

INSTITUTIONS AND ENTREPRENEURSHIP IN CENTRAL AND EASTERN EUROPE: A FOUR-COUNTRY COMPARISON OF UNIVERSITY STUDENTS' PERCEPTIONS

Tatiana S. Manolova¹, Rangamohan V. Eunni²

¹*Bentley University, 175 Forest St., Waltham, MA 02452, USA*
Email: tmanolova@bentley.edu

²*Youngstown State University, Youngstown, OH 44555, USA*
Email: rveunni@ysu.edu

Abstract. We compare and contrast the perceptions of the institutional environment for entrepreneurship among university students in four transition economies in Central and Eastern Europe: Bulgaria, Hungary, Latvia, and Russia, using a survey instrument developed by Busenitz *et al.* (2000) for industrialized countries and validated in the context of emerging markets by Manolova *et al.* (2008). Our results indicate that the institutional environments are perceived as overall unfavorable in all of the four countries. However, the underlying reasons vary, reflecting differences in regulatory regimes, cognitive structures, and normative traditions. Implications for future research, managerial practice, and public policy are discussed.

Keywords: entrepreneurship, institutional environment, transition economies, university students.

Jel classification: L26, P20, P36

1. Introduction

Since the late 1980's, the Central and Eastern European (CEE) countries have transitioned from centrally-planned to market-based economic systems, committing (in varying degrees) to strengthening their market mechanisms through liberalization, stabilization, and the encouragement of private enterprise (Hoskisson *et al.* 2000). The establishment and growth of entrepreneurial private enterprises has greatly accelerated the transition from overwhelmingly government-run economies to competitive markets (Zahra *et al.* 2000; Manev, Manolova 2010). As elsewhere around the world, entrepreneurship in transition economies is a major engine of growth, innovation, and job creation and is vital for their continued development.

Empirical studies demonstrate that aspiring entrepreneurs are most likely to consider starting a new venture between 25-34 years of age (Lévesque, Minniti 2011), or right after completion of college education. University graduates combine the creativity and energy of the young generation with high levels of education and mastery of technological know-how (Lüthje, Franke 2003). They are well prepared to establish innovative new businesses and to create high-quality jobs, thus facilitating the transition to an innovation-driven economy. The encouragement of entrepreneurship among university students in transition economies

is, therefore, a matter of great managerial and public policy interest.

Entrepreneurial intentions are shaped by multiple influences at the individual, family, and societal level (Lüthje, Franke 2003; Liñán *et al.* 2011). Precursors to entrepreneurship at different levels, including personal endowments such as education, experience, and social connections (Cooper *et al.* 1994; Davidsson, Honig 2003); family support and role models (Carsrud *et al.* 1987); or the country's level of macroeconomic, technological, and institutional development (Djankov *et al.* 2002; Bowen, DeClercq 2008; Wong *et al.* 2005) have been extensively studied in prior theoretical treatments and empirical work.

In this study, we contribute to the empirical literature on the role of the institutional environment for the promotion of entrepreneurship. Our contribution is two-fold. First, we compare and contrast the *perceived* favorability of the three dimensions of the institutional environment: regulatory, cognitive, and normative, across four CEE countries: Bulgaria, Hungary, Latvia, and Russia. Our premise is that unless the environment is perceived as entrepreneur-friendly, the potential nascent entrepreneur is not going to be very likely to engage in the arduous and risky process of starting a new venture. Second, we focus specifically on the perceptions of university students, who, as argued above, hold the strongest potential to estab-

lish high-growth innovative new ventures, thus contributing to the accelerated economic development of the transition economies in Central and Eastern Europe.

Our study is structured as follows. We start by a brief theoretical overview and formulate the research question guiding the study. Next, we report the methodology and the results from statistical testing. We conclude by discussing our findings and their theoretical and public policy implications.

