Student Entrepreneurship: Reflections and Future Avenues for Research

Other titles in Foundations and Trends[®] in Entrepreneurship

Understanding Entrepreneurial Failure: Conceptualizing Failure, Taking Stock, and Broadening the Scope of Failure Research Anna Jenkins ISBN: 978-1-68083-950-0

Pioneering Entrepreneurship Research: How, by Whom, and When Pontus Braunerhjelm, Martin Andersson and Johan Eklund ISBN: 978-1-68083-948-7

Vannevar Bush: A Public Sector Entrepreneur Albert N. Link ISBN: 978-1-68083-932-6

IPOs and Entrepreneurial Firms Giancarlo Giudici and Silvio Vismara ISBN: 978-1-68083-868-8

Entrepreneurship, Finance and Management: Essays in Honor of Mike Wright David B. Audretsch, Donald F. Kuratko and Albert N. Link ISBN: 978-1-68083-832-9

Ambidexterity and Entrepreneurship Studies: A Literature Review and Research Agenda Maribel Guerrero ISBN: 978-1-68083-818-3

Student Entrepreneurship: Reflections and Future Avenues for Research

Bart Clarysse ETH Zürich Switzerland bclarysse@ethz.ch

Philippe Mustar Mines Paris – PSL University France philippe.mustar@minesparis.psl.eu

> Lisa Dedeyne Ghent University Belgium Lisa.Dedeyne@Ugent.be



Foundations and Trends[®] in Entrepreneurship

Published, sold and distributed by: now Publishers Inc. PO Box 1024 Hanover, MA 02339 United States Tel. +1-781-985-4510 www.nowpublishers.com sales@nowpublishers.com

Outside North America: now Publishers Inc. PO Box 179 2600 AD Delft The Netherlands Tel. +31-6-51115274

The preferred citation for this publication is

B. Clarysse *et al.*. Student Entrepreneurship: Reflections and Future Avenues for Research. Foundations and Trends[®] in Entrepreneurship, vol. 18, no. 5, pp. 268–329, 2022.

ISBN: 978-1-63828-013-2 © 2022 B. Clarysse *et al.*

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Photocopying. In the USA: This journal is registered at the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by now Publishers Inc for users registered with the Copyright Clearance Center (CCC). The 'services' for users can be found on the internet at: www.copyright.com

For those organizations that have been granted a photocopy license, a separate system of payment has been arranged. Authorization does not extend to other kinds of copying, such as that for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. In the rest of the world: Permission to photocopy must be obtained from the copyright owner. Please apply to now Publishers Inc., PO Box 1024, Hanover, MA 02339, USA; Tel. +1 781 871 0245; www.nowpublishers.com; sales@nowpublishers.com

now Publishers Inc. has an exclusive license to publish this material worldwide. Permission to use this content must be obtained from the copyright license holder. Please apply to now Publishers, PO Box 179, 2600 AD Delft, The Netherlands, www.nowpublishers.com; e-mail: sales@nowpublishers.com

Foundations and Trends[®] in Entrepreneurship Volume 18, Issue 5, 2022 Editorial Board

Editors-in-Chief

Albert N. Link University of North Carolina at Greensboro United States David B. Audretsch Indiana University United States

Editors

Howard Aldrich University of North Carolina

Sharon Alvarez University of Denver

Per Davidsson Queensland University of Technology

Michael Frese National University of Singapore

William B. Gartner Copenhagen Business School

Magnus Henrekson IFN Stockholm

Michael A. Hitt Texas A&M University

Joshua Lerner Harvard University Jeff McMullen Indiana University

P.R. Kumar Texas A&M University

Maria Minniti Syracuse University

Simon Parker University of Western Ontario

Holger Patzelt TU Munich

Saras Sarasvathy University of Virginia

Roy Thurik Erasmus University

Editorial Scope

Topics

Foundations and Trends $^{\odot}$ in Entrepreneurship publishes survey and tutorial articles in the following topics:

