

**COMPARISON OF PERCEIVED BARRIERS TO ENTREPRENEURSHIP IN  
EASTERN AND WESTERN EUROPEAN COUNTRIES**

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Reference: Iakovleva T.A., Kolvereid, L., Gorgievski, M.J., Sørhaug Ø. (2014)  
Comparison of perceived barriers to entrepreneurship in Eastern and Western European  
countries. *Int. J. Entrepreneurship and Innovation Management*, 18, 2/3, 115-133

Acknowledgements: We like to thank Lacramioara Albu for her help with collecting data in  
Romania.

# COMPARISON OF PERCEIVED BARRIERS TO ENTREPRENEURSHIP IN EASTERN AND WESTERN EUROPEAN COUNTRIES

## ABSTRACT

This qualitative study among 591 business students from four European countries investigated cross-country differences in the kind of barriers people perceive to business start-up. In line with Institutional Theory, the most important perceived barriers in all countries related to regulative structures (lack of money) and cognitive conditions (lack of skills). Normative structures, defined as national culture, did not explain cross-country differences in perceived risk as start-up barrier. In Norway and The Netherlands, students reported risk perceptions more often than in Romania and Russia, whereas the latter countries are known to be more uncertainty avoidant. These results aid in developing a theory of entrepreneurial barriers, which could be used to extend current entrepreneurial intentions theories in order to predict actual start-up behaviour better. Concerning practical implications, results indicate that business start-up can be stimulated through improving regulative and cognitive institutional structures, but national differences need to be taken into account.

**Keywords:** Entrepreneurship; entrepreneurial intentions; business start-up; barriers; Institutional Theory; regulative structures; institutions; normative structures; cognitive conditions; cross-cultural comparison; uncertainty avoidance; developing countries; qualitative research; Europe.

## **COMPARISON OF PERCEIVED BARRIERS TO ENTREPRENEURSHIP IN EASTERN AND WESTERN EUROPEAN COUNTRIES**

### **INTRODUCTION**

The question of why graduate students do or do not intent to start their own business has received ample attention in entrepreneurship literature from a motivational perspective (Iakovleva et al., 2011; Kolvereid, 1996; Krueger et al., 2000, Moriano et al, 2012). Entrepreneurs are critical for the development and well-being of a society, play a crucial role in counteracting economic decline and are major agents of economic growth, innovation and employment (Kelley et al., 2011). Barriers to entrepreneurship have long been studied as important factors discouraging the start-up of new enterprises (Bates, 1995, Lien et al., 2002; Schindehutte et al., 2003). Pittaway and Cope (2007) as well as Carayannis et al. (2003) posit that individuals' entrepreneurial intentions are shaped by their perception of barriers to business start-up, cultural values, and the environment in which they are located. Similarly, Lüthje and Franke (2003) argue that entrepreneurial intentions relate to perceived barriers to business creation, cultural values and the environments' infrastructure aimed at supporting entrepreneurs. A poor infrastructure, characterized by, for instance, administrative difficulties and banks' reluctance to finance new projects, and an unsupportive, risk averse cultural environment stigmatizing business failure represent elements that can derail an individual's entrepreneurial desire (Shinnar et al., 2009). Yet, the concept of barriers lacks in most entrepreneurial intentions studies to date.

Entrepreneurial barriers relate to "precipitating events", moderating the link between entrepreneurial intentions and actual efforts to start an enterprise (Krueger 2008, Lüthje and Franke, 2003; Shapero, 1975; Shapero and Sokol, 1982). Previous empirical research has identified several important barriers to start-ups. However, the majority of studies have used a

deductive approach with pre-existing lists of barriers, not allowing to identify country-specific barriers. There is a dearth of scientific work on barriers in developing countries. Moreover, the majority of studies on barriers have been descriptive, only providing highly fragmented and context-specific insights, and no systematic comparisons of cross-cultural differences. In order to fill this void, the present qualitative study conducted in four European countries aims to identify different types of barriers by assessing barriers to entrepreneurship as perceived by graduate students. Our first research question is:

*RQ1: What barriers to entrepreneurship do graduate students perceive in four different European countries?*

Further, following the logic of institutional theory (Meyer and Rowan, 1977), we argue that the different environmental contexts of the four countries will reflect in differences in perceived barriers to entrepreneurship. In the present study, we focus on two developing East European countries—Russia and Romania—versus two developed West European countries—Norway and The Netherlands. Developing countries are defined as countries characterized as middle-income economies according to the classification proposed by the World Bank (2011). The environmental context differs greatly between developing and developed countries. Therefore, our second research question is:

*RQ2: Do perceived barriers to entrepreneurship differ across developing and developed countries?*

The remainder of this article is structured as follows. First, findings from the previous studies on start-up barriers will be discussed. Second, the context of the current study will be

outlined briefly. Third, institutional theory will be presented as the basis for understanding differences in perceived barriers across developing versus developed countries, and hypotheses will be derived. Fourth, the methods section will describe the sample and analysis techniques. Finally, results will be presented and discussed.