2. Theoretical development

Institutions are universally accepted systems of practice, technologies and rules of social interaction which are normatively recognized and established in a society to the extent that behaviors contrary to such practices, technologies and rules of social interaction are met with social disapprobation and even costly sanctions (Lawrence *et al.* 2002). They represent fundamental political, social and legal ground rules which establish the basis of all economic activities. Organizations are expected to conform to these rules in order to be accorded legitimacy and support (North 1990). Scott (1995) advanced a widely accepted typology of formal and informal institutions, classifying them into *regulatory*, *normative*, and *cognitive* categories.

Regulatory institutions refer to the system of formally enacted laws of a society or nation. Less formal but equally important are *normative* institutions, established by professional and trade associations to regulate the conduct of their members. *Cognitive* institutions refer to cultural beliefs and values governing appropriate behavior in social interaction, which are learned through living and growing in a community. Despite some alternative conceptualizations (Hirsch, Lounsbury 1997), the typology has been widely used in organizational and entrepreneurship research (Bruton *et al.* 2010).

The institutional environment determines what is normatively feasible and, by shaping opportunity spaces, affects the speed and scope of new firm formation (Aldrich 1990; Gnyawali, Fogel 1994). The institutional environment also determines what is socially acceptable, and thus has a significant impact on the process of gaining cognitive and political legitimacy which increases new ventures' chances of survival (Freeman *et al.* 1983). Notably, when aspiring entrepreneurs perceive the institutional environment as hostile to entrepreneurs and entrepreneurial activities, they will be much less likely to engage in new venture formation (Lim *et al.* 2010).

The institutional environment in the transition economies of Central and Eastern Europe is considered as overall unfavorable for entrepreneurship development (Manolova *et al.* 2008). The regulatory dimension is still predominantly vertically-oriented and state-centered; professing a primarily low-growth and short-term oriented business outlook (Scase 1997). The cognitive dimension is characterized by high educational attainments but relatively lower levels of entrepreneurial knowledge and skills (Smallbone, Welter 2006). Social norms and attitudes are similarly equivocal because of the legacy of the socialist ideology which traditionally associated entrepreneurship with profiteering and exploitation (Aidis *et al.* 2008).

Yet, important differences do exist among CEE countries across all three dimensions of the institutional environment. The four countries that constitute the sampling frame for this study represent some of these important differences. Thus, the socialist regime in Russia and Latvia lasted considerably longer than in Hungary or Bulgaria, resulting in a much harsher suppression of private business culture (Aidis 2003). Russia and Latvia were part of the former Soviet Union, while Bulgaria and Hungary retained their national sovereignty. On the other hand, the affinity with European countries has led to a more western-oriented development in Latvia and Hungary compared to Bulgaria or Russia (Aidis 2003; Manolova *et al.* 2008).

With respect to university students, the population of interest to our study, some of these differences in the institutional profiles of CEE transition economies may be more salient than others. On the cognitive dimensions, university students are more highly educated than the general population. On the normative dimension, by virtue of their young age, university students in the CEE transition economies have had no personal memories or experiences of the socialist past and hence may be relatively less influenced by the cultural legacies and social stigma on entrepreneurship inculcated by socialist ideology. On the regulatory dimension, however, again by virtue of their young age, university students have not yet had the opportunity to accumulate human capital in the form of professional experience or a safety cushion of personal wealth, which renders them particularly vulnerable to obstructive institutional regimes or government regulations. Hence the research question addressed in this study: *What are the differences in university students' perceptions of the institutional environments for entrepreneurship across the four CEE transition economies?*

3. Methods

3.1. Survey instrument

In this study, we used the survey instrument developed by Busenitz *et al.* (2000). These authors followed the classification approach proposed by Scott (1995) and designed an instrument to measure a country's institutional profile for the development of entrepreneurship, e.g. the regulatory, cognitive, and normative dimensions of the institutional environment. They adopted somewhat narrower definitions than were originally intended by Scott (1995). For instance, the *cognitive dimension* was defined as "the knowledge and skills possessed by the people in a country pertaining to establishing and operating a new business" while the *normative dimension* measured "the degree to which a country's residents admire entrepreneurial activity and value creative and innovative thinking" (Busenitz *et al.* 2000: 995). In the interest of consistency and continuity in empirical work, we decided to retain the scales as conceptualized and operationalized by Busenitz *et al.* (2000). The instrument was validated in the context of emerging markets by Manolova *et al.* (2008) and is presented in the Appendix to the manuscript.

