

Data Driven Insights on Becoming a More Successful Angel Investor

Presented by John Harbison

TCA Chairman Emeritus

March 30, 2023



Data Driven Insights on:

- Angel vs VC returns
- Diversification
- Need for Patience
- Industry
- New vs Follow-on Returns
- Risk Factors
- Form of investment (equity, convertible notes or SAFEs)
- Valuations
- IPO vs M&A Exits
- “Wisdom of Crowds”
- Investing in Diverse Teams
- Due Diligence
- Prior experience of CEOs
- Age of CEOs
- Engagement after Funding
- Economic Cycle Effects
- Economic Impact of Angels



Angel vs VC returns

“Angel returns are similar to expected returns in VC or in the general stock market”

True

or

False

?

Angel vs VC returns

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True

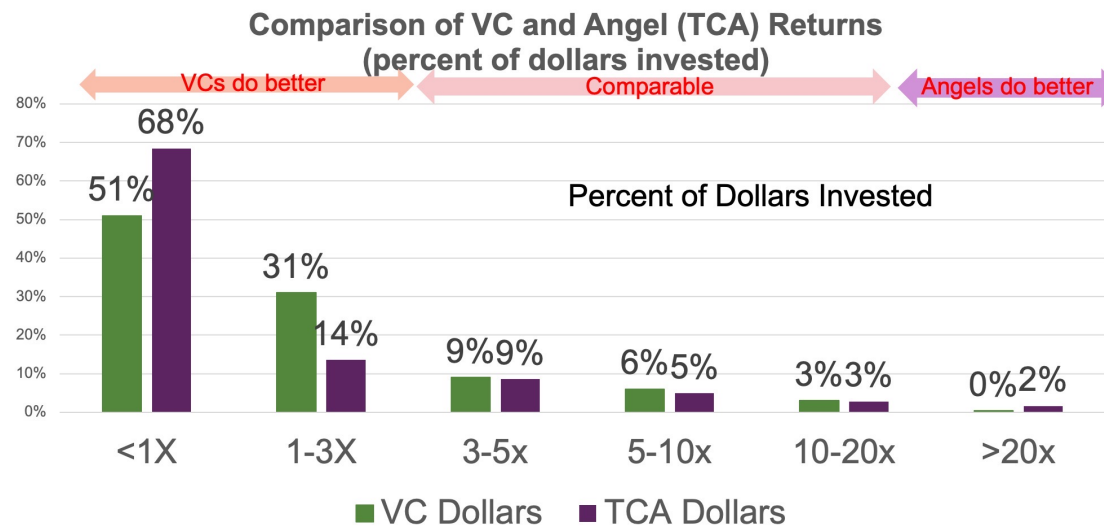
or

False

?

Angel vs. VC Returns

ANGEL VS VENTURE CAPITAL RETURNS



- Similarities are striking
- Differences are most notable at the extremes (failures and "home runs")
- Angels do better with home runs
- VC's do better avoiding failures and with "singles"

Source: Tech Coast Angels (1997-2019) and Correlation Ventures (\$20.5B invested in 27,878 financings (2009-2018) -- includes Exits and Shutdowns



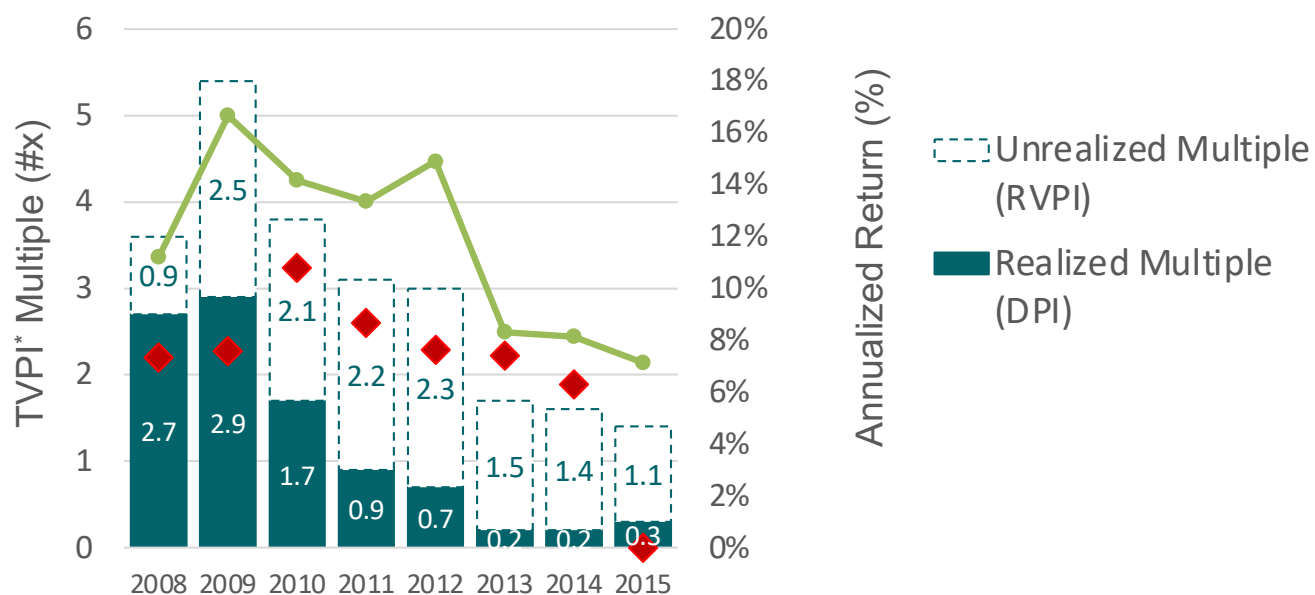
ANGEL CAPITAL ASSOCIATION



Author: John Harbison, Tech Coast Angels - Publication Date: October 2020

Angels Are Not VCs

Launchpad “Portfolio” Returns, by Investment Year Cohort



- Angel investment class differs from VC
 - Invest earlier
 - Not constrained on hold period
 - Decisions by individuals not committee
- This generally can lead to higher portfolio multiples
- Solid performance in each year

*Note: TVPI = Total Value to Paid In Capital - includes both realized (DPI) and unrealized (RVPI) returns

Source: Launchpad Venture Group



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Author: Ham Lord and Alexander Brown, Launchpad Venture Group - Publication Date: July 2020

Diversification

“I can be successful as an angel investor with a handful of investments”

True

or

False

?

Diversification

“I can try a few investments and see how they do before I decide if angel investing is of long-term interest to me”

True

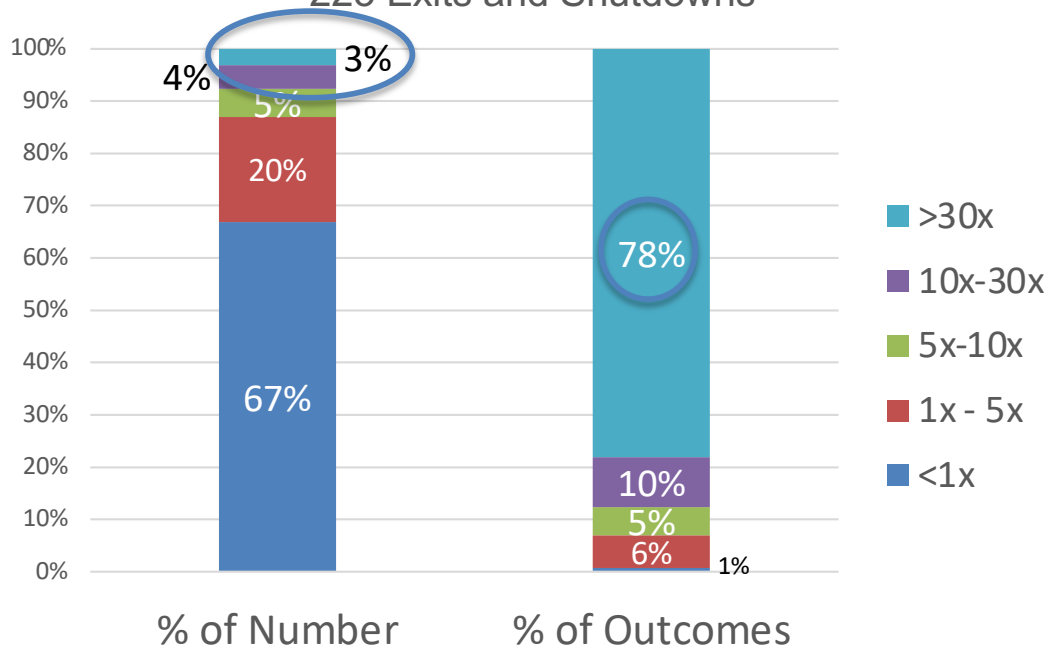
or

False

?

The Value of Diversification

TCA Distribution of Outcomes
223 Exits and Shutdowns



Source: Analysis of 223 Tech Coast Angels Outcomes including Exits and Shutdowns 1997-2021

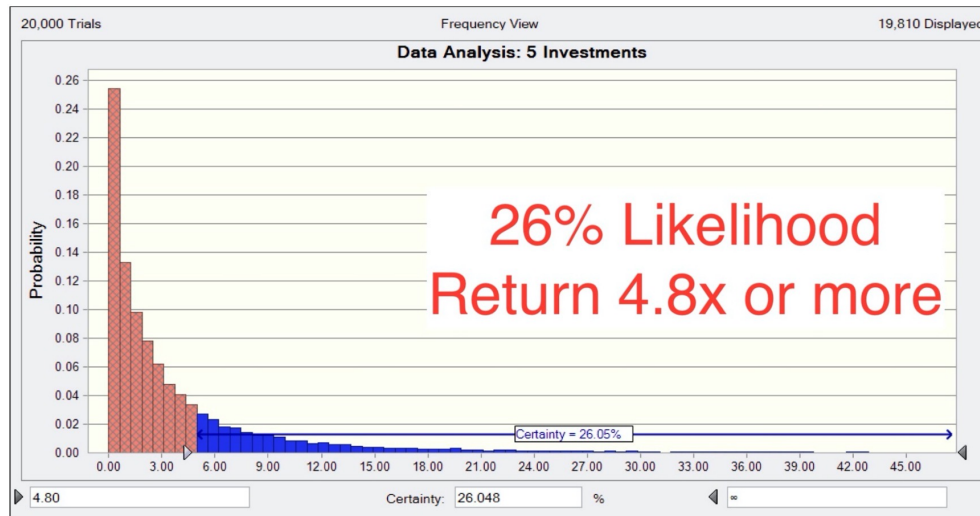
- Homeruns are few and far between, but drive returns
 - 7 of 223 Companies = 3% of Number = 78% of Returns
 - Even a diversified portfolio of 40 investments might have missed the big homerun



The Value of Diversification

STIMULATING DIVERSIFICATION

5 Investments

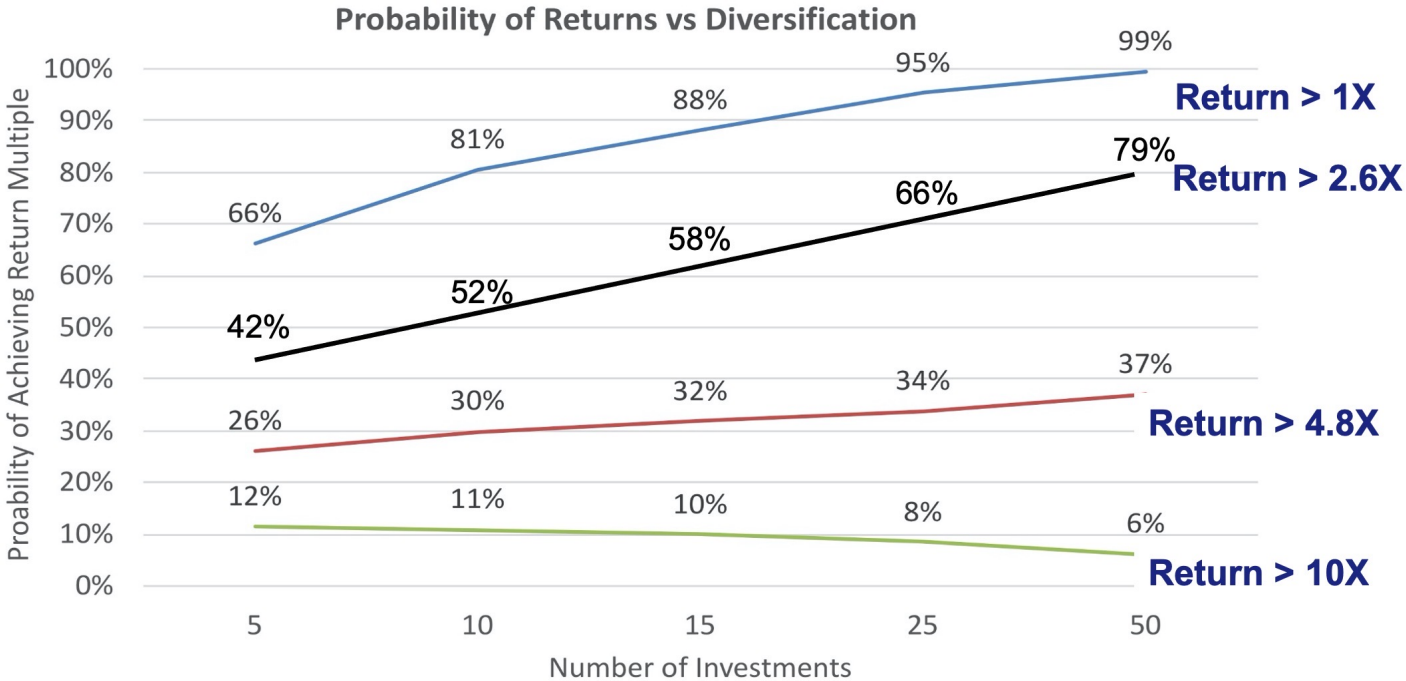


Source: Based on first 159 Outcomes of Tech Coast Angels and Random Selection of Investments & Monte Carlo Simulation of 20,000 outcomes

- **159 Outcomes (Exits and Shutdowns)**
- **Montecarlo Simulation (20,000 outcomes)**



