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*and*

Department of Management, Information and Production  
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*University of Bergamo*

*La student entrepreneurship  
attraverso l'esperimento GUESSS:*  
confronto internazionale ed implicazioni pratiche



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- Andrea Setti, PhD Student
- Davide Gamba
- Paolo Pressiani
- Daniele Radici



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(Svezia)*



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*Maastricht University  
(Olanda)*





# GUESSS 2016

## Global University Entrepreneurial Spirit Students' Survey

- What is GUESSSS? Key Facts
- What is GUESSSS? Team
- What is GUESSSS? Management
- Why do we care about student entrepreneurship?
- Few facts from the Italian sample (non representative)
- My own research
- Conclusion

## What is GUESSS? Key Facts

- «**Global University Entrepreneurial Spirit Students' Survey**»
- A global research project that investigates students' entrepreneurial intentions and activities
  - With a global data collection wave every 2-3 years
  - With significant academic and practitioner-oriented output
  - With valuable benefits for all involved parties

GUESSS is *THE* global research project on student entrepreneurship.

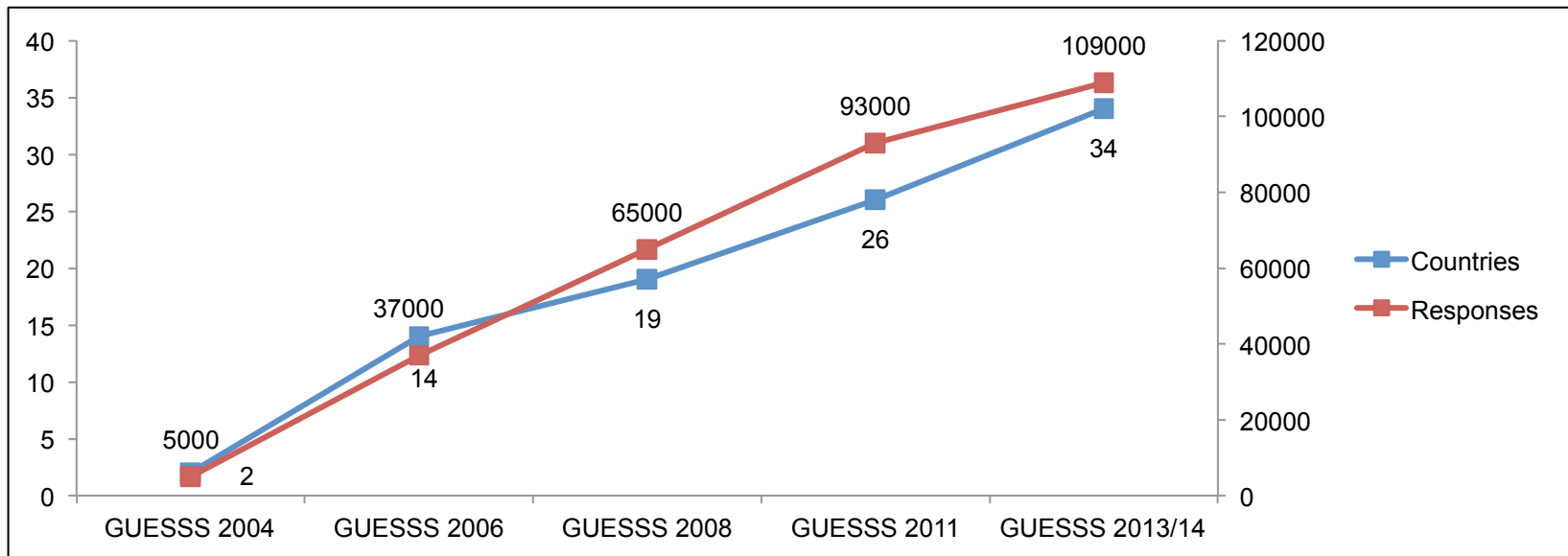
## What is GUESS? Main Goals

- Global systematic observation (panel) of students' entrepreneurial intentions and activities
- Identification of antecedents and boundary conditions of entrepreneurship
  - Factors on different levels: individual (e.g., motivations), family (e.g., family structure), university (e.g., entrepreneurship education), and institutions (e.g., culture)
  - Types of entrepreneurship: new venture creation, succession in the family firm context, firm acquisition, etc.
- Collection of a worldwide unique high-quality data set

The overall aim is to create unique value for different stakeholders: public, universities, students, and academics.