- Nascent and start-up entrepreneurs
- Opportunity recognition
- New venture creation process
- Business formation
- Firm ownership
- Market value and firm growth
- Franchising
- Managerial characteristics and behavior of entrepreneurs
- Strategic alliances and networks
- Government programs and public policy
- Gender and ethnicity

- New business financing:
 - Business angels
 - Bank financing, debt, and trade credit
 - Venture capital and private equity capital
 - Public equity and IPOs
- Family-owned firms
- Management structure, governance and performance
- Corporate entrepreneurship
- High technology:
 - Technology-based new firms
 - High-tech clusters
- Small business and economic growth

Information for Librarians

Foundations and Trends[®] in Entrepreneurship, 2022, Volume 18, 4 issues. ISSN paper version 1551-3114. ISSN online version 1551-3122. Also available as a combined paper and online subscription.

Contents

1	Intro	oduction	3
2	Methodology		7
	2.1	Step 1: Identification of a Sample Frame	7
	2.2	Step 2: Narrowing Down the Sample Frame	9
	2.3	Contributions to Our Understanding of the Phenomenon of	
		Student – Graduate Entrepreneurship	9
	2.4	Who Are Student Entrepreneurs?	10
	2.5	Which Factors Lead Students to Start a Venture?	14
	2.6	How Can They Overcome Initial Shortcomings?	15
	2.7	What Makes Them Different from "Traditional"	
		Entrepreneurs?	16
	2.8	What Role Do Universities Play in Stimulating	
		Student Entrepreneurship?	17
	2.9	Understanding Motivations of Student Entrepreneurs	19
	2.10	The Role of Families and Friends as a Social Web	20
	2.11	The Role of Universities as a Context	22
	2.12	Student/Graduate Versus Academic Entrepreneurs	25
	2.13	Impact of Student Entrepreneurship on the Ecosystem	28
_			~ 1

3 Integration of the Findings

4	Discussion	35
5	Conclusion	41
Re	ferences	54

Student Entrepreneurship: Reflections and Future Avenues for Research

Bart Clarysse¹, Philippe $Mustar^2$ and Lisa Dedeyne³

¹ETH Zürich, Zürich, Switzerland; bclarysse@ethz.ch ²Mines Paris – PSL University, France; philippe.mustar@minesparis.psl.eu ³Faculty of Economics and Business Administration, Ghent University, Belgium; Lisa.Dedeyne@Ugent.be

ABSTRACT

Student entrepreneurship has been booming over the past two decades and has bypassed academic spin-offs both in numbers and performance. Despite the importance of the phenomenon, we know still relatively little about how the process of student entrepreneurship differs from other forms of entrepreneurship. Most studies have focused on the antecedents of students becoming an entrepreneur at different levels of analysis. A rare study compared whether the ventures they create outperform the average venture or academic spin-offs more specifically and a few studies focus on the circumstances that surround student entrepreneurs such as a lack of resources, low opportunity costs and little prior experience. This monograph aims to provide a systematic literature review on the subject and tries to provide some provocative lines of thinking about theory extension which might be studied in the setting of student entrepreneurs.

Bart Clarysse, Philippe Mustar and Lisa Dedeyne (2022), "Student Entrepreneurship: Reflections and Future Avenues for Research", Foundations and Trends[®] in Entrepreneurship: Vol. 18, No. 5, pp 268–329. DOI: 10.1561/0300000109. ©2022 B. Clarysse *et al.*

2

Against the backdrop of resource scarcity, lack of prior knowledge to identify opportunities, up to date technical skills and an open mindset not hindered by such priors, student entrepreneurs offer a great opportunity to extend, challenge or change received insights derived from the classic view on entrepreneurship theory.