The Value of Diversification



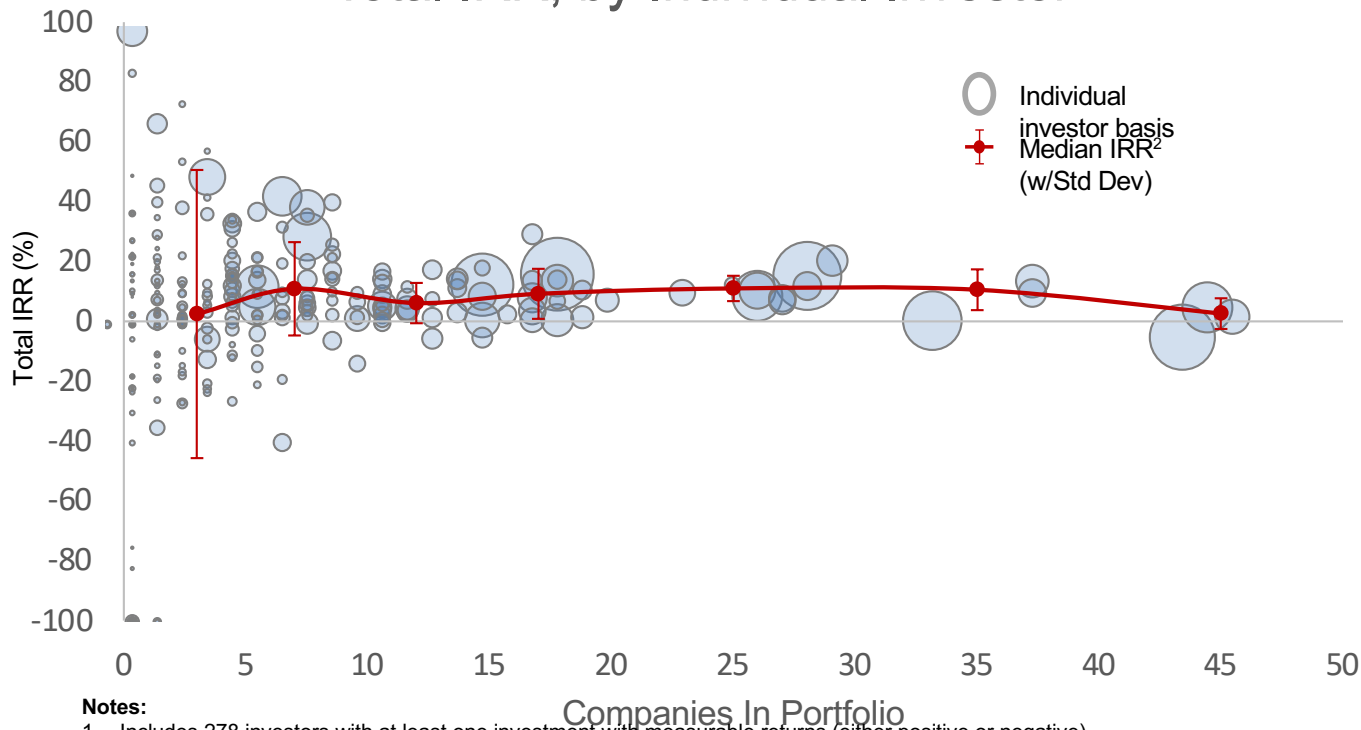
- **5 Companies**
 - 66% chance of earning at least 1x
 - 26% chance of earning at least 4.9x
- **25 Companies**
 - 95% chance of earning at least 1x
 - 34% chance of earning at least 4.8x

Source: Based on first 159 Outcomes of Tech Coast Angels and Random Selection of Investments & Monte Carlo Simulation of 20,000 outcomes



Individual Investor Returns

Total IRR, by Individual Investor



- Diversification drives higher, more consistent returns...to a point

Notes:

1. Includes 278 investors with at least one investment with measurable returns (either positive or negative)
2. Median IRR calculated on groupings based on # of companies in portfolio



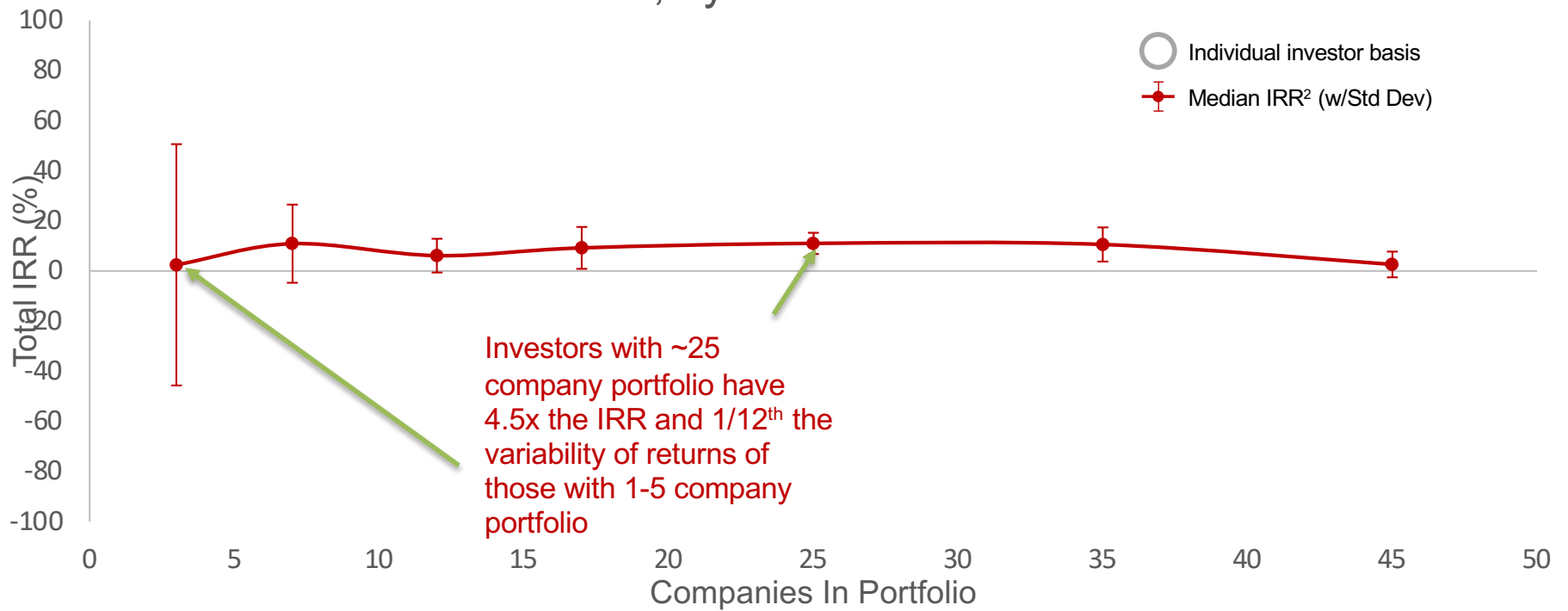
Source: Launchpad Venture Group



Author: Alexander Brown, Launchpad Venture Group - Publication Date: September 2020

Individual Investor Returns

Total IRR, by Individual Investor



Source: Launchpad Venture Group



Author: Alexander Brown, Launchpad Venture Group - Publication Date: September 2020

Need for Patience

“I can try a few investments and see how they do before I decide if angel investing is of long-term interest to me”

True

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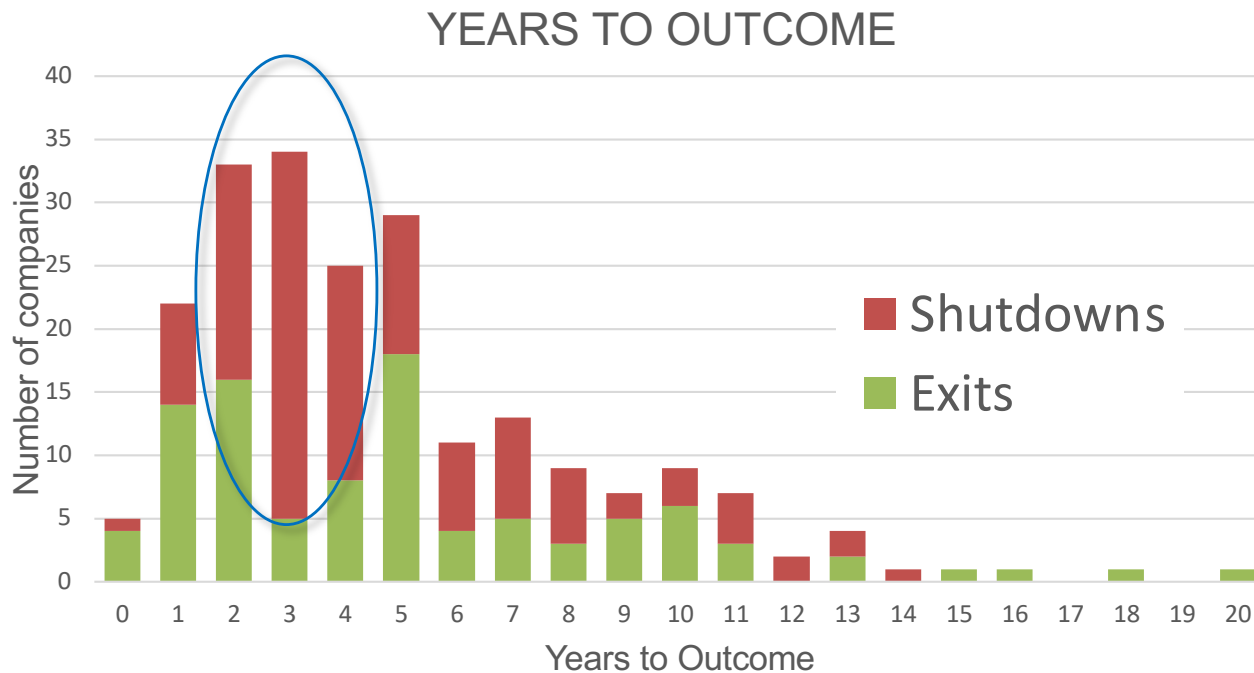
True

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Outcomes Timing Expectations



- TCA had 5-7 Exits each year 2012-2020 (11 in 2021)
- Shutdowns bunch up in first four years
- Exits spread out more or less evenly after investment
 - Quick ones once proven
 - Longer after revenue builds

Source: Analysis of 223 Tech Coast Angels Outcomes including Exits and Shutdowns from 1997-2021



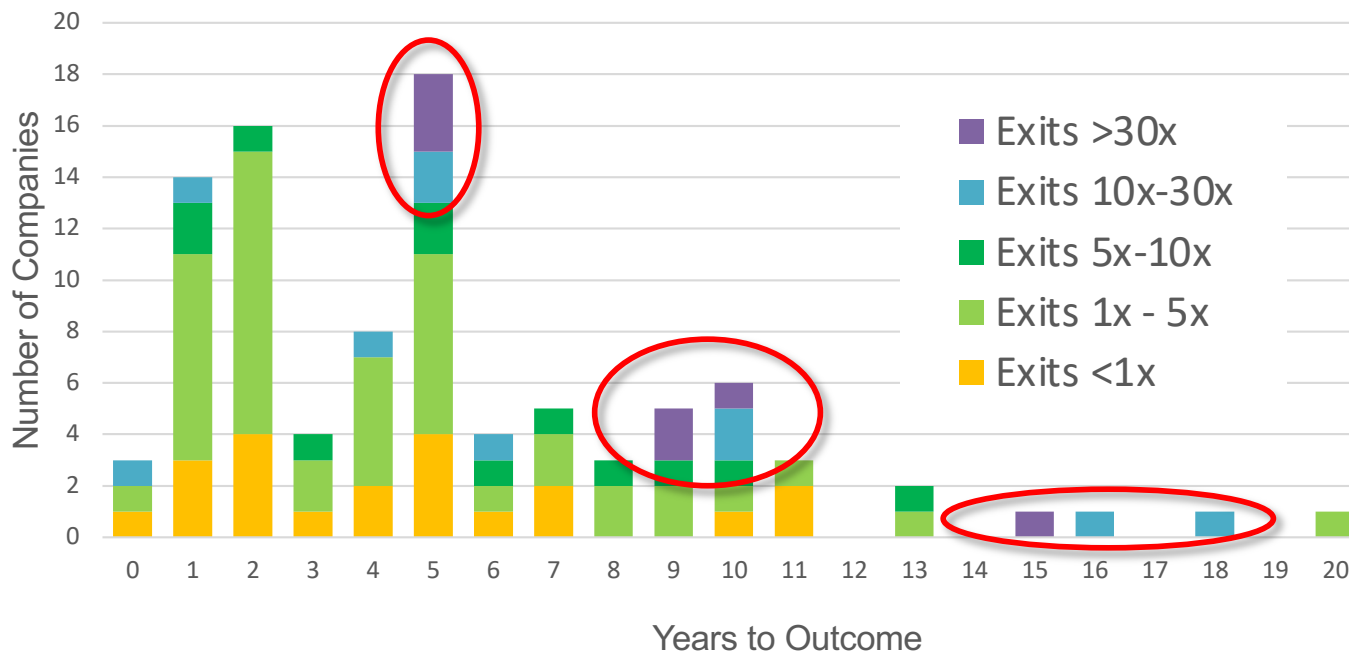
ANGEL CAPITAL ASSOCIATION



Author: John Harbison, Tech Coast Angels - Publication Date: August 2019
Updated through 2021

Outcomes Timing Expectations

EXIT DISTRIBUTION -- BY YEAR & MULTIPLE



- Bigger exits come to more mature companies
- Earliest exits tend to be at low multiples

Source: Analysis of 97 Tech Coast Angels Exits that Realized Cash (1997-2021)



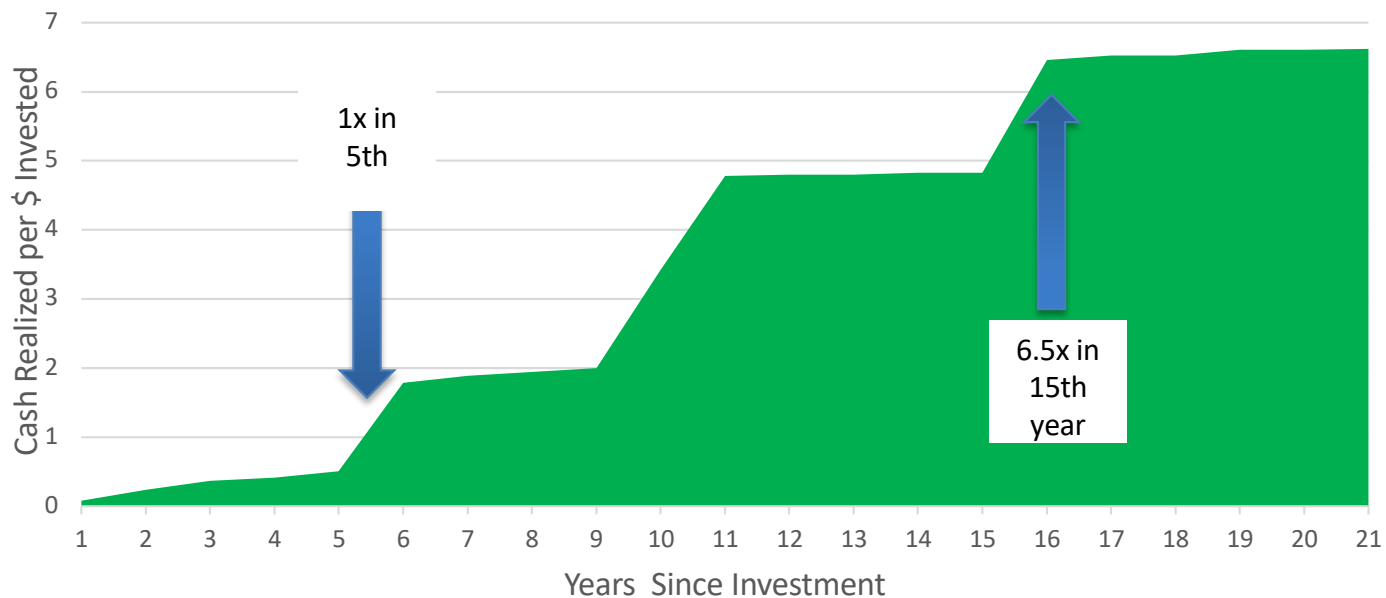
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Author: John Harbison, Tech Coast Angels - Publication Date: August 2019
Updated through 2021

Outcomes Timing Expectations

CUMULATIVE RETURN OVER TIME



- Payback of principal around 4-5 years
- 650% back by year 15

Source: Analysis of 223 Tech Coast Angels Outcomes including Exits and Shutdowns



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Author: John Harbison, Tech Coast Angels - Publication Date: August 2019
Updated 2022

Industry

“Industry does not really matter in terms of portfolio outcomes”

True

or

False

?

