Risk Attitudes in International Travel and Migration by Young Europeans

VLADIMÍR BALÁŽ, MARTINA CHRANČOKOVÁ, AND KATARÍNA KARASOVÁ
Risk Attitudes in International Travel and Migration by Young Europeans

Vladimír Baláž,1 Institute for Forecasting, Slovak Academy of Science, Slovak Republic
Martina Chrančoková, Institute for Forecasting, Slovak Academy of Science, Slovak Republic
Katarína Karasová, Institute for Forecasting, Slovak Academy of Science, Slovak Republic

Abstract: This article explores the relationships between person-centred, competence-based, and culturally-determined risk-taking on the one hand and attitudes to international travel and migration on the other. We based the research on a sample of 540 young people, aged nineteen to thirty-five years, from nine European countries. This study firstly examines attitudes to risk about international travel. Eight deterrents to travel are looked at: poor hygiene, health concerns, weather, crime/terrorism, poor accommodation, political unrest, local customs/religion and natural disasters. Next, we explore self-assessed competence about international migration. Finally, the relationships between the perceived costs/benefits of international migration on the one hand and attitudes to the risks involved in international migration, on the other hand, are analysed. Non-parametric tests and the ANOVA procedure indicate that gender-based “risk traits” may influence the willingness of individuals to take risks in about international travel and migration. Attitudes to risk, however, may also be informed by self-perceived competence regarding international travel and migration. The importance of cross-cultural differences (proxied by region of origin) to attitudes towards risk represents perhaps the most interesting result of this research. Differences in attitudes to risk by participants from the North and South/East of Europe were robust and pervasive across most domains of international travel and migration.

Keywords: Risk Attitudes, Migration, Young Europeans

1. Introduction: Migration and Attitudes to Risk

Intra-European migration is an important phenomenon which is currently shaping the social, economic, and demographic map of the European Union. According to the Eurostat, there were 15.3 million persons living in EU Member States on January 1, 2015, who were citizens of another EU Member State (Eurostat 2016a). About 52 percent of intra-European migrants were young people aged twenty to thirty-six years. There also were some 0.61 million intra-European tertiary students enrolled in EU Member Countries other than their native countries in 2014 (Eurostat 2016b). Many young Europeans consider international mobility to be a key strategy for mediating significant life course transitions: a) school-to-work, b) unemployed-to-employed, and c) youth to independent or “full” adulthood. It is important to examine the factors relevant to migration decisions, including those that represent factors which lie beyond the traditional variables representing income differences and travel channels. The relationship between person-centred, competence-based, and culturally-determined risk-taking on the one hand, and attitudes to international travel and migration, on the other hand, was central to our research.

Rising living standards, improvements in travel provisions, the removal of passport and visa barriers, and the introduction of mobility programmes by the European Commission and the national governments of the EU Member Countries assisted increasing mobility within Europe. Levels of intra-European mobility are still rather low. Intra-European migrants accounted for 3.7 percent of the total European population and intra-European students accounted for 3.3 percent of the total tertiary students within the EU28 area.

As a matter of fact, most people avoid migration and prefer staying in their home country. Even strong economic and educational incentives are usually not enough to tempt people to leave home. There are a plethora of reasons why people choose not to migrate abroad. One of the many possible reasons relates to risk aversion. Most people are risk-averse (Kahneman and Tversky

1 Corresponding Author: Vladimír Baláž, Institute for Forecasting, Slovak Academy of Science, Šancova 56, 811 05 Bratislava, Slovak Republic, email: vbalaz@yahoo.com.
1979). They try to avoid the risks associated with travelling to and living/working in foreign countries.

This research refers to some benchmarking studies on attitudes to risk and migration. It unearths new evidence on the influence of attitudes to risk on decisions about international travel and migration made by young Europeans. It starts with a review of the attitudes to risk which prevail in the domain of international travel and migration. Sections 1.2 through 1.4 discuss the determinants of these attitudes to risk regarding person-centred characteristics (gender, age, and education). These sections also discuss competence-based risk taking and cross-cultural attitudes to risks. Section 2 describes the design of the research and also describes the sample used—which was of 540 young Europeans. Section 3 presents main findings of the research. The conclusions discuss these findings and provide recommendations for further studies.

