop in returns, which is very compelling in terms of overall returns. Jumping to the ten year return it shows an overall cumulative return of 612% compared with all stocks in the index, compared to 242% when excluding the top two performing stocks for 60% reduction in returns. For reference the top two performing stocks in this index being excluded are Apple and Microsoft.

"HOME RUNS" ARE AS INSTRUMENTAL TO SUCCESS IN ANGEL INVESTING AS THEY ARE IN PUBLIC MARKET INVESTING

In looking at the performance of the S&P 500, the weighted average total return is 152% compared to 104% when excluding the top 10 performing stocks for a 32% decline. It is a much larger drop at the ten year mark, going from 804% total cumulative return to 417% total cumulative return excluding the top 10 performing stocks or a 48% decline. The NASDAQ 100 return also has a big impact when excluding the "home run" companies. The five year weighted average cumulative total return is 231% for all companies, compared to 148% when excluding the top 10 performing stocks or a 36% lowering of returns. The ten year return for the NASDAQ 100 shows a weighted average cumulative total return of 1359%, yet when excluding the top 10 performing stocks this index falls to 618% or a significant 55% decline.

When we shift to the CTAN portfolio of returns as noted on the previous chart, the internal rate of return is a very good 31%. However as noted at the bottom of the same chart with public market returns, when we exclude the four highest IRR performing exits, the CTAN IRR falls to 12%. This is still a respectable return but down 61% when compared to the return with all exits. Clearly having "home runs" in this angel portfolio dramatically increases the IRR. Another point of reference with respect to "home runs" impacting angel group returns and the need to build an angel portfolio is TCA Venture Group (formerly Tech Coast Angels). Their overall return on 247 outcomes is 6.4x with an Internal Rate of Return of 25%. If you back out their six "home runs" the return multiple falls to 1.8x and the IRR drops to 9%.

KEY TAKEAWAYS

- After reviewing this data one can conclude that "home runs" are important to achieve excellent returns in angel investing AND also in public marketing investing. Building a portfolio in angel investing AND public market investing is an important consideration when endeavoring to invest in these areas. Again, as noted on the first chart, successful angel investing can outperform public markets noting the total Central Texas Angel Network IRR of 31% versus several public market returns also provided on the first chart. There are many variables in building a successful angel investing portfolio including investing in the appropriate number of companies, investing in initial rounds versus follow-on rounds, investing in different verticals, consideration for first-time and experienced CEO's/founders, and other important factors.

AUTHOR: *Rick Timmins, Central Texas Angel Network and ACA Board Member.*

PUBLICATION DATE: *November 2023*

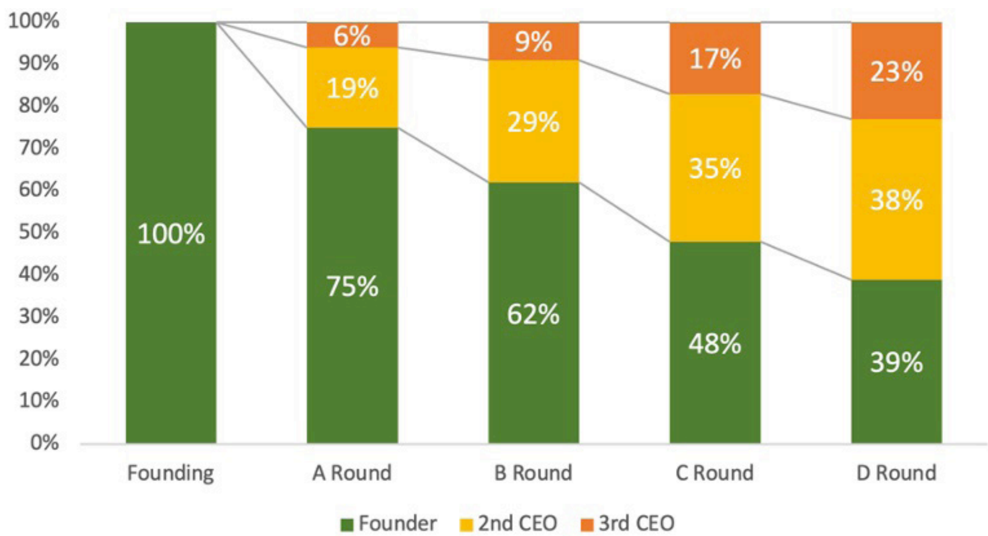
ARE CEO TRANSITIONS REALLY THAT BIG OF A DEAL?

Every experienced angel knows how important the quality of the founding team is when selecting investments. We've all heard the maxims: "Team, Market, Product, in that order!" "An A+ team with a B+ plan will out-perform a B+ team with an A+ plan every time." And so forth. Experienced angels also instinctively know that CEO swaps are very risky and potentially costly. As a result, angels are always looking for a CEO who can "scale." That magical person who not only has the skills to go from $0 to $1M and $1M to $10M, but also from $10M to $100M and even beyond.

Unfortunately, skilled CEOs with that kind of versatility are actually pretty hard to find. Probably harder than we realize, because we somewhat regularly find ourselves in angel investing situations where our founding team has run out of talent relative to the job at hand. "Ooops. Are we now dead in the water?" we wonder. Can we attract new talent to this struggling business? Would we be better off trying to find a coach and mentor (and maybe a COO or other senior manager) to help? There is probably no single universally applicable answer to these questions, because the facts and unique circumstances around each situation are going to differ, but perhaps there is some data that would help?

How Prevalent Are CEO Changes?

FIGURE 1: National CEO Transition Experience



	Founding	A Round	B Round	C Round	D Round
Founder	100%	75%	62%	48%	39%
2nd CEO	0%	19%	29%	35%	38%
3rd CEO	0%	6%	9%	17%	23%

Source: The Founders Dilemma, Noam Wasserman

Academic and author Noam Wasserman, perhaps best known for his 2012 book The Founder's Dilemmas: Anticipating and Avoiding the Pitfalls That Can Sink a Startup, offers some data on the prevalence of founder transitions. Wasserman looked at quantitative data from 10,000 startups. Wasserman shows that CEO transitions are remarkably common with startups. One quarter have replaced their CEO by the time they raise a Series A, and, shockingly, less than 40% are still on their first CEO by the time they raise a Series D round of funding. In fact, nearly a quarter of those are on their THIRD CEO by that point.

ARE CEO TRANSITIONS REALLY THAT BIG OF A DEAL?

What Are The Consequences of CEO Transitions?

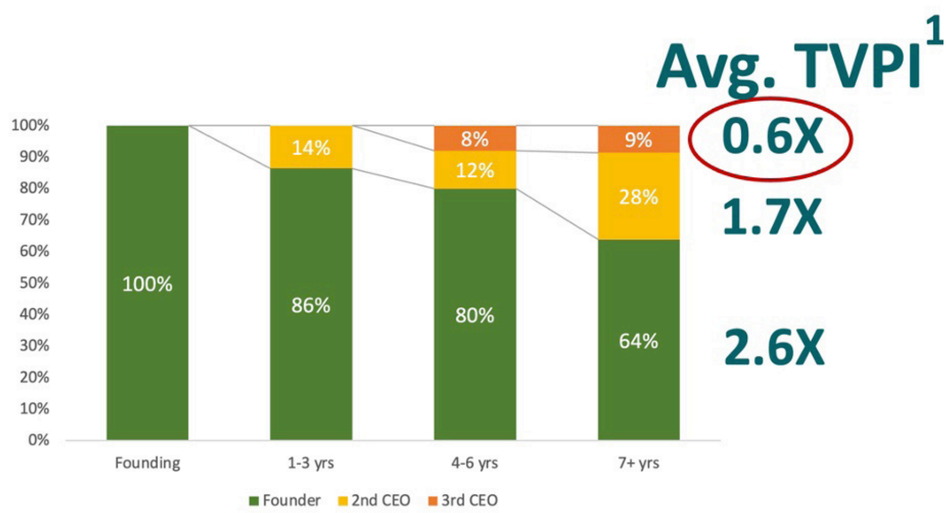
More than half of the companies in Wasserman's study had changed CEOs by the Series C round. But at what cost? Is this just the natural process of bringing in professional leadership as a company scales and matures, or are investors taking a hit on these transitions?

At Launchpad Venture Group we wanted to know the answer to that question of whether investors are taking a hit on CEO transitions. Our diligence process already stressed the importance of finding the best possible teams we could, and on trying to figure out whether those teams had the ability to scale. But was that work worthwhile? What did it cost us to be wrong?

Using outcomes data from the "exited" subset of the 140 companies we have backed in our 20+ year history, our resident data guru Alex Brown took a look at CEO transitions and how they turned out for us.

What did we learn? Two things:

FIGURE 2



	Founding	1-3 yrs	4-6 yrs	7+ yrs
Founder	100%	86%	80%	64%
2nd CEO	0%	14%	12%	28%
3rd CEO	0%	0%	8%	9%

Source: Launchpad Portfolio Data

In 64% of our companies, the CEO made it more than seven years. Those companies had by far the best return multiples. We saw an average return multiple of 2.6X with single CEO companies. The 28% of companies experiencing just one CEO change were still a winning proposition, showing a 1.7X return multiple as a group, but they were still a much weaker outcome overall – 35% lower. And the companies that needed two CEO changes were money losing as a group, showing an average return multiple of just 0.6X. That is a marked difference; chose a great CEO and you are looking at an average return approaching 3X. Back the wrong CEO and you are lucky to get your money back.

What actionable lessons can we take away from this data? Well, before we draw conclusions, we need to acknowledge three things. First, correlation and causation are not the same and one needs to be careful assuming a causal connection when it could be correlational or two seemingly connected factors which are actually independently connected to a third factor. For example, in this case, common sense dictates that if the CEO is being changed, things are already not going perfectly smoothly. However, I would argue that the converse is also somewhat true – if the CEO is good, that is one less thing to go wrong and therefore you have a better probability of success and higher returns.

Second, it is possible that the reason we saw lower rates of CEO change is that angels are just more patient about replacing CEOs or lack the political power (or legal means) to do so. There is probably some truth to that as a general proposition, but it may not entirely explain the lower rate of CEO changes in our case. Launchpad strongly prefers to lead its rounds, and typically does, and we virtually always take a board or observer seat. We also place fairly large bets and tend to follow on fairly strongly over time, so it is not uncommon for us to hold 10% or more of a company in the later years. So we often have a voice at the table and some voting clout to back it up. And, sure enough, throughout our 20+ year history, we have a track record of initiating CEO changes where we felt they were necessary.

Third, we must acknowledge the difficult dynamics of attracting new CEOs to young companies with shaky financials. It stands to reason that the only companies that are going to be able to attract good replacement CEOs are going to be the solid companies with more potential. Again, that may be the case as a general matter, but it does not fully explain our data. If it is not possible to attract new CEOs to angel backed companies, how were we able to do it 36% of the time? And even with the ones that were extra messy, how were we able to attract a THIRD CEO nearly 10% of the time? Certainly, smaller angel-backed companies may not have quite as easy a time replacing CEOs as bigger more cash-rich companies, but they definitely can do it.