Industry

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True

or

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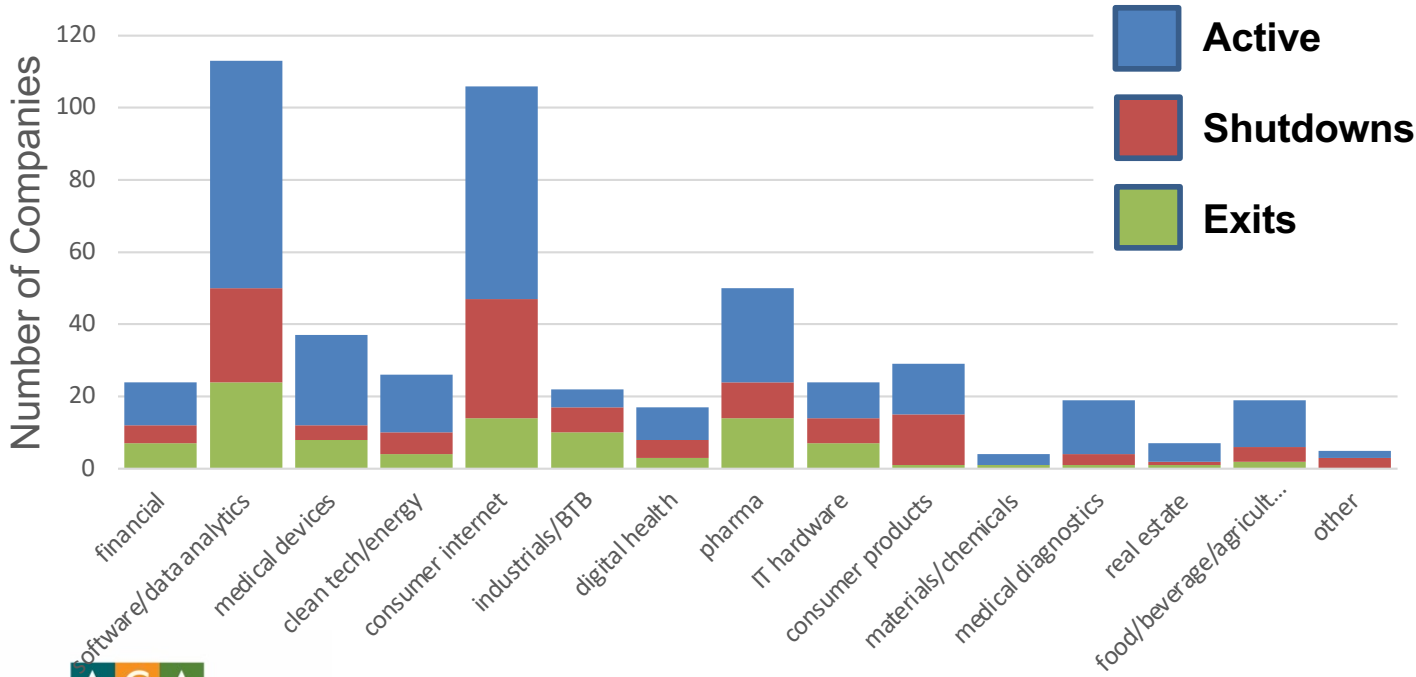
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Outcomes by Vertical



TCA OUTCOMES BY INDUSTRY

43% overall success rate



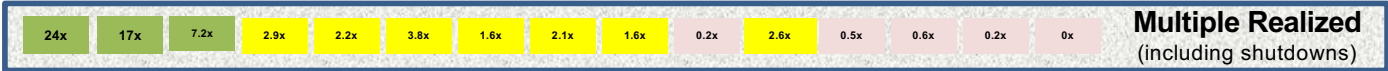
- Medical Devices, Pharma, BTB, Financial have highest ratio of exits to outcomes
- Poorest success rate in Consumer Products, Consumer Internet



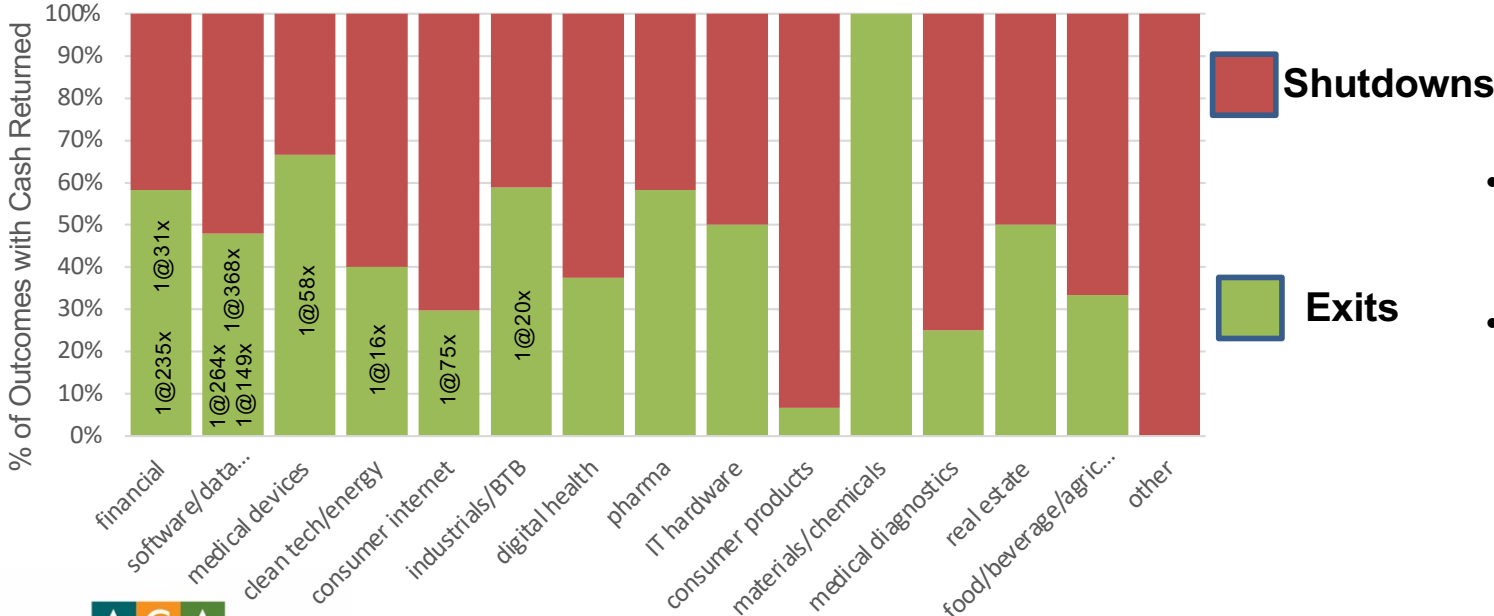
Source: Analysis of all 224 Tech Coast Angels portfolio companies 1997-2021



Outcomes by Vertical



TCA OUTCOMES BY INDUSTRY



- Multiples highest for Financial, Software and Medical Devices- (driven by homeruns)
- Consumer Products/services most disappointing
- All heavily influenced by home runs

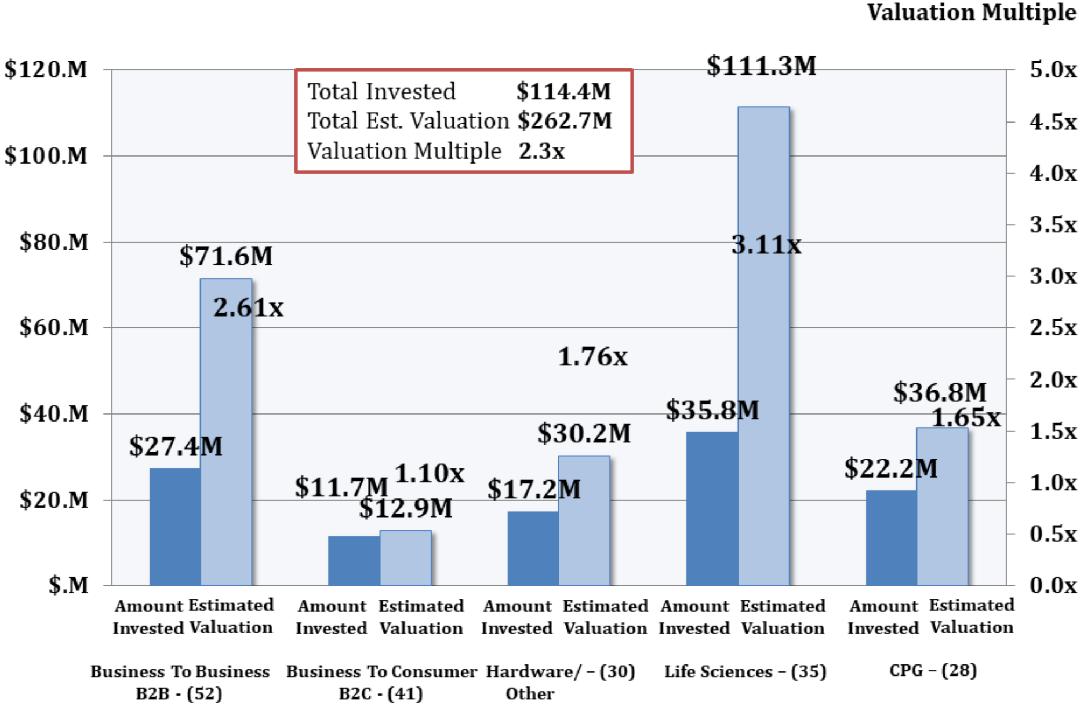


Source: Analysis of all 224 Tech Coast Angels portfolio companies with Outcomes (Exits or Shutdowns) 1997-2021



Outcomes by Vertical

2019 CTAN-Estimated Valuation Multiple by SIG's



Source: Central Texas Angel Network



Author: Rick Timmins, Central Texas Angel Network - Publication Date: February 2021

New vs Follow-on Returns

“Returns from a portfolio of only first round investments tend to do better than a portfolio of latter round investments”

True

or

False

?

New vs Follow-on Returns

“Returns from a portfolio of only first round investments tend to do better than a portfolio of latter round investments”

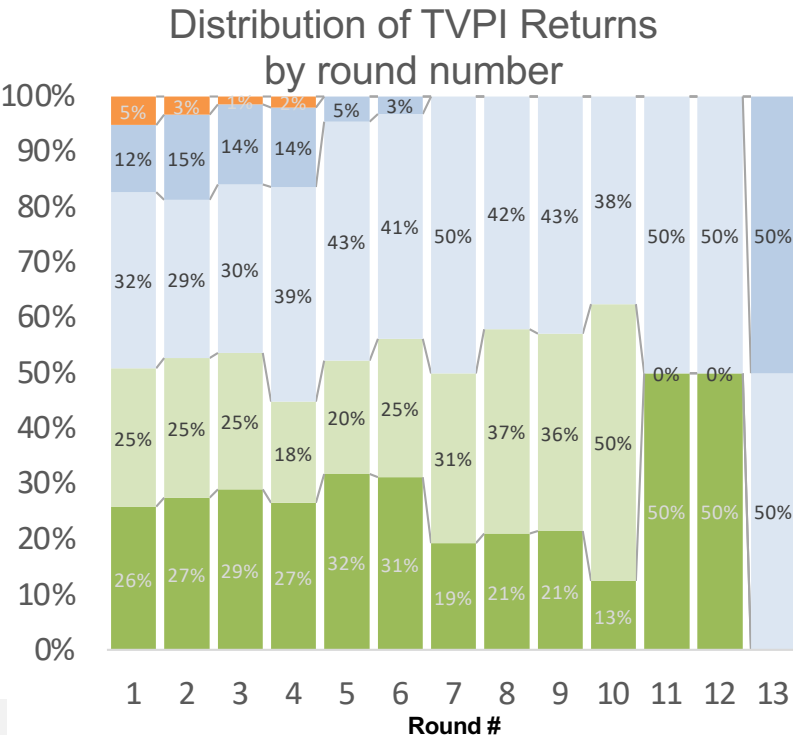
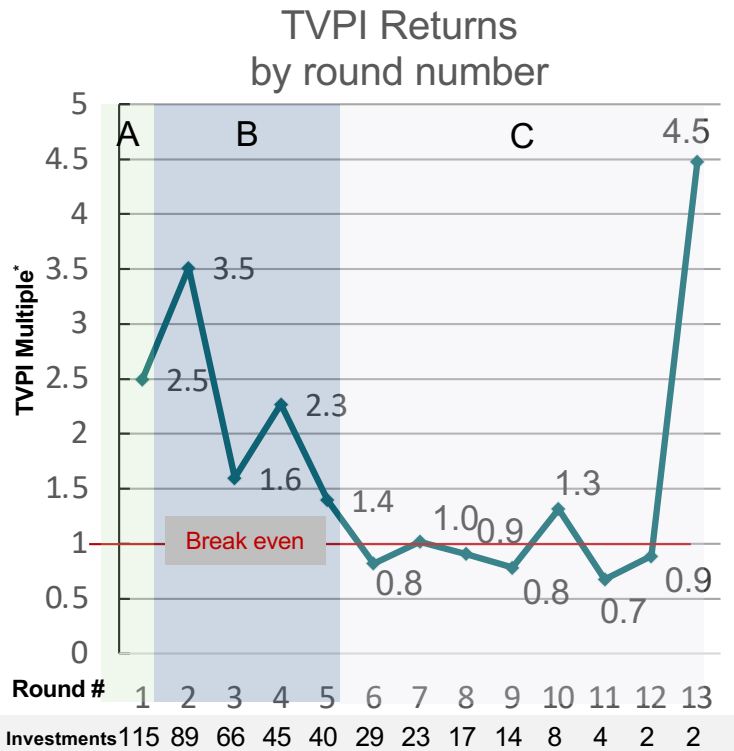
True

or

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Returns by Investment Round



- “One and Done” not the best strategy
- 2nd round offer higher returns than initial
- 1st rounds “overpaid” on valuation to preserve motivation in founder equity
- More than 5 rounds correlate with disappointing returns

- 10x+
- 3 to 10x
- 1 to 3x
- 0 to 1x
- 0x

*Note: TVPI = Total Value to Paid In Capital - includes both realized (DPI) and unrealized (RVPI) returns