## **ENTREPRENEURIAL BARRIERS**

Ample empirical evidence exists that antecedents of behaviour, such as attitudes toward entrepreneurship, (entrepreneurial) self-efficacy, desirability and feasibility explain large proportions of variance in start-up intentions (Kolvereid, 1996, Iakovleva et al. 2011, Moriano et al, 2012). However, intentions often do not turn into actions, reflecting barriers that could not be surmounted (Krueger, 2008). Understanding barriers toward entrepreneurship as “precipitating events” would allow for including barriers as part of intentional theories and take research to the next level; explain how intentions turn into actions. Barriers have long been seen as an important explanatory variable in behavioural research (Lien et al., 2002). The concept of “precipitating event” refers to the appearance of a perceived facilitating factor, or removal of a perceived inhibiting factor (Shapiro and Sokol, 1982).

Several studies have provided insight into perceived opportunities and barriers to entrepreneurship (Bates, 1995; Kelley et al., 2011; Giacomini et al., 2011). For example, Choo and Wong (2006) explored barriers perceived by 145 mid-career individuals in Singapore and found five major groups of barriers based on a pre-defined list: lack of capital, lack of skills, high risk, lack of confidence and compliant costs. These findings are consistent with several other studies reporting that a lack of financial resources were a major inhibiting factor to business start-up (Robertson et al, 2003; Volery et al, 1997). Further, in their recent work, Smith and Beasley (2011) investigated factors that influenced seven graduate students

in the creative and digital industries to start their own businesses in the United Kingdom. They identified the following constraining factors: lack of financial resources, a lack of general business knowledge, contradictory advisory support from external agencies, and lack of sector-specific mentors. In line with these single country studies, Giacomini et al. (2011) in their empirical investigation based on a sample of 2093 students from five different countries (USA, China, India, Belgium and Spain) identified five major categories of barriers (1) lack of support structure and high fiscal and administrative costs, (2) lack of knowledge and experience, (3) economic climate and lack of entrepreneurial competencies, (4) lack of self-confidence, and (5) risk aversion.

Based on this review it can be concluded that the same categories of barriers are found repeatedly, especially availability of financial resources, lack of skills and competencies, and the risk associated with start-up activities. Empirical evidence also suggests that the extent to which nascent entrepreneurs experience certain barriers varies across countries. For example, Giacomini et al. 2011 found that lack of support structure and fiscal and administrative costs was rated as most important by Indian students. American and Indian students considered lack of knowledge and experience, economic climate and lack of entrepreneurial competencies to be more important barriers than students from the other countries. Lack of self-confidence was rated as an important barrier by Indian students, while Spanish students were least concerned with this barrier. Risk aversion was found to be a less important barrier among Chinese and Spanish students. Until to date it has remained unclear what drives such cross-country differences and whether patterns can be identified that can explain them meaningfully. Absence of funding likely refers to external economic conditions. Arguably, the same can be said of lack of skills and competencies, to the extent it relates to the availability of schooling opportunities. Risk tolerance more likely relates to shared cultural values. The present cross-cultural study will investigate such patterns.

## **CONTEXT OF THE STUDY: FOUR EUROPEAN COUNTRIES**

In the present study, two developing East European countries – Romania and Russia are compared with two developed West European countries – Norway and The Netherlands. The economy in former communist East European countries, including Romania and Russia, is in transition and can be classified as developing according to World Bank categorisation (Kelley et al., 2011). It should be noted that entrepreneurial activities in these countries were not permitted until about 20 years ago, when the “perestroika” period began in the former Soviet Union. The economic development of both Russia and Romania has been quite challenging, but during the last decade these countries have been able to develop institutions that support business development, in particular improved laws and regulations for business start-up and improved availability of financial services for small business. However, these sectors are still seriously underdeveloped in comparison with developing countries (Iakovleva et al., 2011). In terms of education, while the traditional education within natural sciences has always been quite strong in post-Soviet countries, there is a much shorter educational tradition in management and entrepreneurship.

In contrast, most countries in Western Europe, including Norway and The Netherlands, have a developed economy. Developed economies are characterised by stability and a high income for each population member. Business infrastructure and support, including financial services, are established and well-developed. Business registration in these countries is a relatively fast and easy process, financial services are available at a wider range of providers, and education in the field of entrepreneurship dates back to the seventies and eighties of the 20th century. Economies of developed countries are often focused on the service sector, and the industrial sector is developed and sophisticated. Such economies are typically associated with increasing research and development and knowledge intensity, and stimulate the emergence of innovative, opportunity-seeking entrepreneurial activities (Bosma

and Levie, 2009). Often, small and innovative entries have a productivity advantage over large established firms, contributing to creative destruction (Roaldsen and Borch, 2011). At the same time, entrepreneurs meet the challenge of high competence demands, hard competition in the stabilized market and often rewards of limited value when starting a business in comparison to being an employee due to a high life standard. In developing countries, business start-up is mostly driven by pull factors—advantages of becoming an entrepreneur—as compared to push factors—negative aspects of not being an entrepreneur.