So for us, the three take-aways from this data were clear. The first conclusion was that the time we spend in diligence really evaluating founding teams, and especially founding CEOs, is well worth it. Finding good CEOs who can scale themselves as they grow a company is correlated with much higher average returns. The second conclusion is that even if we don't nail it on the CEO choice, we might still be OK if the opportunity is good and the CEO is decent enough to make some progress before getting replaced. Having to replace a CEO when things are going OK still costs a bit, knocking nearly a third off your returns, but is not fatal. The third conclusion is that when we bet wrong on the CEO, and the company goes on to flounder and cannot attract a "keeper" replacement CEO, we are done for, and, on average, are going to lose money.

FOR LAUNCHPAD, THE THREE KEY TAKEAWAYS FROM THIS STUDY OF CEO TRANSITIONS ARE:

- CEO due diligence is worth the effort – finding a great CEO who can stick and scale will significantly increase your odds, on average.
- With a solid company, a CEO near-miss hurts, but may not be fatal. If a CEO is decent but not great, and the company is able to make some progress despite needing to replace the CEO, investors may still get a positive return. Not as high, on average, as companies with no CEO change, but not necessarily a loss.
- If the CEO is a big miss and second one also needs to be replaced, it is likely game-over. Few startups are going to survive two early CEO changes. If your CEO is not working out, have a bias for action and make the change early, before the company has dug itself into too deep of a hole to attract a decent replacement. Otherwise, on average, you are looking at negative returns.

AUTHOR: *Christopher Mirabile, ACA Chair Emeritus & Launchpad Venture Group Executive Chair*

PUBLICATION DATE: *October 2023*

ANGEL INVOLVEMENT ON BOARDS IMPROVES RETURNS

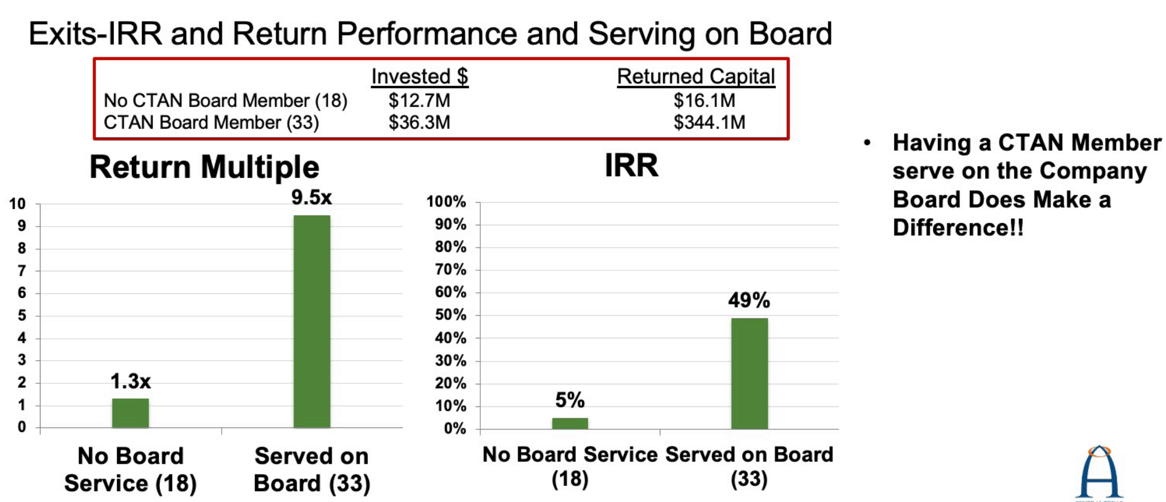
We all know that the success in angel investing involves many factors. We continue to understand this as we develop more analysis to support this belief. Examples of these factors include valuations, due diligence, building a portfolio of companies, business sectors, angel engagement and others. Several monthly ACA Data Insights have been published on these items and others.

One of the items the Central Texas Angel Network (CTAN) reviewed was angel engagement with start-up companies. CTAN is a large angel network in Austin, Texas formed in 2006. Through 2022 CTAN has invested over $125M in 208 companies. CTAN has no fund, so when an investment is made in a company by a member, his/her individual name or entity is on the cap table. There are many ways angel engagement can occur with an entrepreneur and start-up company. One of the primary ways for angels to engage with entrepreneurs is through a personal relationship as a mentor/advisor which can occur both prior to and after an investment has been made. Individuals serving as an advisor can assist with hiring/recruiting, customer engagement, and product development. These roles are generally unpaid.

Another type of engagement is serving as a Board member or Board observer for a start-up. Start-up boards are generally formed when first outside money is invested in a start-up company. In many cases this outside money is from angel investors. Generally speaking when enough CTAN members invest money in a start-up an initial board is formed. In the case of CTAN, when we lead the due diligence of a company and at least 5 or more members are investing collectively $400,000 or more we require a Board be formed with a Board of Directors. This requirement is specified in the Term Sheet we negotiate with the entrepreneur and it will stipulate that one of the Board members will be a CTAN member. Often times this is a CTAN member who participated in the due diligence and has experience or knowledge of the start-up's business. This Board member must have the approval of the founder. Usually, Board Members (and observers) are compensated through stock options.

CTAN is a very data-centric angel group and we wanted to look at our portfolio performance to determine if Board service by a CTAN member was making a difference. Of the 208 companies in which CTAN members have invested, a total of 64 have shut down or gone out of business, 51 companies have provided members with an exit, and 93 companies are still in business. We decided to look at the 51 companies that provided members with an exit. Shown below is a chart which measures the return multiple and internal rate of return for exited companies. Of the 51 exited companies 33, or 65% had a CTAN Board member and 18, or 35% did not have a CTAN member serve on the Board:

FIGURE 1: ENGAGEMENT DRIVES RETURNS



Source All Central Texas Angel Network exits through 2022

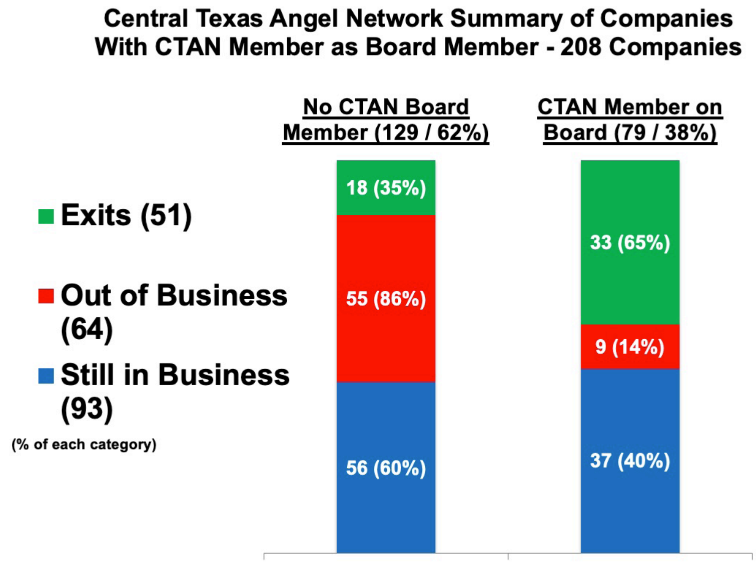
ANGEL INVOLVEMENT ON BOARDS IMPROVES RETURNS

The results are dramatically different. In terms of a return multiple those companies with a CTAN Board had a multiple of 9.5x versus a 1.3x in companies with no CTAN member serving on the Board. The internal rate of return (IRR) also produced dramatically different results. The IRR without a CTAN Board member was 5% compared to an IRR of 49% when there was a CTAN member serving on the Board.

Notably, a total of $49.0M was invested in the companies with exits and $36.3M or 74% was deployed to companies with a CTAN Board member versus $12.7M or 26% which was invested in companies where we did not take a Board seat.

Finally, the failure rate was lower for companies where there was a CTAN Board member. Of the 64 companies that went out of business, only 9 of these companies or 14% had a CTAN Board member when the investment was made. In contrast, 65% of the exits and 40% of the active companies had a CTAN Board Member per the chart below.

FIGURE 2: Summary of Companies With CTAN Member as Board Member - 208 Companies



Source All Central Texas Angel Network exits through 2022

There are many factors likely impacting these results, but the execution abilities or performance of the CEO and his/her team primarily led to this success. Other factors include due diligence on the 33 companies that had Board service and in most cases the 18 companies without Board service did not qualify for due diligence. The issue of Board service is another metric to help determine before an investment is made and during the life cycle of the start-up to help determine if a company will be successful. Another similar study done by Alex Brown of Launchpad Venture Group also showed 20% better returns from companies in which one of their members had a Board seat versus companies without a Board member.

It should also be noted that the Ann and Bill Payne ACA Angel University offers a course on how to effectively serve as a Board member of a start-up company.

THE TAKEAWAY

- While not the only factor in determining the success of a start-up company, having a knowledgeable and active Board member can help drive success in a start-up company and is a factor that should be evaluated.

AUTHOR: *Rick Timmins, Central Texas Angel Network and ACA Board Member.*

PUBLICATION DATE: *November 2023*

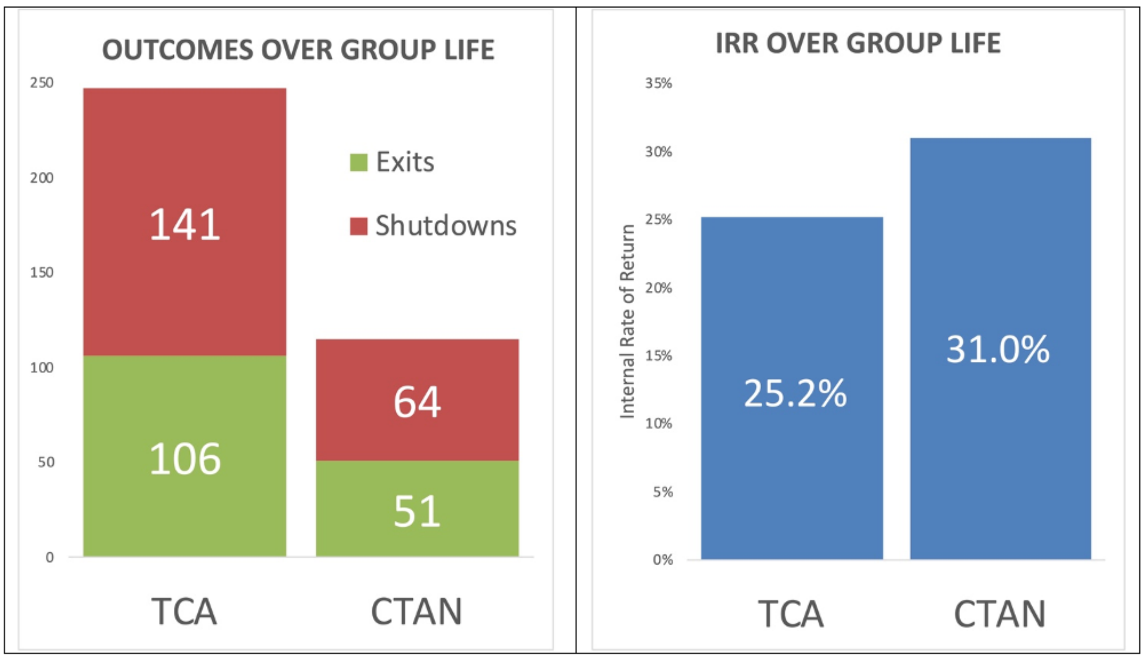
ANGEL RETURNS BEAT ALL ASSET CLASSES BUT POSE GREATER RISK

We all know that investing in startup companies is inherently risky. Over half of early-stage investments typically fail to return any capital, with the top 10% usually returning 85-90% of all the cash proceeds. The game is won on “grand slam home runs,” not “singles.”