1.1. Migration and Attitudes to Risk: The General Risk Trait versus Competence-based Risk-taking

Theories concerning the economic behaviour of people recognise that individuals’ decisions are driven by a fundamental set of dispositions such as attitudes to risk, the evaluation of rewards, and in the social domain, reciprocity, altruism, and trust. A number of these dispositions are poorly understood. Most theories of migration, for example, acknowledge that migration involves risks and attitudes to these risks inform migration decisions. However, migration research seldom quantifies attitudes to risk in. The neoclassical theories of migration (Stark 1991) and the human capital approach to migration (Sjaastad 1970) assume that migrants are rational decision makers acting by minimal reliable ‘market’ information. Migration research acknowledges risks resulting from migration, such as the risk of not obtaining work, and the risk, for irregular migrants, of being detected and deported. These risks, however, are not usually explicitly analysed in empirical modelling. Instead, they are assumed to be implicit in the computations of costs and benefits undertaken by migrants. Risks stemming from migration are assumed to enter estimates of future incomes and costs (Katz and Stark 1986). Migration research only recently acknowledged the influence of attitudes to risk on migration decisions.

The concepts of risk aversion and risk tolerance are important for individual decisions on travelling and living and working in foreign countries. The study of attitudes to risk provides insights into why some people are more likely than others to become migrants (see, for example, Jaeger et al. 2010; Dohmen et al. 2006; Heitmueller 2005). Some recent large-scale cross-country and national surveys provide rich data for testing assumptions regarding the influence of attitudes to risk on travel and migration decisions. Dohmen et al. (2006) used the longitudinal SOEP sample of some 20,000 individuals and provided the most comprehensive research on attitudes to risk in Europe. The SOEP participants revealed their risk-related preferences in a number of specific domains (health, financial behaviour, risky sports, driving, and careers). Relatively high correlations between domains implicated the existence of a “general risk-tolerance trait.” Interestingly, Jaeger et al. (2010, 3) analysed a different SOEP sample and found that, after controlling for socioeconomic characteristics, the willingness to take risks, among a subset of individuals, accounted for much of the residual variance in migration intentions. It follows that attitudes to migration are well-correlated with attitudes to other forms of risky behaviour. Attitudes to risk also impact on decisions regarding internal migration. Akgüç et al. (2016) explored data concerning 51,136 individuals, extracted from the Chinese Rural Household Survey. They found strong support for the assumption that risk proclivity and migration are positively related.

Some factors determine attitudes to risk. Sitkin and Weingart (1995) developed an interactional model of risk-taking in which risk-taking proclivities are formed by person-centred characteristics and situational characteristics. The situational constraints include the content domain of the risky decision as well as contextual variables such as outcome framing and aspiration levels (Weber et al. 2002). The person-centred characteristics include age, gender, and culture. The
characteristics seem to influence a *general risk tolerance trait*—the proclivity to accept risky choices across various domains.

Humans take their decisions within specific domains and contexts. The context of risky decisions usually includes a (perceived) knowledge of the risks involved. People prefer risk-taking in a context where they consider themselves knowledgeable or competent as opposed to “in a context where they feel ignorant or uninformed” (Heath and Tversky 1991, 7). A (perceived) competence may offset attitudes to risk in specific domains of risk-taking. Attitudes to risk inferred from actual behaviour are usually domain-specific rather than reflections of a stable attitude or trait. (Weber et al. 2002, 282). Successful migration experiences provide learning experiences. The acquired competence make migrants more risk tolerant when considering further migrations (Williams and Baláž 2012).

The Figure 1 presents the conceptual framework for the further analysis carried out. We assume that risk-taking is influenced by personal attitudes towards risk and also situational characteristics. The person-centred characteristics shape the attitudes to risk. These include demographic variables (gender and age) and life experiences (including international travel and migration). Situational characteristics include variables both external and internal to the travel and migration decisions. The external variables relate to the context the decision-maker is unable to influence (e.g., natural and socio-economic situation of the destination country). The internal variables refer to an individual’s aspirations, life goals, outcome framing, and perceived competence in international travel and migration. The perceived competence and outcome framing, of course, partly depends on experience with international travel and migration.

