Seed and Early Stage Investing: Challenges for Public Policy

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Acknowledgements

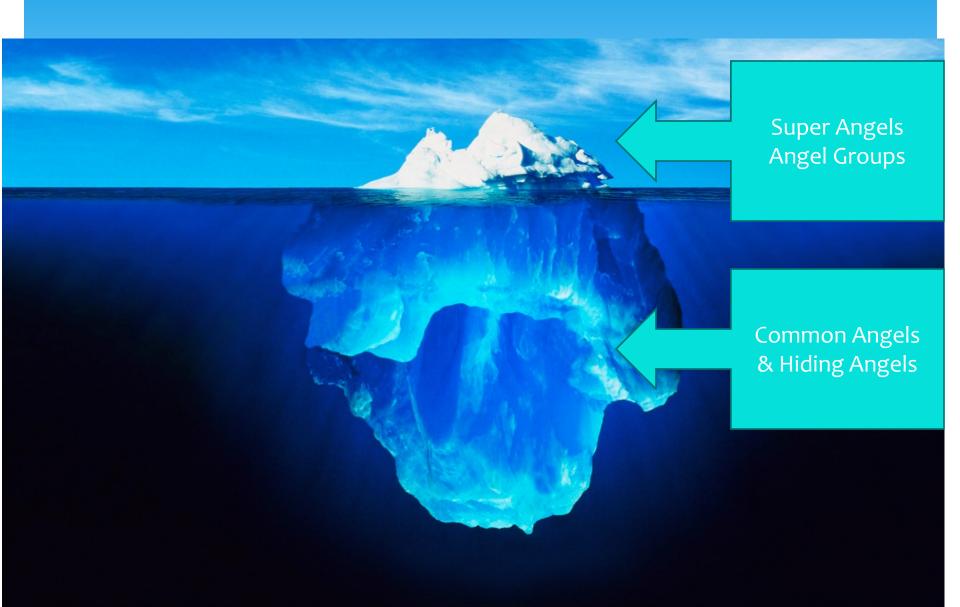
- * Special thanks to the Investment Capital Branch of the Government of the Province of British Columbia
- * Many results based on preliminary analysis.
- * Please do not cite from this presentation without first checking for updates with authors!

Research based on series of papers

Brander, Jim; Qianqian Du and Thomas Hellmann (2013), "The Effects of Government-Sponsored Venture Capital: International Evidence", forthcoming, Review of Finance

- * Engineer, Merwan; Paul Schure & Dan Vo (2012), Hide and Seek: Why Angels Hide and Entrepreneurs Seek. Mimeo, University of Victoria
- * Hellmann, Thomas and Paul Schure (2010), "An Evaluation of the Venture Capital Program in British Columbia" Report prepared for the Report prepared for the BC Ministry of Small Business, Technology and Economic Development
- * Hellmann, Thomas; Paul Schure and Dan Vo, (2014), "Angels and Venture Capitalists: Complements or Substitutes?" Mimeo, University of British Columbia
- * Hellmann, Thomas; Paul Schure and Dan Vo, (2014), "Are all Angels Alike?" Work in Progress, University of British Columbia
- * Hellmann, Thomas and Veikko Thiele (2014), "Friends or Foes? The Interrelationship between Angel and Venture Capital Markets" forthcoming in Journal of Financial Economics
- * Vo, Dan (2014), "The Geography of Angel Investing", Chapter 1 from PhD Thesis, University of Victoria

