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Intention-behavior translation in student entrepreneurship: an institutional perspective

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Research Motivation

- Entrepreneurship is deliberate, goal-oriented behavior, driven to a large extent by **entrepreneurial intentions**
- Yet **not every entrepreneurial intention** is eventually transformed into **actual behavior**
- There are few studies done on the **intention-behavior relationship** in **entrepreneurship** (Kautonen et al., 2013; 2015)
- Putting intentions into action may be hampered or amplified by various attributes specific to the **environment** in which an individual operates (Shirokova et al., 2016; Rauch, 2014)
- Calls for research on **contingencies** with regard to intention-action transition (Liñán & Fayolle, 2015).

Research Question

- Do country-level **institutional peculiarities** affect the entrepreneurial intention-action translation and what are the directions of their impact?



Empirical context:

- (1) student entrepreneurs
- (2) Global University Entrepreneurial Spirit Students' Survey 2011 and 2013/2014
- (3) 9 countries



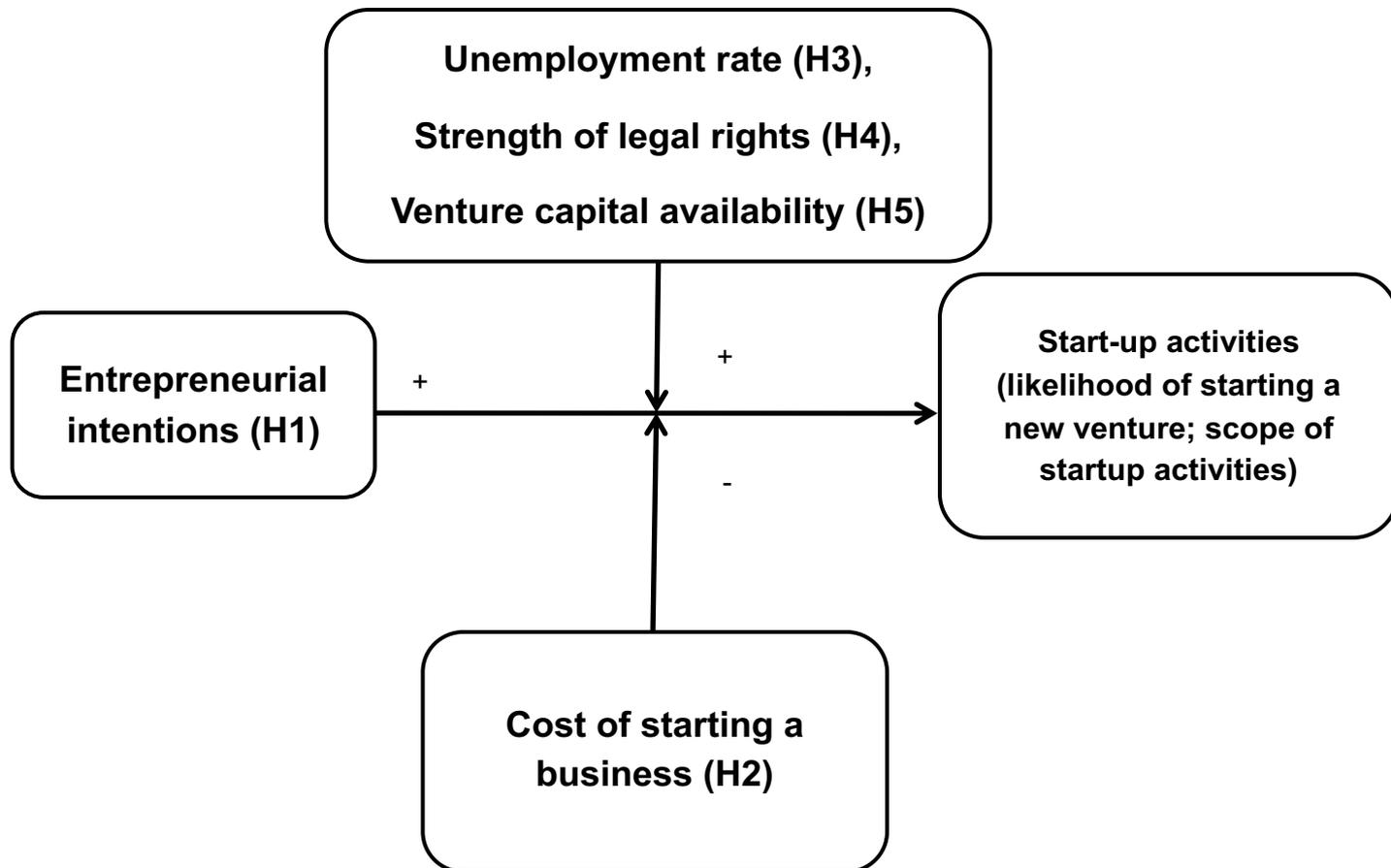
Focal Relationship

- Theory of Planned Behavior: intention is a cognitive link between attitudes, subjective norms, perceived behavioral control and subsequent behavior (Ajzen, 1991), reflecting the motivational factors influencing people's behavior, and determining the amounts of effort people are willing to invest (Bird, 1988; Gielnik et al., 2014)
- Prior empirical studies in different research domains reveal the strong association between intentions and subsequent behaviors