### **INSTITUTIONAL AND CULTURAL BASIS OF START-UP BARRIERS**

External environmental conditions can influence firm formation, survival and development (Covin and Slevin, 1991; Aldrich, 1999). Institutional (or neo-institutional) theory emphasises the effects of the social environment on organizations and individuals, which is presumed to impose constraints on organizations, affecting how they look-their structures-and what they do-their practices (Pfeffer and Salancik, 2003). Institutional theory emphasizes social rules, expectations, norms, and values as primary factors pressuring organizations and individuals to conform. Scott (1995, p. 33), for instance, defined institutions as ‘cognitive, normative, and regulative structures that provide stability and meaning to social behaviour.’ It can therefore be posited that barriers to entrepreneurship in different countries will differ due to the diverse institutional conditions.

#### ***Regulative structures***

Regulative structures refer to formal laws, rules and regulations. In relation to entrepreneurship, it was pointed out earlier in this article that while developed countries have established and good working mechanisms for business support, including governmental grants and programs, easy registration of business, and available banking services, the situation is much less favourable in Russia and Romania. According to the World Bank index



of easiness of doing business, Norway is on the 6<sup>th</sup> position, the Netherland is on the 31<sup>st</sup> place, while Romania is on the 72<sup>th</sup> place and Russia is on the 112<sup>th</sup> place. The index is based on the study of laws and regulations, with the input and verification by more than 9,600 government officials, lawyers, business consultants, accountants and other professionals in 185 economies who routinely advise on or administer legal and regulatory requirements.

Lack of start-up capital in particular is a serious problem for the development of entrepreneurship in both Russia and Romania (Johnson *et al.*, 2000). Indeed, almost all reviewed studies of entrepreneurship in developing countries mention this factor as one of the major constraints. The banking system does not provide loans for small enterprises, and no other market actors or government programs can support small businesses in Russia or Romania (Iakovleva, 2013). Most entrepreneurs rely on family and friends as well as business angels as the main sources of capital for their businesses (RCSME, 2011). In banks, interest rates are considerably higher than in Western countries, making loans expensive and forming a barrier to start-ups. Based on institutional theory we therefore expect that:

*H1: With regard to regulative barriers to entrepreneurship, lack of sufficient funding is a higher barrier in developing than in developed countries.*

### ***Normative structures***

Normative structures refer to the shared norms and values, in other words, national culture. Culture can be defined as the collective programming of the mind, which distinguishes the members of one group or category of people from another (Hofstede, 1997). Table 1 presents cultural norms in the four countries under study, as well as indicators of entrepreneurial activity across these countries. National culture can influence the lens through which entrepreneurs perceive opportunities for business start-up, and could function as either an aid or represent significant barriers (Morrison, 2000). For example, Pastakia (1998) found large cultural barriers to certain kinds of social ventures such as 'green' organizations. In the

same way, cultural and social values could diffuse perceptions of desirability and reduce entrepreneurial intentions (Krueger, 2008).

Hofstede (2001) distinguished between the following five cultural dimensions: power distance, individuality, masculinity, uncertainty avoidance, and long/short term-orientation. Because risk-orientation is one of the major predictors of entrepreneurial behaviour (Lumpkin and Dess, 1996; 2001), it makes sense to compare the four countries under study on uncertainty avoidance. Uncertainty avoidance is “the extent to which the members of a culture feel threatened by uncertain or unknown situations” (Hofstede, 2001: 161). It can be assumed that in countries scoring low on uncertainty avoidance, people are more willing to take risks. In countries high on uncertainty avoidance, one could expect a greater fear of failure, and thus a lower willingness to take risks. Table 1 shows that uncertainty avoidance is much higher in Russia and Romania, indicating that fear of failure should be higher in these countries. This lines up with the entrepreneurial attitude index. Based on data from the Global Entrepreneurship Monitor (Bosma and Levie, 2009) and a variety of secondary data, Acs & Szerb (2009) developed a global entrepreneurship index for 64 different countries, and sub-indexes for the same countries with regard to entrepreneurial attitudes. They defined entrepreneurial attitudes as the general attitude of a country’s population toward recognizing opportunities, knowing entrepreneurs personally, attaching high status to entrepreneurs, accepting the risk associated with business start-up, and possessing the skills required to successfully launching businesses. As one can see from the Table 1, entrepreneurial attitude is high in developed, but low in developing countries such as Russia and Romania. This leads to the following hypothesis:

*H2: With regard to normative barriers to entrepreneurship, risk is a higher barrier in developing than in developed countries.*

### *Cognitive conditions*

Cognitive conditions often refer to actual skills and knowledge of individuals. Skills and knowledge can be obtained through educational institutions or through training and role modelling. In relation to entrepreneurship, the availability and quality of education may vary across countries. Table 1 illustrates the educational indexes and national IQ of the four respective countries in this study. All four countries have quite high indexes.