![Figure 1: Conceptual Framework.](image)

1.2. The Risk-tolerance Trait And Person-centred Characteristics

A substantial body of behavioural research on risk aversion suggests significant differences in the willingness of individuals to take risks, both between socio-demographic groups, and among individuals within these groups (Halek and Eisenhauer 2001; Hartog et al. 2000; Barsky et al. 1995; Sahm 2012; Donkers et al. 2001; Dohmen et al. 2006). The major cleavages run along gender and age. Additional cleavages include education, income, and wealth. Gender and age, however, are central to decisions concerning risk.
1.2.1. Gender

There is a consensus on the proposition that males tend to be more risk tolerant than females. This proposition has been corroborated in many large-scale studies (see for example Barsky et al. 1995; Halek and Eisenhauer 2001; Pålsson 1996; Rieger et al. 2014; Vicider et al. 2012). The findings tend to be highly statistically significant. Key data sources include the Health and Retirement Study (HRS USA), the Socio-economic Panel (SOEP, Germany), the European Social Study, and the World Values Survey. As for the risk-taking involved, most surveys ask about domain-specific risks, such as driving, smoking, and engaging in risky sports. Some surveys measure the presence of a “pure risk-tolerance trait” and include questions based on hypothetical gambling situations, including lotteries. Surveys based on lottery questions (Hartog et al. 2000; Donkers et al. 2001) also found higher risk tolerance among men. A meta-analysis of 150 studies (Byrnes et al. 1999), for example, found that men were more risk tolerant in fourteen out of sixteen observed types of risk-related behaviours. However, the finding that males are more risk seeking may be context and domain-specific. A range of factors influences attitudes to risk-taking in different contexts. There is some evidence (Ronay and Kim 2006) that higher risk aversion on the part of women may be a socially facilitated phenomenon. Financial risk-taking, for example, is usually competence-based and men perceive themselves more competent in financial affairs than women (Daruvala 2007).

1.2.2. Age

Most surveys find younger individuals less risk averse than older ones. The HRS-based studies (Barsky et al. 1995; Halek and Eisenhauer 2001; Sahm 2012), however, over-represent participants aged fifty and over. Lottery-based questions test for the pure risk-tolerance trait and indicate increasing risk aversion with age. Age-related risk aversion, however, may be mitigated by accumulated knowledge of, and (perceived) competence in, specific domains. As noted by Dohmen et al. (2006, 26) “Age decreases the probability that an individual is willing to take risks in all domains, but has a particularly large impact in the domain of sports and leisure, and a relatively small impact in financial matters.”

The abovementioned findings on attitudes to risk refer to generic risk-tolerance. A general risk-tolerance trait may influence the willingness of individuals to take risks regarding travel and migration decision-making as well. Attitudes to risk, however, may also be influenced, here, by perceived competence in international travel and migration.

When turning to domain-specific attitudes towards risk, gender and age emerge as important determinants of attitudes to risk regarding travel behaviour also. Akgüç et al. (2016) found male gender to be the main predictor of rural-urban migration in China. Some studies found gender differences in travel behaviours. Reisinger and Crotts, (2009) surveyed 290 female and 239 male respondents from different countries (Asia, Australia, Europe, UK, US) regarding to their cultural orientation, travel risk perception, travel anxiety and safety perception. Women perceived traveling internationally as involving higher risks. Females were more anxious, felt less safe, and intended to travel less internationally than male respondents, regardless of their cultural orientation. In both groups, terrorism and sociocultural risks emerged as the most significant determinants of travel anxieties and perceptions of safety. Barker et al. (2003) interviewed 1003 domestic and international visitors to downtown Auckland (New Zealand) during the America’s Cup event. Men, older visitors, group travellers, and English-speaking tourists had a higher estimation of the safety of the event. Younger travellers, non-Europeans, women, and individual visitors had lower estimations than the before mentioned group. Some studies differentiate between the perceptions of general and the perceptions of specific risks related to international travel. Lepp and Gibson (2003) sampled 290 US-born young adults. Gender differences proved significant about health and food safety concerns.