1

Introduction

Student entrepreneurship as a phenomenon has rightfully attracted increasing interest from the academic community. Despite the lack of a shared and agreed upon definition, most studies show that student entrepreneurs have a higher probability to start a venture and have more success in their venturing activities than their academic peers (Åstebro *et al.*, 2012). Especially students in the so-called STEM-disciplines are likely to start up their own venture based upon the technical and scientific skills of their education. The likelihood of them starting a venture even increases when they have management courses in their education (Colombo and Piva, 2020). This monograph aims to provide a systematic literature review on the topic, to discuss and suggest a workable definition, and to explore opportunities for further research on student entrepreneurship as a phenomenon and as a basis for theorizing.

As is to be expected in an emerging phenomenon of interest, most studies are atheoretical and try to understand the phenomenon in and of itself (Wright *et al.*, 2020). For instance, many scholars focus on the motivations of students self-selecting into an entrepreneurial career (Edelman *et al.*, 2016; Eesley and Wang, 2017; Kim, 2018). Often, the social network and families of the student entrepreneurs are a main

Introduction

motivator (e.g., Bergmann et al., 2016; Edelman et al., 2016; Eesley and Wang, 2017), sometimes they get inspired through their curriculum (Bergmann et al., 2018; Breznitz and Zhang, 2020; Colombo and Piva, 2020; Marzocchi et al., 2019) and occasionally the macro-economic labor market conditions they face increase their likelihood of starting a venture out of necessity (Roche et al., 2020). A second stream of scholars explores distinctions between those who start a venture and those who do not without making causal assumptions. The interest is mostly in exploring the differences between the two groups of students (Barbini et al., 2021; Havter et al., 2017; Krishnan and Wang, 2019). A third stream focuses more on the venture differences. For instance, scholars in that stream have compared ventures created by students and those that are for instance those founded by academics (Åstebro *et al.*, 2012; Conti and Roche, 2021). Whilst the empirical evidence shows the importance of the phenomenon and its relative impact on the regional economy surrounding the universities these people graduate from, it remains unclear vet whether the phenomenon itself is unique enough for theory extending work.

The more recent papers on the phenomenon have moved towards using a theoretical approach which could be challenged, changed, or extended in the relevant student population. Politis et al. (2012) set the stage for such a theoretical perspective by using institutional logics as a differentiation factor between student entrepreneurs and "other entrepreneurs". Whilst not contributing to institutional theory per se, they claim that student entrepreneurs have a very different view on resources because of the institution they identify with. The theory is not really tested nor extended; it is more used as a lens to categorize an empirical phenomenon. The first real theory focused study is by Larsson et al. (2017), who study the theories of individual-opportunity nexus and local embeddedness in predicting where student entrepreneurship would most likely startup their business. Their results are in line with the theoretical expectations, meaning that students in metropolitan areas are more likely to engage in entrepreneurship and more likely to run a business in the local area of graduation. Meoli et al. (2020) tested the theory of planned behavior as a predictor between entrepreneurial intentions and effectively starting up a business. They claim to extend

the theory of planned behavior by introducing the social embeddedness of student entrepreneurs into the equation. In fact, the importance of social network and family ties was also the core interest of an earlier paper by Edelman *et al.* (2016), who showed that the social and financial network of the family helps to explain why student entrepreneurs effectively startup a venture. Larsson *et al.* (2017) also highlight the importance of social ties and role models to predict effective startup behavior.

Whilst these studies are early attempts to use the phenomenon as a population with interesting characteristics for theoretical research, we only found one paper that explicitly makes use of the uniqueness of the student entrepreneurship population to deepen theory. Kaandorp *et al.* (2020) analyse how student entrepreneurs build up a social network from scratch in the domain where they start their businesses. They theorize the concept of "network momentum" which describes the tipping point when a person's network starts to expand beyond her/his own networking actions. Since student entrepreneurs typically have no network in the beginning, the population represents an excellent sample to study this question. A contribution by Ahsan *et al.* (2018) highlights the importance of adopting an entrepreneurial identity and makes some first attempts to understand how students move towards such an identity but is not able to decontextualize its findings.