# What is GUESSSS? The History

- Initiated at the University of St.Gallen (Switzerland) in 2003 (labeled ISCE until 2006)
- 6 online data collection waves so far
  - 2013/14: 34 countries, >750 universities, almost 2 million contacted students, >109'000 completed responses



New edition (late 2016): 122'000 (50 countries)

# What is GUESS? Topics addressed

- Demographics
- Perceptions about one's own university
- Career choice intentions
- Entrepreneurship Cognition
- Entrepreneurship Behavior
  - Nascent entrepreneurship
  - Active ventures
  - Family business succession

# The Teams of 2016

Università degli Studi di Torino
Università degli Studi di Modena e Reggio Emilia
Università degli Studi di Bergamo
Politecnico di Torino
Università degli Studi di Napoli "Federico II"
Università degli Studi di Udine
Università della Calabria
Università Carlo Cattaneo - LIUC
Università degli Studi di Verona
Università degli Studi di Padova
Università degli Studi di Palermo
Università degli Studi di Pavia
Università degli Studi del Molise
Università degli Studi di Siena
Seconda Università degli Studi di Napoli

#	Country	University	Team Leader(s)
1	Albania / Kosovo (ALB)	AAB College	Malush Tullumi
2	Argentina (ARG)	Austral University / IAE Business School	Prof. Silvia Carbonell
3	Australia (AUS)	Curtin University of Technology	Prof. Paul Weber
4	Austria (AUT)	Johannes Kepler University Linz	Prof. Norbert Kailer
5	Belgium (BEL)	Antwerp Management School	Prof. Eddy Laveren
6	Belarus (BLR)	Belarusian State University	Dr. Radzivon Marozau
7	Brazil (BRA)	UNINOVE - Universidade Nove de Julho	Prof. Edmilson Lima
8	Canada (CAN)	Concordia University	Prof. Alexandra Dawson
9	Chile (CHI)	Universidad Catolica del Norte	Prof. Gianni Romani
10	China (CHN)	Shanghai Finance University	Su Jing
11	Colombia (COL)	Universidad EAFIT	Prof. Claudia Alvarez
12	Croatia (CRO)	University of Zadar	Gabrijela Vidic
13	Czech Republic (CZE)	Technical University of Liberec	Prof. Klara Antlova
14	Ecuador (ECU)	Universidad Católica de Santiago de Guayaquil	Prof. Mariella Jácome Ortega
15	England (ENG)	Kingston University	Prof. Robert Blackburn
16	El Salvador	Universidad Dr. Jose Matias Delgado	Prof. Manuel Sifontes
17	Estonia (EST)	Tallinn University of Technology	Prof. Urve Venesaar
18	Finland (FIN)	Lappeenranta University of Technology	Prof. Timo Pihkala
19	France (FRA)	EM Lyon Business School	Prof. Alain Fayolle
20	Germany (GER)	University of St.Gallen (CH) FH Fulda	Dr. Heiko Bergmann Prof. Stephan Golla
21	Greece (GRE)	University of Macedonia	Prof. Katerina Sarri
22	Hungary (HUN)	Budapest Business School University of Miskolc	Dr. Szilveszter Farkas Andrea S. Gubik
23	India (IND)	The Entrepreneurship School	Sanjeeva Shivesh
24	Ireland (IRL)	Dublin City University	Dr. Eric Clinton
25	Italy (ITA)	University of Bergamo	Prof. Tommaso Minola
26	Japan (JAP)	Hosei University	Prof. Noriko Taji
27	Kazakhstan (KAZ)	Turan University	Prof. Olga Sudibor
28	Korea (KOR)	Korea Entrepreneurship Foundation (KEF)	Kim Jong Sung
29	Liechtenstein (LIE)	University of Liechtenstein	Prof. Dr. Urs Baldegger
30	Lithuania (LTU)	Aleksandras Stulginskis University	Virginija Kargyte
31	Luxembourg (LUX)	Institut Universitaire International Luxembourg	Prof. Pol Wagner
32	Malaysia (MAL)	Universiti Malaysia Kelantan	Prof. Raja Suzana Kasim
33	Macedonia (MAC)	University American College Skopje	Dr. Makedonka Dimitrova
34	Mexico (MEX)	EGADE Business School	Prof. José Ernesto Amorós
35	Morocco (MAR)	Abdelmalek Essaâdi University	Prof. Hassan Ezbalehe
36	Norway (NOR)	Stord/Haugesund University College	Prof. Marina Solesvik
37	Pakistan (PAK)	Sukkur Institute of Business Administration	Dr. Altaf Hussain Samo
38	Panama (PAN)	Universidad de Panama	Omaris Vergara Dr. Maria Angeles Frende
39	Peru (PER)	Universidad Esan	Prof. Jaime Serida
40	Poland (POL)	Family Business Institute Poland	Prof. Adrianna Lewandowska
41	Portugal (POR)	Universidade de Lisboa	Prof. Miguel Amaral
42	Russia (RUS)	St.Petersburg University - GSOM	Prof. Galina Shirokova
43	Slovakia (SVK)	Comenius University Bratislava	Dr. Marian Holienka
44	Slovenia (SLO)	GEA College	Prof. Katja Kraskovic
45	Spain (ESP)	ESADE Business School	Dr. Joan Batista-Foguet Dr. Maika Valencia
46	Sweden (SWE)	University of Skövde	Prof. Susanne Durst
47	Switzerland (SUI)	University of Bern University of St.Gallen HEG Fribourg	Prof. Philipp Sieger Prof. Rico Baldegger
48	Ukraine (UKR)	Stord/Haugesund University College	Prof. Marina Solesvik
49	Uruguay (URY)	Universidad Catolica del Uruguay	Prof. Catherine Krauss
50	USA	Stetson University University of Vermont (UVM)	Prof. Isabel Botero Prof. Erik Monsen

