

Thank you to TCA member and founding father, Bill Payne, for developing and delivering the original version of this content based on his decades of research and experience as an angel!



Setting the Stage: What is an Angel Investor?

- Individual who puts their own money into startups
- First "outside" money in an early-stage company
- An investor who provides more than money
 - This is the "Angel" part
- Typical backgrounds:
 - Successful entrepreneur
 - C-level executive
 - High net worth professional



Capital Sources Over Startup Lifecycle



PROFIT

TIME



Self – Skin in the Game

- Entrepreneurs are expected to exhaust personal resources first
 - Demonstrates commitment
 - Delays outside investment maintain greater ownership
- Sources
 - Personal capital home equity
 - Alternate income stay in job longer, consulting, spouse income
 - Delay expenses home office, used purchases, deals with vendors



Friends and Family (\$70 billion annually)

- Huge source of capital
- Generally unsophisticated
- Investing in entrepreneur, not business
- Clarify gift, debt or equity
- Put terms in writing



Grants (\$3 billion annually)

- US Government (some from states and local governments)
- Many US government agencies
- Grants or contracts is there a deliverable?
- Alignment with company is important



Crowdfunding (equity \$1+ billion annually)

- Many varieties
 - Donation, real estate, debt, rewards, equity, ICOs
- Rewards crowdfunding (Kickstarter) can be market validation
- Equity crowdfunding
 - Accredited investors (AngelList)
 - Non-accredited (SeedInvest, WeFunder, etc.)
- Early crowdfunding may preclude interest from later investors



Accelerators

- Y Combinator, TechStars, 500 Startups, many, many others
 - Classic model is rigorous, onsite, three-month engagement
 - Limited capital (\$10K \$125K per company)
 - Intensive mentoring
 - Lean startup (get to market quickly, pivot, go again)
 - Engagement ends at Demo Day
 - Most successful for software/Internet startups (due to short duration)
- New crop growing of vertical-specific and corporate accelerators, e.g. Indie Bio, Acceleprise, Illumina Accelerator
- Opportunity for angels to engage as mentors/investors



Angel Investors (\$25 billion annually)

- High net worth individuals investing personal funds, usually part-time
- Often invest in groups
- Invest time and money in portfolio companies
- Typical investment: \$25K in round of \$500K
- Invest in seed stage and later
- Strong interest in exit strategy and total investment to get to exit



Venture Capital (\$50+ billion annually)

- Limited partnership model
- General partners raise capital, invest, manage portfolio
- Limited partners passive endowments, corporations
- Most invest in growth stage companies
- Invest \$2+ million in rounds of \$4 million up (could be \$100 million)
- Nano/Micro VCs may invest \$100K up in earlier rounds of \$500K up
- Many look for angel vetted deals

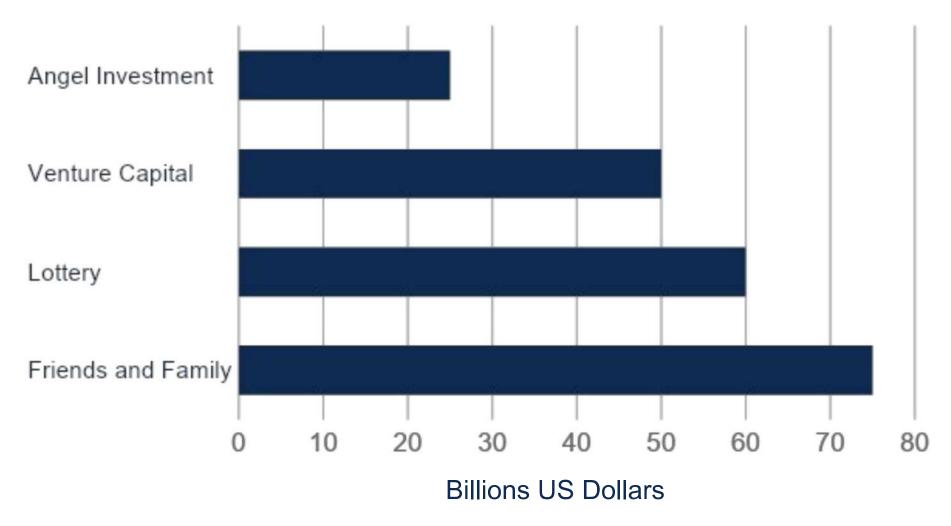


Other Sources of Capital

- Venture debt
 - Silicon Valley Bank, etc.
- Revenue-based financing
 - Lighter Capital, Indie.VC, etc.