Tip of the Iceberg Problem



Some insights from the BC Equity Tax Credit Program

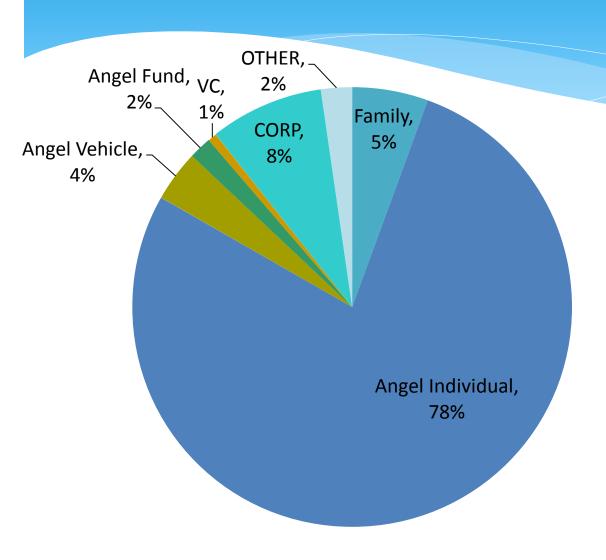
30% 'check in the mail' BC residents and BC companies Various caps and restrictions Sub-programs for VC funds, Angel Funds & **Small Angels**

Four Key Messages

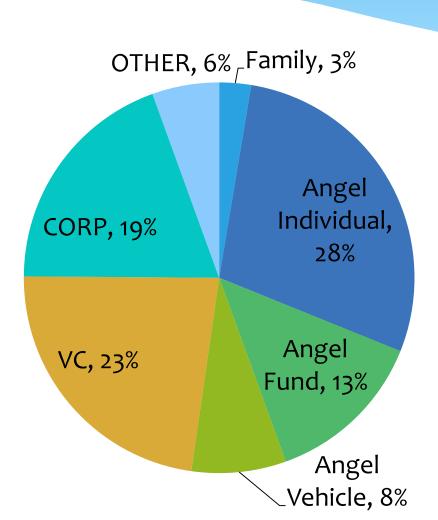
- * 1.) Who funds start-ups?
 - * Investor diversity, even amongst angels
- * 2.) How do angels invest?
 - * Most angels write only one check!
- * 3.) Interactions between angels and VCs
 - * Substitutes not Complements
- * 4.) What policy implications?
 - * Need to rethink policy approaches