Williams and Baláž (2014) utilised a specially commissioned, large UK sample (N = 4528) to examine the relationships between socio-economic profiles and perceptions of different types of
risks in international travel and migration. The human-made risks (crime and terrorism, and political unrest) were considered the major deterrents about travelling abroad. Major differences in risk tolerances associated with travelling to and living /working in foreign countries related to gender. Women were significantly less tolerant of risks posed by crime and terrorism, and political unrest than men. Younger people (up to 45) were more tolerant of travel/migration risks than people aged forty-six and over. There were also some education-related differences in levels of tolerance of travel and migration risks. People with degrees and higher degrees were more risk tolerant than those with only secondary education.

The review of general attitudes to risk and attitudes to risk about international travel and migration domains indicates the importance of some person-centred characteristics. The female gender is frequently associated with higher risk aversion across domains. This type of behaviour is probably an expression of a general risk-aversion trait. The role of age is not as clear. Some studies indicate higher risk aversion being demonstrated by older people, while other ones report young people as being more risk averse. The influence of (domain-specific) competence-based risk taking may explain this contradiction; this kind of risk-taking increases with age.

1.2.3. Competence-based Risk-taking by Migrants and Travellers

In travel research, there is a substantial literature on perceptions of risk. While travel and migration have always involved risk, there has been an increasing awareness of the risks associated with natural and societal-originating disasters, ranging from tsunamis and earthquakes to avian flu and terrorism. Some earlier studies identified key risks associated with travelling, notably health, political instability and terrorism studies (Sönmez and Graefe 1998). A more recent study (Floyd et al. 2004; Lepp and Gibson 2003) indicated that the most significant concerns for travellers relate to safety and security issues and natural disasters.

Wong and Yeh (2009) argued that although risk perceptions make travellers more hesitant in their decision making, personal knowledge may mediate this effect. Several studies illustrate the influence of (perceived) competence on risk perception. Kozak et al. (2007) used data from 180 individuals from the 2003 International Visitor Survey conducted in Hong Kong. Respondents were presented with three types of travel risks (an infectious disease, a terrorist attack, and a natural disaster) and asked whether these risks would impact on their travel plans. Subjects who were unlikely to change their travel plans were more likely to be men, older, and experienced in international travel. The Hajibaba et al. (2015) research on crisis-resistant travel behaviour also supports the assumption that while general attitudes to risk remain stable, risk perceptions can be domain-specific and therefore can lead to different behavioural outcomes in particular areas such as travel abroad.

Competence-based decisions concerning migration can benefit from the existence of migration networks. Migration networks decrease uncertainty about migration costs and benefits. The utilisation of migration networks helps in acquiring migration experiences, and these experiences may lead to a re-assessment of the importance of the network. De Jong et al. (1983), for example, showed that rural Filipinos who visited Manila several times and had migration experience were more likely to engage in rural-urban migration.

Not only does previous migration experience increase competence related to international travel and migration, but engagement in international travel and migration may relate to perceived opportunities to develop personal competence in managing risk and uncertainty. This behaviour resonates with many forms of student migration: gap year, and self-discovery types of migration whereby individuals aspire to enhance their self-esteem, and their status in the eyes of their peers, and—they hope—in the eyes of future employers (King and Ruiz-Gelices 2003).
1.3. Cross-cultural Differences in Risk Attitudes

Several large-scale surveys provide ample evidence about significant cross-cultural differences in attitudes to risk. Rieger et al. (2014) analysed a sample of 6,912 university students from fifty-three countries. They found (a) large differences in risk-taking attitudes both between countries and between cultural regions and (b) a fundamental prevalence of risk aversion in all countries of the world. The risk-aversion trait may have an evolutionary origin. Becker et al. (2014) used representative data from the Global Preference Survey on 80,000 individuals to explore heterogeneity in attitudes to risk across seventy-six countries. They hypothesised that the absolute difference in (average) risk aversion between two countries increases in direct proportion to the length of separation of the respective populations about the course of human history, while the within-country heterogeneity in risk preferences is negatively related to a population’s migratory distance from East Africa. Their findings held after controlling for national and individual differences in demographics, income, institutions, geography, and climate.