The educational index shows the quality of educational services, and ranges from 73.20 (Norway) and 60.60 (Netherland) to 77.20 (Russia) and 65.60 (Romania), indicating no significant differences between the developing and developed countries. The national IQ is also quite high for the respective countries, with no significant differences. Looking at entrepreneurial skills, we refer to the Global Entrepreneurial Monitor Research (Bosma and Levie, 2009). The early stage entrepreneurial activity (TEA) index includes percentages for people between 18–64 years of age, who are either a nascent entrepreneur or owner-manager of a new business. As is evident from Table 1, Romania is ranked first place, followed by The Netherlands, further down follows Norway and Russia is on the last place. These observations lead to the following hypothesis:

*H3 With regard to cognitive barriers to entrepreneurship, lack of skills is an equally important barrier in developing and developed countries.*

## **METHODOLOGY**

### **Data collection**

Data were collected from the autumn of 2007 to spring 2008. Respondents filled in a paper-and-pencil questionnaire in their native language. Translation and back translation procedure was used. Data were collected by master students. No credits were provided. Students received summary reports on request. Table 2 describes the sample characteristics.

INSERT TABLE 2 HERE

A total of 591 students from four countries enrolled in bachelor or master programs in business administration have answered the open-ended question: “What is the single biggest barrier for you to become an entrepreneur?” From Norway, 112 questionnaires were received, of which two answers were unreadable and five were unanswered, so that 105 valid answers were obtained. From The Netherlands, 118 questionnaires were received, of which six were unreadable and six were unanswered, resulting in 104 valid answers. From Romania, 126 questionnaires were received, of which one was unreadable and fifteen unanswered, resulting in 111 valid answers. Finally, 235 questionnaires were received from Russia, of which two were unreadable and sixteen unanswered, resulting in 221 valid answers.

The samples differed significantly with regard to the respondents’ education. In Romania and The Netherlands, more respondents were enrolled in bachelor programs than in Russia and Norway. In Romania, significantly fewer respondents were studying business-related subjects than in the other country samples. Small, but significant differences were also found with regard to age, respondents were older in Norway, gender (more female respondents in Romania); work occupancy (fewer respondents in The Netherlands were working); and self-employment (in Norway, considerably more respondents had had experience with self-employment).

### **Analysis approach**

The first aim of this paper was to identify barriers to business start-up as perceived by students in four different countries. Further, students in developing and developed countries respectively were expected to perceive different barriers. In order to answer our research questions and test our hypotheses, we performed three types of analyses. First, answers were

ranked in order to observe differences in perceived barriers and the ranking of these barriers. Results of the ranking analysis are summarized in Table 3. Secondly, Table 4 shows a cross-tabulation of the three major barriers identified in the introduction (regulative, normative and cognitive) across developed and developing countries, allowing to statistically test for significant differences. Finally, Table 5 presents analysis of a logit regression that allows for testing to what extent the status of the country – developing versus developed, is an important factor explaining these differences.

**Ranking barriers.** In order to answer our first research question of what barriers students perceive, we categorized the answers following the recommendations of Kidder (1981), Terpstra and Olson (1993) and Kolvereid (1996). The answers were individually sorted by the authors of this paper and master students. For each country sample, the answers were sorted by two or three persons (often a master student and one of the authors) who sorted the answers. Each team sorted the given answers from the respondents in as many groups they felt was necessary to reach an adequate categorization, and labelled the categories. If more than one barrier was mentioned by the respondents, the raters were told to consider only the first barrier mentioned. As proposed by Kidder (1981) and Terpstra and Olson (1993) the criteria for the whole process was *distinctive stamp* and *content*. Distinctive stamp refers to the degree to which the categorizations are mutually exclusive and consist of similar answers. Content refers to the degree of categorization that is detailed enough to catch the whole scope of the observed responses. To consider the reliability of the categorization, in each country one or two master students were given a scheme in Excel-format with all observed answers. Students were asked to code all answers by using the categorizations suggested by the researchers. For example, for Norway two master students grouped 88.3% and 92% of

answers into correct categories, indicating a satisfactory inter-rater reliability. The results of this analysis is presented in Table 3.