# Publications and Output

## ■ Selected journal articles

- Zellweger, T., Richards, M., Sieger, P. & Patel, P. (2015). How much am I expected to pay for my parents' firm? An institutional logics perspective on family discounts. **Entrepreneurship Theory & Practice**, forthcoming.
- Sieger, P. & Monsen, E. (2015). Founder, Academic, or Employee? A Nuanced Study of Career Choice Intentions. **Journal of Small Business Management**, forthcoming.
- Lima, E., Lopes, R., Nassif, V. & da Silva, D. (2014). Opportunities to improve entrepreneurship education: contributions considering Brazilian challenges. **Journal of Small Business Management**, forthcoming.
- Laspita, S., Breugst, N., Helblich, S. & Patzelt, H. (2012). Intergenerational Transmission of Entrepreneurial Intentions. **Journal of Business Venturing**, 27(4), 414-435.
- Zellweger, T., Sieger, P. & Halter, F. (2011). Should I Stay or Should I Go? Career Choice Intentions of Students with Family Business Background. **Journal of Business Venturing**, 26(5), 521-536.

Several GUESSS-based articles have been published in top entrepreneurship journals by different GUESSS teams, with many more articles in the pipeline.

# Publications and Output

## ■ Academic papers

<2013	2014	2015	2016
5	4	7	10

## ■ International reports

- 2013/14, 2011, 2008, 2006
- See [www.guesssurvey.org](http://www.guesssurvey.org)

## ■ National reports

- More than 30 reports from 2013/14, 2011, 2008, 2006
- See [www.guesssurvey.org](http://www.guesssurvey.org)

## ■ Other reports

- [International study on succession intentions](#)
- Zellweger, T., Sieger, P. & Englisch, P. (2012). **Coming Home or Breaking Free? Career Choice Intentions of the Next Generation in Family Businesses.** Ernst & Young.
- Follow-up study "Coming Home or Breaking Free: Reloaded" to be published in Summer 2015

