The Use of Effectuation in Venture Capitalist Early-Stage Investment Decision Making in China

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### Glossary of Terms

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<td><strong>Agency problem</strong></td>
<td>A conflict of interest arising between creditors, shareholders, and management because of differing goals. It could be aggregated concern of separation of ownership and control in a corporation, as the agents, who do not own the corporation's resources, may commit moral hazards (such as shirking duties to enjoy leisure and hiding inefficiency to avoid loss of rewards), merely to enhance their own personal wealth at the cost of their principals.</td>
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<td><strong>Angel investor</strong></td>
<td>A wealthy individual who acts as an informal venture capitalist, placing his or her own money directly into early stage new ventures.</td>
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<td><strong>Bounded rationality</strong></td>
<td>The idea that in decision-making, rationality of individuals is limited by the information they have, the cognitive limitations of their minds, and the finite amount of time they have to make a decision.</td>
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<td><strong>Carried interest</strong></td>
<td>A share of any profits that the general partners of private equity receive as compensation, as a means to motivate the general partner (fund manager) to work toward improving the fund's performance.</td>
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<td><strong>Effectual logic</strong></td>
<td>The logic of effectuation.</td>
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<td><strong>Effectuation</strong></td>
<td>A new idea in entrepreneurship, holding that the future is unpredictable yet certain elements are controllable; focusing on intangible resources, the co-creation of value, and relationships and evolving out of the resources at disposal. It expands by forming relationships with others which are nurtured in an effort to co-create a future which rewards both parties. It welcomes surprises, taking advantage of unexpected events to transform them into new opportunities. The process takes a set of means as given and focus on selecting between possible effects that can be created with the set of means.</td>
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<td><strong>Equity financing</strong></td>
<td>The act of raising money for company activities by selling common or preferred stock to individual or institutional investors. In return for the money paid, investors receive ownership interests in the corporation.</td>
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<td><strong>Expected utility</strong></td>
<td>An economic term summarising the utility that an entity or aggregate economy is expected to reach under any number of circumstances; calculated by taking the weighted average of all possible outcomes under certain circumstances, with the weights being assigned by the likelihood, or probability, that any particular event will occur.</td>
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| **Heuristic**               | Experience-based technique for problem solving, learning, and discovery; a strategy using readily accessible, though loosely applicable, information to control problem solving in human
beings and machines.

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<td><strong>Information asymmetry</strong></td>
<td>A situation in which one party in a transaction has more or superior information compared to another, which often happens in transactions where the seller knows more than the buyer, although the reverse can happen as well. Potentially, one party can take advantage of the other party’s lack of knowledge.</td>
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<td><strong>Initial public offering</strong></td>
<td>The first sale of stock by a private company to the public.</td>
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<td><strong>Normative economics</strong></td>
<td>A perspective on economics that incorporates subjectivity within its analyses; the study or presentation of &quot;what ought to be&quot; rather than what actually is.</td>
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<td><strong>Real option</strong></td>
<td>An alternative or choice that becomes available with a business investment opportunity. It can include opportunities to expand and cease projects if certain conditions arise, amongst other options. It is referred to as &quot;real&quot; because it usually pertains to tangible assets, such as capital equipment, rather than financial instruments.</td>
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<tr>
<td><strong>Satisfice</strong></td>
<td>Decide on and pursue a course of action satisfying the minimum requirements to achieve a goal; a decision-making strategy that attempts to meet criteria for adequacy, rather than to identify an optimal solution.</td>
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Abstract

This study investigates how venture capitalists in China make early-stage investment decisions under uncertainty. Within this context, it examines why early-stage venture capitalists use effectuation (involving emergent strategy) in contrast to prediction (concerned with planned strategy) and how the experts and novices differ in their use of effectuation.

Venture capital is important for entrepreneurship development. The topic of how venture capitalists make investment decisions has attracted extensive research efforts over the last few decades. The majority of these studies assume venture capitalists' decision making is a rational process based on prediction. However, early-stage venture development is fraught with uncertainty and ambiguity. Prediction does not work effectively in such a context. Several recent studies have shown expert entrepreneurs use effectuation, which consists of a specific set of heuristics, to tackle uncertainty. This knowledge about entrepreneurs is relevant to venture capitalists as they participate in a similar environment.

This study develops a theoretical framework based on early-stage venture investment expertise and proposes a series of hypotheses along five specific dimensions contrasting effectuation and prediction. An extensively used qualitative method for researching expertise–Protocol analysis–was adopted in this study. 62 participants, including 32 expert early-stage venture capitalists and 30 novices, were asked to think aloud continuously as they solved problems associated with early-stage venture investment decision making.

The findings supported the central hypothesis that expert venture capitalists use effectuation to a significantly higher extent than novices. Specifically, expert venture capitalists are more likely than novices to emphasise execution, be sceptical about market data, and emphasise own personal knowledge of the product. Experts place significantly more emphasis on entrepreneurs' resources and on how venture capitalists' own means could add value to the venture. In addition, experts are more likely to consider the business development cost and partnership. They are more aware of unexpected contingencies and among the participants who acknowledged so, experts are more likely to emphasise the importance of exploiting opportunities
arising from contingencies.

This study also found that expert venture capitalists do not completely abandon prediction in early-stage venture investment decision making. Expert venture capitalists do not differ from novices in emphasizing entrepreneurs’ goal setting and competition. It is also found that experts place even more emphasis on expected return than novices do. Overall, this study suggests that expert venture capitalists’ thinking process is more comprehensive, elaborated, and complex than novices’.

The study makes a significant contribution to the literature by challenging the conventional wisdom about how venture capitalists think and what actions they intend to take in relation to early-stage investment decision making. The knowledge generated may not only help early-stage venture capitalists improve their decision process and investment outcomes, but also allow entrepreneurs to secure venture capital more effectively and efficiently. Learnable elements are identified for training novice venture capitalists and fresh perspectives are presented to venture capital limited partners and entrepreneurship policy-makers for consideration. A future research agenda is proposed at the end of the thesis.
Declaration

I, Zhiqiang Xia, certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Zhiqiang Xia

Date:

28/02/2012

.................................................................
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With respect to field data collection in China, I would like to acknowledge the vital support from various participants of the protocol analysis, especially the expert early-stage venture capitalists. I am grateful for their kindness and generosity in taking time out of their hectic business schedule to provide important data to enable a systematic and in-depth analysis of the relevant research issues. The wonderful face-to-face interviews and meetings with these mysterious and legendary individuals not only made this study a reality, but also helped me gain invaluable first-hand knowledge about the real people, the real industry, and various institutional factors related to the venture capital investment decision making in China. The benefit and impact of this knowledge to my research may go well beyond the completion of this project. Meanwhile, I also would like to acknowledge and thank the two independent coders for their assistance rendered to this study.

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