### **Crosstabs and logit regression**

To answer our second research question: “are there differences in perceived barriers between developing and developed countries?” and to test Hypotheses 1 to 3, cross-tabulations and logit regression analyses were performed. For this aim, the perceived barriers were recoded into three dummy variables: 1) lack of money, 2) perceived risk, and 3) lack of skills/competences, with values 0 (not mentioned) and 1 (mentioned). This coding is slightly different from the initial coding of the open answers, because all answers that used words such as “uncertainty” but also “stress” were assigned to the risk category. Lack of capital, lack of resources, and lack of money was coded yes in the “lack of money” category, and all answers related to lack of skills and competences were assigned to the “lack of skills” category. If answers did not fall into any of these three broader categories, they were coded “0” on all three dummy variables.

First, control variables were entered into the model. The controls included were gender, age of respondents, self-employment experience and working experience. Students expected degree (bachelor or master) and their major (business related or other) were not significantly related to the criterion variables and in order to maximize model fit, were removed from the final analyses.

In the next step, the model was extended by adding the variable “developing”, with Norway and The Netherlands coded 0, and Russia and Romania coded 1. Further, two additional variables were added to allow for a test of base category. These variables were Russia, where Russian respondents were coded 1 and all other respondents were coded 0, and Norway, where Norwegian respondents were coded 1.

Logit regression was performed on each of three dummy variables – money, risk and skills. For our hypotheses to be confirmed, the extended model should be significant and demonstrate better model fit. Moreover, the variable “developing” should be significantly related to money, risk and skills, while the variables Russia and Norway should not be significantly related to the dependent variable. From Table 5 it can be seen, that the extended models provide adequate and improved model fit for all three criteria (-2LL decreases, while Cox and Snell  $R^2$  as well as Nagelkerke  $R^2$  increases after the variables “developed”, “Russia” and “Norway” had been added). Moreover, the models for money and risk show strong relationships, while the model for skills is only weakly significant (Omnibus test Chi-square).

## **RESULTS**

INSERT TABLE 3 HERE

The ranking of perceived barriers (Table 3) shows that risk aversion, lack of capital, lack of motivation, lack of knowledge/self-confidence as well as lack of good ideas are mentioned most in all countries. Additionally, both Dutch and Romanian respondents mentioned system-related barriers.

INSERT TABLE 4 HERE

INSERT TABLE 5 HERE

### ***Regulative barriers***

The ranking of barriers further shows that access to funding was the most important issue in East-European countries, mentioned by 48.4 % and 47.8 % of students in Russia and Romania respectively, as compared to 18.8 % and 19.2 % of students in respectively Norway and The Netherlands (Table 3). Table 4 confirms that differences between developed and developing countries in relation to financial barriers are highly significant. As follows from

Table 5, developing country status is a highly significant predictor of perceived lack of money, thus confirming our first hypothesis that lack of sufficient funding is a more important barrier in developing countries.

### ***Normative barriers***

In contrast to Hypothesis 2, according to which risk perception would be a stronger perceived barrier in risk averse countries on the Hofstede's cultural dimensions (Romania and Russia), Tables 3 and 4 show that perceived risk was the most important perceived barrier in the less risk-averse developed countries, mentioned by 18.8 % of respondents in Norway and 32.6 % in The Netherlands versus 9.2 % in Russia and 8.1 % in Romania. Confirming the findings in Tables 3 and 4, logit regression analyses show evidence that developing country status is significantly and negatively related to risk as a perceived barrier. That means that in comparison to developed countries, perceived risk is of *less* importance in developing countries such as Russia and Romania.

Additionally, a weak, but significant negative association was found for Norway, counteracting the positive association between developed country and perceived risk. This means that the strong relationship between country status and perceived risk can to a larger extent be contributed to perceived risk in The Netherlands than in Norway; 27.7 % of Norwegian respondents mentioned risk as the most important barrier as compared to 32.2% in The Netherlands. Thus, our second hypothesis was not confirmed.

### ***Cognitive barriers***

Table 3 indicates that lack of competence is moderately important in all countries in the study, ranking fourth place for Norway and Russia and fifth place for The Netherlands and Romania. Chi-square statistics confirm that the cross-country differences in the frequency that lack of skills are mentioned as perceived barriers are statistically significant, but there is no



consistency in relation to country status. Logit regression analyses (Table 5) confirm that country status is not related to lack of skills, indicating that whether a country is developing or developed does not influence the perception of lack of skills as a barrier. Thus, our third hypothesis was confirmed.