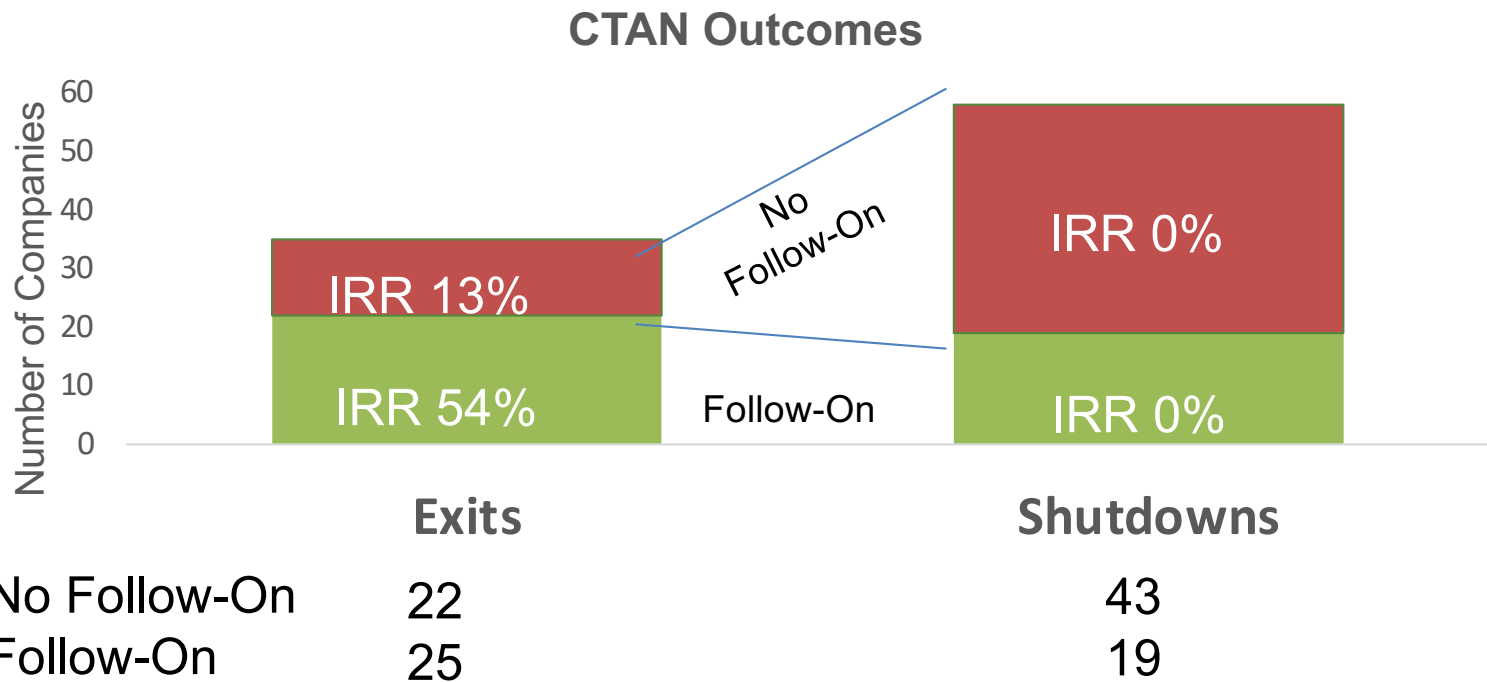


Source: Launchpad Venture Group



Author: Alexander Brown, Launchpad Venture Group - Publication Date: September 2021

Returns for Follow-On



Source: Central Texas Angel Network, 2006-2021; includes Exits and Shutdowns

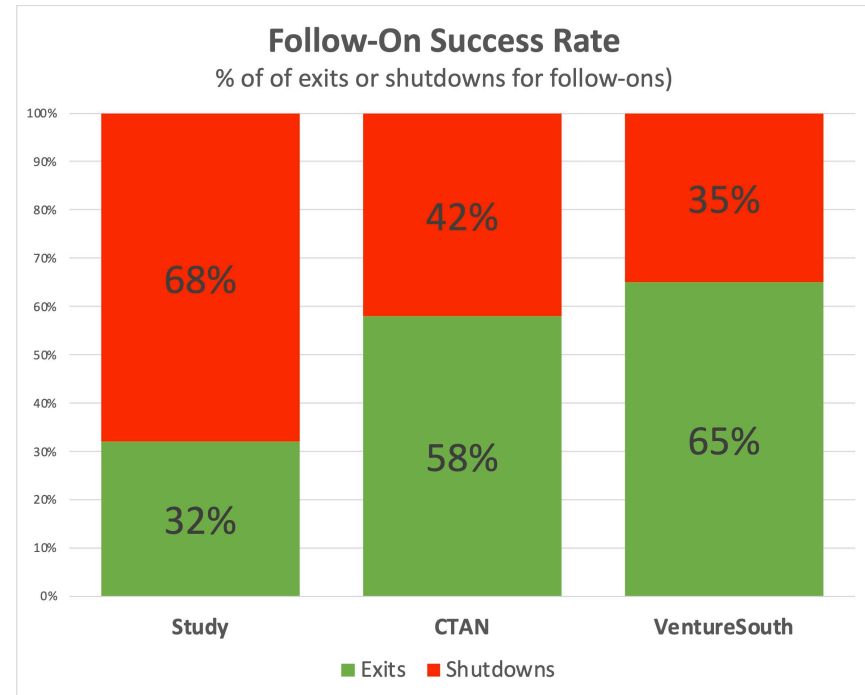
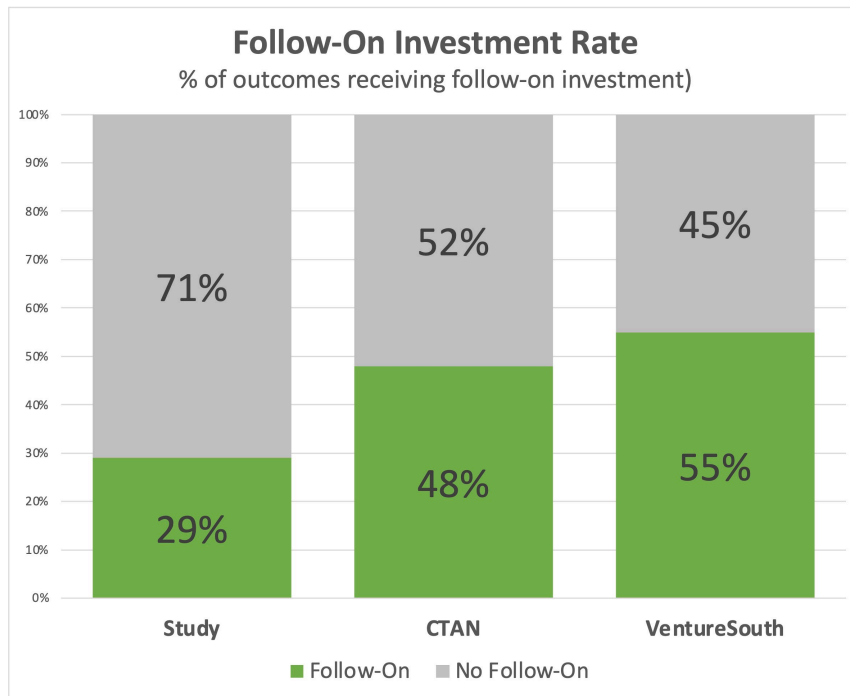


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Author: Rick Timmins, Central Texas Angel Network - Publication Date: June 2020

Follow-on Rates and Success



Note: ACA nomenclature for "exits" includes any concluding transaction(s) that return capital to investors, while shutdowns imply a total capital loss
 Source: VentureSouth (2022), CTAN (2021) and "Returns to Angel Investors in Groups", Wiltbank & Boeker, 2007



Risk Factors

“All risks should be assessed, but no type of risk (market, technical, competitive, financing, etc.) is more important than others”

True

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False

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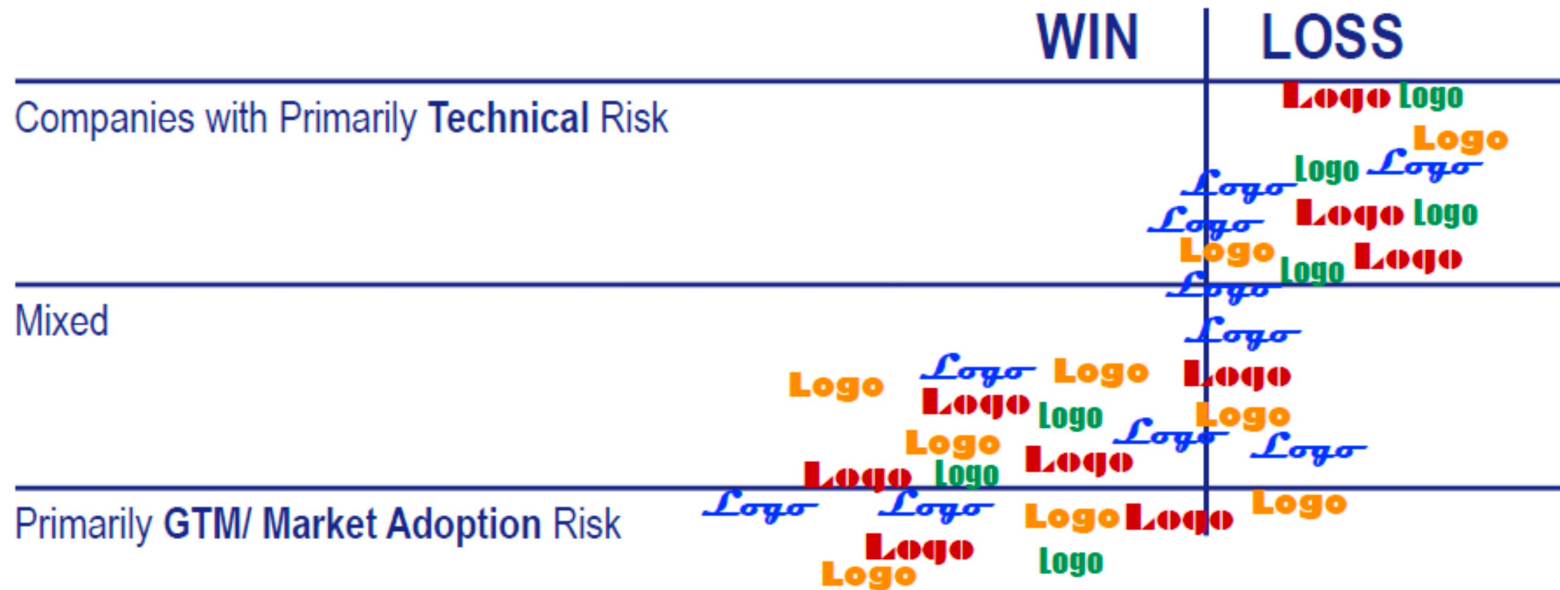
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Risk/Outcomes Correlation

HOW TYPE OF RISK CORRELATES WITH OUR OUTCOMES

Primary risk presented at time of investment:



Source: Launchpad Venture Group



Form of investment

“The form of investment (equity, convertible notes or SAFEs) does not really matter”

True

or

False

?

Form of investment

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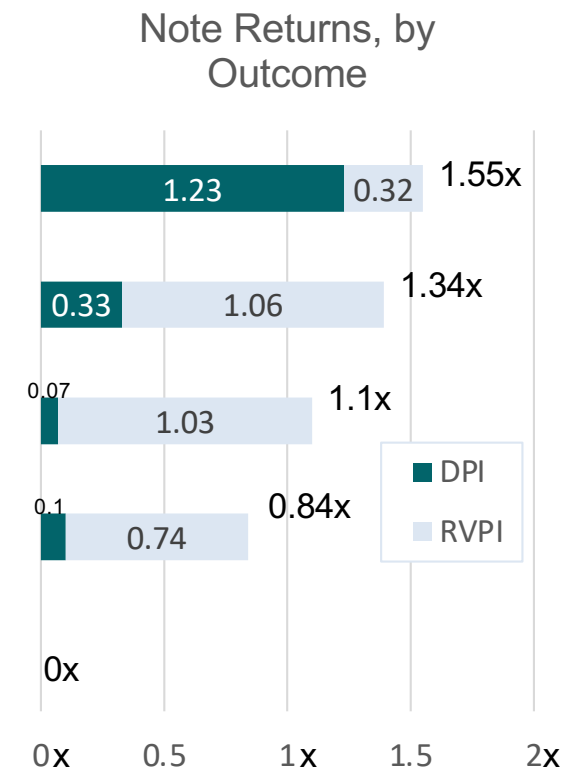
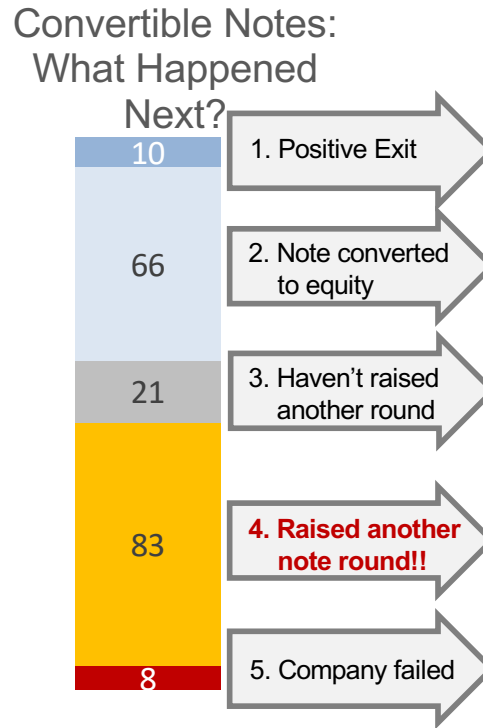
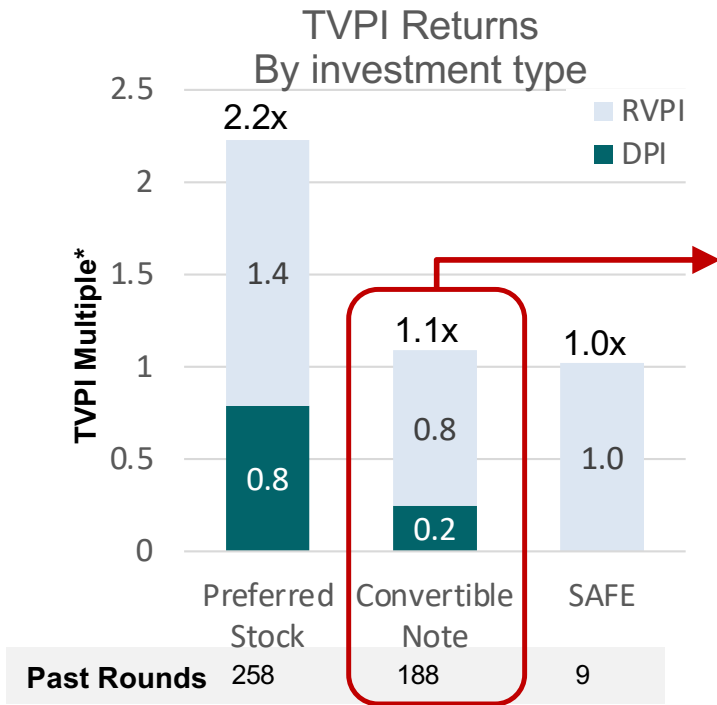
True

or

False

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Returns for Equity > Convertible Notes/SAFE



*Note: TVPI = Total Value to Paid In Capital - includes both realized (DPI) and unrealized (RVPI) returns

Source: Launchpad Venture Group



ANGEL CAPITAL ASSOCIATION



Author: Alexander Brown, Launchpad Venture Group - Publication Date: July 2021

Valuations

“Early-stage valuations are coming down from historical highs, so we should not be concerned about current valuations”

