Encyclopedia of Entrepreneurship

Entry on

Business Angel Network

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Introduction

Informal venture capital (VC) – i.e., angel investing -- is the largest single source of private equity capital in new venture development. Angel investors are so named because in the early 1900s wealthy individuals provided capital to help launch new theatrical productions. As patrons of the arts, these investors were considered by theater professionals as "angels." Estimates of the number of active angel investors in the US vary widely. By triangulation of various estimates it is at least 4 or 5 times larger than the formal VC market (Freear et al, 1996; Mason & Harrison, 2002). For example, while 36,000 companies received $20 billion of angel funding for the year 2002[1], approximately only 3000 companies received capital from VC firms in 2002[2]. Of the latter, only 22% was invested in early stage companies.

A recent trend in angel investing consists of the formation of business angel "networks" such as the Band of Angels in Silicon Valley and the Alliance of Angels in the Pacific Northwest. It is estimated that there are over 150 business angel networks in the USA and several in European and Asian countries. Books and websites on business angels continue to proliferate. From a research standpoint, however, in spite of the considerably larger magnitude of business angels when compared to VCs, we know less about the former than the latter. The current state of the art in early stage investing consists almost exclusively of research into formal VCs, including descriptions of practices, calculations of returns, and theories that explain both.

An intriguing puzzle

From a theoretical standpoint, extant research identifies two key problems of interest with regard to early stage private equity financing – both of which embody elements of information asymmetry between investor and entrepreneur:

[1] Estimate by the *Center for Venture Research* at the University of New Hampshire,
[2] Estimate by *Venture Economics* and the National Venture Capital Association

1. <u>The investor does not know the entrepreneur's ability</u>

   There are at least three sets of theoretical arguments that set this up as a major source of risk in both angel and VC investing. First, as summarized in Berger & Udell, (1998), no one will fund early stage entrepreneurial firms because of moral hazard problems -- so they have to depend on internal funding. Second, the ones that do get funding will not be the best ones because of adverse selection problems (Amit, Glosten & Miller, 1990). Third, when VCs do manage to discover a hi-potential entrepreneurial venture, they will face a free rider problem from other VCs due to non-excludability of the information (Anand & Galetovic, 2000).

2. <u>The investor does not know the entrepreneur's motivation</u>

   Added to the problems due to theories based on information asymmetry and agency is the onerous fact that these problems cannot be "contracted" away. Theories of incomplete contracting therefore suggest that the above theories are inadequate at describing the risks involved in early stage financing, because they all assume both investors and entrepreneurs are motivated by the same thing -- i.e. cash flows (Hart, 2001). But when "private benefits" other than cash flows matter to the entrepreneur, decision (control) rights become extremely important.

Given these enormous problems identified by theoretical and empirical examinations of formal VC funding practices and the early investment histories of entrepreneurial firms, we would expect that business angels, even more than VCs, would have developed an elaborate set of practices to overcome these problems. Yet, what research there is looking at the practices of angel investors suggests that they often use none or considerably less of the types of practices that formal VCs use to overcome the above-mentioned problems. A pithy saying in the popular lore on entrepreneurship points to the earliest investors as consisting of three F's: *friends,*

family, and fools, angels being the last of the three. More seriously, as Prowse (1998) discusses, angel investors focus their investments in earlier stages of venture development than do VCs, do significantly less due diligence, source deals very locally through largely personal networks, do not have comparable levels of portfolio-diversification (if any at all), rarely take positions of controlling interest, and regularly avoid detailed contracts and incentive schemes.

While the predominance of VC investment occurs in the later stages of the development of a venture, angels largely concentrate their investments in very early stages, providing seed and start up capital primarily (Amis & Stevenson, 2001; Prowse, 1998; Gupta & Sapienza, 1992). This earlier angel investment stage is regularly considered to be broadly associated with higher risks of failure (Shepherd et al. 2000) and also subject to higher risks from information asymmetries (Triantis, 2001). Most angels tend to insist on previous personal knowledge of the entrepreneur and consider business plans and forecasts secondary to their own knowledge about the proposals and comfort levels with the entrepreneur. In fact, angels routinely reject "promising" proposals due to lack of first hand knowledge of the venture concept and/or the principals involved (Prowse, 1998).

In a more recent empirical study of the differences between angels and VCs, Mason and Harrison (2002) contrast the two types of investors in terms of their approaches to investment appraisal, due diligence and contracting as follows:

> Many of these arise because business angels, unlike venture capital fund managers, decide on the worth of a potential investment as principals, rather than as agents and/or employees (Feeney et.al., 1999; Prasad et. al., 2000). Business angels are less concerned with financial projections and are less likely to calculate rates of return. They do less detailed due diligence, have fewer meetings with entrepreneurs, are less likely to take up references on the entrepreneur and are less likely to consult other people about the investment. Conversely, business angels are more likely to invest on 'gut feeling.'

When looking at the differences between these investment types, angels and VCs, it seems that angels make investments that are at greater risk of failure than the firms in which

venture capitalists invest. In every category of practice for dealing with the challenges of private equity investing, angel investors tend to be on the higher end of the risk spectrum. At the same time, however, the only clear empirical research comparing the return distributions of formal and informal venture capital suggests that their relationship to failure *is in fact the reverse!* In no small deviation from expectations based on previous theorizing, Mason & Harrison (2002), combining their own surveys with those of Murray (1999), arrive at the conclusion that angels are 60% LESS likely to fail (exit at a loss) than VCs. Additionally, angels' rate of "home run" investments essentially equaled that of the VC group.