Another stream of research concentrated on the relationship between risk-taking and institutional settings. More risk-tolerant societies tend to live in riskier economic, institutional, and health environments (Falk et al. 2015). There is also some direct evidence supporting the assumption that migration behaviour is a kind of evolutionary adaptation to a changing environment. Chen et al. (1999), for example, compiled genetic data on 2,320 individuals coming from thirty-nine different populations. They suggested that human migration may have been speeded up by mutations (alleles) of the DRD4 gene linked to risk-seeking behaviour.

When turning to cross-cultural differences in risk-taking, some studies found risk tolerance associated with culture. Statman (2011) used data on 4,690 individuals coming from twenty-three countries to explore links between culture and risk tolerance. He found risk tolerance relatively high in countries where social trust was comparatively high. High levels of social trust decrease uncertainty about decision outcomes and make risky decisions easier to take.

The relationship between wealth and risk tolerance is not completely clear. Vieider et al. (2012) used data from 2,939 individuals from thirty countries and found a highly significant negative correlation between risk tolerance and income per capita. Vieider et al. (2012) assume that the causal correlation runs from income to risk tolerance. Rich societies tend to provide better safety nets and promote risk aversion rather than risk tolerance. Rich societies, on the other hand, tend to have higher levels of social trust and social trust allows for higher levels of risk taking. L’Haridon and Vieider (2016) used the same dataset to explore the power of individual and country level factors in the forming of attitudes to risk. Their study indicated that individual characteristics explained relatively little of the total heterogeneity in risk preferences, but that the macroeconomic characteristics of countries capture significant proportion of the overall between-country heterogeneity in attitudes to risk.

Some studies in political psychology indicate the importance of political legacies in the formation of attitudes to risk. Schwartz and Bardi (1997) compared basic value priorities in Western and Eastern Europe. The Eastern European participants attributed the most importance to conservative values while the Western European participants attributed the most importance to effective autonomy values.

The above-mentioned studies indicate (i) that there are substantial cultural differences about attitudes to risk across countries and (ii) these differences may arise from factors which include genetics, culture, trust, and income.

2. Research Design: Sample, Methods, and Hypotheses

Data for this research came from an experimental study. We applied the Mouselab-like software tool in the experiment. Mouselab is a web-based interactive research tool which is used for the monitoring of information acquisition and processing tasks conducted by decision-makers in psychological and behavioural economic research.
The participants in the exercise came from nine EU Member Countries. Members of nine partner-university research teams collected the data. The data collection process was supervised by the university researchers—so as to limit survey fraud. We screened results of the experiments screened and cleaned the data. Some 705 individuals participated in the experiment. We retained results for 540 individuals after data cleaning was carried out. Of these, 282 participants were university students, and 258 were young people employed on part-time or full-time contracts. All participants were aged nineteen to thirty-five years. The mean age of the participants was 24.9 years, and the standard deviation about this mean was 4.5 years. Most of the project partners were from university schools of social sciences and humanities. In the sample, students/graduates of the social sciences, the arts, and the humanities were more numerous than students of science, engineering, or the life sciences. The field of study also impacted the gender balance. There were more females than males in the sample (Table 1). All the participants indicated whether they had any previous migration experience. We defined a migrant as a person who had spent at least six months working and studying outside his/her native country. The composition of the project partners enabled the examining of culture-informed differences in attitudes to the risk of participants from diverse regions of Europe. Citizens of all project countries enjoyed visa-free travel within the European Union. Participants’ risk attitudes, therefore, were not impacted by travel barriers.

Participants from Southern Europe (Italy and Spain) and Eastern Europe (Latvia, Romania, and Slovakia) demonstrated quite similar patterns of risk tolerance, competence-based risk-taking, and motives for working abroad. Participants from the abovementioned five countries, therefore, were merged into a South/East sample (N = 308). We compared the South/East sample to a sample of participants coming from the North (Germany, Ireland, Sweden, UK, N = 232).