In order to justify investing in an asset class with this high amount of failure risk we would need to see much higher returns. With an adequately diversified portfolio of early-stage companies, there is compelling evidence that the return on early-stage investment can indeed be compelling. This data insight article explores the comparison with other asset classes.

Two of ACA’s largest angel groups have kept track of IRR (internal rate of return) for all outcomes. The IRR for Central Texas Angels Network’s 115 outcomes between 2006-2022 is 31% and the IRR for TCA Venture Group (formerly Tech Coast Angels)’s 247 outcomes between 1997-2022 is 25% (assuming one invested equal amounts in all companies):

FIGURE 1: THE IRR FOR TCA VENTURE GROUP AND CENTRAL TEXAS ANGELS NETWORK



Source: 247 TCA Venture Group (formerly Tech Coast Angels) outcomes from 1997-2022; 115 Central Texas Angel Network outcomes from 2006-2022.

Both angel group portfolios offer statistically significant sample sizes, and three previous large studies by Professor Rob Wiltbank also showed IRR’s in a similar range: 27% (2007 study), 22% (2009 study) and 22% (2016 study).

ANGEL RETURNS BEAT ALL ASSET CLASSES BUT POSE GREATER RISK

But how does this compare to other asset classes for comparable periods of time? Here is data for a range of other equity investments:

FIGURE 2: ANGEL RETURNS COMPARE TO OTHER POTENTIAL INVESTMENTS

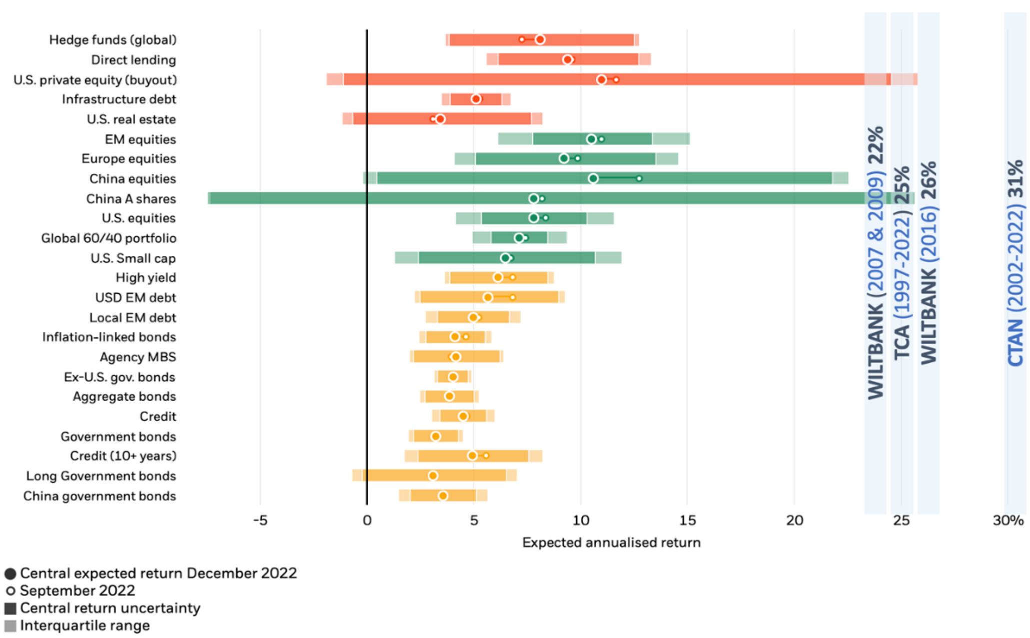
Index	5 Year Return	10 Year Return	15 Year Return
DJIA	9.9%	11.8%	9.4%
NASDAQ	14.0%	15.8%	12.7%
SP500	11.8%	13.0%	9.8%
Russell 2000	6.9%	9.9%	7.7%
Emerging Market Index	.9%	3.2%	1.4%
Bloomberg VC Index*	21.1%	16.4%	10.3%

CTAN (Life of the Group — 17 Years) 31.0%
TCA (Life of the Group – 25 Years) 25.2%

**Note: Per CB Insights, 66% of all VC funds yield <10%*
Source: JP Morgan, Central Texas Angel Network (2006-2022), TCA Venture Group (1997-2022)

Blackrock has done extensive modeling of returns by asset class for public equities and these angel returns beat even the highest quartiles for every class of investment covered in the Blackrock Study:

FIGURE 3: ASSET RETURN EXPECTATIONS AND UNCERTAINTY 20 YEAR RETURN TIME PERIOD

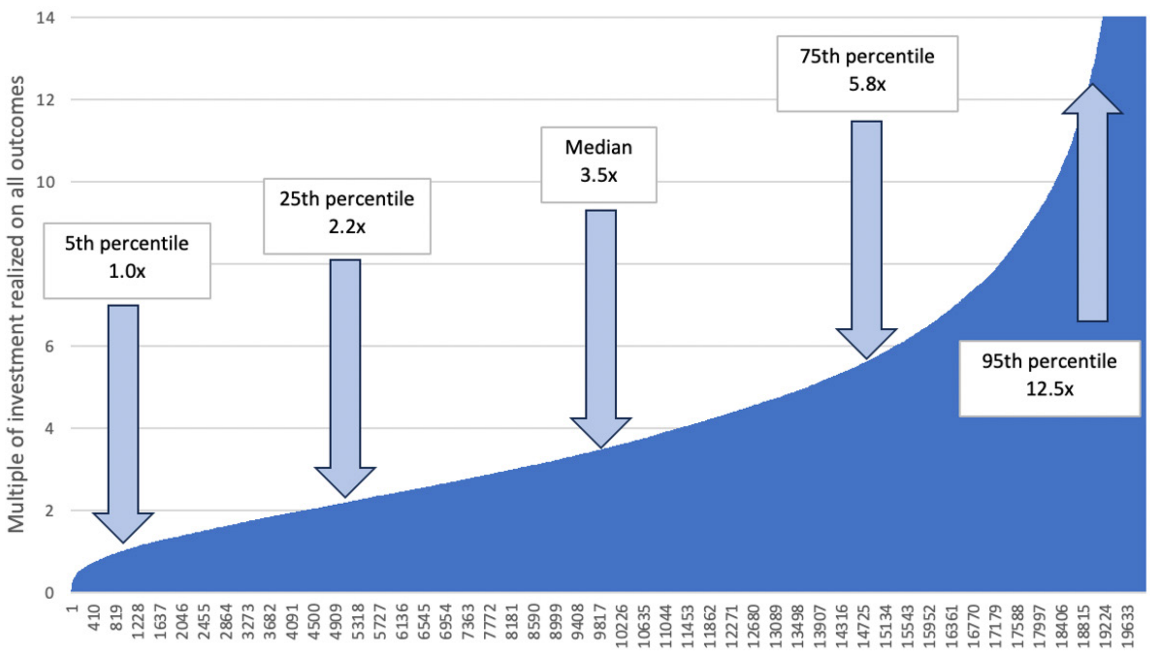


Source: Blackrock Investment Institute, February 2023 (Data as of 31 December 2022); CTAN 2006-2022; TCA (1007-2022), Wiltbank (2007, 2009, 2016)

ANGEL RETURNS BEAT ALL ASSET CLASSES BUT POSE GREATER RISK

Given this strong performance advantage in the early-stage asset class, why bother with diversification outside the asset class? Because the dispersion of returns is much higher in early stage investing, meaning that even with a diversified portfolio within the early-stage asset class, these higher returns are far from assured. At TCA, 8 companies representing 3% of the outcomes produced 77% of the dollars returned. Using a Montecarlo simulation of 20,000 random portfolios of 25 investments based upon TCA's first 159 outcomes shows an extremely large range of portfolio returns:

FIGURE 4: DISTRIBUTION OF OUTCOMES FOR PORTFOLIO OF 25 INVESTMENTS

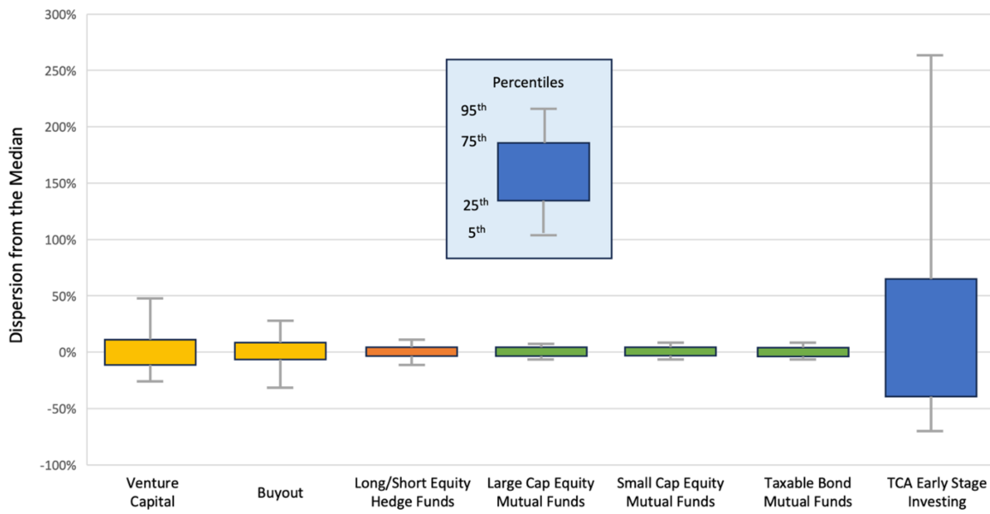


Source: Based on first 159 outcomes of TCA Venture Group and random selection of investments using Montecarlo simulation of 20,000 outcomes (including exits and shutdowns).

Comparing this extreme dispersion of outcomes to other asset classes shows how much greater is the range of outcomes for the early-stage asset class compared with other asset classes:

ANGEL RETURNS BEAT ALL ASSET CLASSES BUT POSE GREATER RISK

FIGURE 5: DISPERSION OF RETURNS FOR ACTIVE MANAGERS IN VARIOUS ASSET CLASSES



Note: Returns for venture capital and buyout are based on net internal rates of return since inception for vintage years 1980-2018; returns for hedge funds and mutual funds are based on trailing 5-year annualized returns net of expenses with income reinvested through 12/31/2019. Source: Morgan Stanley, Morningstar Direct and PitchBook; TCA Venture Group Montecarlo simulation of 20,000 outcomes in a portfolio of 25 investments.

KEY TAKEAWAYS

- Angel Investing as an asset class offers potential returns far greater than any other asset class, given the possibility of achieving extraordinary multiples (exceeding 100x) on a few companies (TCA has had 4 out of 247 outcomes in this category).
- Diversification is critical given the rare nature of those "grand slam home runs", and a smart angel investor should seek a robust number of early-stage investments in his/her early-stage portfolio.
- While other asset classes offer lower returns, the dispersion around those returns is far lower – so it is wise to keep early-stage as only a small portion on one's investable assets. 10-20% is often cited as a good rule of thumb.