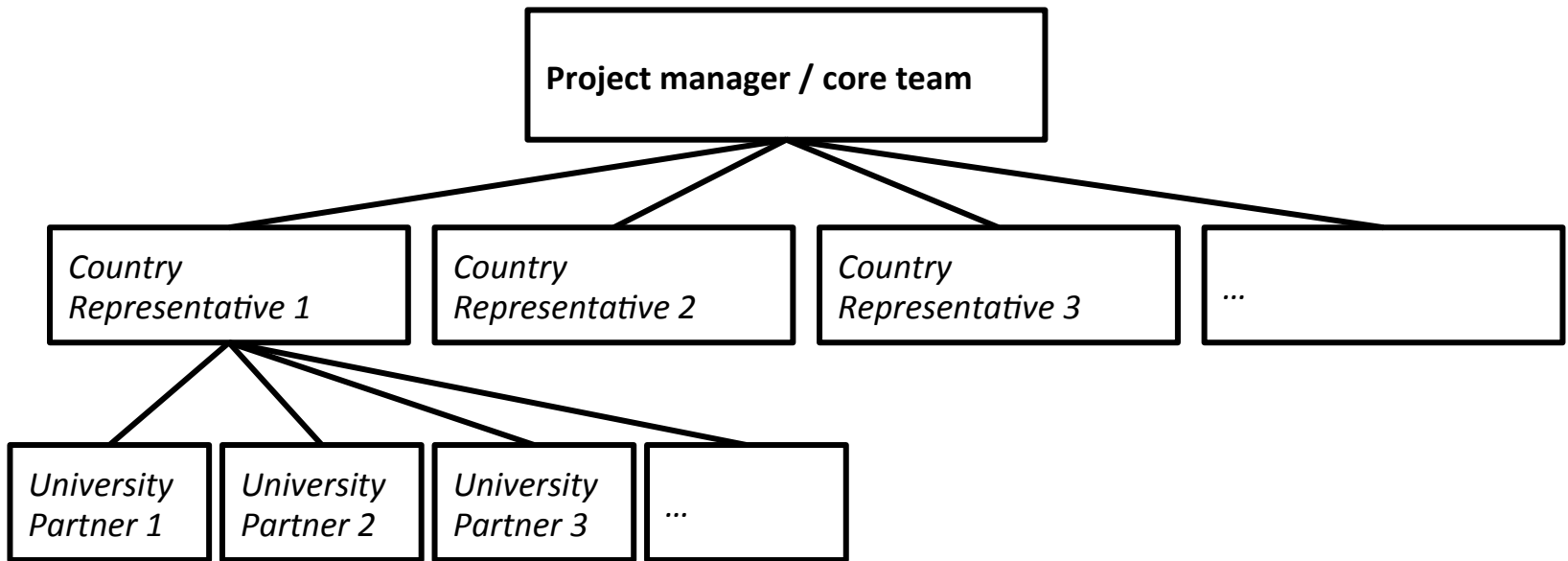


# GUESSS Management

- GUESSS is managed at the University of St.Gallen
  - Swiss Research Institute of Small Business and Entrepreneurship (KMU-HSG)
  - Center for Family Business (CFB-HSG)
- Responsible Project Manager
  - Prof. Dr. [Philipp Sieger](#)
  - Assistant Professor of Family Business
- Supervisory Board
  - Prof. Urs Fueglistaller
  - Prof. Thomas Zellweger
  - Prof. Norris Krueger
  - Dr. Frank Halter
- International Project Partner
  - GUESSS is generously supported by Ernst & Young

# GUESSS Management: Organizational Structure

- Level 1: Project manager and core team
- Level 2: One country representative (team) in each country
- Level 3: University partners



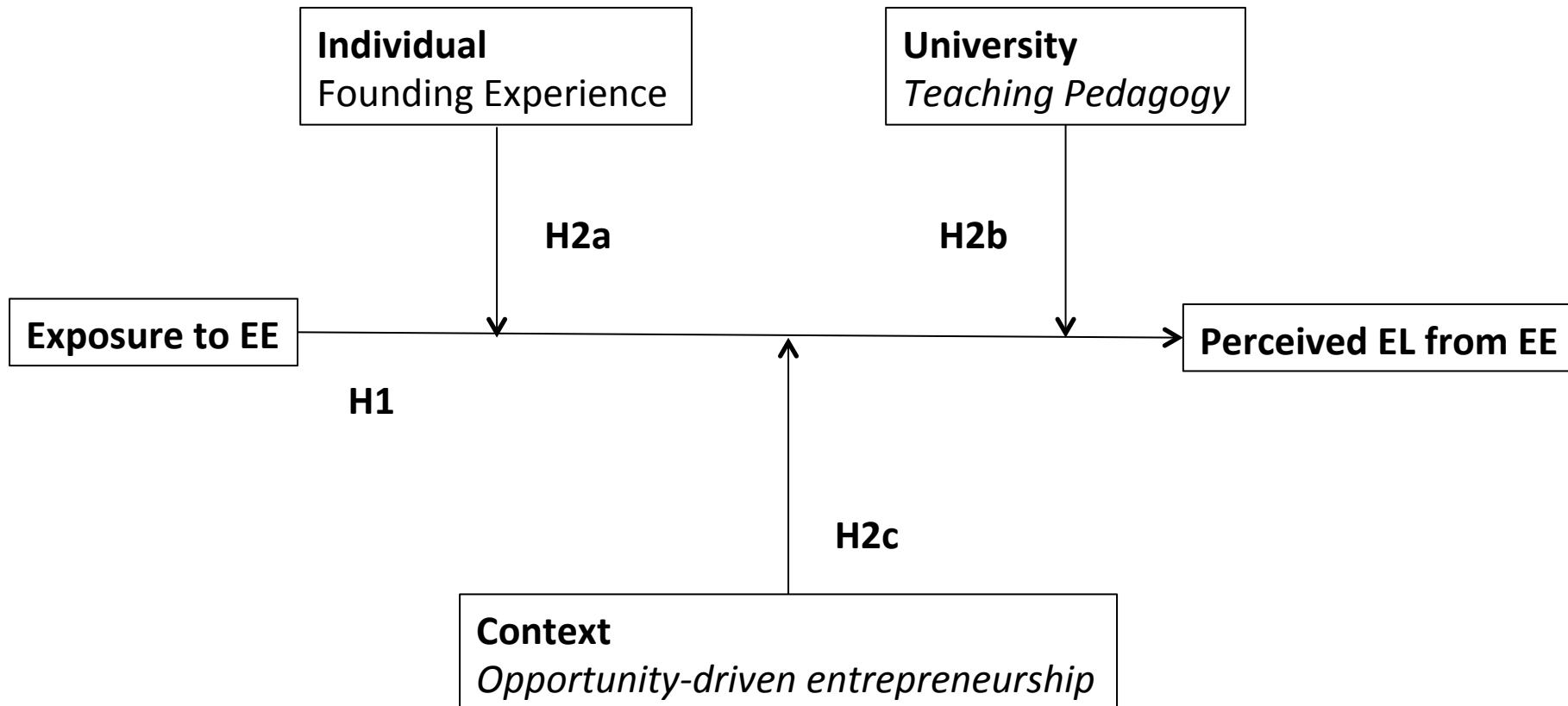
Each level has different tasks and responsibilities as well as benefits.