H1. Entrepreneurial intentions are positively associated with subsequent startup activities: (a) the likelihood of engaging in startup activities; (b) the scope of start-up activities



Moderating Framework





Method

Sample

- Data from the 2011 and 2013/2014 Global University Entrepreneurial Spirit Students' Survey (GUESSS)
- 1434 students from 9 countries: Germany, Switzerland, Austria, Netherlands, Estonia, Russia, Hungary, Latin America, and Singapore
- Sample selection bias control: Heckman's (1979) two-stage correction procedure

Statistical procedure

- IVs: entrepreneurial intentions (dummy variable reflecting the desired choice of a career path), cultural indexes
- DVs: dummy variable (starting a new venture) and summative index reflecting start-up activities scope
- Logistic regression and negative binomial estimation, cluster-robust SE



Moderators

- **cost of starting a business** (% of income per capita), Doing Business Report 2013
- **unemployment rate in the country** (% of total labor force, 2013), World Bank Development Indicators database
- **strength of legal rights index** (0=weak to 10=strong), World Bank Doing Business 2013
- **venture capital availability** (7-point Likert scale assessing the item “Entrepreneurs with innovative but risky projects can generally find venture capital in your country” (1 = not true, 7 = true)), Global Competitiveness Report 2013-2014.



Results: Descriptives

Baseline EIs rate:

- Out of 1434 students in the sample, only 141 (**10%**) declared having entrepreneurial intentions in 2011

Intentions-actions translation rate:

- Out of these “high intentions” respondents, 51 (**36%** of the “high intentions” group) translated these intentions into starting a new venture in 2013/2014

Interestingly, out of 1293 respondents declaring in 2011 no intentions to start a business right after their studies, 170 (13% of the “no intentions group”) were operating their businesses in 2013/2014.



Results: Regression Models

Predictors	Model 1: Logistic regression (predicting the likelihood of starting a new venture)	Model 2: Negative binomial regression (predicting the scope of startup activities)
<i>Individual-level controls:</i>		
Age	0.04 (0.02) †	0.06 (0.03) †
Gender	-0.91 (0.08) ***	-1.09 (0.06) ***
Attending an entrepreneurship course	0.44 (0.22) *	0.87 (0.38) *
University entrepreneurial environment	0.00 (0.04)	-0.06 (0.05)
Field of study (fixed effects)	IN	IN
<i>Country-level controls:</i>		
GDP per capita in 2013	-2.63e-06 (3.32e-06)	-19.2e-06 (6.98e-06) **
Cost of starting a business (% of GDP/capita)	-0.06 (0.04)	-0.03 (0.08)
Unemployment rate	0.17 (0.04) ***	-0.03 (0.10)
Strength of legal rights index	0.03 (0.03)	0.08 (0.08)
Venture capital availability index	-0.08 (0.20)	0.55 (0.33) †
Tax burden (% of GDP)	-0.03 (0.01) ***	0.01 (0.03)
<i>Main effect:</i>		
Entrepreneurial intentions (EI)	6.04 (2.39) *	6.11 (2.41) *
<i>Interactions:</i>		
EI X Cost of starting a business	-0.23 (0.13) †	-0.04 (0.14)
EI X Unemployment	-0.10 (0.11)	-0.32 (0.14) *
EI X Strength of legal rights index	0.29 (0.09) ***	0.45 (0.12) ***
EI X Venture capital availability index	-1.56 (0.63) *	-1.67 (0.59) **
<i>Sampling bias correction: inverse Mill's ratio (λ)</i>	-0.31 (0.28)	-0.21 (0.36)



Discussion

Although there is a significant positive association between EI and subsequent behavior, this association is reinforced or weakened by a set of institutional factors of the country the entrepreneur is operating in:

- Strength of legal rights reinforces the translation
- Cost of starting a business weakens the translation
- For potential student entrepreneurs, the country-level unemployment rate weakens the translation (result may not be generalizable beyond student context)
- Surprising result: Venture capital availability index weakens the translation



Contribution

- To **comparative international entrepreneurship literature**: explaining the impact of country-level institutions on the major building block of the entrepreneurship process – the translation of individual entrepreneurial intentions into actions, or moving from the ‘aspiring’ to the ‘active’ entrepreneurial stage.
- To **entrepreneurial intention models** and **entrepreneurial cognition** literature: specifying the contextual moderators (boundary conditions) that determine the strength of the association between entrepreneurial intentions and subsequent actions, in addition to the traditionally studied traits of the entrepreneur (Liñán & Fayolle, 2015).



Limitations, Future Research Directions & Implications

- **Limitations and future research directions**
 - Our analysis is based on a single method (i.e., the self-report measures obtained from a single informant), potentially vulnerable to a set of biases
 - Our current research is based on a sample representing a single coherent group of subjects – university students.
- **Implications**
 - **for policy makers:** developing evidence-based ‘remediation’ plans and programs, aimed at stimulating the move between intentions and actions, or between the stages of aspiring and active entrepreneurs
 - **for aspiring young entrepreneurs:** being aware of institutional contingencies of intentions-action translation allows individuals to mitigate their possible negative influences.

Questions and Suggestions?