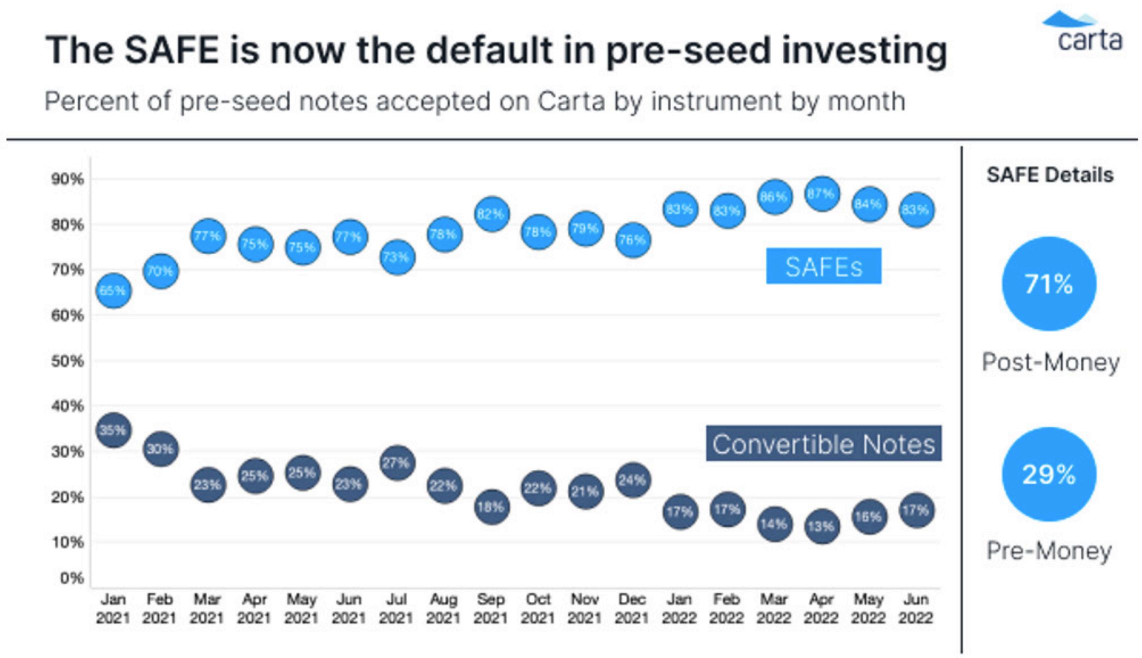
AUTHOR: *John Harbison, Chairman Emeritus of TCA Venture Group.*

PUBLICATION DATE: *May 2023*

ARE SAFE'S TRULY EVERYWHERE? THE ROLE OF SAFES IN ANGEL-STAGE DEALS

SAFEs! They're apparently everywhere. And it is easy to understand why this perception persists. Y Combinator, a leading incubator, invented the original (pre-money) SAFE (Simple Agreement for Future Equity) in 2013 to provide an easy, fast and cheap way to fund the dozens of startups comprising a Y/C batch. Their rationale was simple. Companies receiving small amounts of cash should not spend much of that on legal fees or waste time negotiating complex legal terms so early in a startup's journey. As Carta indicates, the SAFE has become the "default" for earliest stage deals:

FIGURE 1: PERCENT OF SAFES AS PRE-SEED NOTES ON CARTA



Source: Carta

But the SAFE note quickly escaped, COVID-like, from the pre-Seed incubator lab to the general startup population, and not just for the earliest deals. Y/C helped enable this by introducing the Post-Money SAFE in 2018, fixing some of the more egregious problems with SAFEs, principally the lack of transparency about valuations when multiple SAFEs convert to equity. The Post-Money SAFE, by design, made it easier for SAFEs to be used in larger financing rounds and has largely replaced the original SAFE.

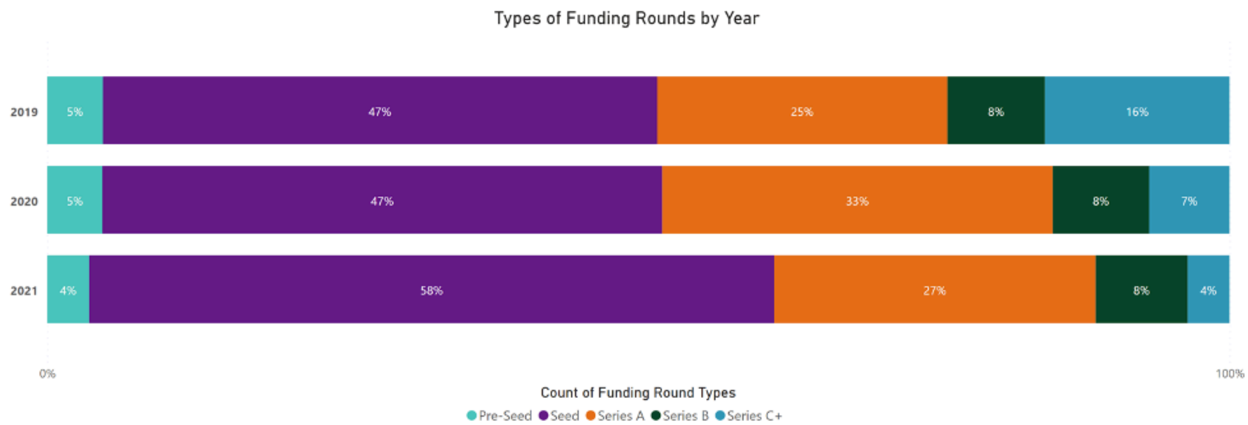
Startup CEOs love SAFEs, not simply for their simplicity and low cost, but also because the original SAFE's terms tilted the balance of power sharply towards CEOs against investors. At the same time, the Post-Money SAFE's emphasis on valuation transparency brought a bit more balance to that relationship. But serious problems remain, particularly the exclusion of investors from having governance rights or roles. Since Y Combinator plays an outsized role in the life of their portfolio companies, it didn't need many of those priced round protective and governance provisions to ensure a dominant role in the next stage of a portfolio company's journey. Lawyers, too, love SAFEs. Executing a SAFE requires very little work as there is very little to decide, negotiate or explain.

So, are SAFEs truly dominating early-stage investing? Such is the common perception. But what about angels? What is the role of SAFEs in our deals? To answer this question, let's first identify the stage at which angels most commonly invest.

ARE SAFE'S TRULY EVERYWHERE? THE ROLE OF SAFES IN ANGEL-STAGE DEALS

Whomever is doing the bulk of those pre-seed deals examined by CARTA, it is probably not America's leading professional angel groups. FIGURE 2, drawn from the ACA's Angel Funders' Report database, examines the funding rounds in which angel groups participated between 2019 (the year after the Post-Money SAFE was introduced) and 2021. FIGURE 2 indicates that pre-seed deals accounted for only 4% to 5% of all ACA angel group rounds. In contrast, Seed and Series A collectively comprised 70% to 80% of ACA angel rounds, with Seed stage, by itself, accounting for nearly 50%. Seed is clearly the most popular stage at which angel groups invest:

FIGURE 2: ANGEL GROUP ROUNDS (2019-2021)



Source: ACA Angel Funder's Report Database

Pre-Seed, which CARTA has demonstrated is dominated by SAFEs, accounts for only a tiny fraction of ACA angel group deals.

So, what about Seed Stage, the angel's most frequent investing stage? Is it also dominated by SAFEs? FIGURE 3 examines the different types of securities used at each stage at which ACA angel groups invested from 2019 through 2021. For all stages of angel rounds the percentage of SAFEs increased from 3.5% in 2019 to 8% in 2020, and remained at that level in 2021.

Examining deals by stage, for pre-Seed, SAFEs more than doubled in frequency between 2019 and 2020, jumping from 10% to 28% of all pre-Seed deals done by ACA angel groups. However, by Seed stage, the percentage of SAFEs declined by nearly 60%, from 28% at pre-Seed to roughly 12% at Seed stage in 2020 and 2021. Seed stage angels decisively preferred traditional priced equity and convertible notes, which comprised approximately 85% of all Seed deals. And it was traditional preferred equity that dominated Seed deal structures, accounting for nearly 50% of all deals in both 2020 and 2021. And, of course, Series A and later stages were decisively dominated by preferred equity deal terms.

FIGURE 3: DEAL STRUCTURES BY TYPE OF ROUND (2019 - 2021)

	Common Stock	Convertible	Preferred Equity	SAFE	Grand Total
2019	4.2%	31.4%	60.9%	3.5%	100%
Pre-Seed	0.0%	60.0%	30.0%	10.0%	100%
Seed	5.5%	35.9%	53.9%	4.7%	100%
Series A	2.5%	18.6%	77.6%	1.2%	100%
Series B	3.6%	27.3%	69.1%	0.0%	100%
Series C	0.0%	18.2%	81.8%	0.0%	100%
2020	5.2%	29.7%	56.4%	8.7%	100%
Pre-Seed	10.3%	46.2%	15.4%	28.2%	100%
Seed	3.9%	35.5%	48.8%	11.8%	100%
Series A	8.6%	12.6%	77.5%	1.3%	100%
Series B	6.8%	20.3%	72.9%	0.0%	100%
Series C	0.0%	32.0%	68.0%	0.0%	100%
2021	2.5%	29.2%	60.2%	8.0%	100%
Pre-Seed	5.6%	44.4%	22.2%	27.8%	100%
Seed	2.3%	36.8%	48.9%	12.0%	100%
Series A	2.0%	19.9%	76.2%	2.0%	100%
Series B	5.0%	11.7%	83.3%	0.0%	100%
Series C	0.0%	40.0%	53.3%	6.7%	100%
Grand Total	4.1%	30.2%	59.0%	6.7%	100%

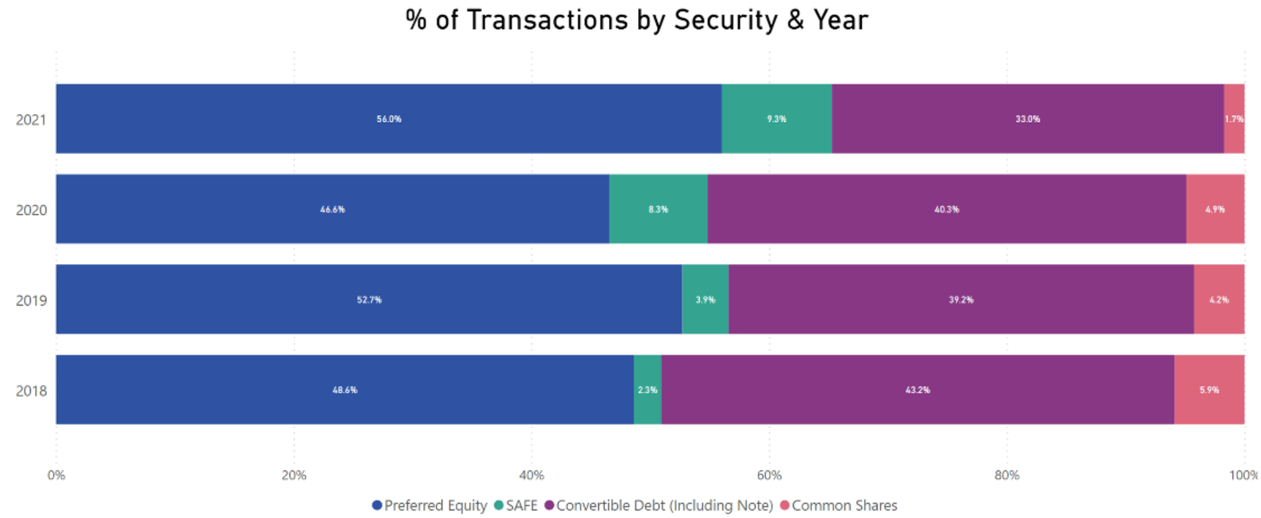
Source: Angel Funder's Report Database

As CARTA has demonstrated, it is undeniable that SAFEs have made a major impact on pre-Seed funding, though less so (according to ACA data) when angel groups participated in those pre-Seed rounds. SAFEs remain prevalent for incubator and earliest stage startup hub deals, stages typically prior to major angel investing.