True

or

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Valuations

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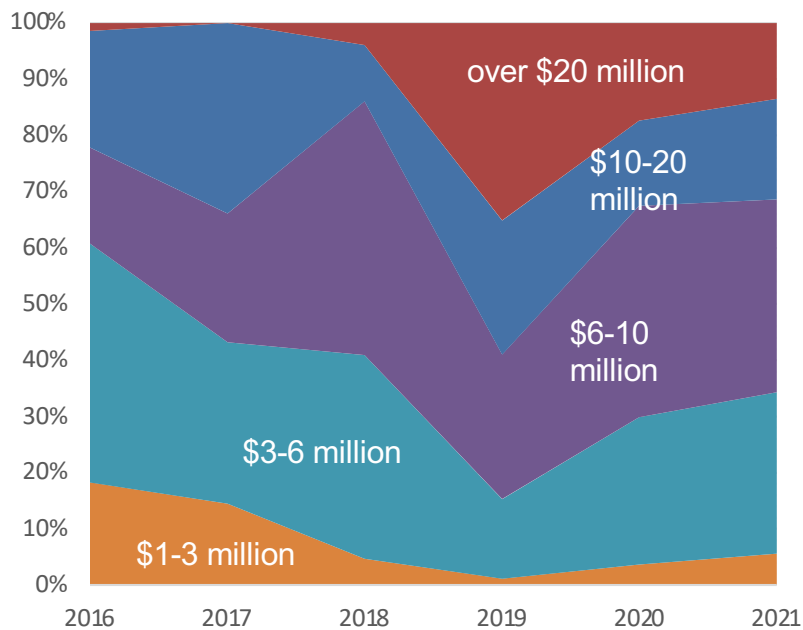
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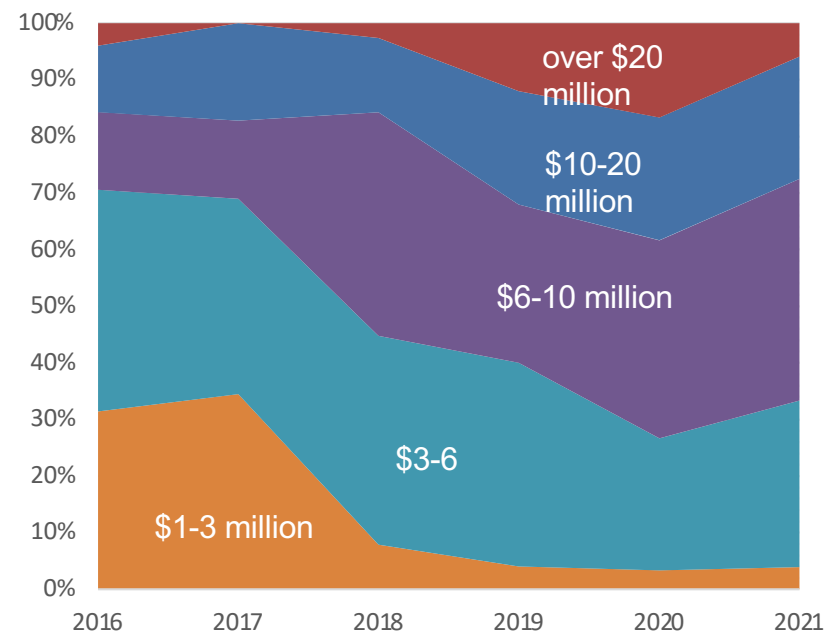
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Valuation Mix Trends

2016-2021 TCA INVESTMENTS
BY VALUATION
MIX OF DOLLARS



2016-2021 TCA INVESTMENTS
BY VALUATION
MIX OF COMPANIES

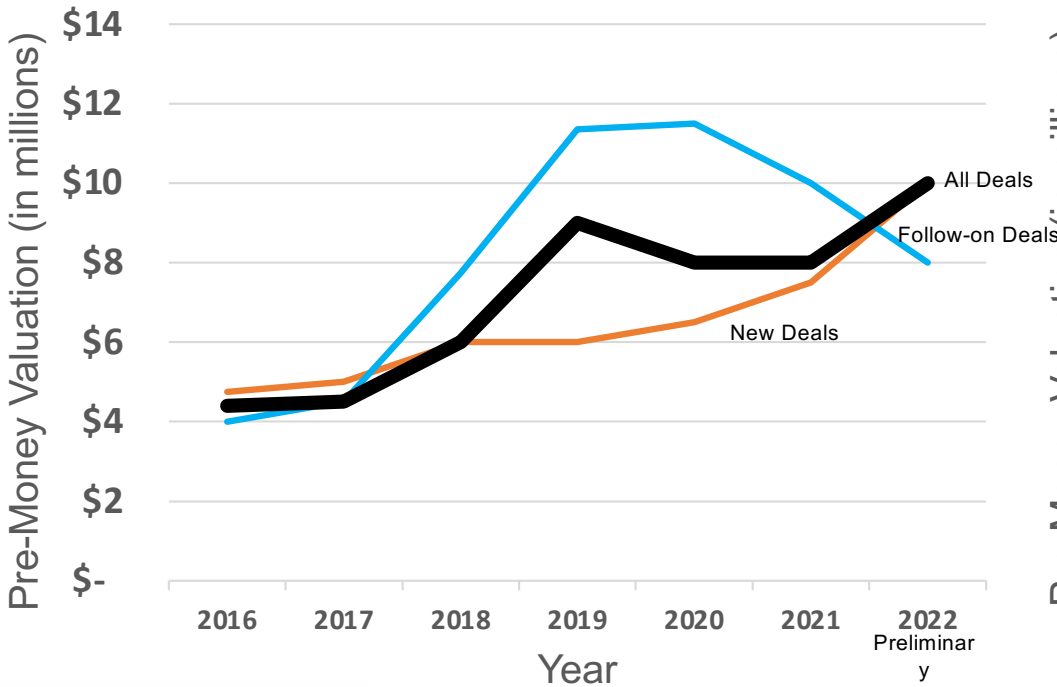


Source: TCA 2021 Annual Report

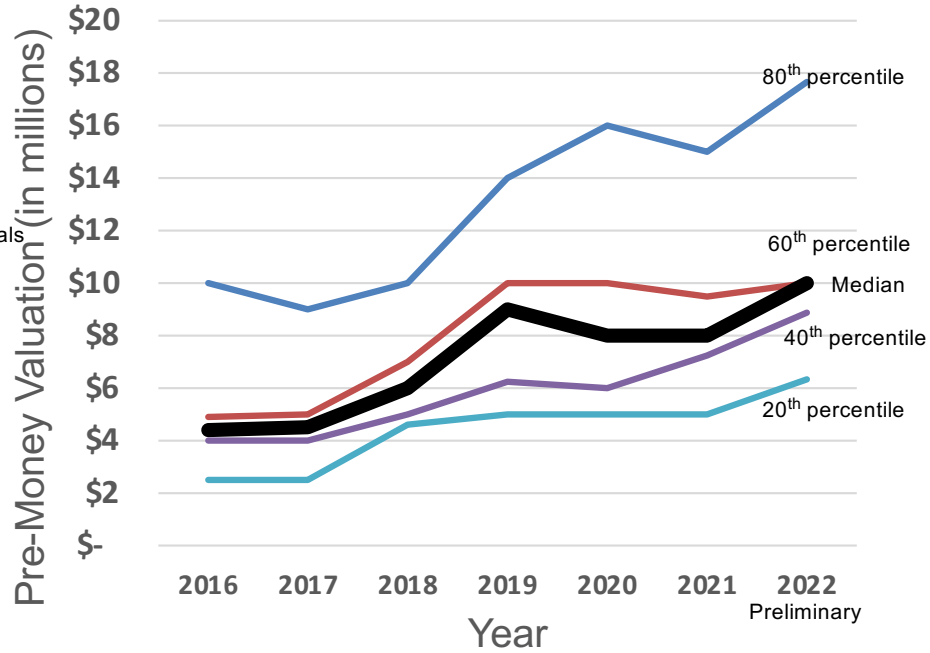


Valuation Mix Trends

PRE-MONEY VALUATION TRENDS BY NEW/FOLLOW-ON



PRE-MONEY VALUATION TRENDS FOR TCA INVESTMENTS



Source: TCA 2021 Annual Report with preliminary estimates for 2022



IPO vs M&A Exits

“IPO exits produce better returns than
M&A exits”

True

or

False

?

IPO vs M&A Exits

“IPO exits produce better returns than
M&A exits”

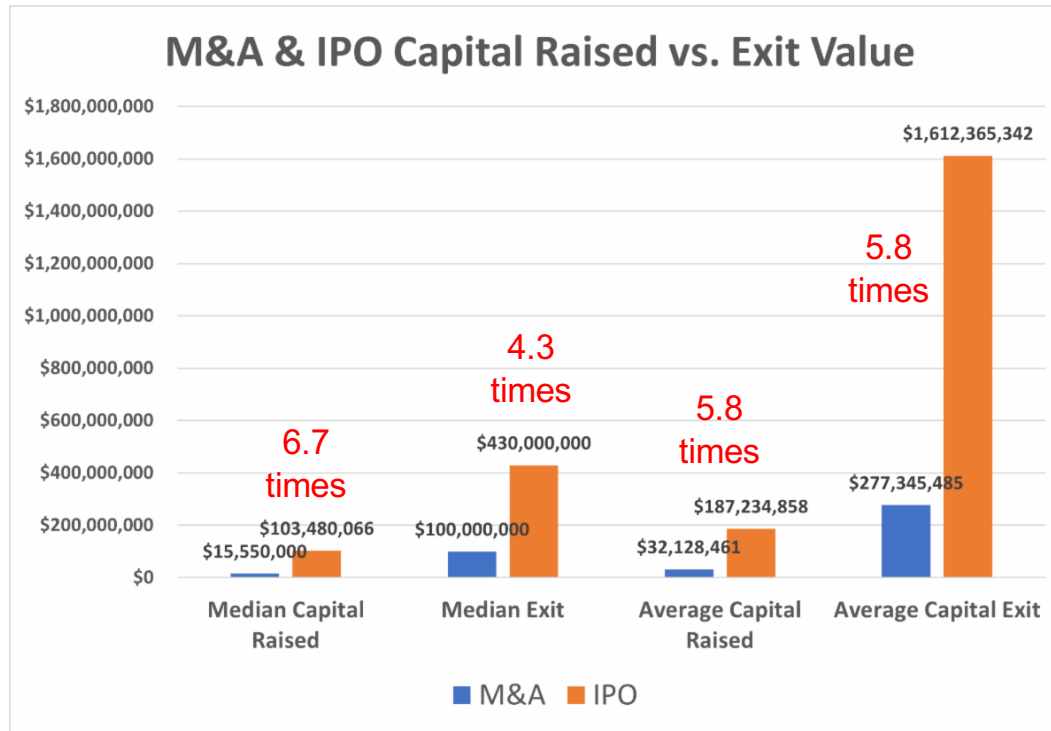
True

or

False

?

M&A & IPO -- Capital Raised vs Exit Value?



Multiple
Realized on
Median:
IPO 4.2x
M&A 6.4x

Multiple
Realized on
Average:
IPO 8.6x
M&A 8.6x

Note: This Crunchbase sample includes approximately 1000 M&A transactions and 1750 IPOs from 2010 to 2017, not distorted by several recent overlapping IPO bubbles.
Source: Crunchbase



“Wisdom of Crowds”

““Wisdom of Crowds” means the more members make investments, the better I should expect the outcomes will be”

True

or

False

?

“Wisdom of Crowds”

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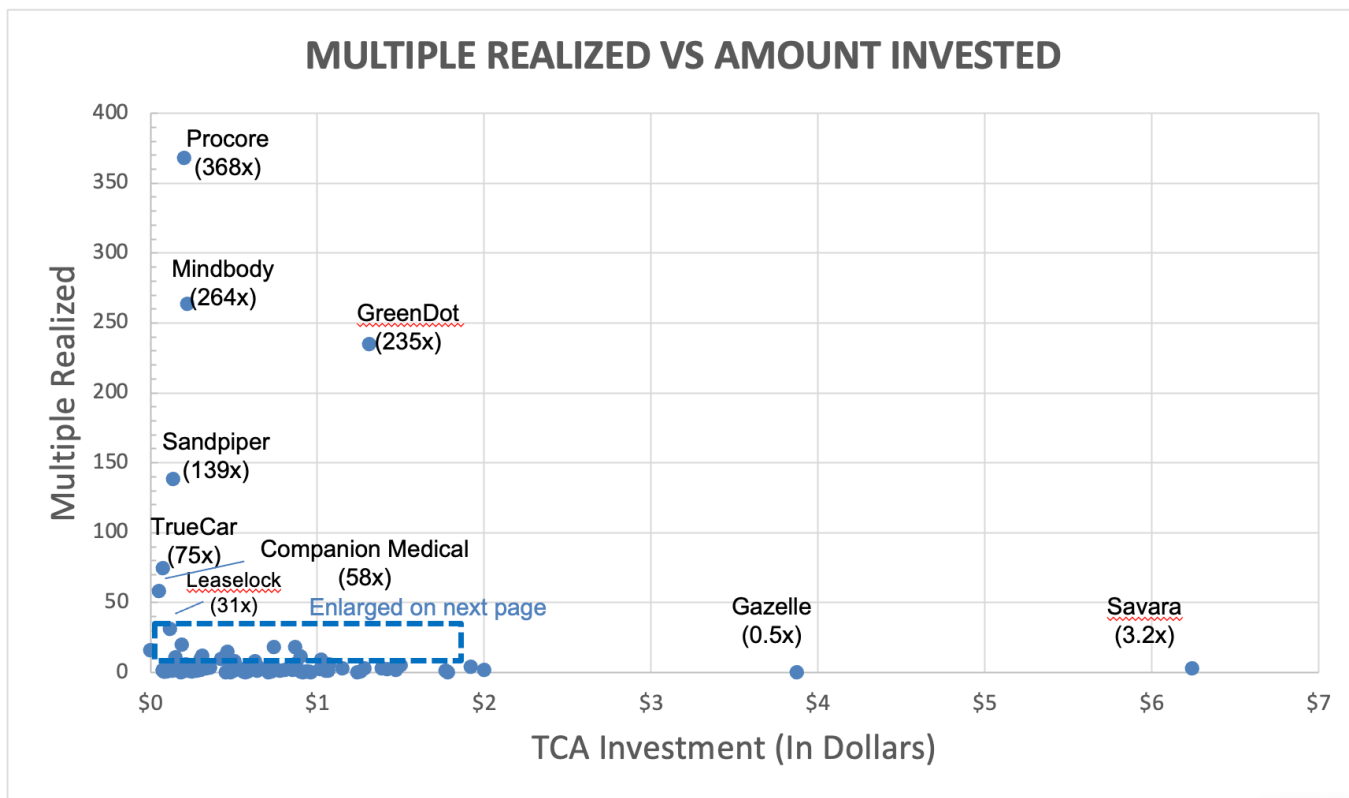
True

or

False

?

Is There Wisdom in Crowds of Angel Investors?



- **No correlation between size of deal and outcomes at the extremes**

Source: Analysis of 86 Tech Coast Angel exits that realized cash 1997-2021

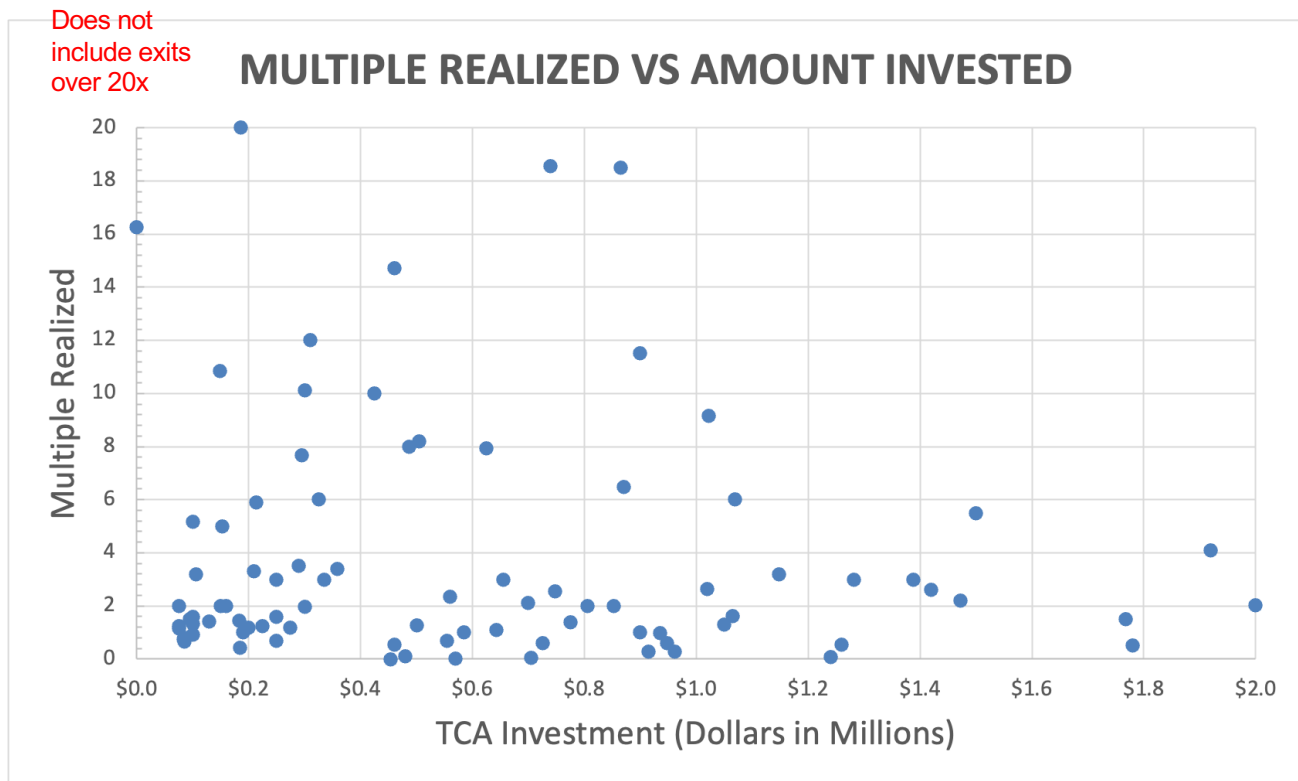


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Author: John Harbison, Tech Coast Angels - Publication Date: June 2021
Updated through 2021

Is There Wisdom in Crowds of Angel Investors?



