Impact Investing
Case Studies on LGT Venture Philanthropy investments in Colombia

Water and Light: Managing Strategies to Scale Up Sustainable Social and Environmental Projects in Colombia

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Personal introduction

Christoph Birkholz

- Social Entrepreneur and PhD researcher
- Co-Founder and Managing Director of HUB Zürich
- Director of global HUB Fellowship
- PhD candidate (HSG) on impact investing and entrepreneurship
- Supervisors: Rolf Wüstenhagen & Filipe Santos

Experience in
- Enabling Social Entrepreneurship
- Access to clean energy and water
- Corporate Venture Capital
- (Renewable) energy sector
- Research in Eastern Africa, Mexico, Southern India
- Qualitative research

Why research impact investors and social entrepreneurship?
- Impactful research area
- Limited existing research
- Personal interest in contributing to impact investment and social entrepreneurship discourse

Institute for Economy and the Environment
University of St.Gallen

HUB Zürich

HUB Fellowship

Impact Investing

Background and context

- Managing (and financing) strategies to **scale up social entrepreneurship**
  - Access to finance matters (Bygrave and Zacharakis, 2007; Shane, 2008)
  - Social entrepreneurship neither pure philanthropy/ development aid, nor commercial investment cases
- Impact investing
  - Seed, start-up and growth financing (debt, equity, grant, mezzanine) in organizations with both an impact model (positive social and environmental impact) and a business model (financial sustainability)
  - Synonyms: Venture Philanthropy, Philanthropic Venture Capital, Social Venture Capital
- Impact investing as compared to conventional venture capital / BA financing
  - High uncertainty (new solutions, new markets, difficult contexts)
  - Different type of returns (not just financial exit)
- **How to manage uncertainty in impact investing?**

Impact Investing
Theory on Venture Capital Decision Making

Existing theories for managing uncertainty (in Venture Capital)

- Based on rationality (von Neumann & Morgenstern, 1944)
  - Decision-making based on e.g. Principal Agent (i.e. information asymmetries)
  - Management of uncertainty e.g. via contracts (i.e. agree on staged financing)

- Based on bounded rationality (Simon, 1955)
  - Decision-making based on intuition (Mitchell et al., 2005)
  - Management of uncertainty e.g. via heuristics (e.g., referrals from peers, signals, etc.)
  - A more realistic concept of decision-making than rationality assumption?

- Based on effectuation (Sarasvathy, 2001)
  - Decision-making based on non-predictive control strategies
  - Management of uncertainty e.g. by limiting losses (as opposed to optimal investments)
  - Wish for control rooted in human psychology => even closer to decision-making in reality? (Goodie, 2003; March and Shapira, 1987; Shapira, 1995)

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  - A more realistic concept of decision-making than rationality assumption?
  - If you can predict the future you can control (/ manage) it.
- Based on effectuation (Sarasvathy, 2001)
  - Decision-making based on non-predictive control strategies
  - Management of uncertainty e.g. by limiting losses (as opposed to optimal investments)
  - Wish for control rooted in human psychology => even closer to decision-making in reality? (Goodie, 2003; March and Shapira, 1987; Shapira, 1995)
  - If you can control the future, you do not need to predict it.

Focus

Impact Investing
From theory to practice (and back)

Approach
- What can impact investors learn from decision-making literature?
- How could impact investing inform theory?

(Part of the) Venture Capital (/Impact Investor) Cycle (Gompers & Lerner, 1999)
- Phase 1: Screening, Due Diligence, Structuring/ Deal Closing
- Investment done
- Phase 2: Post-investment management

Three projects
1. Managing uncertainty in deal closing in impact investing
2. Managing uncertainty in impact investing
3. Narratives on impact investing

Research partner: LGT Venture Philanthropy
- Based in Zurich and Liechtenstein, focus of activities in developing and emerging countries
- Providing finance and non-monetary value-adding interventions for portfolio ventures
- “We improve the quality of life of less advantaged people.“

Research Project 1
Uncertainty during deal closing in impact investing

Research question: During <u>deal structuring/ deal closing</u>, how do impact investors manage uncertainty with regards to expected financial and impact performance of the future portfolio venture?

Theoretical basis

- Bounded rationality, intuitive decision-making, heuristics
- Effectuation, non-predictive control strategies
  - Focus on (existing) means
  - Limit potential losses to what can be afforded
  - Involve pre-committed partners (to increase means)
  - Leveraging surprise

Methodology (hybrid)

- Qualitative case study on one or two deal closing processes (i.e. single or multiple case study)
  - Interviews and deal structuring documents
- Development of survey instrument to distribute to 'universe' of impact investors

Cases: LGT VP and company A and B

- Company A: Local social venture in natural food production, bottom-up family business, little financial knowledge, current challenge in production and storage facilities, seeking CFO/CSO
- Company B: Multi-national social venture in education, top managers in place, current challenge in scaling sales in existing international operations

Research Project 1
Uncertainty during deal closing in impact investing

Research question: During deal structuring/ deal closing, how do impact investors manage uncertainty with regards to expected financial and impact performance of the future portfolio venture?

Data

- Interviews & deal structuring documents
  - "no general approach, we do this on a case by case basis"
  - "you have to rely on your intuition"
  - "doing these investments in totally new areas, we are in learning mode"
  - "for a venture that creates a new market there is now way of judging whether our estimations are conservative or over-optimistic"
- Quantitative data from survey

Publication outlet

- "Water & Light" conference contribution (and academic journal, e.g. Journal of Business Ethics)

Timeline

- Q4 2012: Data collection
- Q1 2013: Write case study for 'Water & Light' conference contribution and Bogotá conference
- Q3 2013: Finish hybrid (incl. survey) method research project

Theoretical contribution

- Towards an effectuation-based theory of venture capital decision-making (Wiltbank et al., 2009)

Research Project 2

Managing uncertainty in impact investing

Research question: How do impact investors manage uncertainty with regards to individual portfolio companies?