- Several studies based on GUESSS data from 2006, 2008, and 2011
- Studying individuals at the earliest possible stage of entrepreneurial activities
  - True prospective view without retrospective bias
  - Formation of entrepreneurial intentions
- Homogeneous population in terms of age and qualification
- Longitudinal replication
- Role of family and university
- Regional competitiveness (Guerrero et al., 2016)

- 4,446 respondents (39 universities)
- Engineering (42.6%) >> Law & Economics
- 62.05% bachelor, 34.05% master, 3.89% other students ( i.e. PhD and MBA)
- The majority of Italian students never attended a course on entrepreneurship
- Directly after studies, more than 80% of students prefers to work as employee; after five years: higher
- 6% of the Italian students have intentions to found the business
- 4.45% of the Italian students were already active entrepreneurs.

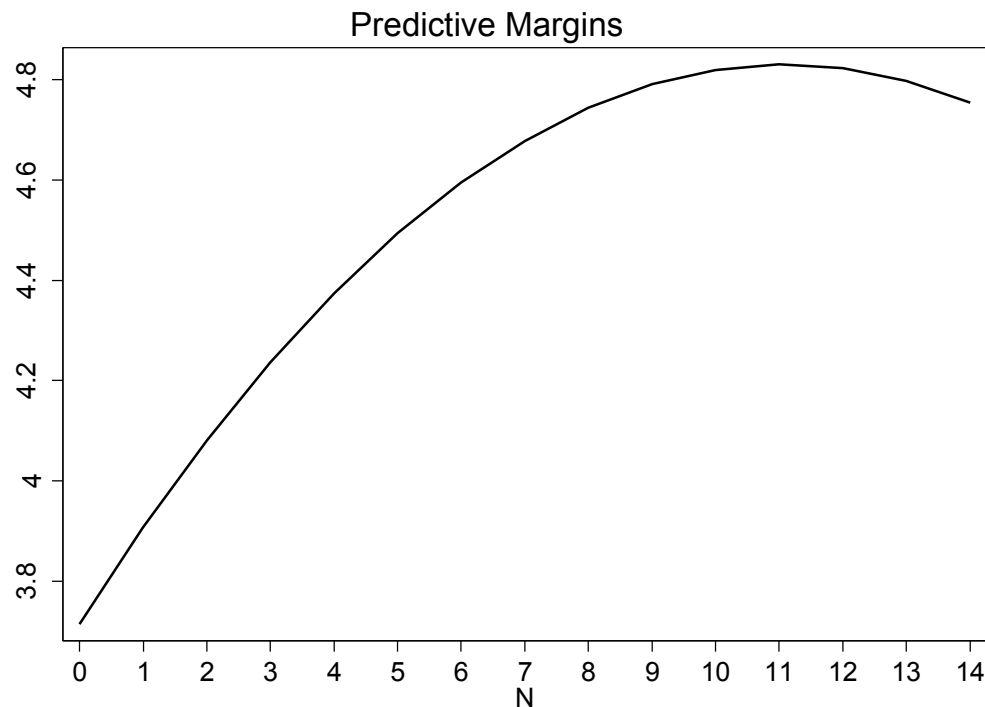
## Study 1

Hahn, D., Minola, T., van Gils, A., Huybrechts, J. (2018), Entrepreneurial Learning at Universities: Exploring Multilevel Contingencies. ***Entrepreneurship and Regional Development***