<table>
<thead>
<tr>
<th>Country</th>
<th>Female</th>
<th>Male</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>41</td>
<td>18</td>
<td>31</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>Great Britain</td>
<td>33</td>
<td>26</td>
<td>36</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>Ireland</td>
<td>40</td>
<td>24</td>
<td>28</td>
<td>23</td>
<td>64</td>
</tr>
<tr>
<td>Sweden</td>
<td>38</td>
<td>12</td>
<td>32</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>Italy</td>
<td>32</td>
<td>28</td>
<td>44</td>
<td>16</td>
<td>60</td>
</tr>
<tr>
<td>Spain</td>
<td>20</td>
<td>37</td>
<td>52</td>
<td>5</td>
<td>57</td>
</tr>
<tr>
<td>Latvia</td>
<td>33</td>
<td>27</td>
<td>50</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>Romania</td>
<td>53</td>
<td>12</td>
<td>54</td>
<td>11</td>
<td>65</td>
</tr>
<tr>
<td>Slovakia</td>
<td>45</td>
<td>21</td>
<td>58</td>
<td>8</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td>335</td>
<td>205</td>
<td>385</td>
<td>142</td>
<td>540</td>
</tr>
</tbody>
</table>

The socio-demographic variables were standard measures of age, gender, and migration experience, all of which are related to willingness to take risks.

The research questionnaire first explored attitudes to risk about international travel. The questions on attitudes to risk were mostly standard risk tolerance/aversion questions drawn from research by Kahneman and Tversky (1979), Barsky et al. (1995) and Dohmen et al. (2006). We added new questions concerning tourism and mobility experiences (see Williams and Baláž 2014). We used nine-point scales for all attitudinal variables. We tested eight travel deterrents for poor hygiene, health concerns, weather, crime/terrorism, poor accommodation, political unrest, local customs/religion and natural disasters (Table 2, section A of the questionnaire). The second part of the questionnaire analysed self-assessed competence. It included both questions on general risk-taking and questions on specific competence in international travel and migration (section B of the questionnaire). Finally, Section C of the questionnaire explored the relationship between the
perceived costs/benefits of international migration on the one hand and attitudes to risks associated with international migration on the other. The design of the questionnaire aimed at high-quality measures and comparability to major research instruments used in behavioural economics. The validity of the measures used in the questionnaire was based on their derivation from an extensive body of research in behavioural economics and large-scale surveys. The measures were drawn especially from the USA’s Health and Retirement Study and Survey of Consumer Finance (e.g., Barsky et al. 1995) and the German Socio-Economic Panel data (e.g., Dohmen et al. 2006). The questions had been developed and tested over time by a community of behaviouralist researchers. Regarding reliability, the internal consistency of the constructs was tested using Cronbach Alpha statistics. High scores were recorded for risk tolerance as related to travel abroad (0.786) and perceived competence in working abroad (0.856). The measures for migration motives are very diverse (ranging from, say, weather to family ties) and cannot reasonably be combined in a single construct for testing purposes.

We tested three hypotheses:

General opinions about visiting foreign countries were used as a proxy for attitudes to risk in the domain of international travel. Essentially, these captured risk traits as expressed across various domains, such as health concerns, crime/terrorism, etc. Hypothesis 1 is gender and cultural factors are important in the tolerating of the risks associated with travel to foreign countries. Opinions on the ability of individuals to manage risks related to life abroad, including competence-based risk taking. Hypothesis 2 is previous migration experience is important about the competence-based risk-taking which associates with travel to foreign countries. Opinions about living/working in foreign countries as proxies for migration motives. Hypothesis 3 is motives for (non) migration are situational and context-specific, and impacted by a mixture of factors such as (i) economic pull-push factors, (ii) travel deterrents, (iii) attitudes to risk, (iv) costs/benefit considerations, and (v) family considerations.

3. Research Findings

3.1. Person-centred Characteristics: Risk Traits and Travelling to Foreign Countries

Concerns about health risks, hygiene, crime/terrorism and natural disasters emerged as major deterrents to international travel. Males, people with migration experience and participants from the North declared significantly higher tolerance for the abovementioned risks than females, non-migrants, and participants from the South/East (Table 2). The difference between the European regions, however, may come down to sample composition. The percentage of participants with migration experience was much higher in the sample representing the North (39.7%) than it was in the sample representing the South/East (16.2%). Regional cleavages in risk tolerance may refer both to competence-based risk taking and culture-informed risk traits.