3.2. Data collection

The survey was administered during March-September 2006 in Bulgaria, Hungary, Latvia, and Russia. We chose these four countries because of the noticeable variation in the influences on their institutional environments. Hungary and Bulgaria retained nominal sovereignty during socialist rule, while Russia and Latvia are former members of the Soviet Union. Hungary and Latvia joined the European Union in 2004, and Bulgaria was just about to ascend to full membership at the time of the survey, while Russia was not (nor is, to this day) planning on joining. We expected that these differences would allow us to compare and contrast the resulting perceptions of the institutional environments for entrepreneurship in the four countries. Table 1, based on the World Development Indicators (World Bank 2012) and Doing Business data (World Bank 2012), presents the profiles of the four countries as of 2006 (the time of the study).

The survey was administered in English in Latvia and in the respective local languages in Russia, Bulgaria, and Hungary. Translation equivalence was established through back-translation (Brislin 1980).

Table 1. Country profiles

Country	GNI p.c. (\$)	R&D spending (% GDP)	Ease of starting a business		
			N of proce- dures	Time (days)	% p.c. in- come
Bulgaria	4080	0.48	11	32	9.6
Hungary	11040	0.96	6	38	22.4
Latvia	8120	0.59	5	16	4.2
Russia	5820	1.12	10	31	8.2

3.3. Sample

The initial sample included 454 students from random class sections in major business schools in the four countries (one school in each country). Employing a screening question on nationality, 57 foreign students (i.e., those whose nationality was different from the country surveyed) were filtered out, bringing our usable sample size to 397 (136 from Bulgaria, 64 from Hungary, 54 from Latvia, and 143 from Russia). Although the sample included both undergraduate and masters-level students, the mean age across the four countries was between 18 and 22 years, representative of typical college age. Following Busenitz *et al.* (2000), the survey was administered in a classroom setting to maximize the response rate. Respondent characteristics are summarized in Table 2.

Table 2. Respondent characteristics

Item	Bulgaria	Hungary	Latvia	Russia
Month/year of the survey	April 2006	March 2006	May 2006	Sept 2006
Sample size	139	64	100	151
% Female	52%	55%	44%	71%
% Male	48%	45%	56%	29%
Age				
19-35 yrs.	93%	98%	100%	98%
Mean (yrs)	21	22	20	18.2
Education				
Undergrad	59%	0%	100%	100%
Grad	41%	100%	0%	0%
# of foreign students excluded	3	0	46	8

4. Results

Descriptive statistics are presented in Table 3. The results from the confirmatory factor analysis (Table 4 and Figure 1) show that our model compares favorably with Busentitz *et al.*'s (2000) model in terms of factor loadings, scale reliabilities, and goodness of fit indicators. We also assessed the model equivalency across the four country samples, performing factor analysis on each country sample separately. In each case, the loading patterns were similar. The results from the country subsamples are not presented here because of space constraints and are available from the authors upon request.

Table 3. Descriptive statistics*

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
Regulatory 1	2.54	0.87												
Regulatory 2	2.91	1.31	0.48											
Regulatory 3	3.09	1.38	0.49	0.44										
Regulatory 4	3.66	1.35	0.36	0.34	0.38									
Regulatory 5	2.57	1.26	0.38	0.37	0.39	0.43								
Cognitive 1	3.73	1.54	0.23	0.14	0.17	0.24	0.27							
Cognitive 2	3.96	1.55	0.09	0.10	0.05	0.11	0.12	0.44						
Cognitive 3	3.84	1.41	0.09	0.09	0.07	0.13	0.10	0.44	0.66					
Cognitive 4	4.48	1.50	0.08	0.06	0.01	0.11	0.09	0.39	0.40	0.44				
Normative 1	4.25	1.60	0.24	0.23	0.22	0.16	0.19	0.25	0.24	0.27	0.27			
Normative 2	4.22	1.63	0.33	0.28	0.30	0.20	0.29	0.30	0.19	0.20	0.18	0.55		
Normative 3	4.18	1.57	0.17	0.20	0.22	0.22	0.21	0.24	0.20	0.20	0.25	0.39	0.48	
Normative 4	4.31	1.57	0.17	0.23	0.20	0.15	0.23	0.26	0.21	0.20	0.20	0.36	0.41	0.66