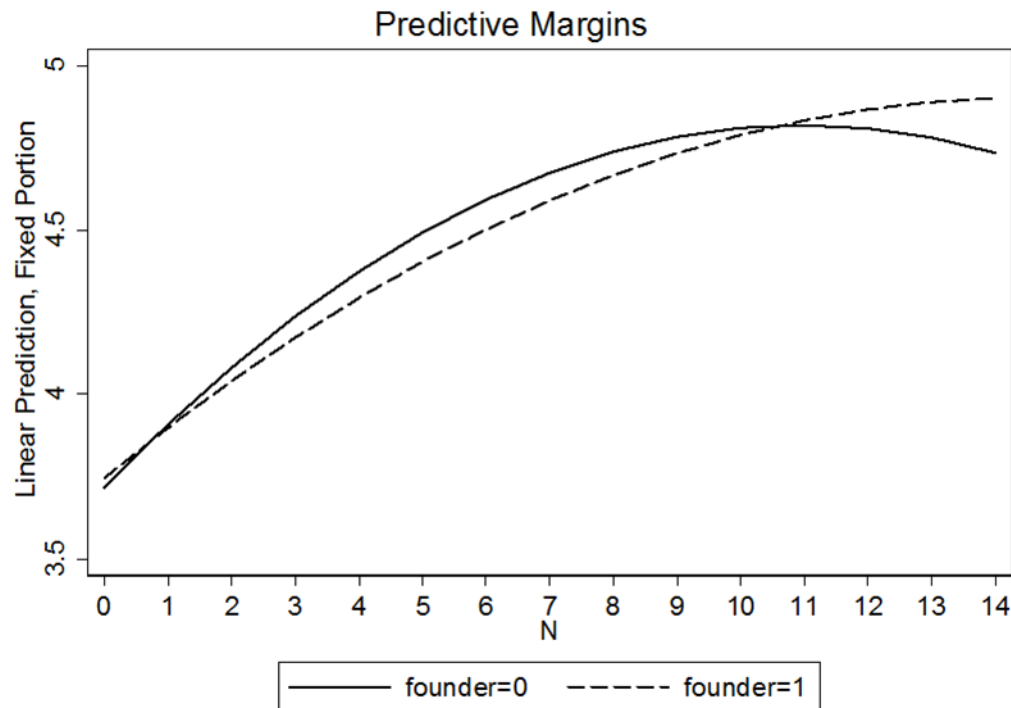
## Study 1

*H1: There is an inverse U-shaped relationship between EE and EL*



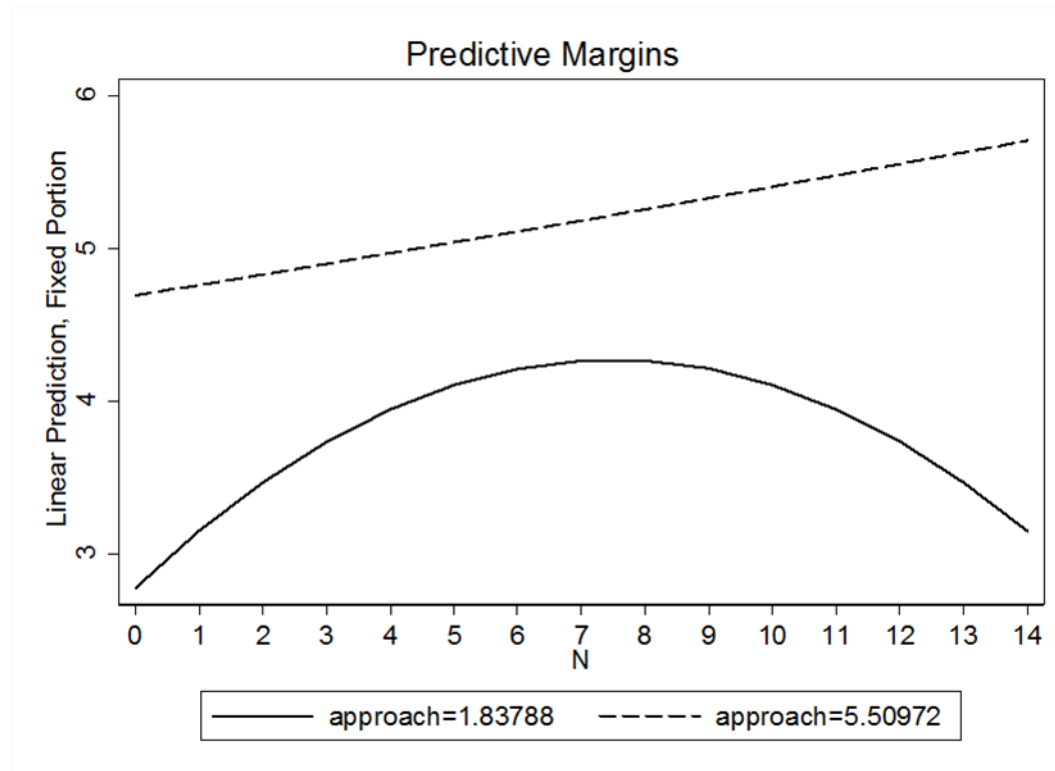
## Study 1

*H2a: Founding experience moderates the relationship between EE and EL such that the positive side of the inverted U-shape will become wider for students with founding experience.*



