

**Entrepreneurial intention-behavior translation among university students: do institutions matter?<sup>1</sup>**

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## **Extended abstract**

### **Principal topic**

Formation of entrepreneurial intentions represents one of the key stages of entrepreneurial process. While the theory of planned behavior (Ajzen, 1991) suggests a direct link between intentions and subsequent behavior, in practice, however, not every declared intention is eventually transformed into an operating venture, creating in this way an intention-action gap. A growing body of research is aiming to address the issue of intention-behavior translation in entrepreneurship (e.g., Kautonen, Van Gelderen & Fink, 2015; Kautonen, Van Gelderen & Tornikoski, 2013; Van Gelderen, Kautonen & Fink, 2015). However, the specific contingencies of this relationship still remain to be identified (Liñán & Fayolle, 2015).

Entrepreneurship is traditionally viewed as a vocational choice that allows independence and personal freedom, becoming more and more attractive for young people (Martinez, Mora & Vila, 2007). Empirical evidence suggests that, even though young people are becoming more educated, levels of youth unemployment is increasing worldwide (Schøtt, Kew & Cheraghi, 2015). As a result, fostering entrepreneurial activity among youth is regarded as a paramount development strategy, as it allows involving young people - an extremely prominent population group in terms of their economic potential – into the labor market (Kvedaraite, 2014). Entrepreneurial activity is embedded in an institutional context. Formal institutions, comprising laws, rules, and regulations, are the regulatory pillars that marshal individual and firm behavior (North, 1990; Peng, 2009). Examples of formal institutions include property right protection, the judiciary system, business regulations, and investment laws. Their function is to reduce uncertainty, thereby facilitating business interactions and development (Li & Zahra, 2012; North, 1990). *Ceteris paribus*, individuals are more likely to translate their entrepreneurial intentions into start-up activities in a

country with strong institutions and low uncertainty, as this reduces the overall risk of doing business (Wan & Hoskisson, 2003).

Thus, drawing on the theory of planned behavior and institutional approach, with a piece of cross-country data derived from the Global University Entrepreneurial Spirit Students' Survey 2011 and 2013/2014, we address the following research question: do country-level institutional peculiarities affect the entrepreneurial intention-action translation and what are the directions of their impact?

### **Theoretical framework and research hypotheses**

Entrepreneurial start-up activities are the events and behaviors of individuals who are engaged in the process of starting a new venture (Gartner, Carter, & Reynolds 2004). These activities are important since engagement in them is a necessary condition for developing a viable venture (Shepherd, 2015). Empirical findings demonstrate that a high level of engagement in start-up activities increases the probability of eventual organizational emergence (Brush, Manolova & Edelman, 2008).

The power of entrepreneurial intentions to predict involvement into start-up activities is theoretically underpinned by the theory of planned behavior (Ajzen, 1991), its predecessor – theory of reasoned action (Fishbein & Ajzen, 1975), Rubicon model of action phases (Achtziger & Gollwitzer, 2008), and causal theory of intentional action (Davidson, 1963). In the entrepreneurship context, this relationship is corroborated by empirical evidence (Kautonen, Van Gelderen & Fink, 2015; Kautonen, Van Gelderen & Tornikoski, 2013; Liñán & Rodriguez-Cohard, 2015; Van Gelderen, Kautonen & Fink, 2015). However, the link between entrepreneurial intentions and actions may be hampered or triggered by a large variety of environmental contingencies. Focusing attention on the role of institutional peculiarities, this study scrutinizes

the role of country-level financial institutions and strength of property rights protection in the process of entrepreneurial intentions-behavior transformation. The hypothesized relationships are described below.

***Hypothesis 1:*** Entrepreneurial intentions are positively associated with the scope of subsequent startup activities among youth.

***Hypothesis 2:*** The country-level financial market institutions reinforce the relationship between entrepreneurial intentions and start-up behavior among youth, so that in countries with well-developed financial institutions the relationship becomes stronger.

***Hypothesis 3:*** The country-level property rights protection reinforces the relationship between entrepreneurial intentions and start-up behavior among youth, so that in countries with well-developed property rights system the relationship becomes stronger.

### **Method**

To address the issue of intention-action translation, we employ two waves of the Global University Entrepreneurial Spirit Students' Survey (GUESSS), from 2011 and 2013/2014. We detected 1434 answers to the GUESSS questionnaire in both indicated waves of GUESSS survey belonging to respondents from 9 different in terms of institutional development countries - Germany, Switzerland, Austria, Netherlands, Estonia, Russia, Hungary, Brazil, Singapore.

The entrepreneurial behavior was measured in the second wave of survey (2013/2014) by calculating the aggregated index of individual actions that constitute the behavioral category of starting a new venture – the scope of start-up activities that a student has already carried out on his or her way to the new venture creation. This represents a count variable reflecting number of actions a student has already undertaken on his way to venture creation. Students' entrepreneurial intentions variable was captured using a specific question in the 2011 GUESSS questionnaire

regarding the future career aspirations of the respondent: “Which career path do you intend to pursue right after completion of your studies?” The dummy variable for Entrepreneurial Intentions assumed the value of 1 if the answer to the question was “As a founder” and 0 otherwise. The moderator variables in this study were taken from external sources. The country-level financial market institutions were assessed as a sum of two indices from the Global Competitiveness Report 2013-2014: (1) Ease of access to loans (“*How easy is it to obtain a loan in your country with only a good business plan and no collateral?*” (1 = impossible, 7 = easy)), and (2) Venture capital availability (“*Entrepreneurs with innovative but risky projects can generally find venture capital in your country*” (1 = not true, 7 = true)). The country-level property rights protection was assessed using the 2013 International Property Rights Index (IPRI<sup>2</sup>, comprising three sub-indices: Legal and Political Environment, Physical Property Rights, and Intellectual Property Rights), measured on a scale from 0 (lowest level) to 10 (highest level).