But when it comes to deals done by sophisticated angel groups, for whom protective provisions and mature governance really matter, SAFEs have not made much of an impact, amounting to less than 10% of deals at all stages in 2021. And remember that 2021 was the most management-friendly deal year, with the highest valuations on record. Another reason for the preference for priced rounds is that these rounds clearly start the clock on the holding period for QSBS favorable tax treatment.

ARE SAFE'S TRULY EVERYWHERE? THE ROLE OF SAFES IN ANGEL-STAGE DEALS

FIGURE 4: % OF ANGEL DEALS BY DEAL STRUCTURE



Source: Angel Funder's Report, 2022

KEY TAKEAWAYS

- For earliest stage deals, when little is known and complex deal structures are less relevant, SAFEs offer speed, simplicity and low cost.
- By the time companies need to raise a true Seed stage angel round, they often have to deal with more complex investor, employee, partner, customer, competitor and IP matters. Experienced angels know that these issues call for more sophisticated deal terms. Convertibles and Priced Equity deals give both investors and management greater protections and clearer visibility.
- And governance really starts to matter at Seed stage. This has recently and amply been demonstrated by the reappearance of Boards and serious governance as critical deal terms. Good governance promotes more resilient startups by being better able to deal with today's tougher financial and operational challenges.

AUTHOR: *Ronald Weissman, Band of Angels and Chair, Angel Capital Association*

PUBLICATION DATE: *April 2023*

INVESTING DURING UP AND DOWN CYCLES –WHICH PRODUCES BETTER RETURNS?

Early-Stage investing is inherently cyclical, and for the first time in over a decade we are experiencing a downcycle. An important question leaps out: Is it better to invest more or less during a downcycle?

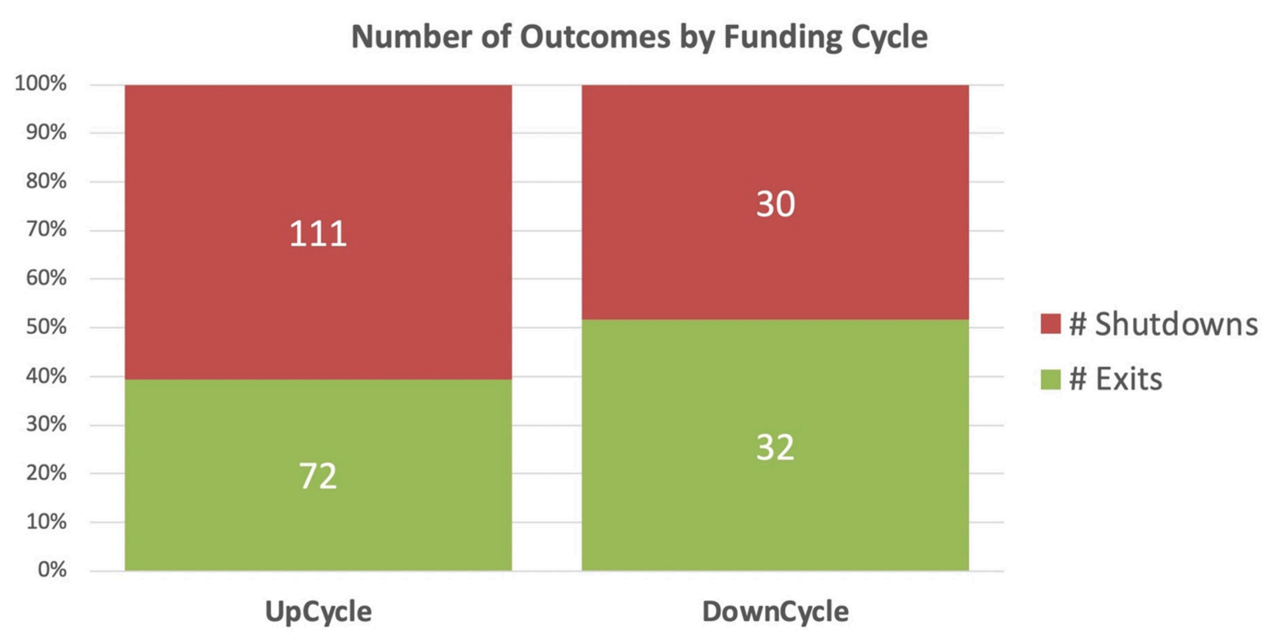
Conventional wisdom suggests that companies receiving initial investment during a downcycle should do better than companies receiving initial funding during upcycles. This is presumably because the hurdle for receiving investment is higher (meaning the companies are better) and competitors are less likely to get funding (or at least there is a head start over those competitors that take longer to get funding).

But is that conclusion supported by data? Apparently not – let's go over the analysis.

To answer this question, we look at data from TCA Venture Group. TCA has invested in 520 companies since 1997 and had 247 "outcomes" with 106 returning some cash (but only 79 of these returned more than the amount invested). 25% of those outcomes were initially funded during downcycle years (2001-2003 and 2008-2011) with the rest during the upcycles. If you had invested an equal amount in all 247 of those outcomes, your return would be 6.3x. But what does this data set say about returns by (up or down) cycle?

A higher percentage of companies receiving initial funding during downcycles eventually reached exits compared to those initially funded during upcycles – 52% vs 39%. At face value, this supports the conventional wisdom that it is better to invest during downcycles:

FIGURE 1: NUMBER OF OUTCOMES BY FUNDING CYCLE

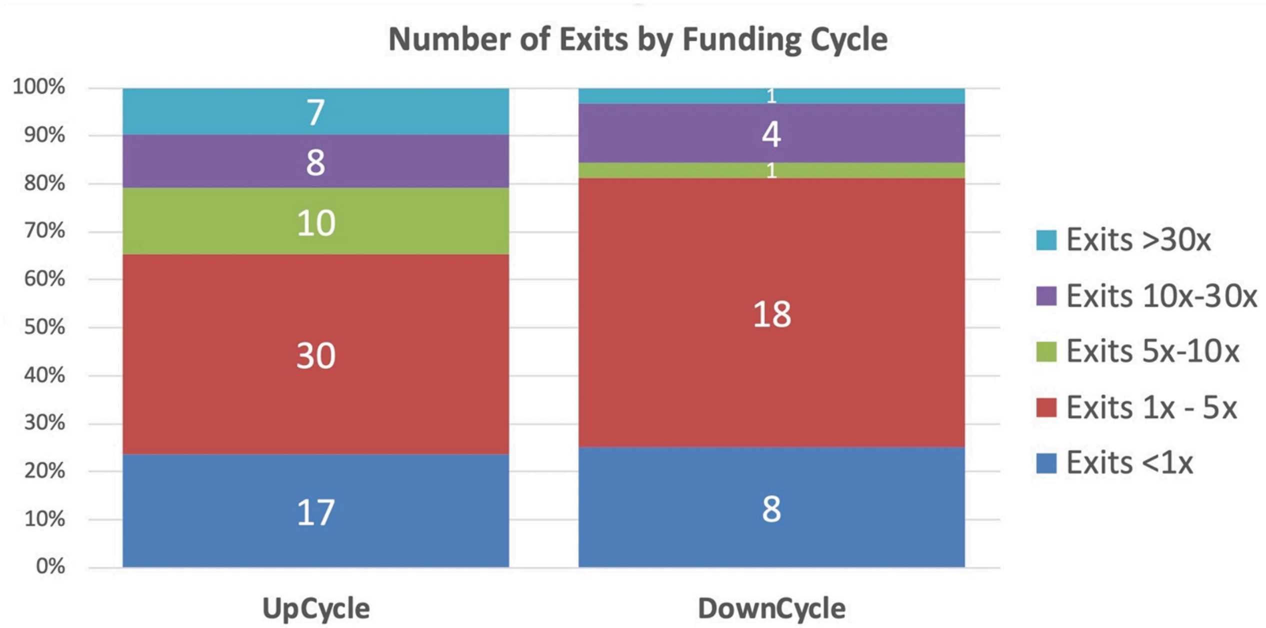


Source: Source: Analysis of 247 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2022.

INVESTING DURING UP AND DOWN CYCLES –WHICH PRODUCES BETTER RETURNS?

However, those exits from the downcycle companies seem to be much less likely to become big home runs and realize outsized multiples:

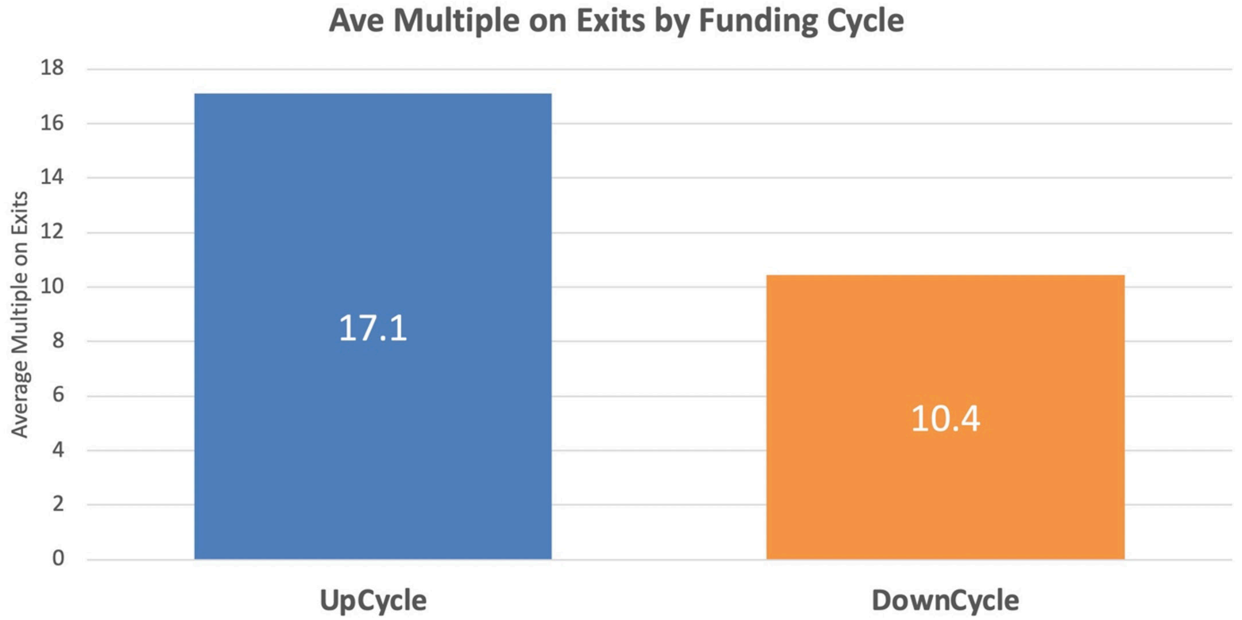
FIGURE 2: NUMBER OF EXITS BY FUNDING CYCLE



Source: Analysis of 247 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2022.