First Message: Investor Diversity

Total Number of Distinct Investors

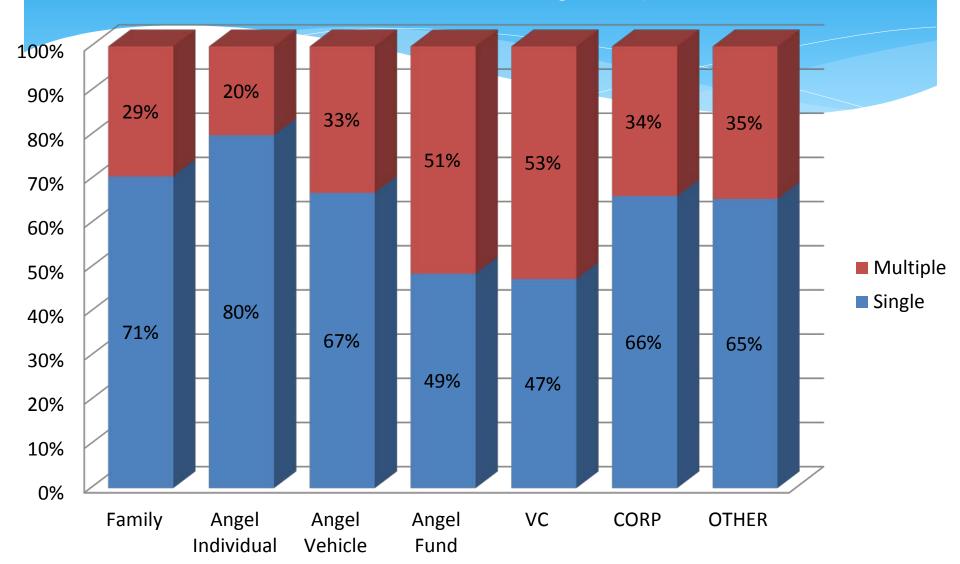


Aggregate Investment Shares

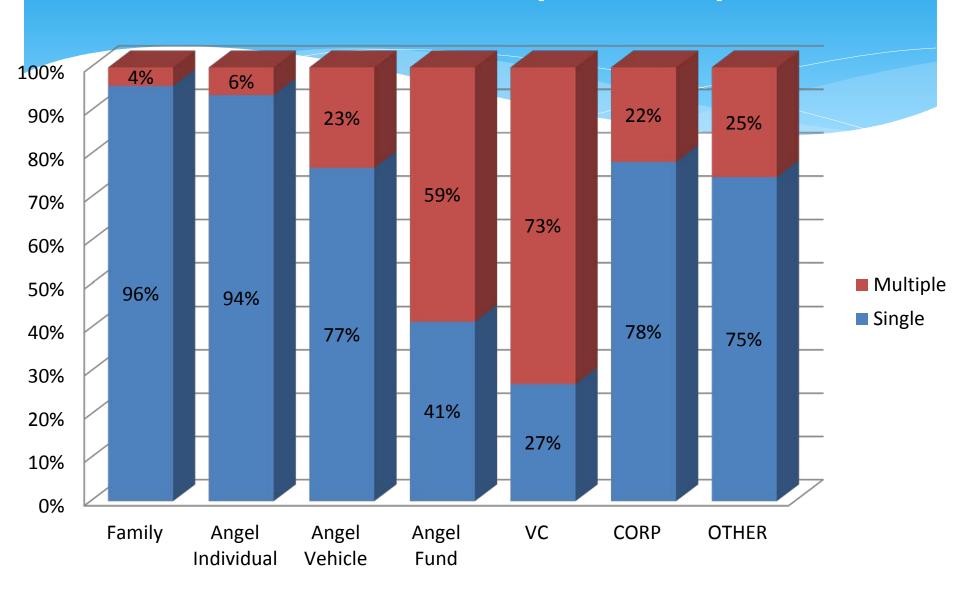


Second message: Most angels write only one check

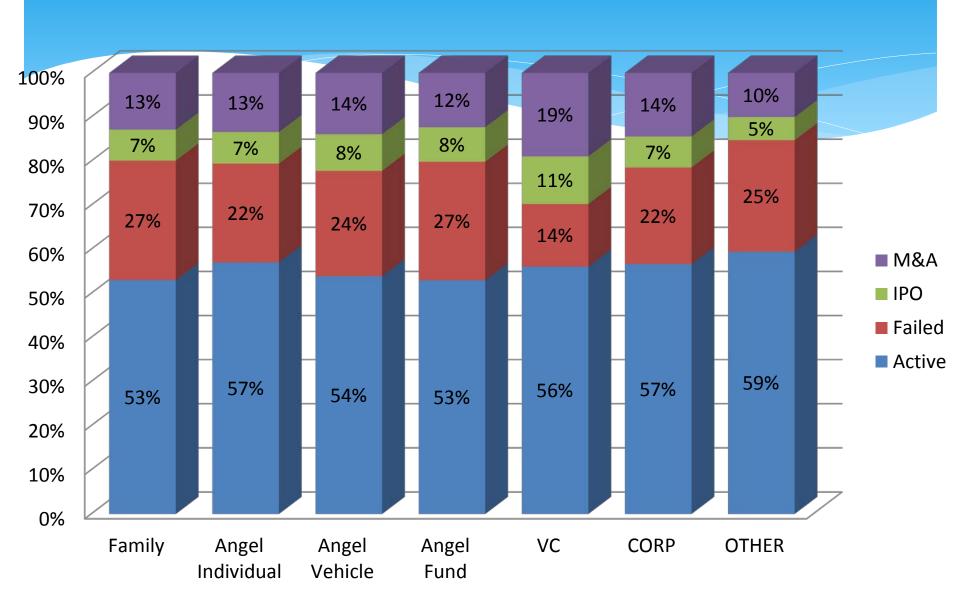
Who makes repeat investments in same company?



Who invests in multiple companies?



Outcomes



Third message: VCs and angels are 'substitutes' not 'complements'

Dynamic financing pattern: Angels and VCs

- * Complements:
 - * Examples: Google, Facebook
 - * "Integrated financial eco-system"
 - * Stepping stone logic
- * Substitutes:
 - * Examples: Smartcells, Club Penguin
 - * "Separate financial eco-systems"
 - * Lock-in effect

The Effect of Prior Investor Choices on Current Investor Choices.