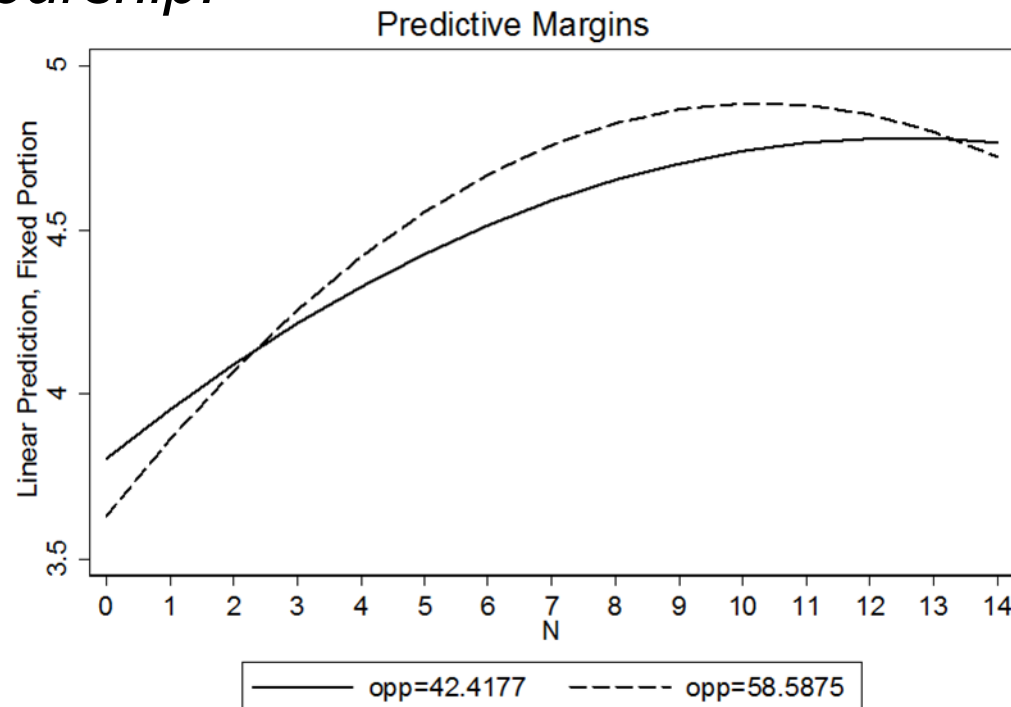
## Study 1

*H2b: The educational approach moderates the relationship between EE and EL such that the positive side of the inverted U-shape will become wider if the educational approach is less normative.*



## Study 1

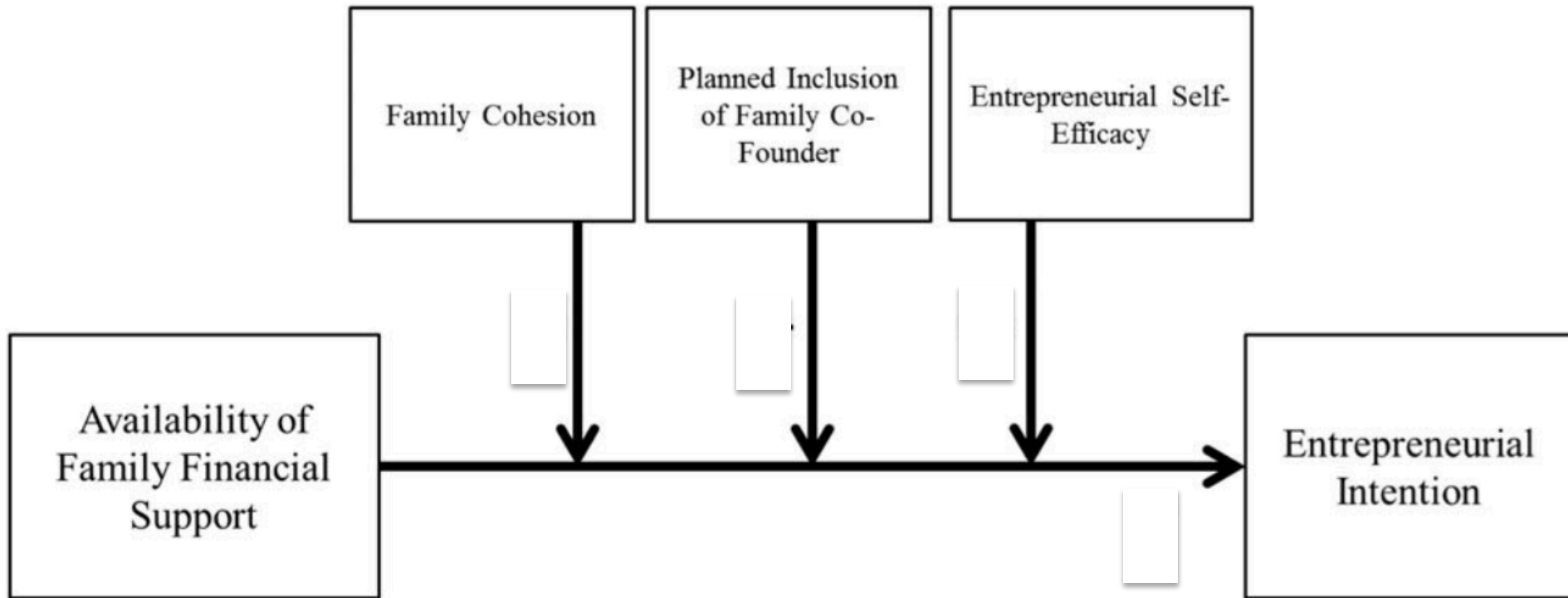
*H2c: The contextual entrepreneurial activity moderates the relationship between EE and EL such that the positive side of the inverted U-shape will become smaller at higher levels of opportunity-driven entrepreneurship.*