As a result, the average cash-on-cash multiple realized for exits of companies born during the upcycle is dramatically higher – 17x for exits of companies initially funded during upcycles and 10x for companies initially funded during downcycles:

FIGURE 3: AVERAGE MULTIPLE ON EXITS BY FUNDING CYCLE

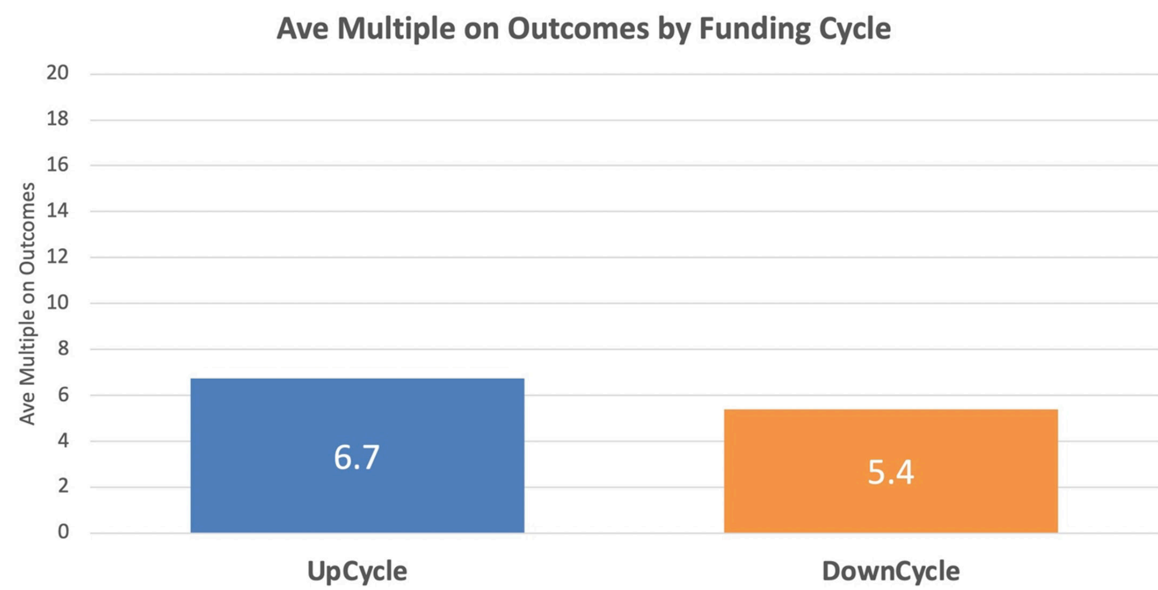


Source: Analysis of 247 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2022.

INVESTING DURING UP AND DOWN CYCLES –WHICH PRODUCES BETTER RETURNS?

Even after factoring in the greater percentage of shutdowns in the upcycle group, average cash-on-cash multiple realized for upcycle outcomes (exits + shutdowns) is higher – 6.7x for outcomes of companies initially funded during upcycles and 5.4x for companies initially funded during downcycles:

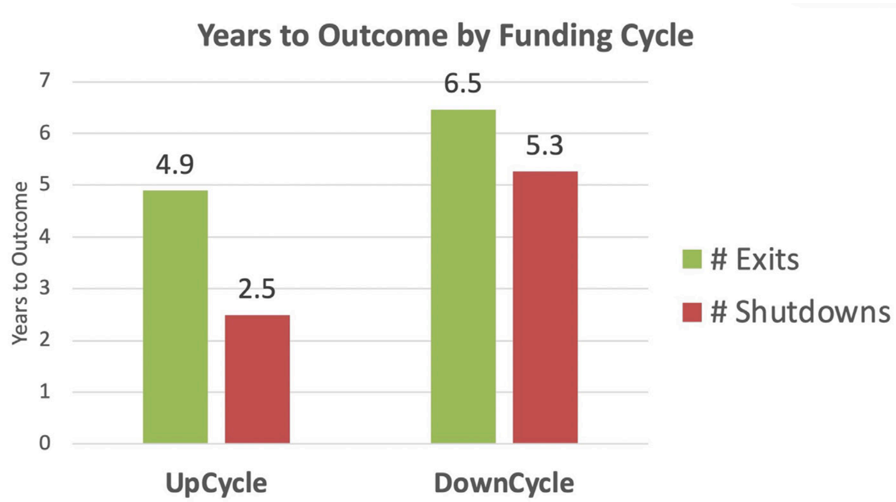
FIGURE 4: AVERAGE MULTIPLE ON OUTCOMES BY FUNDING CYCLE



Source: Analysis of 247 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2022.

Another interesting insight is that the time to shutdown for the companies initially funded during downcycles is more than twice as long (5.3 vs 2.5 months) compared to the upcycle group. The time to exit is also longer for the companies initially funded during downcycles but it is not as big a difference (6.5 vs 4.9 months). This longer time to outcomes for companies funded during downcycles is perhaps because their traction is slower in a funding constrained environment, or they last longer because they are of necessity more frugal, plus it takes a while for markets to turn so that exits become more plentiful. For the companies initially funded during upcycles, exits come faster because markets are already more receptive to M&A or IPOs.

FIGURE 5: YEARS TO OUTCOME BY FUNDING CYCLE



Source: Analysis of 247 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2022.

INVESTING DURING UP AND DOWN CYCLES –WHICH PRODUCES BETTER RETURNS?

Why might the data show this? Perhaps it is because valuations didn't drop enough during downcycles. Or perhaps during the downturns, investors were especially cautious and risk averse, and that translated into avoidance of the highest risk ventures that might eventually deliver the highest returns. Or it could be that TCA was just "unlucky" and only one of TCA's six exits realizing the highest returns (58x – 368x) fell during those downcycle funding years. Hopefully, we will get a clearer picture when more angel groups that have been around for decades publish similar analysis on their own portfolios, since while 247 outcomes is a large portfolio, the outsized influence of a few grand slam exits may result in errant conclusions. But in the meantime, the TCA data gives us reason to reconsider our assumptions.

A final consideration is that in the current downcycle, valuations of seed stage companies have not fallen as dramatically as later-stage companies and public markets. In previous cycles, the valuation correction was greater. That difference might also have a dampening effect on the ultimate returns from the current crop of companies being funded.

KEY TAKEAWAYS

- Investments in the downcycle may be more likely to reach an exit, but the lower multiples for those exits compared to companies initially funded during the upcycle make the overall multiple realized on a portfolio less for the downcycle ones.
- When investing in a downcycle, expectations should be that it will take longer to reach exits, as well as longer for shutdowns to occur.
- Valuations remaining at relatively high levels despite the downcycle might further constrain returns.

AUTHOR: *John Harbison, Chairman Emeritus of TCA Venture Group.*

PUBLICATION DATE: *March 2023*

HOW MEMBER ENGAGEMENT CAN GROW YOUR ANGEL GROUP'S INVESTMENTS

In the July 2022 edition of ACA Data Insights, the Queen City Angels (QCA) presented "What We Learned from Our Data," a comprehensive study using six years of data related to member engagement. QCA defined "engagement" as a member's commitment to QCA's success and demonstrated by their intellectual contributions and participation in activities key to the organization's mission. QCA members spent 6 months meeting with other investor groups (many ACA members) around the country doing a smart practices study of deal flow and due diligence processes which contributed to the writing of our Standards + Practices Guide. Our members also meet regularly with other groups to gauge DEI smart practices as well. QCA members contribute to our annual Entrepreneur Boot Camp (735 founders have participated in its 22-year history), participate in a weekly Morning Mentoring session with entrepreneurs (over 300 sessions over 18 years), coach and mentor founders and participate in pre-screening companies prior to formal funding app. In total, our members donate 50,000 hours per year coaching founders.

The key activities used to generate the data were focused on individual member attendance at regular investor meetings; serving on deal screening or due diligence teams; post investment governance activities; and/or, serving on standing QCA committees. These activities were collectively used to define "active member (or membership)" in the group, as well as defining member engagement when talking with prospective new members.

To recap from the previous articles, an analysis of the data revealed the following:

1. Member activity more than doubled in the six-year time frame and the percent of active member engagement far exceeded the Pareto Principle in all categories that were analyzed.
2. Service on both due diligence committees and screening committees was broadly distributed throughout the membership. For these committees, engagement doubled over the six years considered.
3. Member engagement kept pace with the expansion of companies being considered. In addition to effectively distributing the required workload, increased member engagement also resulted in increased "speed" of execution as it relates to working companies through the pipeline.
4. The number of companies, at all stages of the pipeline, remained constant or increased over the six-year period. Thus, the increased speed of execution did not come at the expense of having fewer companies in the pipeline. Clearly, the increased member engagement had a very positive effect on QCA's ability to consider more companies for investment and to do it faster.

Note: The data supporting the above outcomes was presented in two previous ACA Data Insights articles in July and August of 2022.

Once the data analysis work was completed and the conclusion reached that increased member engagement had a direct, positive result on the number of companies being considered for investment and the speed in which those decisions were made, the remaining questions relate to the results/outcomes. Did the increased level of engagement result in better results/outcomes?

In this third and final article of the series, an analysis of the data, as it relates to a wide range of results/outcomes, will be presented along with an explanation of how the data (related to member engagement) were measured and evaluated.

Angel Investor Groups, like other volunteer organizations, are enabled by the level of the individual member's engagement. Intuitively, one would believe that the level of engagement, combined with members' experience and expertise, tends to be directly related to an angel group improving its results/outcomes.

HOW MEMBER ENGAGEMENT CAN GROW YOUR ANGEL GROUP'S INVESTMENTS

Given the findings reported in the July and August 2022 ACA Data Insights, QCA members' engagement was higher than expected and clearly indicates a broader distribution of the workload. The findings also indicate more members are gaining valuable experience and developing the needed expertise to better evaluate companies coming through the pipeline and make good investment decisions to improve outcomes. Some important questions that are considered herein include:

Is the measured level of increased engagement creating better results/outcomes?