- **No correlation between size of deal and outcomes in “normal” range either**

Source: Analysis of 86 Tech Coast Angel exits that realized cash 1997-2021

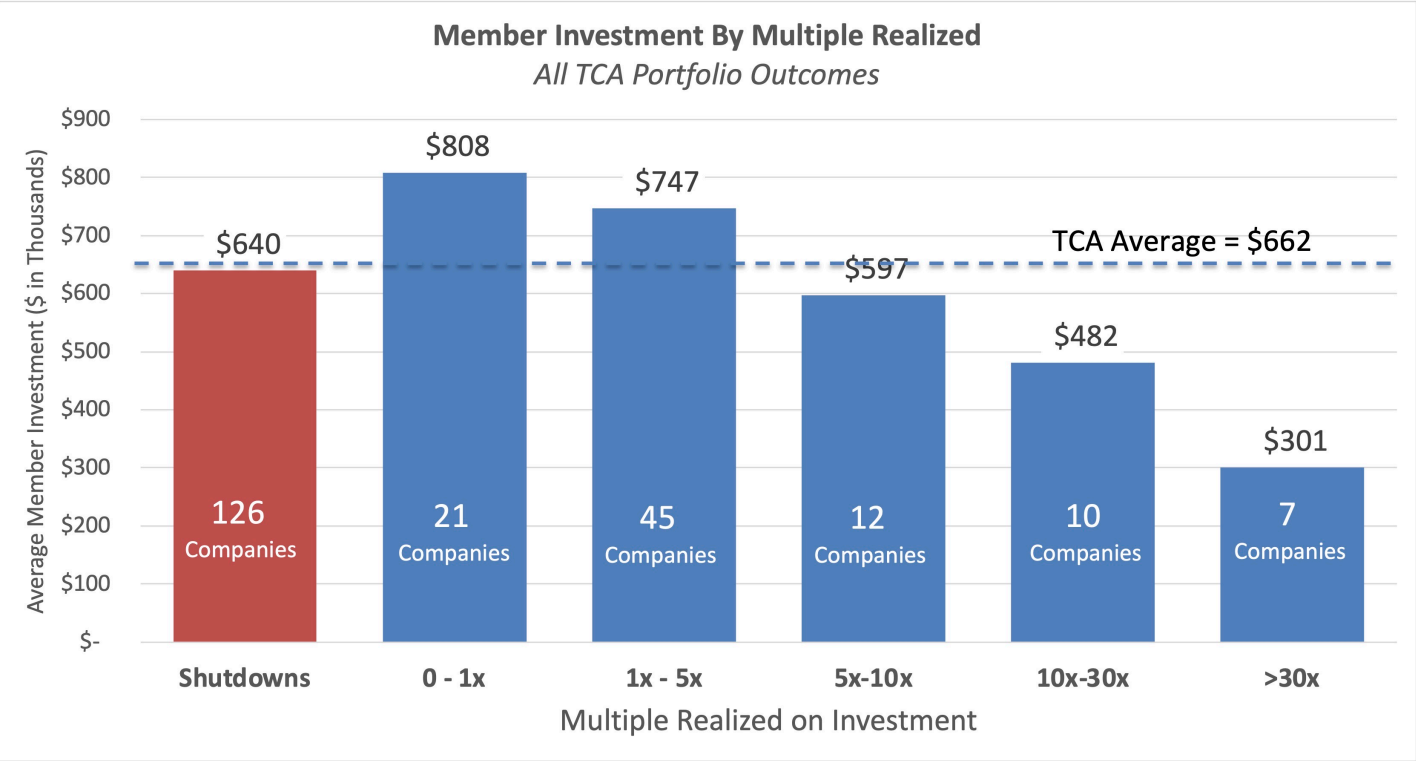


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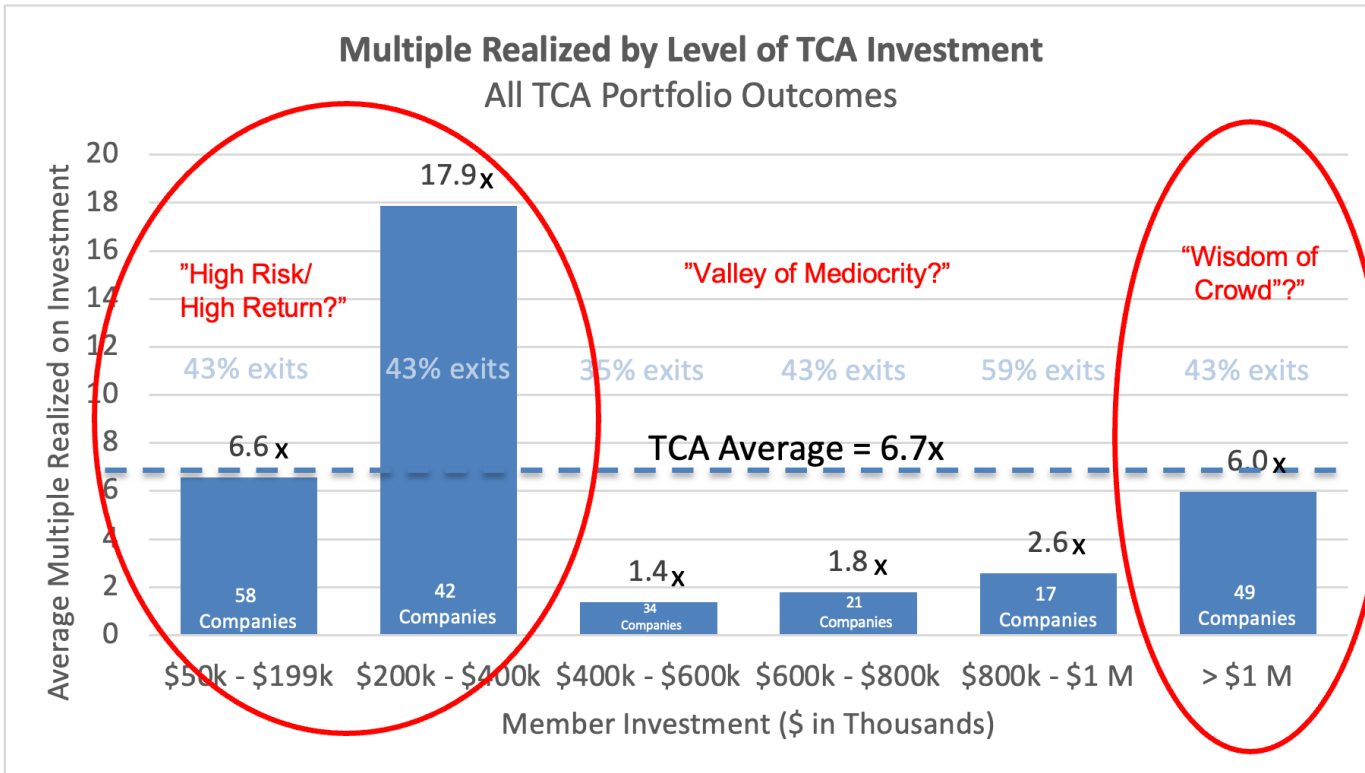
Is There Wisdom in Crowds of Angel Investors?



Source: Analysis of 223 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2021



“U-Curve” of Returns



- **Best Returns are Most Heavily Subscribed and Least Heavily Subscribed Companies**

Source: Analysis of 223 Tech Coast Angel Outcomes (Exits and Shutdowns) 1997-2021



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Author: John Harbison, Tech Coast Angels - Publication Date: June 2021
Updated for all of 2021

Investing in Diverse Teams

“Investing in diverse founders may be good for society, but returns may suffer”

True

or

False

?

Investing in Diverse Teams

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False

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Ethnically Diverse Founders Produce Better Returns

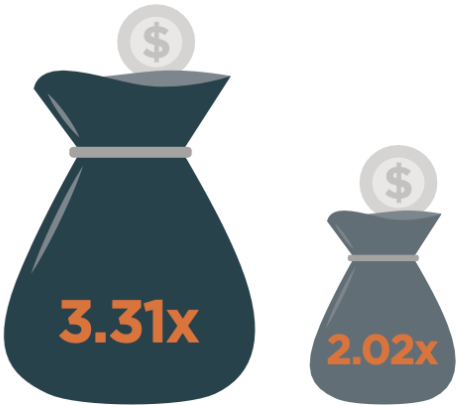
Founding Team's Ethnicity



Ethnically Diverse Founders

All-White Founders

C-Level Leadership Ethnicity



Ethnically Diverse C-Level Leadership

All-White C-Level Leadership

Source: OASB 2020 Annual Report from SEC

Due Diligence

“Due diligence is overrated, since the amount of DD (or expertise in the DD team) does not correlate with better outcomes”

True

or

False

?

Due Diligence

“Due diligence is overrated, since the amount of DD (or expertise in the DD team) does not correlate with better outcomes”

True

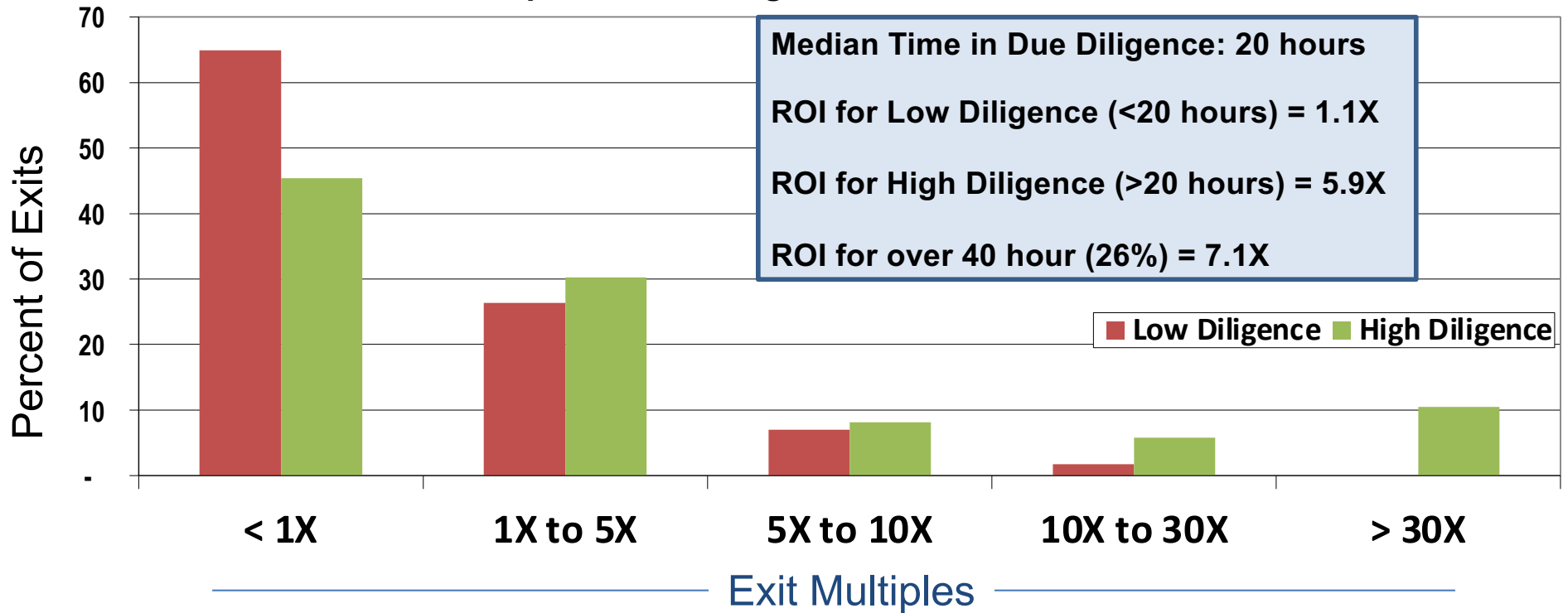
or

False

?

Due Diligence

Impact of Due Diligence on Returns



Prior experience of CEOs

“Prior experience of CEOs matters a lot
in terms of outcomes”

True

or

False

?

Prior experience of CEOs

“Prior experience of CEOs matters a lot
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True

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Prior Experience of CEO

	Out of Business	Exits	Still Active	Total
Serial Entrepreneur	6	12	19	37
First-Time CEO	56	35	74	165
Total	62	47	93	202

Source: Central Texas Angel Network, 2006-2021



But Don't Lose Sight of the “Whole Package”

- All things being equal, you should expect better success with an experienced CEO
- But beware screening out all that don't meet criteria of previous CEO Experience. What if one of these young entrepreneurs applied to your Angel Group?
 - Steve Jobs at APPLE (market cap now \$2,424 B)
 - Bill Gates at MICROSOFT (market cap now \$2.026 B)
 - Jeff Bezos at AMAZON (market cap now \$1,022 B)
 - Sergey Brin & Larry Page at GOOGLE (market cap now \$1,214 B)
 - Mark Zuckerberg at FACEBOOK (market cap now \$465 B)

Note: Market Caps as of February 14, 2023

Source: Yahoo Finance



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Age of CEOs

“Young CEOs do better than more mature CEOs because they have more energy and are more innovative”

True

or

False

?

