The Final Oral Examination
for the Degree of

DOCTOR OF PHILOSOPHY
(Department of Economics)

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2007  University of Victoria  MA (Economics)
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“Essays on Entrepreneurial Finance”

Monday, October 7th, 2013
10:00AM
UVC A207a, Faculty of Graduate Studies boardroom

Supervisory Committee:
Dr. Paul H. Schure, Department of Economics, UVic.
(Supervisor)
Dr. Merwan H. Engineer, Department of Economics, UVic.
(Member)
Dr. Thomas F. Hellmann, Sauder School of Business, UBC
(Outside Member)

External Examiner:
Dr. Jean-Etienne De Bettignies, Queen’s School of Business,
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Chair of Oral Examination:
Dr. Reuven Gordon, Department of Electrical and Computer
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Abstract

In many developed countries angel capital investment is the main source of outside equity financing for young entrepreneurial companies. In spite of its importance, there are not too many studies of the angel capital market. This is partly due the fact that data on angel capital investment is rare and unsystematic. This dissertation makes an attempt to learn more about the important but not so well-understood angel capital market.

In this first essay, we look at the relationship between angels and venture capitalists in financing start-up ventures. This essay juxtaposes a complements hypothesis – angel financing is a springboard for venture capital, against a substitutes hypothesis – angels and venture capital are distinct financing methods that ought not to be combined. We find that companies that obtain angel financing subsequently obtain less venture capital, and vice versa. On average venture capitalist make larger investments, but this alone cannot explain the substitutes pattern. We also find that companies funded by venture capital perform better than angel backed companies, as measured by successful exits or revenues. Mixing angel and venture capital funding tends to be associated with worse performance.

In the second essay, we analyze the role of geographic distance between angel investors and investee companies on the angel investment performance measured by the internal rate of return. We provide four channels through which distance may play a role in determining angel investment performance, some of which predict a positive relationship between distance and performance, and some of which predict a negative relationship. We find that distance has a positive relationship with the return to angel investment. Examining the effect of distance across different categories of angel investors, across angel investor’s locations and across company’s location, we find some evidence that this
positive relationship is mainly driven by what we call the “objectivity effect”, which suggests that distant investors can evaluate the prospect of a company more objectively than close-by investors, who tend to be more biased in their judgments.

In the third essay we examine why entrepreneurs find it generally hard to find angel investors. We modify the standard search model introduced by Pissarides to explain this phenomenon. In our model the hiding behaviour of angels forces entrepreneurs to engage in costly search for angels. We find that angel investors adopt the hiding strategy to screen out low-productivity entrepreneurs who would otherwise inundate angels. Interestingly, social surplus is often increased when angels hide, though in some circumstances surplus may fall.
Awards, Scholarships, Fellowships

2007 – 2010 Van Dusen Fellowship, University of Victoria
2005 – 2007 Pacific Century Graduate Fellowship, University of Victoria.

Presentations

1. Vo, Dan, Hellmann, T., and Schure, P.
   “Angels and Venture Capitalists: Substitute or Complements”

2. Vo, Dan
   “The Geography of Angel Investments.”

3. Vo, Dan, Hellmann, T., and Schure, P.
   “Angels and Venture Capitalists: Substitute or Complements”

4. Vo, Dan, Merwan. E., and Schure, P.
   “Hide and Seek: Why Angels Hide and Entrepreneurs Seek.”