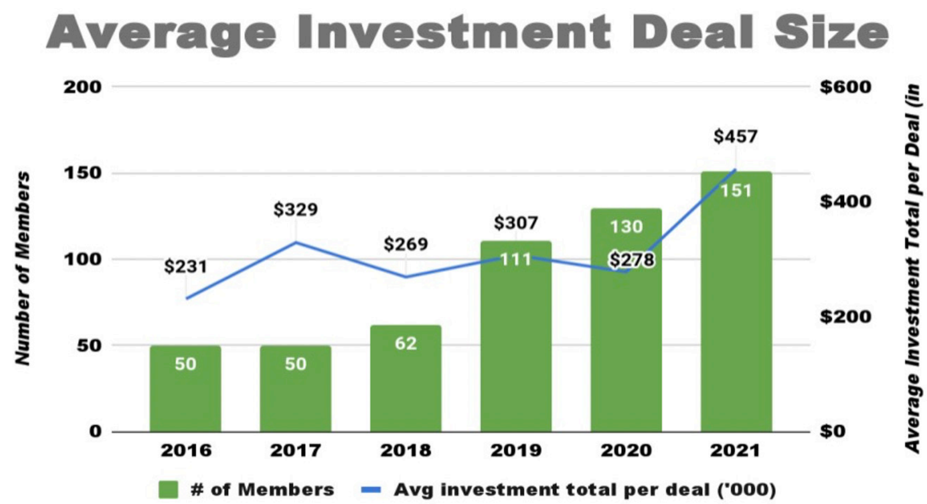
- If yes, which specific results/outcomes?
- How were the results measured and evaluated?
- How are the results related to engagement?

Recognizing that angel investors (like all investors) desire a risk adjusted rate of financial return on their investments, there are several traditional measurements (ROI, IRR, etc.) available to evaluate financial results/outcomes. The data used in this QCA study only covers six years which is typically too short of a period to enable many start-up companies to reach an exit. However, for this study, QCA selected four QCA portfolio companies that did exit in this period, and even though it is a relatively small sample size, the outcomes of these exits were used in the data analysis work.

There are several results/outcomes that have been directly impacted by QCA's increased member engagement:

1. Increased member engagement has had a direct result on the rapid growth in QCA's overall membership, which has increased by 365% over the past six years. Many of the new members cited their desire to be actively engaged with start-up businesses and ''giving-back" as prime motivators for their decision to join the group. In fact, many of the new members were actively recruited by short-term QCA members who touted "engagement" as the driving factor in their decision to become an angel investor.
2. Not only has QCA membership dramatically grown in the past six years, but members are also more diverse today than ever and QCA members reside in 20 states across the country. Both of those trends have been a direct result of member engagement. Typically, those members were searching for an Angel organization that would enable their active involvement.
3. The complete upgrade and major overhaul of QCA's Standard and Practices Guide has been a direct result of the increased membership engagement. Without the higher level of engagement and the added people resources (through membership growth) necessary, the monumental task would never have been undertaken. For reference purposes, over 30 QCA members invested more than 1500 hours to complete the major rewrite of the Standard and Practices Guide and the group is currently investing several hundred hours per year updating and revising the Guide. The completed QCA Standards and Practices Guide has provided QCA with a tool that leads to a very comprehensive due diligence assessment of deals being considered by the group and produces more consistent ranking results for assessing important deal attributes.
4. Increased member engagement resulted in increased referrals and overall, the total group membership grew substantially. Increased membership resulted in larger investment Funds and drove more investment per deal. In the past three years, QCA has raised it largest investment Fund ($23 million, which is more than two times the group's previous largest Fund). Additionally, QCA has increased its annual investment amount from approximately $5M to more than $10M, and the number of active portfolio companies has almost doubled.

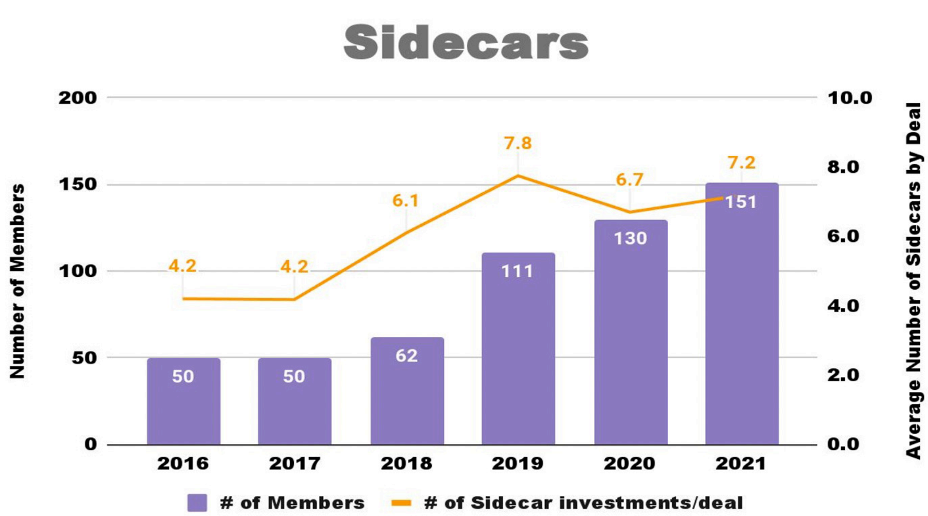
FIGURE 1: AVERAGE INVESTMENT DEAL SIZE



Source: Queen City Angels

As investments from QCA's current active Fund have grown, so have the number of individual "sidecar" investments (QCA utilizes a hybrid-investing model). Specifically for companies funded by QCA during 2021-2022, the average number of sidecar investments increased by 50%, as compared to the sidecar investments made during the 2016-2019 time period. Clearly, as the fund investment grew, the number of individual members became more engaged and increased the average number of sidecar investments per deal.

FIGURE 2: SIDECARS



Source: Queen City Angels

As a result of active member engagement involvement with governance activities, more of the group's portfolio companies are "doing better" than ever before. Specifically, QCA monitors its active portfolio companies and "grades" their performance. Some of the criteria considered includes achieving stated KPIs, achieving financial budget results, managing cash resources, preparing for a successful exit, etc. Using a 0 to 5 scoring system (0 indicating a "writeoff," 1 indicating "diving," 2 indicating "surviving," 3 indicating "striving," 4 indicating "thriving," and 5 indicating a "successful exit"), 85% of the group's portfolio companies are graded as a "3" or higher.

HOW MEMBER ENGAGEMENT CAN GROW YOUR ANGEL GROUP'S INVESTMENTS

In summary, utilizing the criteria stated herein, QCA's increased results/outcomes are directly related to increased member engagement. In fact, as the group reviewed the data, it became clear that ALL its positive results/outcomes are directly tied to increased member engagement. For QCA, member engagement is essential throughout its key activities (member attendance at regular investor meetings; serving on deal screening or due diligence teams; post investment governance activities; and/or serving on standing committees). QCA believes that Engagement + Expertise + Experience + Expectations= Exciting Exits.

KEY TAKEAWAYS

- Increased member engagement has driven more members volunteering in our due diligence process. QCA has "developed" more skilled investors and has improved its ability to evaluate deals coming into our pipeline.
- As our membership has more than tripled in size, QCA has more than doubled the amount it has invested per deal. This has enabled us to more easily lead deals and our aggregation rights have enabled QCA the ability to secure more Board seats.
- The more engaged our newer members have become, the more likely they have been to write sidecar checks.

AUTHOR:

- *Scott Jacobs, Executive Director, Queen City Angels*
- *Tony Shipley, Immediate Past Chair of ACA, Founder/Chairman of the Queen City Angels*
- *Ted Capossela, QCA Board Member, QCA Investor Member*

PUBLICATION DATE: *February 2023*

AVOIDING UNINTENDED CONSEQUENCES OF REVISING THE SEC'S ACCREDITED INVESTOR DEFINITION

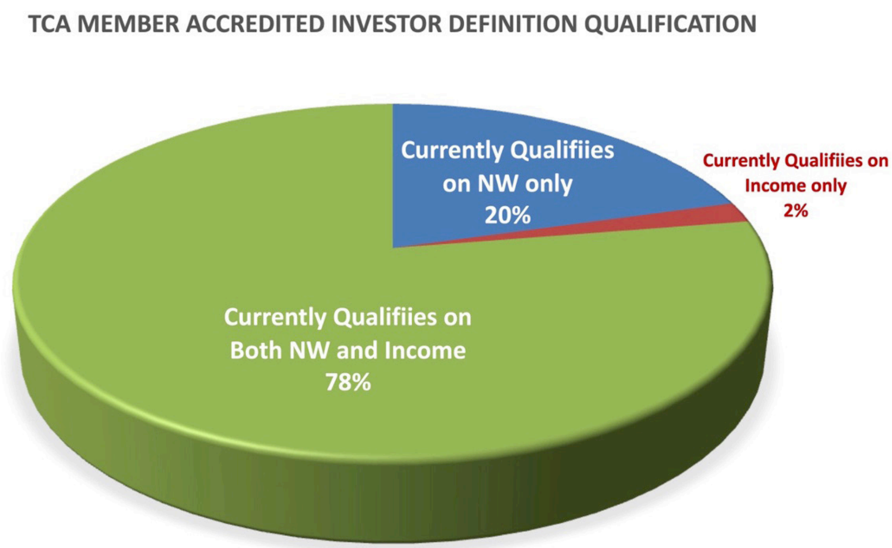
The SEC's Accredited Investor Definition has been in place since 1982. This requirement uses two measures of wealth as surrogates for sophistication as an investor, as well as attempts to mitigate possible negative consequences of what is admittedly a risky asset class. The current SEC regulation requires investors to meet one of the following criteria:

- Net worth over $1 million, excluding primary residence (individually or with spouse or partner)
- Income over $200,000 (individually) or $300,000 (with spouse or partner) in each of the prior two years, and reasonably expects the same for the current year

The SEC is currently considering making changes in those thresholds, possibly by indexing for inflation which would mean a tripling in the amounts. This raises a serious concern about how many currently active Angel Investors would no longer qualify to make investments in early-stage companies, and what that will do to stifle innovation and slow our economy. Such a change could trigger an existential crisis for early-stage companies who would become starved for much needed capital, since substantially more companies are funded by angel investors than by any other source.