### **CONCLUSION AND DISCUSSION**

Based on this study it can be concluded that cross-country differences and differences in country status impact the kind of barriers people perceive to business start-up. These differences line up with predictions based on institutional theory, and relate to regulative structures (lack of money) and normative structures (risk perceptions). It was confirmed that developing countries perceive higher regulative barriers, such as lack of money. However, with regard to normative structures, in specific risk perception, the significant differences between developed and developing countries were opposite to the hypothesized direction. While both Norway and The Netherlands score lower on Hofstede's uncertainty avoidance index, which would mean students from these countries should be less risk averse than students from Romania and Russia, they reported risk perceptions much more often as barriers to business start-up. Possibly, Hofstede's index is too general. Students from developed countries might be less risk averse in general, but may actually have more to lose when starting a business instead of becoming employees on pay-role. It is well known that in Eastern European countries such as Russia and Romania, employees have less stable and less protected positions than employees in Western countries, due to the violation of the Labour Codex and an unstable political situation (Iakovleva, 2007).

While cognitive structures, such as entrepreneurial skills, were cited as an important barrier across all four countries, differences in this barrier cannot consistently be explained by

country's stage of economic development. Lack of skills was found to be an equally important barrier in developing and developed countries.

Although this is a qualitative study based on a relatively small research sample, the results are provoking. Understanding the barriers to business start-up and finding ways to remove them is crucial for stimulating business start-up, and thus the development of economies.

### **Theoretical implications**

Theory building on business start-up to date has mainly focused on entrepreneurial intentions, paying little attention to the role of barriers. The work on entrepreneurial barriers so far has been mainly descriptive and fragmented, and lacked a systematic analysis of cross-country differences in perceived barriers. The present paper views the role of barriers as possible precipitating events, impacting the implementation of intentions into actions. Understanding the background of perceived barriers across countries is an important step toward the development of a "theory of entrepreneurial barriers". This theory of entrepreneurial barriers extends well-known entrepreneurial intentions theories that focus on (entrepreneurial) self-efficacy, attitudes toward entrepreneurship and social norms, taking scientific research to the next level of predicting actual start-up behaviour rather than intentions. Empirical studies have provided ample evidence for the importance of self-efficacy as predictors of entrepreneurial intentions (Krueger et al., 2000, Iakovleva and Kickul, 2011, Moriano et al., 2012). These studies have often defined self-efficacy in terms of specific entrepreneurial tasks, such as writing a business plan. There is increasing evidence that efficacy perceptions with respect to perceived hurdles are also important. Krueger (2008), for example, argues that feeling efficacious at surmounting critical barriers is crucial for realizing intentions into actions. Development of an entrepreneurial self-efficacy measure based on specific start-up

barriers might represent a fruitful avenue for entrepreneurship scholars to explore in the future.

However, it should be noted that the two most important barriers perceived by respondents in the current study, availability of money and perceived risk, may also be dealt with on a societal level rather than the personal level. Both barriers can be categorized as “external” to the individual, relating to the institutional and economic environment. This calls for a multi-level approach to start-up behaviour including both predictors at the individual level and predictors on societal level.

A barriers-perspective can also be related to attitudes toward entrepreneurship and social norms. For example, high risk perceptions in developed countries likely predict low feasibility toward entrepreneurship. The advantages of working on pay-role may be perceived as exceeding the advantages of becoming an entrepreneur, and risk perceptions may be related to losing these advantages. The relatively low frequency of risk as a perceived barrier to business start-up in developing countries in our study seems to contradict with Hofstede’s high uncertainty avoidance index in these countries. Our findings call for a deeper investigation of the role of normative institutional structures (culture) on start-up behaviour. In addition, the cultural value of uncertainty avoidance may be indirectly related to entrepreneurial behaviour through perceived social norms and entrepreneurial intentions, rather than through perceived barriers.

### **Practical implications**

The results of this study have interesting practical implication. In developing economies, the momentum seems there to foster entrepreneurship through the improvement of regulative institutional mechanisms. The availability of start-up capital appeared to be the most important obstacle, and fear of failure plays a less important role in preventing people from

starting entrepreneurial activities. Developing countries need to focus on the development of institutions that can support entrepreneurial efforts, especially (bank) programs to facilitate the availability of financial resources to start-ups. Reduction of bureaucracy and improving transparency of the “rules of the game” are also necessary conditions for stimulating start-ups. Improving regulative institutional mechanisms is primarily the task of governments and policy makers.

In developed economies, perceived risk is an important barrier to start-up, which relates to a discrepancy between potential rewards expected from entrepreneurial activities versus the rewards of salaried employment. In developed countries business start-up may be stimulated through training programs emphasizing risk management. Finally, in all countries lack of entrepreneurial competencies seems to be an important barrier. That barrier in particular can be lowered by creating practically-oriented entrepreneurship programmes that can teach young generations the competencies needed to start up an enterprise.

Taken in concert, the findings presented suggest that entrepreneurial activity can be increased by improving institutional mechanisms, but national differences should be taken into account. Moreover, cross-country differences can be grouped together based on developmental status. Although some differences exist on country level, the largest differences were found when comparing developing and developed countries. In developing countries, emphasis lies on ways to obtain finances for the new ventures, in developed countries, the emphasis lies on supporting entrepreneurs how to deal with risks. The development of entrepreneurial skills appears to be equally important in both developing and developed countries.