* $n = 397$; all correlations $> |0.08|$ significant at $p < 0.05$ (2-tailed)

Table 4. Model statistics: Comparison with the Busentitz *et al.*'s (2000) study

Indicator	Busentitz et al. (2000)	Our study
Number of factors	3	3
Scale reliabilities		
Regulatory	0.76	0.78
Cognitive	0.68	0.81
Normative	0.81	0.78
Overall	0.78	0.80
Goodness of Fit		
CFI	0.94	0.89
NFI	0.91	0.85
IFI	0.94	0.90
RMSEA	0.05	0.08

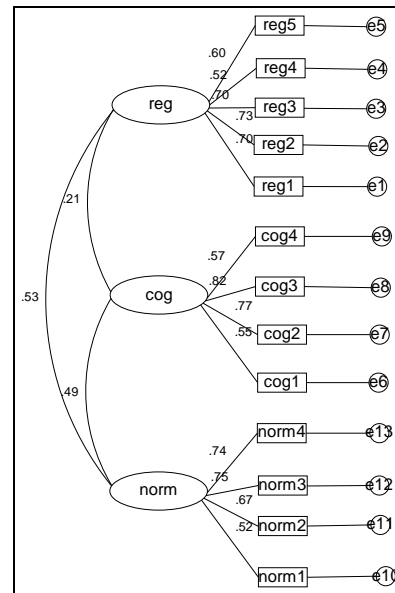


Fig.1. Factor structure

Next, we ran an analysis of variance (ANOVA) across the four countries in the sample. The results (Table 5) show that there are significant differences among the four economies in the overall institutional profile scores, as well as in two of the three individual dimensions: regulatory and cognitive.

Table 5. Analysis of variance results

Country	Institutional Profile		Regulatory		Cognitive		Normative	
	Mean (Rank)	s.d.	Mean (Rank)	s.d.	Mean (Rank)	s.d.	Mean (Rank)	s.d.
Bulgaria	2.75 (4)	0.78	2.54 (4)	0.87	2.74 (3)	0.99	2.97 (4)	1.01
Hungary	2.91 (3)	0.54	3.19 (1)	0.76	2.56 (4)	0.73	2.30 (3)	0.74
Latvia	3.10 (1)	0.47	3.04 (2)	0.54	2.83 (2)	0.87	3.44 (1)	0.75
Russia	3.02 (2)	0.70	2.85 (3)	0.79	3.19 (1)	0.84	3.03 (2)	0.94
F test	3.83**		10.06**		7.68**		2.03	

Note: ** $p < 0.01$; * $p < 0.1$

Post hoc tests to determine which country means differ from which others (not reported here because of space constraints and available from the authors upon request) showed significant differences between the four countries in the overall institutional profile. While in the overall dimension of institutional profile score there was a significant difference between Bulgaria and Russia ($p = .005$), there were no significant differences between any other countries. Latvia had the highest score, while Bulgaria had the lowest score in the overall institutional profile.

In terms of the individual dimensions, significant differences exist in the regulative dimensions scores amongst four countries ($p < .001$). The post-hoc analysis showed that other than Russia

and Latvia, all other countries differed on regulatory scores, with Hungary having the highest score and Bulgaria having the lowest score. As for the cognitive dimension, there were significant differences amongst all countries ($p < .001$) other than Hungary and Latvia. Russia had the highest score on this measure while Hungary had the lowest. As regards the normative dimension, there were no significant differences among the four countries ($p = .163$), even though Latvia had the highest score and Bulgaria had the lowest score.