US Funding in Typical Year



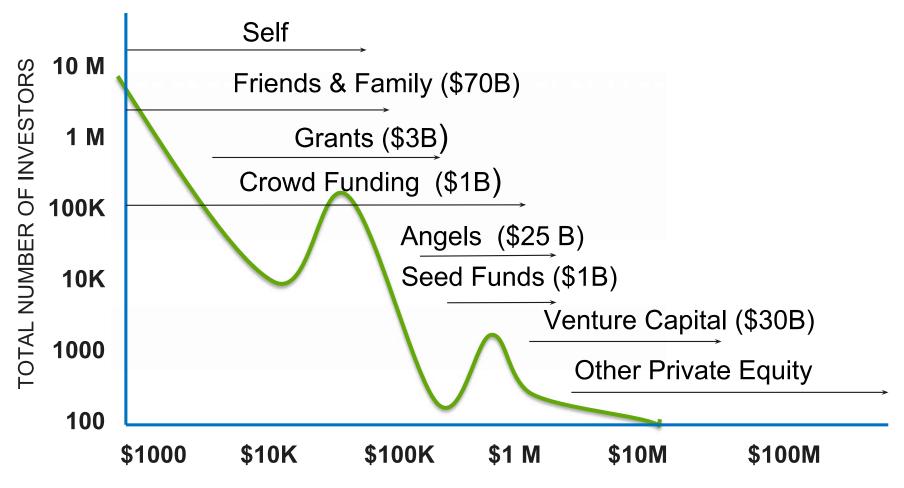


Understanding the Capital Food Chain (at what stage, what round size)

- Friends and Family before third-party validation
- Accelerators post-formation, MVP
- Crowdfunding usually early
- Angel investors with market validation, probably with initial customers/revenue
- Venture capital further along, revenues, clinical phase, etc.
 - Typically de-risked from angel round



Diminishing Number of Investors with Round Size



INVESTMENT SIZE



Non-Linearity of Capital Availability

- Rational assumption would be that
 - The less capital required, the more available sources
 - And, the more capital required, the fewer sources
- However... few capital sources available for rounds sizes of
 - \$50K to \$100K
 - \$1M to \$3M

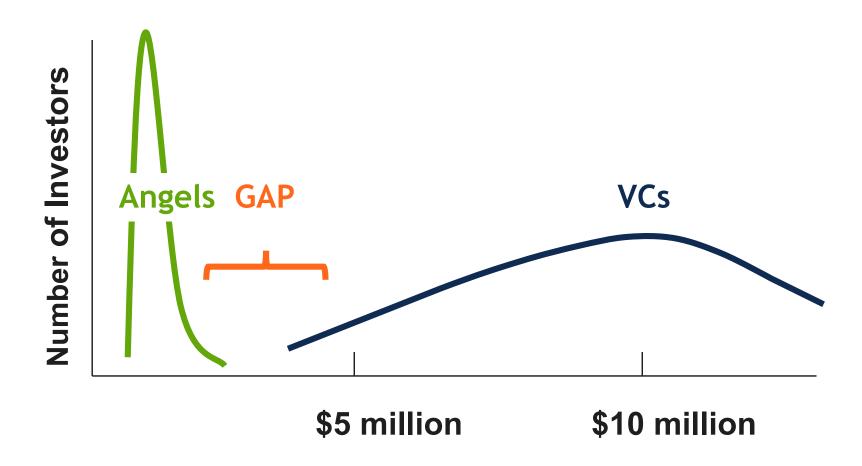


Why the Non-Linearity

- \$50,000 \$100,000
 - In most cases, too large for Friends and Family
 - Generally too small for angels to justify the expense of due diligence and legal documentation of the deal
- \$1 million \$3 million
 - Prior to 2000, smaller VCs (\$10 \$50 million) invested in this gap
 - "2-and-20" VC model is not financially viable for smaller funds
 - \$200+ million VCs cannot justify small investments
 - Yes, there are some small VCs, but the number is small
- Note to entrepreneurs: Avoid round sizes in these gaps...or go to TCA!