Theoretical basis

- Managing uncertainty (along the venture capital cycle) based on
  - Intuition, heuristics
  - Effectuation, non-predictive control strategies

Methodology

- Longitudinal qualitative case study (18 months)
- Qualitative, in-depth longitudinal case study
  - Data sources / content analysis on:
    - Interviews
    - Deal structuring documents and quarterly reports
    - Field visits in country location and Bogotá

Cases

- Company A and/or B
- High uncertainty
  - Uncertainty about new market creation
  - Uncertainty social <u>and</u> financial performance

Research Project 2
Managing uncertainty in impact investing

Research question: How do impact investors manage uncertainty with regards to individual portfolio companies?

Data (examples by stage of venture cycle)

- Screening/ due diligence/ deal closing
  - Referrals/ social capital ("almost very deal is recommended", "in many cases, other investors reduce risks by following our investment")
  - Commitment ("for an investment manager, it is like choosing a new job")
  - Outcomes of research project 1
- Post-investment
  - Active involvement: Operational support (iCats Fellow program), strategic support ("help hiring a CFO") (…non-predictive?)
  - Monitoring activities (…prediction oriented?)

Publication outlet

- Research journal (e.g. Journal of Business Ethics)

Timeline

- Q4 2012 – Q4 2014

Theoretical contribution

- Towards an effectuation-based theory of venture capital decision-making (Wiltbank et al., 2009)

Research Project 3
Narratives on impact investing

Story-telling
- Understand and present a story/ narrative of LGT VP's investment activity
- Applied case for presentation, reflection and/or teaching purposes

Cases
- Company A and/or B

Focus
- Involvement of Impact Investor/ value adding activities
- Management of uncertainty
- Relationship between Impact Investor and social venture
  - Investment manager spends 10-20% of time with venture
  - iCats Fellows (i.e. B-school graduates supporting venture pro bono), etc.

Methodology
- Case study narrative

Publication outlet
- Applied journal (e.g. Stanford Social Innovation Review), teaching case and/or blog post

Timeline
- Q4 2013 – Q2 2014

Discussion

Theory / existing literature
- A different theoretical lens?
- Any advice on intuitive decision-making or on effectuation?
- Recommended papers/ readings

Methodology
- Qualitative approach reasonable
- Any other methodological advice

Contribution and outlets
- Possible contributions of this research (theory or practice)
- Suggested outlets (journals)

Impact and scope
- Maximize the impact of this work
- Further partnerships/ co-authorships (in research or practice)

Universidad de los Andes Colombia

Institute for Economy and the Environment University of St.Gallen

LGT Venture Philanthropy – Creating a Smiling World

Vielen Dank

Gracias

Thanks

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Research background
Managing uncertainty in impact investing

Research question: How do impact investors manage uncertainty?

Research on Venture Capital

- Need for research on the entire ‘venture cycle’ (i.e. from fund initation to exit) (Gompers & Lerner, 1999)
- Biased decision-making (Shepherd, 1999; Zacharakis & Shepherd, 2001; Shepherd et al., 2003)
- Intuition in entrepreneurship (Baron, 2007)
- ‘Pick winners or build them’ (Baum & Silverman, 2004)
- VCs as scouts or coaches (Hellmann, 2000)
- ‘Personal chemistry’ is a relevant factor for 44% of respondents (Weber & Dierkes, 2002)
- Methodological
  - Need for longitudinal studies on VC decision making (Petty & Gruber, 2009)
  - Problems of retrospec-tive reporting (c.f., Tyebjee and Bruno 1984), use of questionnaire responses rather than actual evaluations (c.f., MacMillan et al. 1987) and biases and errors associated with self-reporting (c.f., Hisrich and Jankowitz 1990)

Uncertainty in Venture Capital

- Why uncertain?
  - Market
    - Investments in emerging industries (Wüstenhagen & Teppo, 2006)
  - Ventures
    - Information asymmetries reg. companies (P-A theory; based on rationality assumption)
- Mitigation/ Management?
  - Mitigated by contractual agreements
  - Intuitive decision-making (based on bounded rationality concept, i.e. Simon, 1955)
  - Process (Co-investors, active involvement, …)
  - Tools (contracts, frameworks, reporting documents

Recommendations for further research from Scarlata & Alemany (2010) Journal of Business Ethics

- Organizational level: Analyze real contractual agreements
  - „At the organizational level, studying the contractual agreements actually signed by Philanthropic Venture Capitalists (PhVCs) and backed social entrepreneurs."
- Role of Trust
  - "new insights into the mechanisms through which trust between the PhVCs and the backed social entrepreneur is built and how they impact the success of the investment both in terms of sustainability of the backed SE"
- Activities of traditional VCs
  - „whether and under which conditions the strategies borrowed by PhVCs from traditional VCs can effectively be applied to the financing of for-profit social ventures"
- Mix of social and financial motives during management
  - „how social and financial motives are mixed in the strategic management of the investment."

Investment criteria
(Kollmann & Kuckertz, 2010)

VC decision making criteria

- Theoretical base: Economics of information

- Criteria for decision making

- Relevance of criterion
  - For success / performance
  - For survival probability

- Uncertainty to evaluate this criterion (SEC qualities)
  - Search quality: Can be know (to a satisfactory level) upfront.
  - Experience quality: Can only be known after decision is done.
  - Credence quality: Can not be known even after decision is done.