In sum, we claim in our review of the literature¹ that most studies describe the phenomenon and try to understand the motivations and/or characteristics of student entrepreneurs whilst some make causal relations between those motivations and entrepreneurial behavior. The social context in which student entrepreneurs are embedded is the number one explanation. Only a couple of studies have a theoretical focus, typically within the heart of entrepreneurship as a domain of research and using entrepreneurship specific theories such as planned behavior or research angles such as the individual-opportunity nexus as a focus of interest. Hardly any attempts have been made to use

¹For a full summary of the relevant papers, see Tables 5.1 and 5.2. These tables include the authors and journal, title, the sample, primary research method, and the main findings for each article. These papers are the basis for the analyses in this monograph.

Introduction

the unique characteristics of the population of entrepreneurs to extend, challenge or change existing theoretical insights in- or outside of the entrepreneurship domain of research. This provides major opportunities.

The monograph unfolds along the following lines. First, we discuss the method which is used to systematically list the different contributions to the emerging literature on student entrepreneurship. Second, we describe the different contributions to the phenomenon of student entrepreneurship to the theory of entrepreneurship. Finally, we discuss how the uniqueness of the phenomenon can create unique opportunities for theoretical research.

- Agarwal, R., M. Moeen, and S. K. Shah (2017). "Athena's birth: Triggers, actors, and actions preceding industry inception". *Strategic Entrepreneurship Journal*. 11(3): 287–305.
- Ahsan, M., C. Zheng, A. DeNoble, and M. Musteen (2018). "From student to entrepreneur: How mentorships and affect influence student venture launch". *Journal of Small Business Management*. 56(1): 76–102.
- Aldrich, H. E. and J. E. Cliff (2003). "The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective". *Journal of Business Venturing*. 18(5): 573–596.
- Åstebro, T., N. Bazzazian, and S. Braguinsky (2012). "Startups by recent university graduates and their faculty: Implications for university entrepreneurship policy". *Research Policy*. 41(4): 663–677.
- Audretsch, D. B. (2014). "From the entrepreneurial university to the university for the entrepreneurial society". The Journal of Technology Transfer. 39(3): 313–321.
- Autio, E., M. Kenney, P. Mustar, D. Siegel, and M. Wright (2014). "Entrepreneurial innovation: The importance of context". *Research Policy*. 43(7): 1097–1108.
- Baker, T. and R. E. Nelson (2005). "Creating something from nothing: Resource construction through entrepreneurial". Administrative Science Quarterly. 50(3): 329–366.

- Barbini, F. M., M. Corsino, and P. Giuri (2021). "How do universities shape founding teams? Social proximity and informal mechanisms of knowledge transfer in student entrepreneurship". *Journal of Tech*nology Transfer. 46(4): 1046–1082.
- Benedict, M. E., D. Mcclough, and J. Hoag (2012). "STEM: A path to self-employment and jobs?" *Journal of Entrepreneurship Education*. 15: 99–122.
- Bergmann, H., M. Geissler, C. Hundt, and B. Grave (2018). "The climate for entrepreneurship at higher education institutions". *Research Policy.* 47(4): 700–716.
- Bergmann, H., C. Hundt, and R. Sternberg (2016). "What makes student entrepreneurs? On the relevance (and irrelevance) of the university and the regional context for student start-ups". *Small Business Economics.* 47(1): 53–76.
- Beyhan, B. and D. Findik (2018). "Student and graduate entrepreneurship: Ambidextrous universities create more nascent entrepreneurs". *Journal of Technology Transfer.* 43(5): 1346–1374.
- Bolzani, D., R. Fini, S. Napolitano, and L. Toschi (2019). "Entrepreneurial teams: An input-process-outcome framework". *Foundations* and *Trends[®]* in *Entrepreneurship*. 15(2): 56–258.
- Breznitz, S. M. and Q. Zhang (2020). "Determinants of graduates" entrepreneurial activity". Small Business Economics. 55(4): 1039– 1056.
- Brunton, M. and G. Eweje (2010). "The influence of culture on ethical perception held by business students in a New Zealand university". *Business Ethics: A European Review.* 19(4): 349–362.
- Byerly, R. T., D. Dave, and B. D. Medlin (2002). "Ethics in business program curricula: An emperical investigation of attitudes and perceptions of United States students". *International Journal of Management.* 19(2): 357–365.
- Cai, Z. and J. V. Winters (2017). "Self-employment differentials among foreign-born STEM and non-STEM workers". *Journal of Business Venturing.* 32(4): 371–384.
- Cohen, W. M. and D. Levinthal (1990). "Absorptive capacity: A new perspective on learning and innovation". *Administrative Science Quarterly*. 35(1): 128–152.