- **Contribution to Human Capital theory**
  - How and when investments in HC taking the form of EE become HC assets in the form of EL.
- **From an applied research point of view this work supports the need to adopt a holistic and multilevel perspective to understand EE**
- **Practical implications by helping educators and policy makers in**
  - deciding what is the optimal allocation of resources towards EE depending on audiences and context
  - designing the most appropriate educational approach

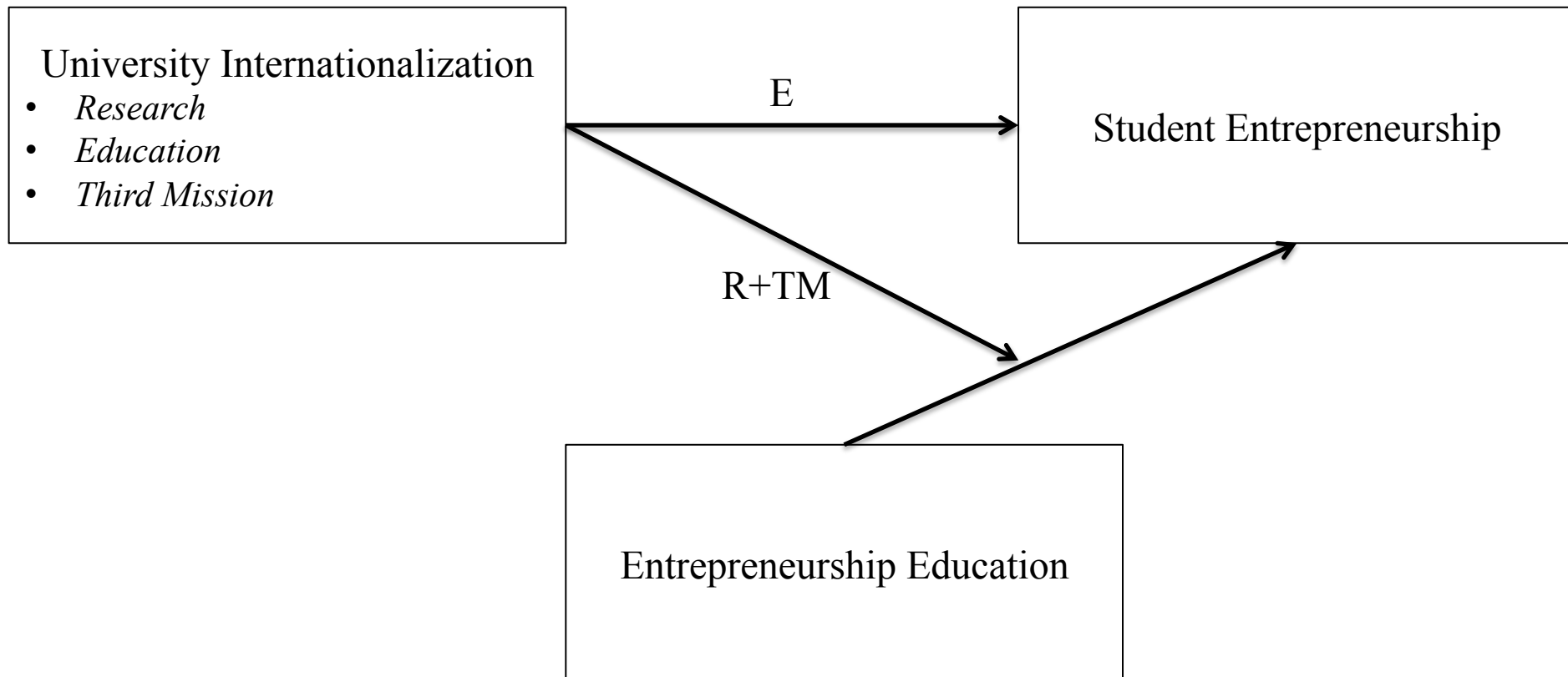
## Study 2

Sieger, P., Minola, T. (2017), The family's financial support as “Poisoned Gift”: a family embeddedness perspective on entrepreneurial intentions. ***The Journal of Small Business Management***



## Study 3

Minola, T., Donina, D., Meoli, M. (2016). Students climbing the entrepreneurial ladder: does university internationalization pay off? *Small Business Economics*, vol. 47, Iss: 3, p. 565-587.



- Multilevel learning
- 'Hot topic' for the research community
- A sort of 'internal' third mission to the Univ.
- 2018 New wave
  - [guesss@unibg.it](mailto:guesss@unibg.it)



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[www.facebook.com/cyfe.unibg](https://www.facebook.com/cyfe.unibg)

## **GUESSS**

**"Global University Entrepreneurial Spirit  
Students' Survey"**

<http://www.guesssurvey.org/>