	Angel	VC	Other	All
Prior Cumulative				
Prior Angel	0.259***	-0.351***	-0.0847***	-0.154***
	(0.0358)	(0.0362)	(0.0321)	(0.0329)
Prior VC	-0.237***	0.334***	0.00854	0.0585*
	(0.0390)	(0.0372)	(0.0276)	(0.0315)
Prior Other	-0.0391	-0.0835***	0.166***	-0.0939***
	(0.0359)	(0.0237)	(0.0289)	(0.0355)
Controls	YES	YES	YES	YES
Observations	1,715	1,715	1,715	1,715
Number of companies	469	469	469	469

Drilling down the substitution effect

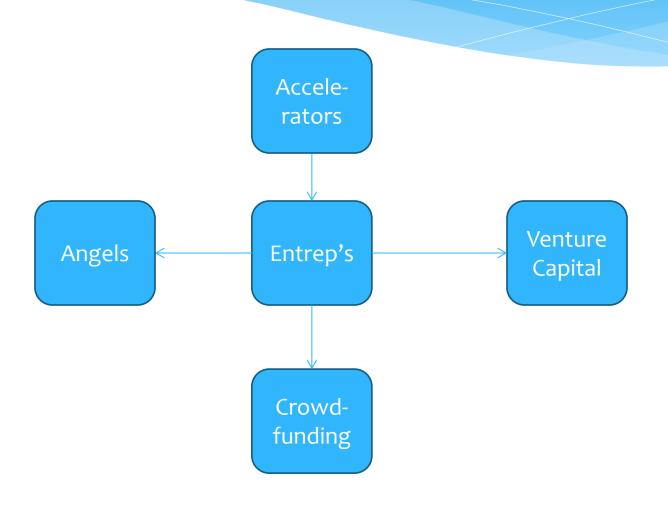
- * Is substitution effect driven by losers?
 - * VC funding associated with higher exit rate
 - * Same substitution pattern across failed, alive & exited companies
- * Is substitution effect uniform across angel types?
 - * Strongest for 'one-check' angels
 - * Insignificant for 'portfolio' angels
 - * Also strong for angel funds

Why should we care? Focus on Policy Implications

The 'Old' World of EntrepreneurialFinance



The Brave 'New' World of Entrepreneurial Finance



Some Dilemmas for policy makers

- * Rationale for government support for entrepreneurial finance
 - * Jobs, Innovation, Ecosystem
- * What investor type should we target?
 - * VC, angels, accelerator, crowdfunding, other?
- * Amongst the angels, how do we target the right ones?
 - * Angel groups, Super-angels, Common angels, etc...?
- * How can justify support/subsidies to 'rich' people?
- * What is the right mix of support tools?
 - * Tax credits, matching funds, etc...?

Type of Program	Cost to Government	Conditional on investor	Reward Investment or Performance	Rule or Discretion
Investment tax credits	High	Yes	Investment	Rule
R&D tax credits	High	No	Investment	Rule
Capital gains tax breaks	High but delayed	Yes	Performance	Rule
Government (Fund-of-) Funds	Low in long term	Yes	Investment	Discretion
Co-investment funds	Low in long term	Yes	Investment	Discretion
Matching funds	Low in long term	Yes	Investment	Rule

My Two Proposals (aka Back to Basics)

- * Proposal 1: Give support to companies, not investors
 - * Make support conditional on receiving equity investments
 - * Government remains agnostic to investor types
 - More flexible in changing investment environments
 - Political economy easier
- * Proposal 2: More emphasis on capital gains reductions
 - * Reward performance not investment
 - Incentive and selection effects
 - * Ideally combine investment and performance support

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 - Substitutes not Complements
- * 4.) What policy implications?
 - * Need to rethink policy approaches
 - * Back to Basics: Focus on companies and performance

Thank you

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