- Colombo, M. G. and E. Piva (2020). "Start-ups launched by recent STEM university graduates: The impact of university education on entrepreneurial entry". *Research Policy*. 49(6): 103993. DOI: 10.1016/ j.respol.2020.103993.
- Conti, A. and M. P. Roche (2021). "Lowering the bar? External conditions, opportunity costs, and high-tech startup outcomets". *Organization Science*, forthcoming.
- Delmar, F. and P. Davidsson (2000). "Where do they come from? prevalence and characteristics of nascent entrepreneurs". *Entrepreneurship* and Regional Development. 12(1): 1–23.
- Dunn, T. and D. Holtz-Eakin (2000). "Financial capital, human capital, and the transition to self-employment: Evidence from intergenerational links". *Journal of Labor Economics.* 18(2): 282–305.
- Edelman, L. F., T. Manolova, G. Shirokova, and T. Tsukanova (2016). "The impact of family support on young entrepreneurs' start-up activities". *Journal of Business Venturing*. 31(4): 428–448.
- Eesley, C. and Y. Wang (2017). "Social influence in career choice: Evidence from a randomized field experiment on entrepreneurial mentorship". *Research Policy.* 46(3): 636–650.
- Ertmer, P. A., T. J. Newby, J. H. Yu, W. Liu, A. Tomory, Y. M. Lee, ... P. Sendurur (2011). "Facilitating students' global perspectives: Collaborating with international partners using Web 2.0 technologies". *Internet and Higher Education*. 14: 251–261. DOI: 10.1016/ j.iheduc.2011.05.005.
- Etzkowitz, H. and L. Leydesdorff (2000). "The dynamics of innovation: From National Systems and 'Mode 2' to a Triple Helix of university– industry–government relations". *Research Policy*. 29(2): 109–123.
- Fauchart, E. and M. Gruber (2011). "Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship". *Academy of Management.* 54(5): 935–957.
- Felin, T. and T. R. Zenger (2009). "Entrepreneurs as theorists: On the origins of collective beliefs and novel strategies". *Strategic Entrepreneurship Journal*. 3(2): 127–146.
- Fini, R., A. Meoli, S. Ghiselli, and F. Ferrante (2016). "Student entrepreneurship: Demographics, competences and obstacles". Almalaurea Consortium. URL: http://ssrn.com/abstract=2740541.