To understand this, TCA Venture Group recently conducted a confidential survey of our 385 members, and 107 members responded – a healthy response rate. 78% of those responding members currently qualify on both the Net Worth and Income thresholds, with 20% qualifying only on the Net Worth threshold and 2% only on the Income threshold:

FIGURE 1: TCA Member Accredited Investor Definition Qualification



Source: June 2023 Survey of Tech Coast Angel members

In terms of changing the Income threshold, even in a very wealthy area such as parts of Los Angeles, doubling it to $400,000 would mean 51% fewer members would qualify, and tripling it (to match inflation) would mean 66% fewer members would qualify. The effects would be similarly large in other sophisticated markets and massively amplified in other regions. This would trigger a dramatic reduction of the amount of capital deployed to early-stage companies, as well as threaten the viability of many angel groups, the worker bees of capital formation:

FIGURE 2: Eligibility Reduction Based on Income

Source: June 2023 Survey of Tech Coast Angel members

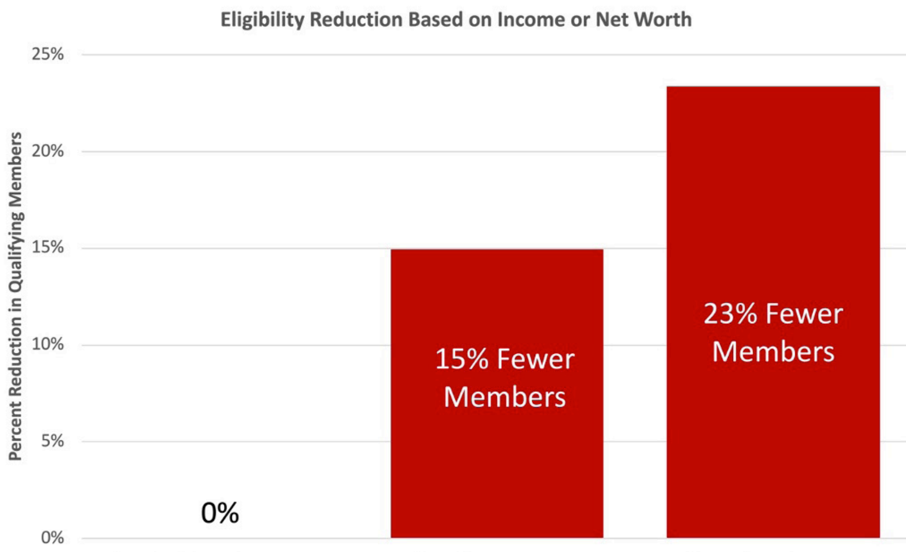
In terms of changing the threshold for Net Worth qualification, a doubling or tripling of the qualifying amount would also have a severe impact:

FIGURE 3: Eligibility Reduction Based on Net Worth

Source: June 2023 Survey of Tech Coast Angel members

Combining the criteria, the overall impact is similar to the impact of changing the net worth criteria since there is more wealth distribution above the threshold on net worth compared to income. While fewer members would qualify on income they would still qualify on net worth:

FIGURE 4: Eligibility Reduction Based on Income or Net Worth



Source: June 2023 Survey of Tech Coast Angel members

In 2022, TCA provided $15.4 million in funding. If we had 23% fewer members (with the criteria fully adjusting for inflation since 1982), the funding level would have dropped $3.5 million (assuming the average investment for those that dropped was the same as for the overall average of $37,500 per member).

It is important to reiterate that the negative impact nationally would be significantly more severe since this study looked only at TCA members, the majority of whom live in Southern California where wages are significantly higher than most of the country and the net worth of angel members is likely also higher. Specifically, the negative impact would be considerably more severe in the middle of the US due to differences in income and net worth compared to the coasts -- a recent national survey by ACA suggests that 53% of current investors would no longer qualify. Such a large drop in eligibility would be devastating to many angel groups particularly in America's heartland because these groups would lose more members and some would fall well below the critical mass needed to stay viable and operating. This in turn would be devastating to capital access for companies in those parts of the country and reverse much progress that has been made in recent decades to foster innovation and early-stage companies in the underserved heartland. And in those cases where VCs follow an angel investment, any drop in the number of angel-back companies would also have an adverse effect on VC funding, even though VC funding is less reliant directly on the Accredited Investor Definition.

A more effective way to maintain and safely enhance access to capital for early-stage companies would be to provide alternative means to encourage and measure sophistication beyond simple wealth metrics. It is clear that many people with sophistication fall short of the wealth thresholds, and also no secret that many wealthy people lack sophistication as investors in this asset class. Instead, creating the option of education and sophistication tests would benefit the ecosystem by safely improving the size of the capital pool and allowing access to new investors who seek to participate in this asset class but are currently precluded due to the wealth criteria. Knowledge-based accreditation testing is a more effective solution.

Increasing the thresholds without creating an option for a sophistication test would not only hinder capital formation, but it would also halt and reverse the modest gains made in recent years getting more diversity into the investor ranks. That diversity is critical to attracting and investing in more diverse founders. Because of historical income gaps along racial lines, diverse investors have only relatively recently entered the ranks of accredited investors but if wealth criteria are raised, the more diverse investors at the bottom of the pay and wealth scale will be the first to be forced out of the investor pool. This would be an unfortunate setback in terms of access and inclusion to expand and diversify the base of investors (rather than contract it) – and spurring innovation and economic growth.

KEY TAKEAWAYS

- Increasing the wealth thresholds for the Accredited Investor Definition would be counterproductive and devastating to early-stage companies -- causing a dramatic reduction in capital available especially beyond the higher income areas in California and the Northeast. If implemented, this would stifle innovation and slow our economy. A more thoughtful refinement would be to provide education and sophistication tests to allow more people to invest and participate.

AUTHOR: *John Harbison, Chairman Emeritus of TCA Venture Group*

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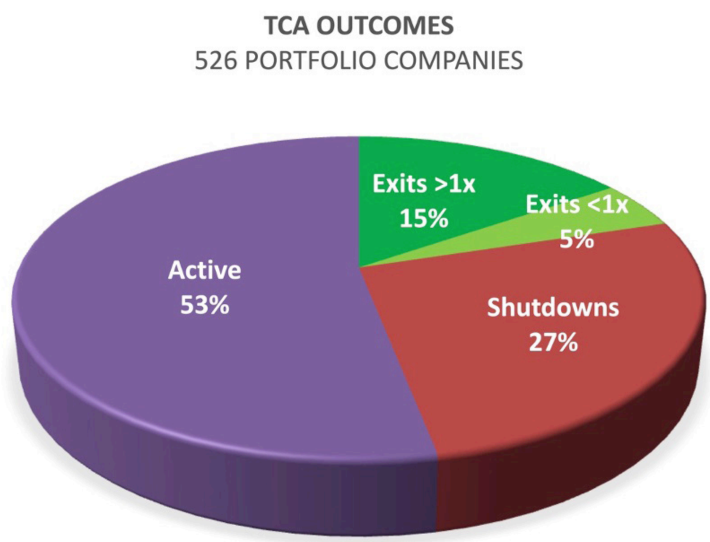
FAILURES AND FRAUD IN EARLY-STAGE ANGEL INVESTING

We all know that investing in early-stage companies is a very risky proposition, and the majority of investments will either fail completely or fail to return the capital invested.

The reasons for failure are diverse, but almost never due to fraud. Unfortunately, the intense media coverage of a few spectacular failures such as Theranos and FTX (and the fraud associated with them) have sadly led many policy makers in Washington DC to conclude that fraud is rampant in this asset class and therefore further regulation is necessary to help "protect" investors. This perception is a remarkable misunderstanding, and this article will present data and analysis to set the record straight. It is also regrettable since some of these notable failures (such as Theranos) never received funding from any organized Angel Group, all of which follow a rigorous due diligence process, so in that sense there is not a prevalent problem with fraud in investments by Angel Groups after appropriate due diligence.

Many studies have shown the failure rate in this asset class is over 50%. For TCA Venture Group, 32% of the companies and 68% of the outcomes failed to return the capital invested:

FIGURE 1: TCA Outcomes from 526 Portfolio Companies

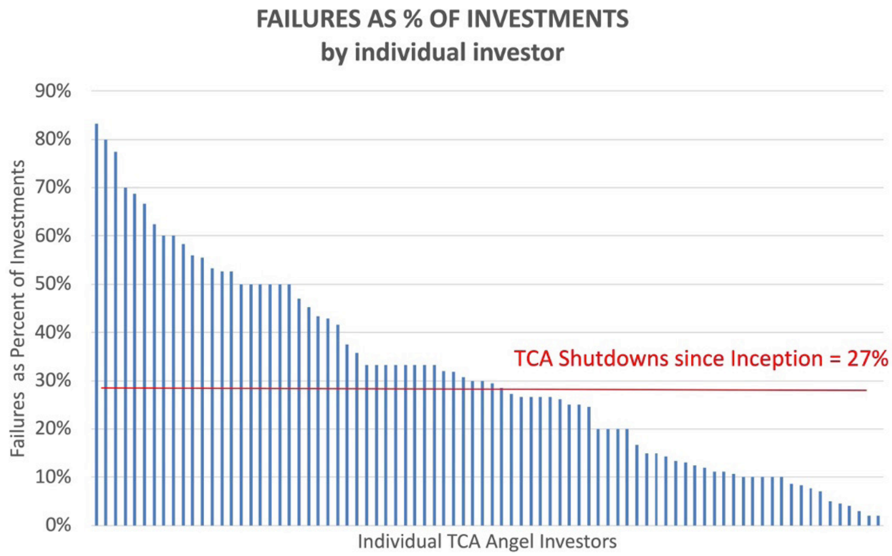


Source: June 2023 Survey of Tech Coast Angel members

FAILURES AND FRAUD IN EARLY-STAGE ANGEL INVESTING

For individual TCA members, the failure rate varies widely, partly due to some members having a higher proportion of recent investments -- hence fewer outcomes:

FIGURE 2: Failures as % of Investments



Source: June 2023 Survey of Tech Coast Angel members

But of those failures, less than half a percent were due to fraud. This is based on a recent survey of TCA members in which 107 members indicated 2733 investments and only 10 were related to fraud (and all 10 were investments in the same "alleged" fraudulent company):

FIGURE 2: Failures as % of Investments

Source: June 2023 Survey of Tech Coast Angel members

AVOIDING UNINTENDED CONSEQUENCES OF REVISING THE SEC'S ACCREDITED INVESTOR DEFINITION

Fraud obviously comes in many flavors such as Ponzi schemes, misrepresentation of financials, embezzlement of funds aka payroll fraud, overvaluation of assets, misuse of investment funds, false customer or partnership agreements, exaggerated market traction, fabricated intellectual property claims, unreported conflicts of interest, falsifying financial statements to misrepresent the company's financial health and performance, vendor fraud, inventory theft or misappropriation, expense reimbursement fraud, fake invoices and billing fraud. However, it typically does not include overly optimistic communications from the CEO to investors; many companies as they go into their final spiral before acknowledging failure have the problem of claiming things look better than they are, but few people consider those rose-colored glasses "fraud."

Not withstanding the high overall failure rate, a sufficiently diversified portfolio of early-stage investments can yield attractive returns. Since TCA's founding in 1997, there have been 247 outcomes including 106 exits and 141 shutdowns. If you'd invested an equal amount in all 247 of those companies, you would have received a cash return amounting to 6.4 times your investment and an IRR of 25%. But as is the case in early-stage investing, a small percentage of investments make for most of the return. Six of the exits were from 58x to 368x and missing all of these six drops the TCA portfolio return to 1.8x and 9.3% IRR. This is why diversification is so important. For more on this, see a previous insight on "Angel Returns Beat All Asset Classes But Pose Greater Risk."

KEY TAKEAWAYS

- Failures are quite common in early-stage investing, but the reason for failure almost never is because of fraud. While fraud equates to failure, failure does not equate to fraud: It is critical to understand that failure comes in multiple non-fraudulent forms.

AUTHOR: John Harbison, *Chairman Emeritus of TCA Venture Group*
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THE ACA DATA ANALYTICS INITIATIVE

These data insights, like the Angel Funders report, are based on the data collection and analysis of leading ACA member organizations throughout the U.S. and Canada. We are actively recruiting all ACA member organizations to contribute their investment data to the ACA Data Initiative. The more data we collect from as many groups as possible, the more valuable the analysis and reporting becomes.

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