5. Discussion

In this study, we set out to investigate the differences in the perceived institutional environments for entrepreneurship among university students in four transition economies in Central and Eastern Europe: Bulgaria, Hungary, Latvia, and Russia. The results from statistical testing lead us to three main findings which we discuss below.

To start with, university students in all four countries perceived the institutional environment as overall unfavorable for entrepreneurship. The scores across all three dimensions of the institutional environment, regulatory, cognitive, and normative, were below 4 (the neutral anchor in our 7-point Likert-type scale). This is in contrast to Busenitz *et al.*'s (2000) study which found the overall institutional profiles of four of the six developed economies studied to be conducive to entrepreneurship (rated above the neutral anchor).

Our finding is in line with evidence from the most recent report of the Global Entrepreneurship Monitor (GEM) which traces nascent entrepreneurship activity worldwide. According to the 2010 GEM Global Report (Kelley *et al.* 2011), 29.1% of the respondents in Latvia, 33.3% of the respondents in Hungary, and 21.7% of the respondents in Russia saw entrepreneurial opportunities (Bulgaria was not covered by the 2010 GEM study). These numbers compare unfavorably to the perceptions of respondents in countries with a similar level of economic development, classified by GEM as "efficiency-driven" economies, such as Argentina (50.3%), Chile (65.0%), Malaysia (40.1%), or Turkey (36.1%). Not surprisingly, a relatively low 58.8% of the respondents in Latvia, 55.0% of the respondents in Hungary, and 65.4% of the respondents in Russia considered entrepreneurship "a good career choice", compared to 74.3% of the respondents in Argentina, 87.4% in Chile, 55.7% in Malaysia, and 71.2% in Turkey. Apparently, when the institutional environment is perceived as not particularly friendly towards entrepreneurs and entrepreneurial activities, the per-

ceived feasibility (e.g. perceived opportunities) and desirability (e.g. career choice) of entrepreneurship are correspondingly low.

The effect of the perceived favorability of the institutional environment on the perceived feasibility and desirability of entrepreneurial behavior has important implications for theory. Our model, which captures perceptions of the institutional environment for entrepreneurship, complements models of entrepreneurial intentions, such as Azjen's (1987) Theory of Planned Behavior (TPB). In Azjen's (1987) TPB model, intentions are determined to a large extent by three factors: (1) the personal attitudes towards the planned behavior (or perceived desirability), (2) the social norms about the planned behavior, or the perceptions of what important people in respondents' lives think about performing the behavior, and (3) the perceived behavioral control over the intended behavior (or perceived feasibility). Interestingly, most of the empirical research has tested Azjen's model on university student samples (Liñán *et al.* 2011; Autio *et al.* 2001; Kolvereid 1996). Thus, to date, we have a robust body of empirical evidence suggesting the TPB model is an appropriate theoretical anchor for the study of entrepreneurial intentions among university students. Recently, there have been calls for extending the TPB model by including antecedents, such as the institutional environment influences on individual cognitions (Liñán *et al.* 2011; Lim *et al.* 2010). A fruitful extension of our study would be to combine it with established models of entrepreneurial intentions such as the TPB model in order to better capture the environmental influences on the perceived desirability, feasibility, and social acceptance of entrepreneurial behavior.