- García-Morales, V. J., R. Martín-Rojas, and R. Garde-Sánchez (2020). "How to encourage social entrepreneurship action? Using web 2.0 technologies in higher education institutions". *Journal of Business Ethics*. 161(2): 329–350.
- Gartner, W. B. (1989). "Who is an entrepreneur?" Is the Wrong Question: Entrepreneurship Theory and Practice. 25–46. DOI: 10.1177/ 104225878901300406.
- Geißler, M. (2013). "Determinanten des Vorgründungsprozesses". In: Determinanten des Vorgründungsprozesses. Springer Fachmedien Wiesbaden. URL: 10.1007/978-3-658-01665-4.
- Greenberg, J. (2014). "What you value or what you know? Which mechanism explains the intergenerational transmission of business ownership expectations?" *Research in the Sociology of Work.* 25: 85–126. DOI: 10.1108/S0277-283320140000025004/FULL/XML.
- Grimaldi, R., M. Kenney, D. S. Siegel, and M. Wright (2011). "30 years after Bayh-Dole: Reassessing academic entrepreneurship". *Research Policy*. 40(8): 1045–1057.
- Gruber, M., I. C. MacMillan, and J. D. Thompson (2013). "Escaping the prior knowledge corridor: What shapes the number and variety of market opportunities identified before market entry of technology start-ups?" Organization Science. 24(1): 280–300.
- Guerrero, M. and D. Urbano (2012). "The development of an entrepreneurial university". Journal of Technology Transfer. 37(1): 43–74.
- Guzman, J., S. Stern, M. Bertrand, E. Brynjolffson, A. Chavda, C. Fazio, J. Gans, J. Haltiwanger, B. Kerr, F. Murray, A. Nagaraj, R. Rigobon, D. Robinson, and H. Varian (2016). The State of American Entrepreneurship: New Estimates of the Quality and Quantity of Entrepreneurship for 32 US States, 1988–2014. DOI: 10.3386/W220 95.
- Hayter, C. S., B. Fischer, and E. Rasmussen (2022). "Becoming an academic entrepreneur: How scientists develop an entrepreneurial identity". *Small Business Economics*. forthcoming.

- Hayter, C. S., R. Lubynsky, and S. Maroulis (2017). "Who is the academic entrepreneur? The role of graduate students in the development of university spinoffs". *Journal of Technology Transfer*. 42(6): 1237–1254.
- Hoang, H. and B. Antoncic (2003). "Network-based research in entrepreneurship: A critical review". Journal of Business Venturing. 18(2): 165–187.
- Hoang, H. and J. Gimeno (2010). "Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding". *Journal of Business Venturing*. 25: 41–53.
- Hsu, D. H., E. B. Roberts, and C. E. Eesley (2007). "Entrepreneurs from technology-based universities: Evidence from MIT". *Research Policy.* 36(5): 768–788.
- Hudnut, P. and D. R. DeTienne (2010). "Envirofit international: A venture adventure". *Entrepreneurship Theory and Practice*. 34(4): 785–797.
- Jain, S., G. George, and M. Maltarich (2009). "Academics or entrepreneurs? Investigating role identity modification of university scientists involved in commercialization activity". *Research Policy*. 38: 922–935.
- Johns, G. (2006). "The essential impact of context on organizational behavior". Academy of Management Review. 31(2): 386–408.
- Kaandorp, M., E. van Burg, and T. Karlsson (2020). "Initial networking processes of student entrepreneurs: The role of action and evaluation". *Entrepreneurship: Theory and Practice*. 44(3): 527–556.
- Kim, J. D. (2018). "Is there a startup wage premium? Evidence from MIT graduates". *Research Policy*. 47(3): 637–649.
- Kim, P. H., H. E. Aldrich, and L. A. Keister (2006). "Access (not) denied: The impact of financial, human, and cultural capital on entrepreneurial entryin the United States". Small Business Economics. 27(1): 5–22.
- Krishnan, K. and P. Wang (2019). "The cost of financing education: Can student debt hinder entrepreneurship?" Management Science. 65(10): 4522–4554.