To capture other possible effects able to influence the entrepreneurial intention-behavior translation, we have also introduced a number of individual- and country-level control variables.

## **Results**

Since our dependent variables is continuous, we used the negative binomial estimation for predicting the scope of startup activities. The results suggest that, even though there is a direct positive relationship between entrepreneurial intentions and scope of start-up activities, there is a significant impact of institutional dimensions on entrepreneurial intentions-behavior transformation. Namely, the strength of property rights has a positive impact on entrepreneurial intentions-actions relationship. Contrary to our expectations, well-developed financial institutions

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<sup>2</sup> Provided by the Property Rights Alliance: <http://internationalpropertyrightsindex.org/>

have a negative impact on intentions-actions translation which represents an extremely unexpected finding.

### **Contribution and implications**

This paper aims to make several distinct contributions. First, we extend the existing knowledge within the entrepreneurial cognition domain by specifying the external factors that might affect the actual shift from entrepreneurial intentions to start-up activities (Liñán & Fayolle, 2015). Second, having assessed the impact of country-specific institutional conditions on the process of entrepreneurial intentions-behavior transformation, we contribute to the stream of comparative international entrepreneurship literature (Terjesen et al., 2013). Finally, having addressed the focal relationships in a very specific context of student entrepreneurship (on average our respondents are around 25 years old), we introduce new insights to the youth entrepreneurship literature stream (Hulsink & Koek, 2014).

### **References**

- Achtziger, A., & Gollwitzer, P.M., (2008). Motivation and volition during the course of action. In Heckhausen, J., Heckhausen, H. (Eds.), *Motivation and Action* (pp. 272–295). Cambridge: Cambridge University Press.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior & Human Decision Processes*, 50(2), 179–211.
- Brush, C., Manolova, T. S., Edelman, L. F. (2008). Properties of Emerging Organizations: An Empirical Test. *Journal of Business Venturing*, 23 (5), 547-566.
- Davidson, D. (1963). Actions, reasons and causes. *Journal of Philosophy*, 60, 685–700.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

- Gartner, W. Carter, N.M., & Reynolds P.D. (2004). Business start-up activities In Gartner, W., Shaver, K.G., Carter, N.M., & Reynolds P.D. (Eds.), *Handbook of Entrepreneurial Dynamics: The Process of Business Creation* (pp. 185-298). Thousand Oaks, CA: Sage Publications.
- Hulsink, W., & Koek, D. (2014). The young, the fast and the furious: a study about the triggers and impediments of youth entrepreneurship. *International Journal of Entrepreneurship & Innovation Management*, 18(2/3), 182–209.
- Kautonen, T., van Gelderen, M. & Tornikoski, E.T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, 45(6), 697–707.
- Kautonen, T., van Gelderen, & Fink, M. (2015). Robustness of the Theory of Planned Behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 39(3), 655-674.
- Kvedaraite, N. (2014). Reasons and Obstacles to Starting a Business: Experience of Students of Lithuanian Higher Education Institutions, *Management – Journal of Contemporary Management Issues* 19(1), 1–16.
- Li, Y. and Zahra, S. A. (2012). Formal institutions, culture, and venture capital activity: a cross-country analysis. *Journal of Business Venturing*, 27, 95-111.
- Liñán, F. & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 1-27.
- Liñán, F. & Rodriguez-Cohard, J. C. (2015). Assessing the stability of graduates' entrepreneurial intention and exploring its predictive capacity. *Academia Revista Latinoamericana de Administración*, 28(1), 77-98.

- Martinez, D., Mora, J.G., & Vila, L.E. (2007). Entrepreneurs, the self-employed and employees among young European higher education graduates. *European Journal of Education*, 42(1), 99–117.
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- Peng, M. W. (2009). *Global strategy* (2<sup>nd</sup> ed.). Cincinnati: South-Western Cengage Learning.
- Schøtt, T., Kew, P. & Cheraghi, M. (2015). Future Potential: A GEM Perspective on Youth Entrepreneurship. *Global Entrepreneurship Monitor (GEM)*.
- Shepherd, D. (2015). Party On! A call for entrepreneurship research that is more interactive, activity based, cognitively hot, compassionate, and prosocial. *Journal of Business Venturing*, 30 (4), 489-507.
- Terjesen, S., Hessels, J., & Li, D. (2013). Comparative international entrepreneurship: A review and research agenda. *Journal of Management*, forthcoming, doi: 10.1177/0149206313486259.
- Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30, 655-673.
- Wan, W. P., and Hoskisson, R. E. (2003). Home country environments, corporate diversification strategies, and firm performance. *Academy of Management Journal*, 46, 27-45.