Our second finding reflects the differences in the perceived institutional environments for entrepreneurship across the four countries. Overall, Latvia emerged as the country most favorable (or, properly speaking, least unfavorable) to entrepreneurship, followed by Russia, Hungary, and Bulgaria. The differences in the overall institutional profiles were significant, as demonstrated by the analysis of variance (Table 5). Thus, our research question is answered in the affirmative: there are, indeed, significant differences in university students' perceptions of the overall institutional profiles for entrepreneurship across the four CEE transition economies we studied. However, we also found that these differences were mostly due to the perceived differences in the regulatory and cognitive dimensions of the institutional environment, whereas the normative environment was perceived by university students as rather uniform-

ly unfavorable across the four countries. This finding confirms our initial premise that university students, because of their young age, will be more sensitive to differences in the institutional influences they are most exposed to, namely formal laws and regulations as well as the institutional arrangements governing the attainment of entrepreneurial knowledge and skills. A possible avenue for future empirical research would be to ascertain in more depth the salient factors which are most likely to shape university students' perceptions of the favorability of different dimensions of the formal and informal institutional environment for entrepreneurship in transition economies.

Last, but not least, we established some interesting contrasts in the perceived favorability of the different pillars of the institutional environment across the four institutional settings. Thus, university students in Latvia accorded a relatively high rank to all three dimensions of the institutional environment, resulting in a balanced perception of environmental influences. Hungary, on the other hand, was accorded the highest score on the regulatory dimension and the lowest score on the cognitive dimension. In contrast, Russia was accorded the highest score on the cognitive dimension, but the second lowest score on the regulatory dimension of the institutional environment. Finally, Bulgaria received a balanced but, unfortunately, low score across all three dimensions of the institutional environment, suggesting that the country needs to accelerate institutional development on all fronts. Our finding is in line with prior research on the institutional profiles for entrepreneurship in the CEE transitional economies (Manolova *et al.* 2008) and reinforces the need for finer-grained and clearly defined constructs and scales to evaluate both the formal and the informal pillars of the institutional environment (Mayer, Peng 2005).

6. Limitations and future research

We are cognizant of several limitations of our study, which restrict its generalizability. To start with, the definitions adopted by Busenitz *et al.* (2000) may not capture their rich connotations in the new institutional theory (North 1990; Scott 1995). Second, our dataset comes from only four CEE countries, warranting further research before our findings could be extended to other contexts. At any rate, however, we can surmise that the institutional environment for entrepreneurship tends to be perceived as rather unfavorable across multiple transition economy settings. Finally, our study provides a snapshot in time, whereas institutional profiles of countries can change over time. Notably, the ease of starting a business has improved

considerably in all four countries since the time of our study. For example, according to the latest Doing Business Indicators (World Bank 2012), the number of procedures needed to start a new business in Hungary has gone down from 6 to 4, the time necessary to start a new business has gone down from 38 days to 4 days, while the cost of starting a new business as percent of per capita income has gone down from 22.4% to 7.6%. We call for future longitudinal studies to document the dynamic coevolution of the institutional environment and entrepreneurship in the CEE transition economies.

7. Conclusions

Limitations notwithstanding, our study has important implications for public policy. The university students in our four-country sample perceived the institutional environment for entrepreneurship as overall unfavorable across all three dimensions, the regulatory, the cognitive, and the normative. While significant differences in the regulatory and cognitive dimensions did exist across the four countries, the normative dimension was perceived as more or less uniformly unfavorable. Our findings strongly suggest that the formal and informal framework for support of entrepreneurship needs to be considerably enhanced. A country-specific mix of entrepreneur-friendly legislation, strategic investments to enhance entrepreneurial competencies, and promotion of positive entrepreneurial role models to influence social attitudes can help unlock the entrepreneurship potential of the young generation in the transition economies of Central and Eastern Europe.

Appendix. Survey items

Regulatory dimension

Regulatory 1: Government organizations in this country assist individuals with starting their own businesses.

Regulatory 2: The government sets aside government contracts for new and small businesses.

Regulatory 3: Local and national governments have special support available for individuals who want to start a new business.

Regulatory 4: The government sponsors organizations that help new businesses develop.

Regulatory 5: Even after failing in an earlier business, the government assists entrepreneurs in starting again.

Cognitive dimension

Cognitive 1: Individuals know how to legally protect a new business.

Cognitive 2: Those who start new businesses know how to deal with much risk.

Cognitive 3: Those who start new businesses know how to manage risk

Cognitive 4: Most people know where to find information about markets for their products.