Series A Funding Gap



Investment (one round)



Implications of the Gap to Angels

- Angels are filling the gap through multiple rounds and forming as groups (TCA, etc.)
- Save dry powder
 - Assume multiple rounds
 - Make smaller individual investments in the earliest stage
- Consider following-on rounds for deals meeting milestones for companies you missed or passed on the earlier. Good diversification strategy.



Summary – Capital Sources

- Entrepreneurs should right-size their funding to capital source
- TCA plays an important role in filling the "gap"
- New sources can help in the early stage
 - Crowdfunding, accelerators, micro-VC



Angels: Motivation and Returns



Angel Investor Motivations

- Angels invest time and money in potential high growth companies
- Primary motivation for investment: ROI and IRR
- Staying in the business game...
 - Finding deals
 - Performing due diligence on deals
 - Negotiating the deal
 - Mentoring and serving on boards (post-investment)
 - Participating in investment groups
 - Lifelong learning
 - "Seeing the future"
- Typically, the return on time spent is mostly intrinsic (i.e. enjoyment, fulfillment, paying-it-forward, etc.)



Wiltbank Studies of Returns to Angels

- High risk investments deserve high returns: 20% IRR?
- 20% IRR equates to 2.5X ROI in 5 years
- Angel investors (as a group) achieve this goal
 - In the US and in Europe (three studies by Wiltbank)
 - Since 1997, TCA has returns of 4.8X and 23% IRR on all exits
- But:
 - 50% of angel-funded startups fail to return capital
 - All of upside comes from one in ten (or two in ten if you are REALLY good or lucky)
- What does it take to get a 2.5X ROI?



We Don't Know Which of our Investments Will Prove to be Home Runs

Therefore:

 All angel investments must have a potential for high returns (10X+)

Moreover:

- Angels need a large portfolio: 15 to 25 lifetime investments
- Multiple individual investments per year, or diversification through 3 to 5 angel funds

Mitigation of Risk through Diversification

- Diversification drives returns and lowers risk!
- Probability of returns based on a Monte Carlo simulation of Wiltbank data:
 - 6 investments 50% of return of capital (1X)
 - 12 investments 75% probability of 2.6X return
 - 24 investments 90% probability of 2.6X return
- Diversification by stage (seed, expansion stage, etc.)
- 50%+ of TCA investments are follow-on to earlier investments



Diversification Strategy

- $10 \times $25,000 \times 2 = $500,000$
 - Ten invested companies (probably more)
 - \$25,000 per investment
 - At least one follow-on investment per deal
- Some deals will take more follow-on rounds
 - But...some will fail early, before a follow-on round
- Or... your fast-track to diversification...EASY!
 - Invest \$10,000 or more each year into an angel fund that invests in 10–15 companies per year
 - Follow-on directly with your favorite fund investments to increase exposure



How long will this take?

- Time to exit for failures: ~3 years
- Time to exit for 10X returns: ~5 years
- Time to exit for 25X returns: ~8 years

Patience is required!



Angels in Groups



Why Do Angels Join Groups?

- Deal flow
 - Larger groups have better deal flow
- Best practices
 - Screening deals
 - Due diligence
 - Deal terms
- Expertise
 - Wisdom (and experience!) of the crowd
 - Due diligence know how and business segment expertise
 - Engaging with companies after investment (mentors, directors)
- Dividing the work eases the pain
- Leverage!



Angel Deal Flow Process

- Referral & application Inbound introduction of company to group
- Committee screening Does the deal meet the group's criteria for investment?
- Member meeting Group hears formal pitch with Q&A
- Due Diligence Deeper dive into the business
- Funding Legal negotiation and financing
- Syndication Fill-out round by sharing with trusted groups



Angel Investing Statistics

- Average Angel deal size: \$345K*
- Median pre-money valuation: \$6M (up 20% YoY) ***
- Priced equity structures accounted for 54% of deals and 46% were convertible notes or SAFEs (up 8% YoY) ***
- Typical number of checks Angel Investors wrote: 2 4 **
- Total number of checks an Angel writes in her/his career:
 median of 10 / mean of 19 **
- Size of Angel checks: median of \$25K / mean of \$35K **
 - AngelList Syndicates and angel funds reduce minimum check size to \$5K - \$10K



^{*} Center for Venture Research 2015 Analysis of Angel Investing

^{**} The American Angel Campaign, 2016 Wharton Business School

^{***} ACA Angel Funders Report 2019

Fundable Companies



Killer Management Team

- CEO
 - Coachable
 - Integrity
 - Leadership and management experience
 - Founder-market fit (i.e. vertical experience)
- World-class Team
 - Balanced and complete
 - Experienced
- The "IT" Factor
 - Can you visualize success with this team???