Age of CEOs

“Young CEOs do better than more mature CEOs because they have more energy and are more innovative”

True

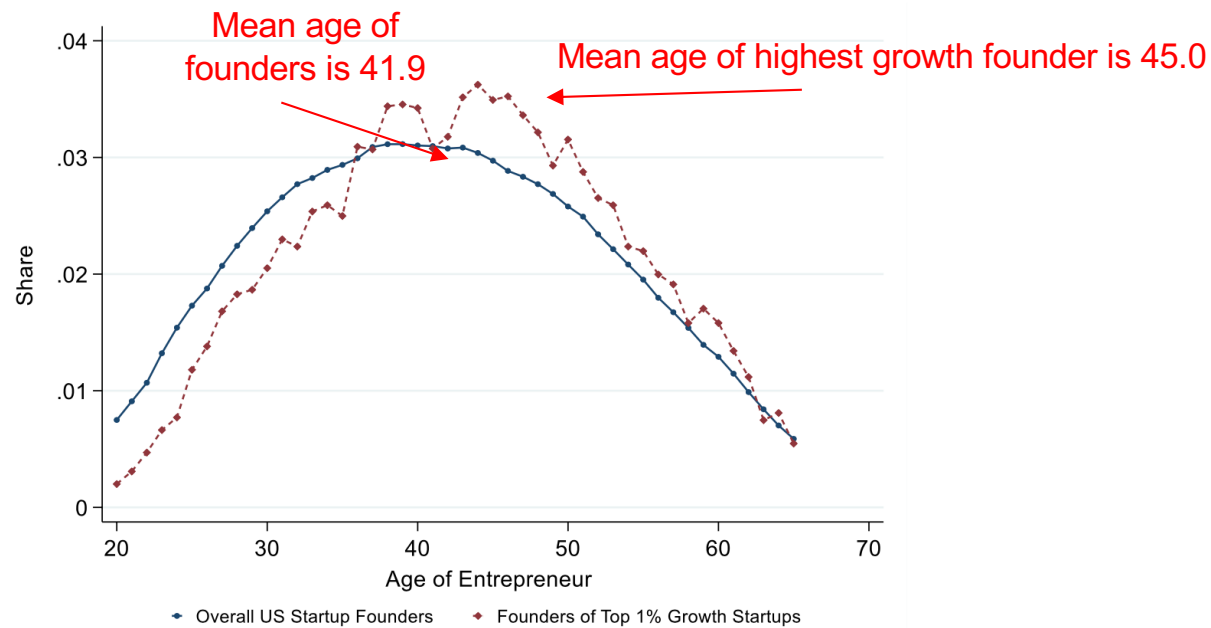
or

False

?

Founder Age Impact on Returns

Figure 1: Founder Age Distribution: All Startups and High Growth Startups



Source: *Age and High Growth Entrepreneurship* (April 2019) by Pierre Azoulay (MIT), Benjamin F. Jones (Northwestern University), J. Daniel Kim (MIT), Javier Miranda (U.S. Census Bureau)

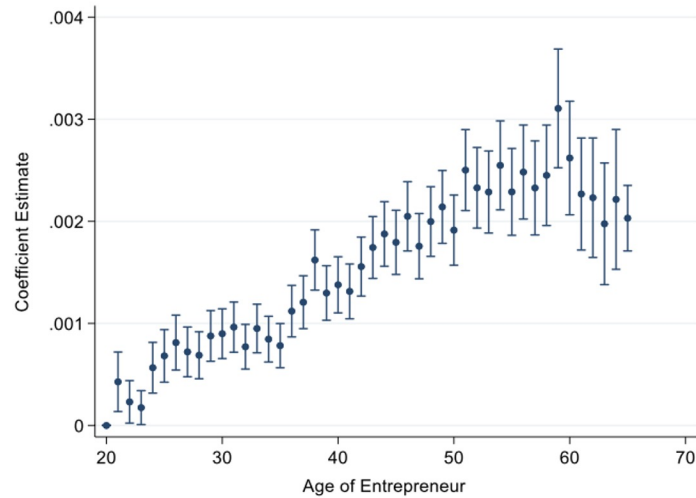


Older CEOs Fare Better

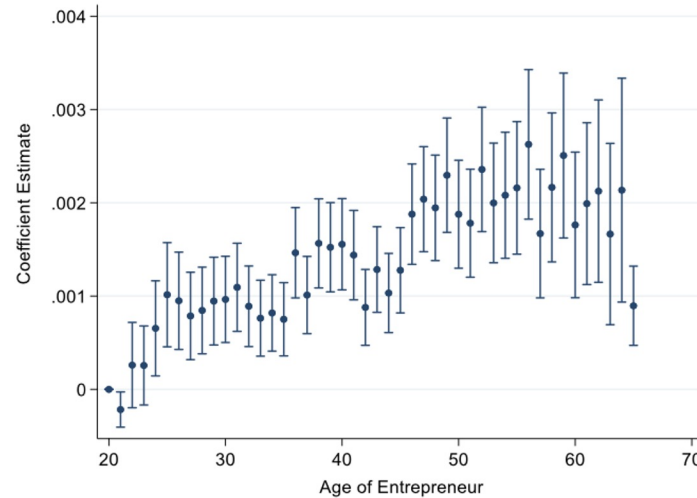
Figure 2: Likelihood of Extreme Success, Conditional on Starting a Firm

50-year old founder is 1.8 times more likely to achieve upper tail growth than 30-year old

Fig. 2A: Probability of Successful Exit (IPO or acquisition), by Age



2B: Probability of Top 0.1% Employment at 5 Years, by Age



Source: *Age and High Growth Entrepreneurship* (April 2019) by Pierre Azoulay (MIT), Benjamin F. Jones (Northwestern University), J. Daniel Kim (MIT), Javier Miranda (U.S. Census Bureau)



Engagement after Funding

“Engagement is overrated in terms of the affect on returns”

True

or

False

?

Engagement after Funding

“Engagement is overrated in terms of the affect on returns”

True

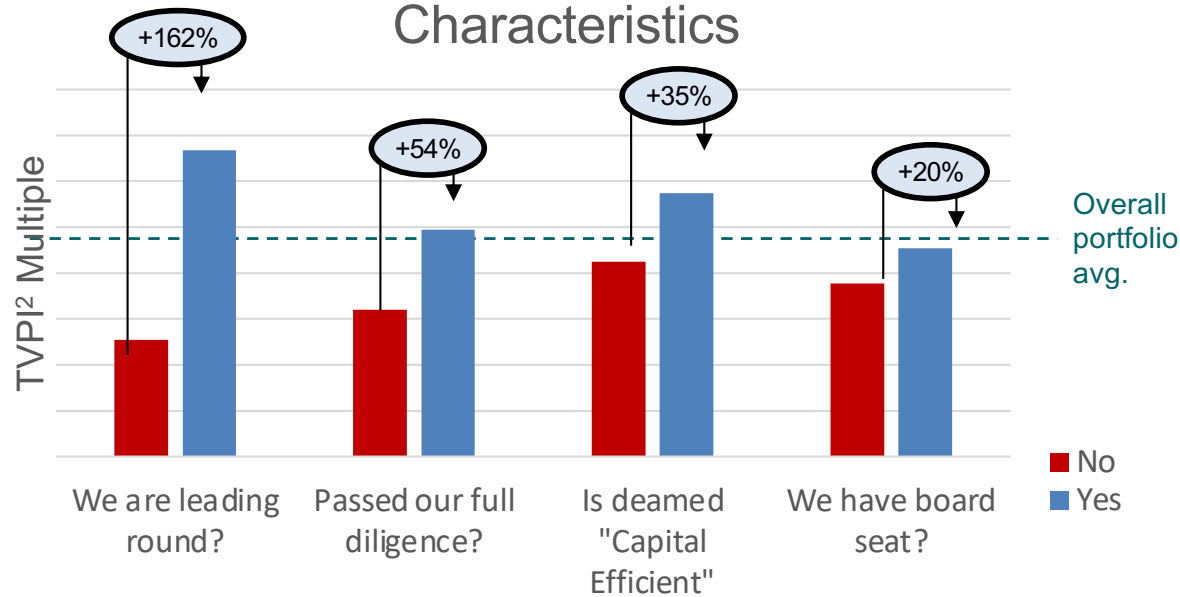
or

False

?

Value of Engagement

Portfolio Returns by Key Deal Characteristics



- Engagement yields better returns
 - Full diligence
 - Understanding capital staging
 - Negotiating reasonable terms
 - Supporting the company

# Companies ¹	71	34	38	67	76	29	34	71
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Notes:

1. Includes 105 active and exited portfolio companies with at least 18 months since initial investment
2. TVPI = Total Value to Paid In Capital (includes both realized and unrealized returns)



Source: Launchpad Venture Group



Author: Alexander Brown, Launchpad Group - Publication Date: March 2021

Economic Cycle Effects

“The stage in the economic cycle at time of funding has little impact on outcomes”

True

or

False

?

Economic Cycle Effects

“The stage in the economic cycle at time of funding has little impact on outcomes”

True

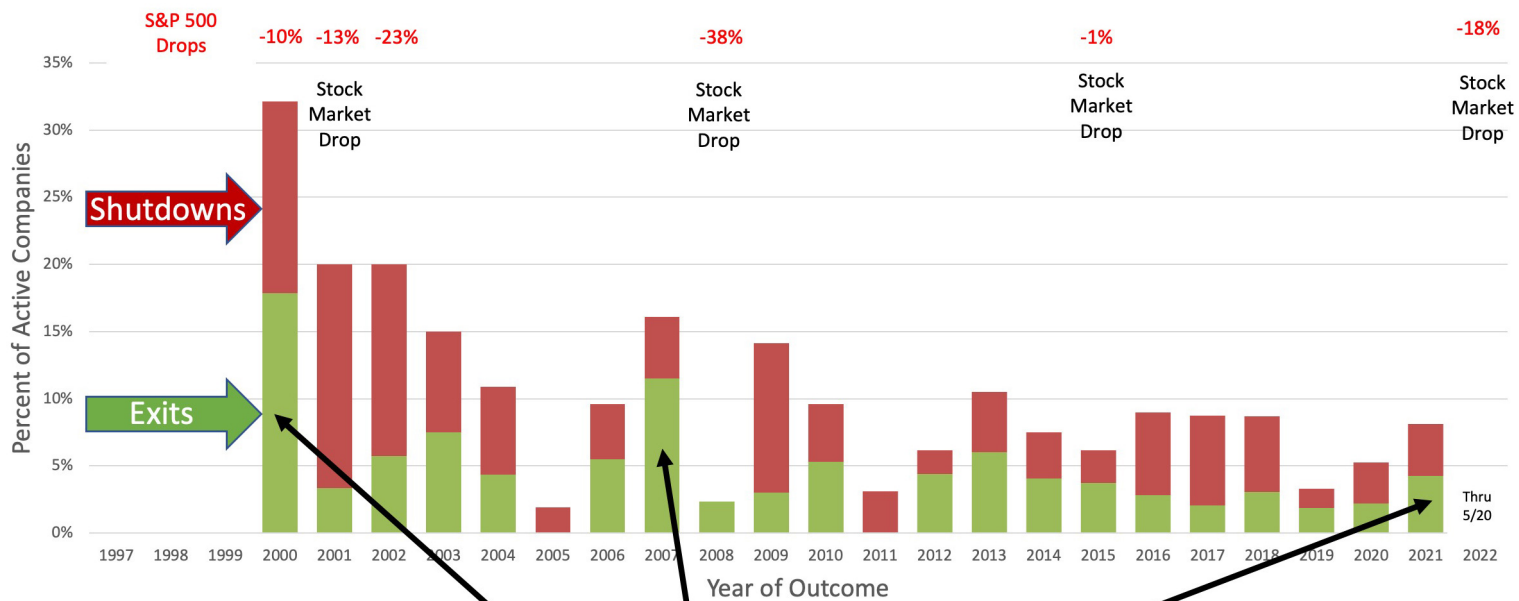
or

False

?

Impact of Stock Market Drops on Exits & Shutdowns

NUMBER OF TCA EXITS AND SHUTDOWNS % OF ACTIVE



Exits Surge Just Before S&P 500 Drop

Source: Tech Coast Angels Portfolio Outcomes

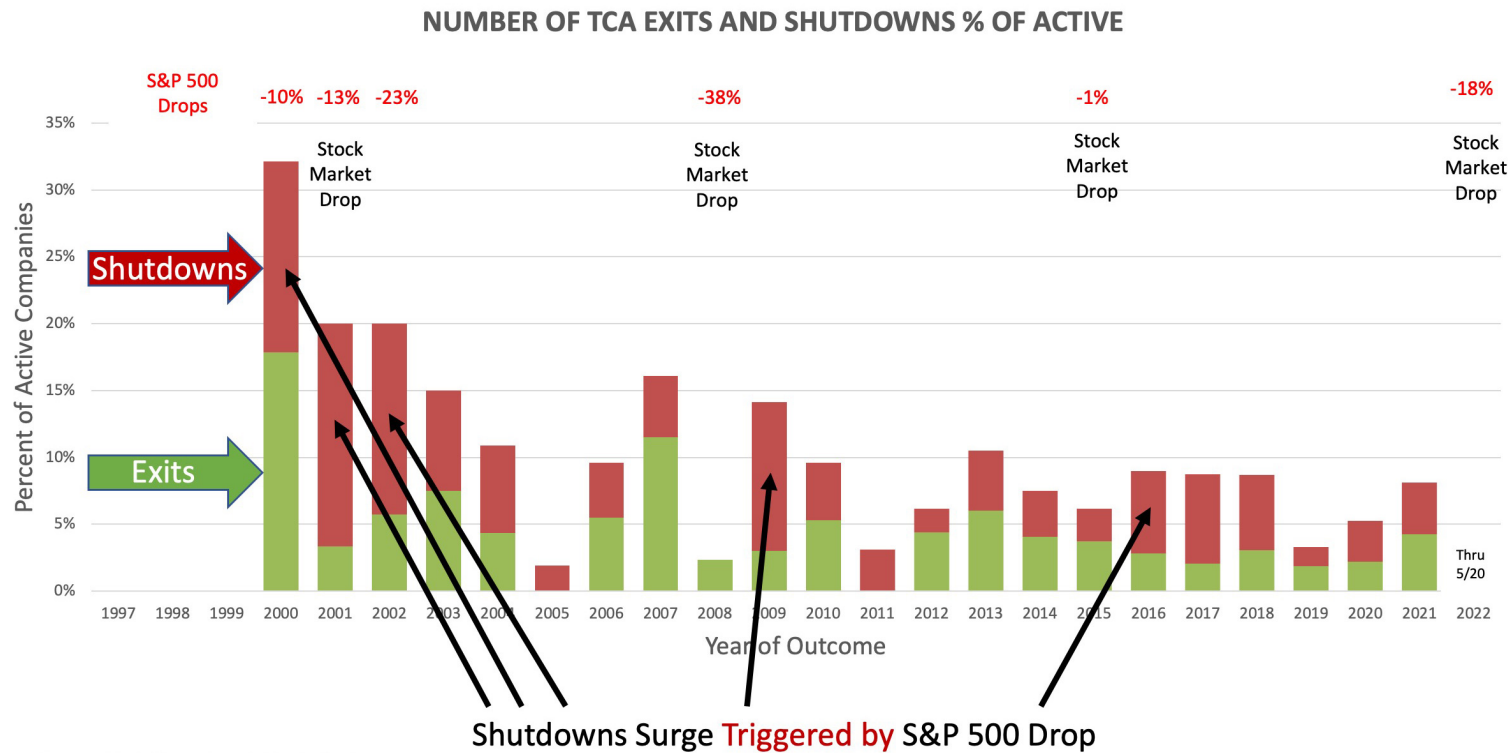


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Author: John Harbison, Tech Coast Angels - Publication Date: May 2022

Impact of Stock Market Drops on Exits & Shutdowns



Source: Tech Coast Angels Portfolio Outcomes



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Impact of Stock Market Drops on Investment Levels