- Lansberg, I. and J. H. Astrachan (2016). "Influence of family relationships on succession planning and training: The importance of mediating factors". *Family Business Review*. 7(1): 39–59.
- Larsson, J. P., K. Wennberg, J. Wiklund, and M. Wright (2017). "Location choices of graduate entrepreneurs". *Research Policy*. 46(8): 1490–1504.
- Laspita, S., N. Breugst, S. Heblich, and H. Patzelt (2012). "Intergenerational transmission of entrepreneurial intentions". *Journal of Business Venturing*. 27(4): 414–435.
- Lee, Y. S. and C. Eesley (2018). "The persistence of entrepreneurship and innovative immigrants". *Research Policy*. 47(6): 1032–1044.
- Li, J., J. Qu, and Q. Huang (2018). "Why are some graduate entrepreneurs more innovative than others? The effect of human capital, psychological factor and entrepreneurial rewards on entrepreneurial innovativeness". *Entrepreneurship and Regional Development*. 30(5– 6): 479–501.
- Marchand, J. and S. Sood (2014). "The alchemy of student entrepreneurs: Towards a model of entrepreneurial maturity". *International Journal* of Entrepreneurship and Innovation Management. 18(1): 75–92.
- Marzocchi, C., F. Kitagawa, and M. Sánchez-Barrioluengo (2019). "Evolving missions and university entrepreneurship: Academic spinoffs and graduate start-ups in the entrepreneurial society". *Journal* of *Technology Transfer.* 44(1): 167–188.
- Meoli, A., R. Fini, M. Sobrero, and J. Wiklund (2020). "How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context". *Journal of Business Venturing.* 35(3): 105982. DOI: 10.1016/j.jbusvent.2019.105982.
- Merida, A. L. and V. Rocha (2021). "It's about time: The timing of entrepreneurial experience and the career dynamics of university graduates". *Research Policy*. 50(1). DOI: 10.1016/j.respol.2020.1041 35.
- Miles, M. B. and A. M. Huberman (1994). "An Expanded Sourcebook: Qualitative Data Analysis". In: Sage Publications. Ed. by M. B. Miles and A. M. Huberman. 2nd edn., Issue 2nd edn. SAGE Publications.

- Murray, F. and M. Tripsas (2004). "The exploratory processes of entrepreneurial firms: The role of purposeful experimentation". Advances in Strategic Management. 21: 45–75. DOI: 10.1016/S0742-332 2(04)21002-6/FULL/XML.
- Mustar, P. (2020). L'entrepreneuriat en Action. Ou Comment de Jeunes ingénieurs créent des Entreprises Innovantes. Paris: Presses des Mines. 309p.
- Nabi, G., F. Linan, A. Fayolle, N. Krueger, and A. Walmsley (2017). "The impact of entrepreneurship education in higher education: A systematic review and research agenda". Academy of Management Learning and Education. 16(2): 277–299.
- Oreopoulos, P., T. von Wachter, and A. Heisz (2012). "The short-and long-term career effects of graduating in a recession[†]". *American Economic Journal: Applied Economics.* 4(1): 1–29.
- Perkmann, M. and A. Spicer (2014). "How emerging organizations take form: The role of imprinting and values in organizational bricolage". *Organization Science*. 25(6): 1785–1806.
- Politis, D., J. Winborg, and Å. L. Dahlstrand (2012). "Exploring the resource logic of student entrepreneurs". *International Small Business Journal*. 30(6): 659–683.
- Powell, E. E. and T. Baker (2014). "It's what you make of it: Founder identity and enacting strategic responses to adversity". Academy of Management Review. 57(5): 1406–1433.
- Powell, E. E. and T. Baker (2018). "In the beginning: Identity processes and organizing in multi-founder nascent ventures". Academy of Management. 60(6): 2381–2414.
- Ramarajan, L., I. E. Berger, and I. Greenspan (2017). "Multiple identity configurations: The benefits of focused enhancement for prosocial behavior". Organization Science. 28(3): 495–513.
- Roche, M. P., A. Conti, and F. T. Rothaermel (2020). "Different founders, different venture outcomes: A comparative analysis of academic and non-academic startups". *Research Policy*. 49(10): 104062. DOI: 10.1016/j.respol.2020.104062.
- Roodman, D. (2011). "Fitting fully observed recursive mixed-process models with CMP". The Stata Journal: Promoting Communications on Statistics and Stata. 11(2): 159–206.