Compelling Opportunity

- Scalable
 - \$20M+ revenue in 5-7 years
 - Serving a \$1B+ total market (TAM)
- High gross margins
- Ready for customers (or the clinic for life science)
- Unfair competitive advantage
- Other investor-specific interests
 - Social impact, down-side protection, industry, etc.



Competitive Advantage

- Formidable founders (execution-focused!)
- Time-to-market
- Network effect
- Brand
- Innovation
- Intellectual Property

Intellectual Property

- Patents
 - Could be important, but difficult to defend
 - Seed/startup investors do not assign great value
 - Acquiring companies might!!
- Trade Secrets
- Copyrights and trademarks
- Does not apply to all deals

Funding Considerations

- How much funding?
 - Large rounds difficult to fill
 - Early, partial closings dangerous
 - Syndication is time-consuming
- Can we visualize a VC follow-on investment?
- Are there "hair and warts" that could jeopardize future funding
 - Cap table
 - Accumulated debt
 - Founder/board toxicity
 - Licensing, IP, other legal



Valuation of Early Stage Companies



Valuation Determines Investor Ownership

- Negotiating valuations can be easy or contentious
 - Some entrepreneurs underestimate the importance of funding
 - Others know what to expect
- Angels groups typically invest \$300K to \$2 million in seed stage deals
- For this investment, angels typically purchase 15% to 30% ownership
- Investors typically negotiate pre-money valuation, but ownership is based on post-money valuation
 - Pre-money Valuation + Investment = Post-money Valuation
 - Investor ownership (%) = Investment / Post-money Valuation
- Beware a bulging post-money valuation!



What Determines Pre-Money Valuation?

- Quality of the team?
- Value of IP?
- Size of market?
- Yes, yes, yes!
- But, also
 - Location
 - Economic (financial) cycle
 - Business sector
- Analogous to the real estate market



Valuations Methodologies

(For establishing the pre-money valuation of pre-revenue startups)

- Discounting exit valuation or proforma financials
 - Venture Capital Method
 - Chicago Method
- Comparing target to typical funded startup
 - Scorecard Method
 - Dave Berkus Method
 - Risk Factor Summation Method
 - Gatto Method



Using Comparables

Appraising target startups using comps

- Starting point: Median valuation of similar startups
 - Similar stage of development
 - Similar business sector
 - Similar location
- Comparing features of target to the norm
- Adjust median by your appraisal of the target



Using a Scorecard

Criteria	Weighting	Comparison	Adjusted Weighting
Entrepreneur, Team, Board	30%		
Size of Opportunity	25%		
Product/Technology	15%		
Competitive Environment	10%		
Sales/Marketing	10%		
Need for More Financing	5%		
Other	5%		

Hypothetical Example

Criteria	Weighting	Comparison	Adjusted Weighting
Entrepreneur, Team, Board	30%	120%	
Size of Opportunity	25%	100%	
Product/Technology	15%	140%	
Competitive Environment	10%	80%	
Sales/Marketing	10%	60%	
Need for More Financing	5%	100%	
Other	5%	75%	

Hypothetical Example

Criteria	Weighting	Comparison	Adjusted Weighting
Entrepreneur, Team, Board	30%	120%	.36
Size of Opportunity	25%	100%	.25
Product/Technology	15%	140%	.21
Competitive Environment	10%	80%	.08
Sales/Marketing	10%	60%	.06
Need for More Financing	5%	100%	.05
Other	5%	75%	.04

Sum of Adjusted Weightings: 1.05



Calculate Pre-money Valuation

- Add up Adjusted Weightings = 1.05
- Determine median pre-money valuation for startups in your area for startups in the same business sector
- Let's assume the US median from the ACA Report
- Then:

\$6 million multiplied times the adjusted weighting = \$6.3 million



Valuation Summary

- Valuation of startups is more art than science
- But you can use a structured approach to help
- Every angel investor has to decide what is important to them
- The market influences valuation as well



Questions, Answers, Comments... and Break!