Normative dimension

Normative 1: Turning new ideas into businesses is an admired career path in this country.

Normative 2: In this country, innovative and creative thinking is viewed as a route to success.

Normative 3: Entrepreneurs are admired in this country

Normative 4: People in this country tend to greatly admire those who start their own business.

References

- Aidis, R. 2003. *Entrepreneurship and Economic Transition*. A Tinberg Institute Discussion Paper TI2003-015/2. Available from Internet: <http://www.tinbergen.nl>
- Aidis, R.; Estrin, S.; Mickiewicz, T. 2008. Institutions and entrepreneurship development in Russia: A comparative perspective, *Journal of Business Venturing* 23: 656-672. <http://dx.doi.org/10.1016/j.jbusvent.2008.01.005>
- Aldrich, H.E. 1990. Using an ecological perspective to study organizational founding rates, *Entrepreneurship Theory and Practice* 14(3): 7-24.
- Autio, E.; Keeley, R.H.; Klofsten, M.; Parker, G.G.C.; Hay, M. 2001. Entrepreneurial intent among students in Scandinavia and in the USA, *Enterprise and Innovation Management Studies* 2(2): 145-160. <http://dx.doi.org/10.1080/14632440110094632>
- Azjen, I. 1987. Attitudes, traits, and actions: Dispositional prediction of behavior in social psychology, *Advances in Experimental Social Psychology* 32(4): 665-683.
- Brislin, R.W. 1980. Translation and content analysis of oral and written materials. in Triandis, H.C.; Berry, J.W.(Eds.) *Handbook of Cross-Cultural Psychology*, Allyn & Bacon, 389-444.
- Bowen, H.P.; De Clercq, D. 2008. Institutional context and the allocation of entrepreneurial effort, *Journal of International Business Studies* 39: 747-767. <http://dx.doi.org/10.1057/palgrave.jibs.8400343>
- Bruton, G.D.; Ahlstrom, D.; Li, H.-L. 2010. Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice* 34: 421-440. <http://dx.doi.org/10.1111/j.1540-6520.2010.00390.x>
- Busenitz, L.W.; Gomez, C.; Spencer, J.W. 2000. Country institutional profiles: Unlocking entrepreneurial phenomena, *Academy of Management Journal* 43(5): 994-1003. <http://dx.doi.org/10.2307/1556423>
- Carsrud, A.; Olm, K.; Eddy, G. 1987. Entrepreneur-mentors, networks and successful new venture development: An exploratory study, *American Journal of Small Business* 12(1): 13-18.
- Cooper, A.C.; Gimeno-Gascon, F.L.; Woo, C.Y. 1994. Initial human and financial capital as predictors of new venture performance, *Journal of Business Venturing* 9(5): 371-395. [http://dx.doi.org/10.1016/0883-9026\(94\)90013-2](http://dx.doi.org/10.1016/0883-9026(94)90013-2)
- Davidsson, P.; Honig, B. 2003. The role of human and social capital among nascent entrepreneurs, *Journal of Business Venturing* 18(3): 301-331. [http://dx.doi.org/10.1016/S0883-9026\(02\)00097-6](http://dx.doi.org/10.1016/S0883-9026(02)00097-6)
- Djankov, S.; La Porta, R.; Lopez-de-Silanes, F.; Shleifer, A. 2002. The regulation of entry, *Quarterly Journal of Economics* 117: 1-37. <http://dx.doi.org/10.1162/003355302753399436>
- Freeman, J.; Carroll, G.R.; Hannan, M.T. 1983. The liability of newness: Age dependence in organizational death rates, *American Sociological Review* 48: 692-710. <http://dx.doi.org/10.2307/2094928>
- Gnyawali, D.R.; Fogel, D.S. 1994. Environments for entrepreneurship development: Key dimensions and research implications, *Entrepreneurship Theory and Practice* 18(4): 43-62.
- Hirsch, P.M.; Lounsbury, M. 1997. Ending the family quarrel: Toward a reconciliation of "old" and "new" institutionalisms, *American Behavioral Science* 40: 406-418. <http://dx.doi.org/10.1177/0002764297040004004>
- Hoskisson, R.E.; Eden, L.; Lau, C.M.; Wright, M. 2000. Strategy in emerging economies, *Academy of Management Journal* 43(3): 249-267. <http://dx.doi.org/10.2307/1556394>
- Kelley, D.J.; Bosma, N.; Amorós, J.E. 2011. *Global Entrepreneurship Monitor: 2010 Global Report*. Babson Park, MA: Babson College.
- Kolvereid, L. 1996. Predictions of employment status choice intentions, *Entrepreneurship Theory and Practice* 21(1): 47-57.
- Lawrence, T.B.; Hardy, C.; Phillips, N. 2002. Institutional effects of inter-organizational collaboration: The emergence of proto-institutions, *Academy of Management Journal* 45: 281-290. <http://dx.doi.org/10.2307/3069297>
- Lévesque, M.; Minniti, M. 2011. Age matters: How demographics influence aggregate entrepreneurship, *Strategic Entrepreneurship Journal* 5: 269-284. <http://dx.doi.org/10.1002/sej.117>
- Lim, D.S.K.; Morse, E.A.; Mitchell, R.K.; Seawright, K.K. 2010. Institutional environment and entrepreneurial cognitions: A comparative business systems perspective, *Entrepreneurship Theory and Prac-*