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## Comparison of perceived barriers to entrepreneurship

Table 1. Normative, Cognitive and Regulative conditions in the countries under study.

	Developed Western Economies		Developing Eastern Economies	
	Norway	The Netherlands	Russia	Romania
<b>Regulative conditions</b>				
Ease of doing business <sup>1</sup>	6	31	72	112
<b>Normative conditions</b>				
<i>National culture</i> <sup>2</sup>				
Uncertainty avoidance	50	53	95	90
Entrepreneurial attitude sub-index <sup>3</sup>	0.69 (8)	0.72 (7)	0.13 (64)	0.29 (49)
<b>Cognitive conditions</b>				
Education <sup>4</sup>	73.2	60.6	77.2	65.6
National IQ <sup>5</sup>	98	102	96	94
Early stage entrepreneurial activity rate (TEA) <sup>6</sup>	6.9	8.2	4.6	9.9

<sup>1</sup> International Finance Corporation. The World Bank. Accessed 14.01.2013 at <http://www.doingbusiness.org/rankings>

<sup>2</sup> Hofstede, H. 2001. *Culture's Consequences: Comparing Values, Behaviours, Institutions and Organizations Across Nations*. 2<sup>nd</sup> edn. Thousand Oaks, CA: Sage.

<sup>3</sup> Acs, Z.J. & Szerb. L. 2009. The Global Entrepreneurship Index (GEINDEX). *Foundations and Trends in Entrepreneurship*, 5(5), 341-435. DOI: 10.1561/0300000027.

<sup>4</sup><http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20573961~menuPK:282404~pagePK:148956~piPK:216618~theSitePK:282386,00.html>

<sup>5</sup> Lynn, R. & Vanhanen, T. 2002. *IQ and the Wealth of Nations*. Westport: Praeger.

<sup>6</sup> Global Entrepreneurship Monitor (GEM) 2011 [www.gemconsortium.com](http://www.gemconsortium.com)



**Table 2.** Respondent characteristics (percentages for every variable) and significance of differences test (analysis performed on the original file)

Characteristics	Total sample (n = 591)	Norway (n = 118)	The Netherlands (n=112)	Russia (n = 235)	Romania (n = 126)	Significance of difference $\chi^2$
Mean age (SD)	22.8 (4.6)	26.5 (6.3)	21.9 (2.55)	21.6 (4.1)	22.7 (3.68)	35436***
<i>Gender</i>						
Men	47.3	55.4	67.8	44.7	23.5	50 076*** (df = 3)
Women	52.7	44.6	32.2	55.3	76.5	
<i>Work occupancy</i>						
Students only	68.3	67.9	97.4	59.1	57.9	60 197*** (df = 3)
Working at least 20%	31.7	32.1	2.6	40.9	42.1	
<i>Self-employed experience</i>						
Yes	8.6	15.6 <sup>1</sup>	5	7.2	8.7	9 367* (df = 3)
No	91.4	84.8	95	92.8	91.3	
<i>Degree program</i>						
Bachelor	75.5	57.1	97.5	60.3	99.1	114240*** (df = 3)
Masters	24.5	42.9	2.5	39.7	0.9	
<i>Major</i>						
Business related	84.7	100	93.4	84.3	62.6	69 989*** (df = 3)
Other	15.3	0.0	6.6	15.7	37.4	

Note: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.1. <sup>1</sup> In Norway a program for school pupils exists where they open and then close an enterprise, which might explain over 15% rate on this question about self-employment. Also, whether respondents are on a bachelor or master level has a strong influence.

**Table 3.** Ranking of barriers to entrepreneurship as perceived by students in Western (developed) and Eastern (developing) economies.