This sets up an interesting puzzle for future theorizing about financing of entrepreneurial ventures: *What could be the theoretical rationale for this observed empirical anomaly?*

A possible answer to the puzzle

One possible answer is suggested by recent studies of expert entrepreneurs (Sarasvathy, 2001a; 2001b; Dew, 2002). Together these studies argue that not only do external stakeholders such as angels and VCs not know the abilities and motivations of entrepreneurs, but, in fact, the entrepreneurs themselves do not know their own capabilities and motivations. They discover and formulate them in the very process of building new firms and markets. Curiously, it is their ability to plow forth in the face of considerable goal ambiguity that allows them to create frame-breaking demand-side innovations and new social artifacts such as new markets and new organizations. Furthermore, this tolerance of goal ambiguity may actually help overcome the problems in early stage equity financing based on information asymmetry, agency, and incomplete contracts.

This "effectual" view of equity investing takes a position diametrically opposed to that of "causal" agency theories. Causal theories cast entrepreneurs and angels as two sides of an

adversarial relationship where each is trying to out-guess the other in terms of what each brings to the table and what each (really) wants. Effectuation instead posits both as partners seeking to construct new possibilities in a world where neither can predict what the future will be, and both strive for as long as feasible, to remain untethered to specific goals to be achieved in that future. In this view, agents do not come with a priori well-ordered preferences. In fact each stakeholder remains tentative in many relevant preferences that may need to be traded off in making an acceptable future happen. In other words, angels and entrepreneurs negotiate not for pieces of the predicted future pie, but for what the pie can possibly be, given what each is willing to commit to the enterprise in the face of Knightian uncertainty (Knight, 1921). Therefore they undertake the venture together as principals, not as principal and agent, a fact that is evidenced also by the extraordinary emphasis that angels explicitly place upon entrepreneurial human capital, while they tend to under-weight or even ignore other predictive elements of the actual business proposal. Once they are satisfied with the potential of the entrepreneurial team, they base their investment decisions not on expected return, but on affordable loss, and their strategies seek to leverage positive contingencies, rather than to avoid negative ones.

Conclusion

Whether current theories suggesting the overwhelming implausibility or even impossibility of “rational” early stage equity financing are more useful than the new “effectual” perspective that endorses the wisdom of specific principles of decision making that embrace both environmental uncertainties and motivational ambiguities, is at present an open question. But in the meanwhile, it is very clear that business angels constitute a fascinating unexplored landscape -- a phenomenon of high practical importance and intriguing intellectual potential -- for future researchers.

References

Amis, D.; Stevenson, H. 2001. *Winning Angels: The Seven Fundamentals of Early Stage Investing*. Harlow: Pearson Educational.

Amit, R., Glosten, L., Muller, E., 1990. Entrepreneurial ability, venture investments, and risksharing. *Management Science* 36: 1232-1245.

Anand, B.N.; Galetovic, A., 2000. Information, Nonexcludability, and Financial Market Structure. *Journal of Business.* 73 (3): 357-402.

Berger, A.N.; Udell, G.F. 1998. The Economics of Small Business Finance: the Roles of Private Equity and Debt markets in the Financial Growth Cycle. *Journal of Banking and Finance* 22: 613-673.

Dew, N. 2002. Lipsticks and razorblades: How the Auto-ID Center used pre-commitments to build the "Internet of Things." *Dissertation,* University of Virginia.

Feeney, L.; Haines, G.H.; Riding, A.L. 1999. Private investors' investment criteria: insights from qualitative data. *Venture Capital: International Journal of Entrepreneurial Finance.* 1: 121-145.

Freear, J., Sohl, J.E., Wetzel, W.E., 1995. Angels: personal investors in the venture capital market. *Entrepreneurship Reg Dev*. 7: 85–94.

Gupta, A.K.; Sapienza, H.J. 1992. Determinants of venture capital firms' preferences regarding the industry diversity and geographic scope of their investments. *Journal of Business Venturing*. 7: 347-362.

Hart, O., 2001. Financial Contracting. *Journal of Economic Literature*. 39: 4. pp: 1079-1100.

Mason, C.M.; Harrison, R.T., 2002. Is it worth it? The Rates of Return from Informal Venture Capital Investments. *Journal of Business Venturing*. 17: 211-236.

Murray, G., 1999. Seed Capital Funds and the Effect of Scale Economies. *Venture Capital: International Journal of Entrepreneurial Finance*. 1: 351-384.

Prasad, D.; Bruton, G.D.; Vozikis, G. 2000. Signaling value to business angels: the proportion of the entrepreneur's net worth invested in a new venture as a decision signal. Venture Capital: *International Journal of Entrepreneurial Finance*. 2: 167–182.

Prowse, S., 1998. Angel investors and the market for angel investments. *Journal of Banking and Finance* 22: 785-792.

Sarasvathy, S. D. 2001a. Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review, 26: 243-263.

Sarasvathy, S. D. 2001b. Effectual reasoning in entrepreneurial decision making: Existence and bounds. Best paper proceedings, Academy of Management 2001. Washington DC, August 3-8, 2001.

Shepherd, D.A.; Douglas, E.J.; Shanley, M. 2000. New Venture Survival: Ignorance, External Shock, and Risk Reduction Strategies. *Journal of Business Venturing*. 15: 393-410.

Triantis, G.G. 2001. Financial contract design in the world of venture capital. *The University of Chicago Law Review*. 68: 305-322.