- tice* 34(3): 491-516.
<http://dx.doi.org/10.1111/j.1540-6520.2010.00384.x>
- Liñán, F.; Urbano, D.; Guerrero, M. 2011. Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain, *Entrepreneurship and Regional Development* 23(3/4): 187-215.
- Lüthje, C.; Franke, N. 2003. The making of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT, *RandD Management* 33(2): 135-147.
- Manev, I.M.; Manolova, T.S. 2010. Entrepreneurship in transitional economies: Review and integration of two decades of research, *Journal of Developmental Entrepreneurship* 15(1): 69-99.
<http://dx.doi.org/10.1142/S1084946710001427>
- Manolova, T.S.; Eunni, R.V.; Gyoshev, B.S. 2008. Institutional environment for entrepreneurship: Evidence from emerging economies in Eastern Europe, *Entrepreneurship Theory and Practice* 32(1): 203-218. <http://dx.doi.org/10.1111/j.1540-6520.2007.00222.x>
- Mayer, K.E.; Peng, M.W. 2005. Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions, *Journal of International Business Studies* 36: 600-621.
<http://dx.doi.org/10.1057/palgrave.jibs.8400167>
- North, D. 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Norton.
- Scase, R. 1997. The role of small businesses in the economic transformation of Eastern Europe: Real but relatively unimportant? *International Small Business Journal* 16(1): 13-21.
<http://dx.doi.org/10.1177/0266242697161001>
- Scott, W.R. 1995. *Institutions and Organizations*. Thousand Oaks, CA: Sage.
- Smallbone, D.; Welter, F. 2006. Conceptualizing entrepreneurship in a transition context, *International Journal of Entrepreneurship and Small Business* 3(2): 190-206.
<http://dx.doi.org/10.1504/IJESB.2006.008928>
- Wong, P.K.; Ho, Y.P.; Autio, E. 2005. Entrepreneurship, innovation and economic growth: Evidence from GEM data, *Small Business Economics* 24: 335-350.
<http://dx.doi.org/10.1007/s11187-005-2000-1>
- World Bank <The>. 2012. *Doing Business*. Available from Internet: <http://www.doingbusiness.org>
- World Bank <The>. 2012. *World Development Indicators*. Available from Internet: <http://data.worldbank.org/data-catalog/world-development-indicators>
- Zahra, S.A.; Ireland, R.D.; Gutierrez, I.; Hitt, M.A. 2000. Privatization and entrepreneurial transformation: Emerging issues and a future research agenda, *Academy of Management Review* 25(3): 509-524.