	Developed Countries						Developing Countries					
	Norway (n= 105)			The Netherlands (n= 104 )			Russia (n=221)			Romania (n=111)		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
Lack of capital	21	<b>18.8</b>	<i>1-2</i>	20	<b>19.2</b>	<i>2</i>	105	<b>48.4</b>	<i>1</i>	53	<b>47.8</b>	<i>1</i>
Risk aversion	21	<b>18.8</b>	<i>1-2</i>	34	<b>32.7</b>	<i>1</i>	20	<b>9.2</b>	<i>3</i>	9	<b>8.1</b>	<i>4</i>
Lack of motivation	19	<b>17.0</b>	<i>3</i>	12	<b>11.5</b>	<i>3-4</i>	29	<b>13.4</b>	<i>2</i>	6	<b>5.4</b>	<i>6</i>
Lack of knowledge, experience	16	<b>14.3</b>	<i>4</i>	7	<b>6.7</b>	<i>5</i>	18	<b>8.3</b>	<i>4</i>	7	<b>6.31</b>	<i>5</i>
Lack of good ideas	12	<b>10.7</b>	<i>5</i>	6	<b>5.8</b>	<i>6</i>	9	<b>4.1</b>	<i>6-7</i>	4	<b>3.6</b>	<i>8</i>
Lack of social support	5	<b>4.5</b>	<i>7</i>	1	<b>0.9</b>	<i>10</i>	3	<b>1.4</b>	<i>9-10</i>	2	<b>1.8</b>	<i>9</i>
Lack of self-confidence	11	<b>9.8</b>	<i>6</i>	4	<b>3.9</b>	<i>8</i>	17	<b>7.8</b>	<i>5</i>	14	<b>12.6</b>	<i>2</i>
System related (bureaucracy), external economic or political situation	0	<b>0.0</b>	<i>9-10</i>	5	<b>4.8</b>	<i>7</i>	9	<b>4.1</b>	<i>6-7</i>	10	<b>9.0</b>	<i>3</i>
Other (health, age, children)	3	<b>4.1</b>	<i>8</i>	12	<b>11.5</b>	<i>3-4</i>	3	<b>1.4</b>	<i>9-10</i>	1	<b>0.9</b>	<i>10</i>
No barriers perceived	0	<b>0.0</b>	<i>9-10</i>	3	<b>2.9</b>	<i>9</i>	4	<b>1.8</b>	<i>8</i>	5	<b>4.5</b>	<i>7</i>

**Table 4.** Cross-country comparison of risk, money and skills as perceived barriers to business start-up and  $\chi^2$ significance of difference tests.

Characteristics	Developed countries			Developing countries		Significance of difference $\chi^2$
	Total sample (n = 583)	Norway (n = 112)	The Netherlands (n=121 )	Russia (n = 235)	Romania (n = 126)	
Risk = 1	481 (17.5%)	31 <b>(27.7%)</b>	39 <b>(32.2%)</b>	21 <b>(8.9%)</b>	11 <b>(9.6%)</b>	43.186*** (df 3)
Risk = 0	102 (82.5%)	81 (72.3%)	82 (67.8%)	214 (91.1)	104 (90.4%)	
Money = 1	206 (35.4%)	25 <b>(22.3%)</b>	23 <b>(19.2%)</b>	106 <b>(45.1%)</b>	52 <b>(45.2%)</b>	36.736*** (df 3)
Money = 0	376 (64.6%)	87 (77.7%)	97 (80.8%)	129 (54.9%)	63 (54.8%)	
Skills = 1	53 (9.1%)	18 <b>(16.1%)</b>	3 <b>(2.5%)</b>	24 <b>(10.3%)</b>	8 <b>(7%)</b>	13.886** (df 3)
Skills = 0	528 (90.9%)	94 (83.9%)	117 (97.5%)	210 (89.7%)	107 (93%)	

Note: 1 = mentioned, 0 = not mentioned; \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$

Table 5. Results of the logit analyses, perceived barriers to entrepreneurship (lack of money, risk and lack of skills) regressed on country status (developing versus developed).

	Lack of money		Risk		Lack of Skills	
	B (ExpB)	B (ExpB)	B (ExpB)	B (ExpB)	B (ExpB)	B (ExpB)
Gender	-.27 (.76)	-.03 (.97)	.34 (1.40)	.06 (1.06)	-.30 (.74)	-.31 (.74)
Age	-.02 (.98)	-.04 (.96)	.06 (1.06)	.09* (1.09)	-.017 (.98)	-.02 (.98)
Self-employment experience	-.22 (.81)	-.23 (.80)	.27 (1.31)	.70 (2.01)	.54* (1.71)	-.25 (.78)
Work experience	-.01 (.99)	.02 (1.02)	-.07 (.94)	-.09* (.92)	.05 (1.05)	.04 (1.04)
Developing country		<b>1.29***</b> (3.62)		<b>-1.66***</b> (.19)		1.00 (2.72)
Russia		-.02 (.98)		.04 (1.04)		.43 (1.15)
Norway		.73 (2.08)		<b>-1.63*</b> (.20)		<b>2.69*</b> (14.77)
-2LL	733.75	707.47	520.61	486.43	340.94	330.83
Cox and Snell R <sup>2</sup>	.03	.07	.03	.09	.01	.03
Nagelkerke R <sup>2</sup>	.04	.10	.05	.14	.03	.07
Hosmer and Lemeshow $\chi^2$	4.93 (df 8)	9.82 (df 8)	8.02 (df 8)	7.09 (df 8)	7.47 (df 8)	4.68 (df 8)
Omnibus test $\chi^2$	15.35** (df 4)	26.28*** (df 3)	17.31** (df 4)	34.18*** (df 3)	7.95 (df 4)	10.11* (df 3)
N	575		576		574	