TCA NEW & FOLLOW-ON INVESTMENTS BY YEAR



Source: Tech Coast Angels Portfolio Investments



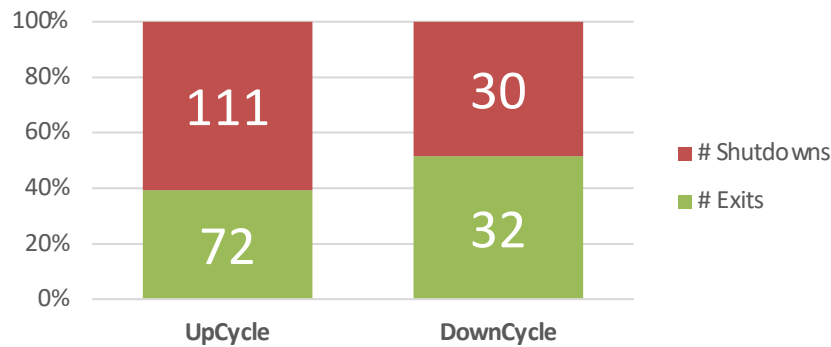
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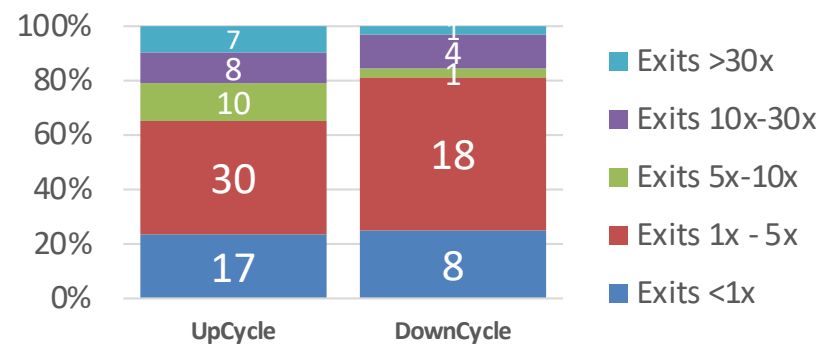
Author: John Harbison, Tech Coast Angels - Publication Date: May 2022

Outcomes by Cycle When Funded

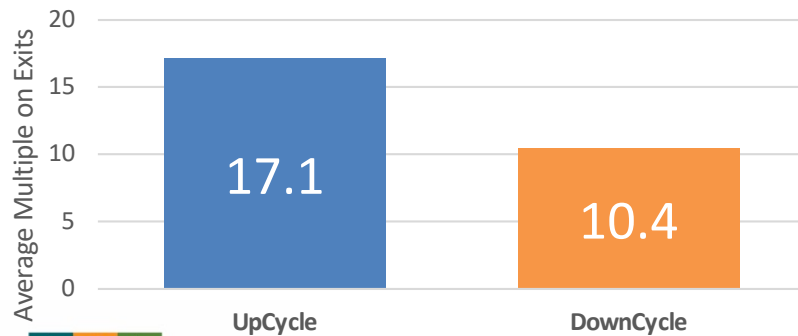
Number of Outcomes by Funding Cycle



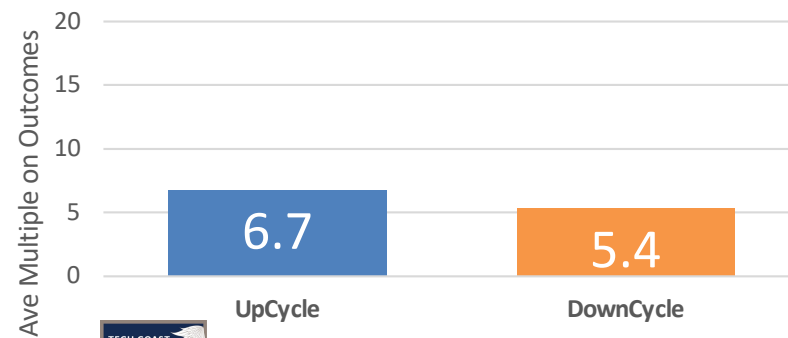
Number of Exits by Funding Cycle



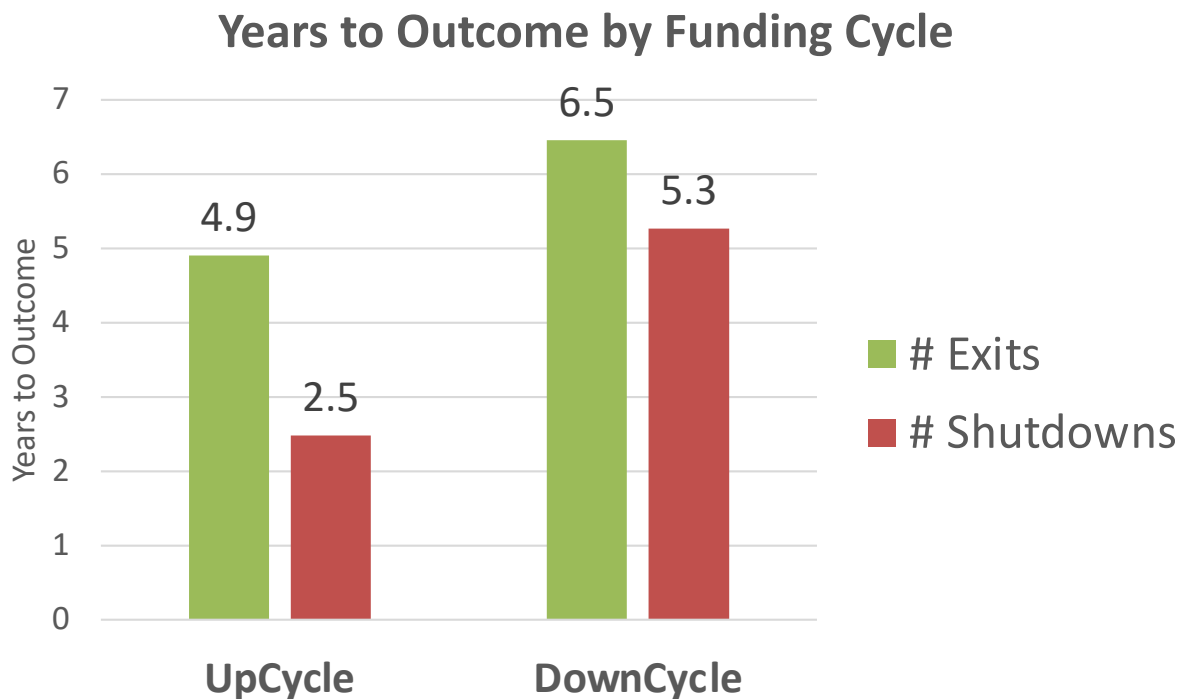
Ave Multiple on Exits



Ave Multiple on Outcomes



Time to Outcome by Cycle When Funded



- **Downcycle-born companies take longer to reach outcome (slower spend rate and resilience from frugality)**
- **Time to shutdown is more than twice as long (5.3 vs 2.5 months) for downcycle funded companies**
- **For upcycle-born companies, exits come faster because markets are already more receptive to M&A or IPOs**



Economic Impact of Angels

“Angel investment is very important to growing the economy”

True

or

False

?

Economic Impact of Angels

“Angel investment is very important to growing the economy”

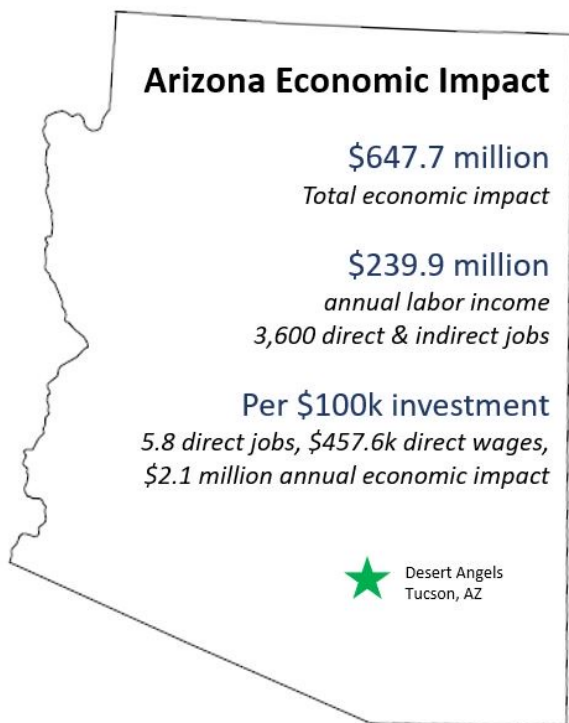
True

or

False

?

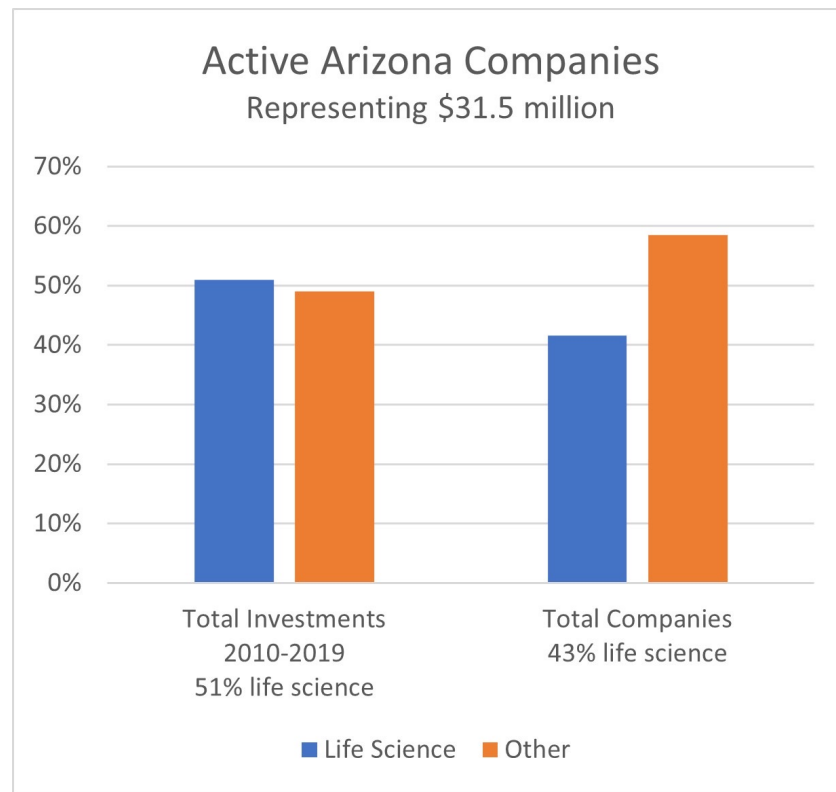
Economic Impact of Angel Investing Can Be Measured



Source: Desert Angels

DESERT ANGELS

Study of 65 companies active in Arizona in 2019, who received \$31.5 million in funding from members between 2010-2019.

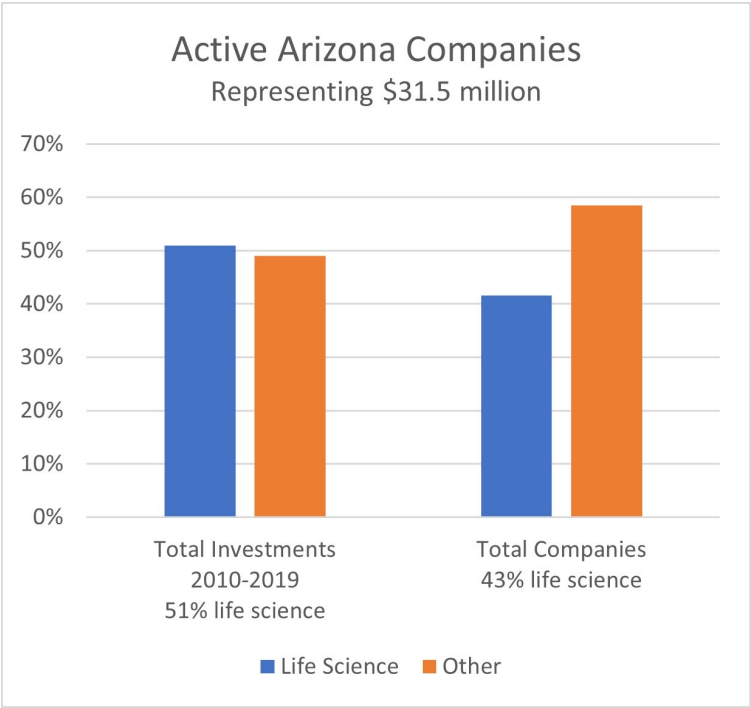
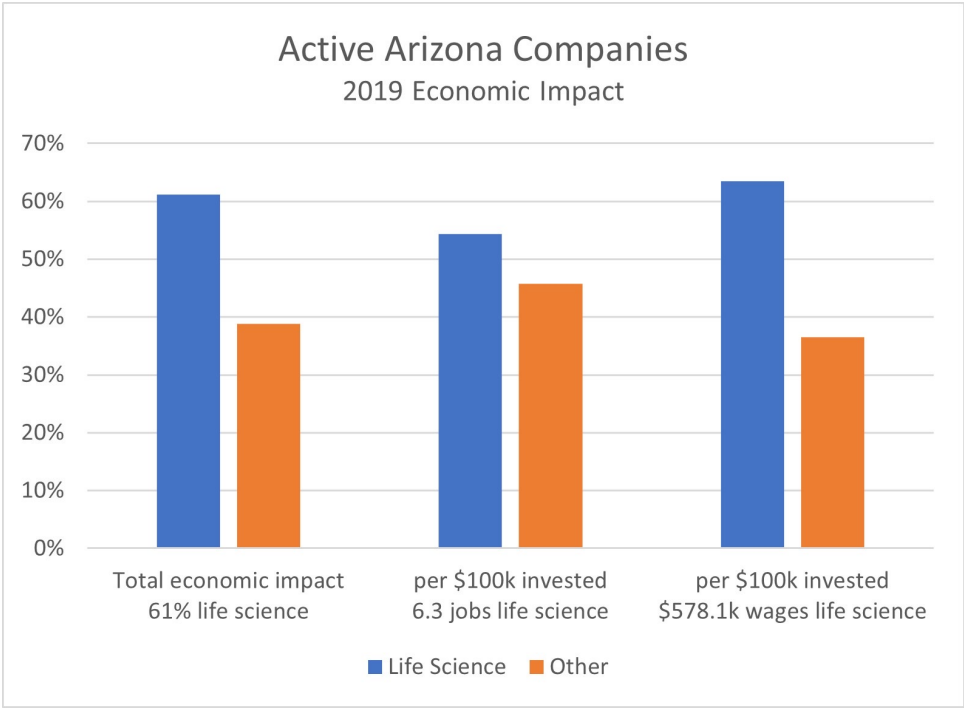


DESERT ANGELS

Author: Joann MacMaster, Desert Angels - Publication Date: January 2022



Economic Impact of Angel Investing Can Be Measured



Source: Desert Angels

Economic Impact of Angel Investing on Communities

Economic Impacts With CTAN Investments Per Year 2015-2021

# of Companies in Business-Y/E	Average # of Jobs Per Company	Total # of Employees
90	28	2,520

Estimated Salaries	Estimated # of Additional Jobs Created	Estimated Total Labor Income in Communities
\$197M	4,939	\$325M

Source: Central Texas Angel Network



ANGEL CAPITAL ASSOCIATION



Author: Rick Timmins, Central Texas Angel Network - Publication Date: June 2022

Economic Impact of Angel Investing on Communities

CTAN Portfolio – 2006-2021 – By the Numbers

Companies Invested In	Total \$'s Invested	Total \$'s Valuation	
202	\$124M	\$425M	
Valuation Multiple	Exits & Out of Business Companies	IRR on Exits & Out of Business Companies	
3.4X	109	29%	
<th>Excess Cash Returned Above Investment to CTAN Members</th> <th>Excess Cash Returned To Entrepreneurs/ Teams (Estimated)</th>		Excess Cash Returned Above Investment to CTAN Members	Excess Cash Returned To Entrepreneurs/ Teams (Estimated)
\$204M		\$714M	

Source: Central Texas Angel Network



ANGEL CAPITAL ASSOCIATION



Author: Rick Timmins, Central Texas Angel Network - Publication Date: June 2022

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