- Rosa, P. (2003). "Hardly likely to make the Japanese tremble: The businesses of recently graduated university and college entrepreneurs". *International Small Business Journal.* 21(4): 435–460.
- Sarasvathy, S. D. (2001). "Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency". *Academy of Management Review.* 26(2): 243–263.
- Schoar, A. (2009). "The divide between subsistence and transformational entrepreneurship". Innovation Policy and the Economy. 10: 57–81. DOI: 10.1086/605853.
- Shalizi, C. R. and A. C. Thomas (2011). "Homophily and contagion are generically confounded in observational social network studies". *Sociological Methods and Research*. 40(2): 211–239.
- Shane, S. (2001). "Technological opportunities and new firm creation". Management Science. 47(2): 205–220.
- Shane, S. (2002). "Selling university technology: Patterns from MIT". Management Science. 48(1): 122–137.
- Shane, S. (2009). "Why encouraging more people to become entrepreneurs is bad public policy". *Small Business Economics*. 33(2): 141–149.
- Shane, S. and S. Venkataraman (2000). "The promise of entrepreneurship as a field of research". Academy of Management Review. 25(1): 217–226.
- Slavtchev, V., S. Laspita, and H. Patzelt (2012). Effects of entrepreneurship education at universities. URL: https://www.econstor.eu/ handle/10419/70147.
- Smilor, R. W., D. V. Gibson, and G. B. Dietrich (1990). "University spin-out companies: Technology start-ups from UT-Austin". *Journal* of Business Venturing. 5(1): 63–76.
- Sørensen, J. B. (2007). "Closure and exposure: Mechanisms in the intergenerational transmission of self-employment". *Research in* the Sociology of Organizations. 25(SUPPL): 83–124. DOI: 10.1016/ S0733-558X(06)25003-1.
- Sørensen, J. B. and M. A. Fassiotto (2011). "Organizations as fonts of entrepreneurship". Organization Science. 22(5): 1322–1331.

- Souitaris, V., S. Zerbinati, and A. Al-Laham (2007). "Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources". *Journal of Business Venturing*. 22(4): 566–591.
- Stam, E. (2015). "Entrepreneurial ecosystems and regional policy: A sympathetic critique". European Planning Studies. 23(9): 1759–1769.
- Stuart, T. E. and O. Sorenson (2007). "Strategic networks and entrepreneurial ventures". Strategic Entrepreneurship Journal. 1(3–4): 211–227.
- Tasselli, S., M. Kilduff, and J. I. Menges (2015). "The microfoundations of organizational social networks. A review and an agenda for future research". *Journal of Management.* 41(5): 1361–1387.
- Teixeira, A. A. C. and R. P. Forte (2017). "Prior education and entrepreneurial intentions: The differential impact of a wide range of fields of study". *Review of Managerial Science*. 11(2): 353–394.
- Vanaelst, I., B. Clarysse, M. Wright, A. Lockett, N. Moray, and R. S'Jegers (2006). "Entrepreneurial team development in academic spinouts: An examination of team heterogeneity". *Entrepreneurship Theory and Practice*. 30(2): 249–271.
- Welter, F. (2011). "Contextualizing entrepreneurship—Conceptual challenges and ways forward". Entrepreneurship Theory and Practice. 35(1): 165–184.
- Wright, M. and B. Clarysse (2020). "Technology entrepreneurship and shaping industries". Academy of Management Discoveries. 6(3): 355– 358.
- Wright, M., P. Mustar, and D. Siegel (2020). Student Start-ups: The New Landscape Of Academic Entrepreneurship. World Scientific.
- Wright, M., D. S. Siegel, and P. Mustar (2017). "An emerging ecosystem for student start-ups". Journal of Technology Transfer. 42(4): 909– 922.