3.2. Competence-based Risk-taking and the Ability to Manage Risks

As for the risk traits, males indicated higher risk tolerance than females and migrants a greater risk tolerance than non-migrants. Competence-based risk-taking was almost exclusively related to migration experience (Table 2). The most significant difference between migrants and non-migrants related to the (claimed) ability to adapt to life and work abroad. As for risk-taking, males and participants with migration experience claimed higher competence in risk taking.
3.3. Motives for Working in Foreign Countries and Attitudes to Risks

Females reported climate, crime and terrorism, health risks and family circumstances as the main reasons not to live/work in foreign countries (Table 2). There were no gender differences related to income seeking and novelty seeking. As for the migrants and non-migrants, the main differences relating to motives for living abroad associated with family considerations.

The most significant positive motives for living / working abroad related to jobs, income, and novelty seeking and to social networks abroad. Culture-informed regional disparities were statistically significant in six out of nine motives. The sample composition may explain some regional differences in travel motives. Participants from the South/East tended to state family reasons for (non) migration more often than participants from the North. Fears of crime and terrorism, and health risks also were cited more by participants in the South/East sample than by participants in the North sample. This difference is probably related to the lower percentage of migrants in the South/East samples.

We detected two important regional divisions which were unlikely to have resulted from the sample compositions: (a) Participants from the North considered climate conditions more frequently than those from the South and East; (b) Participants from the South/East indicated income and good jobs as being of much higher importance than those from the North. These divisions were related to (a) the different climates in the North and South/East regions, and (b) the substantially higher wages that pertain in the North, as opposed to the South/East, of Europe.
Table 2: Participants’ Opinions on (A) Risks Related to International Travel, (B) Abilities to Respond to Risk and Challenges in International Migration, and (C) Motives for Working/Living in Foreign Countries.

**A. Person-centred Characteristics: Risk trait and Travelling to Foreign Countries.**

There may be specific risks when visiting some foreign countries. Please tell us how important these risks would be in deterring you from travelling there? Please tick each line. This factor would deter me: (1) (not much) to 9 (very much)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Non-migrant</th>
<th>Migrant</th>
<th>North</th>
<th>South &amp; East</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Poor Hygiene</td>
<td>6.1</td>
<td>5.4*</td>
<td>6.1</td>
<td>5.2*</td>
<td>5.0</td>
<td>6.5*</td>
</tr>
<tr>
<td>B) Health Concerns</td>
<td>7.0</td>
<td>6.2*</td>
<td>6.9</td>
<td>6.1*</td>
<td>6.1</td>
<td>7.1*</td>
</tr>
<tr>
<td>B) Weather</td>
<td>3.8</td>
<td>3.6</td>
<td>3.8</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
</tr>
<tr>
<td>D) Crime/Terrorism</td>
<td>7.4</td>
<td>6.5*</td>
<td>7.3</td>
<td>6.5*</td>
<td>6.5</td>
<td>7.5*</td>
</tr>
<tr>
<td>E) Poor Accommodation</td>
<td>5.3</td>
<td>5.3</td>
<td>5.5</td>
<td>4.7*</td>
<td>4.8</td>
<td>5.7</td>
</tr>
<tr>
<td>F) Political Unrest</td>
<td>6.3</td>
<td>5.9*</td>
<td>6.2</td>
<td>6.0</td>
<td>6.2</td>
<td>6.1</td>
</tr>
<tr>
<td>G) Local Customs/Religion</td>
<td>3.6</td>
<td>3.8</td>
<td>3.7</td>
<td>3.4</td>
<td>3.2</td>
<td>4.0*</td>
</tr>
<tr>
<td>H) Natural Disasters</td>
<td>5.9</td>
<td>5.3*</td>
<td>5.9</td>
<td>5.0*</td>
<td>5.0</td>
<td>6.2*</td>
</tr>
</tbody>
</table>

**B. Competence-based Risk-taking and Abilities to Manage Risks**

Please assess your abilities to respond to risk and challenges in international migration, on a scale of 1 (not much) to 9 (very much)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Non-migrant</th>
<th>Migrant</th>
<th>North</th>
<th>South &amp; East</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Adap Flexibly</td>
<td>6.9</td>
<td>7.0</td>
<td>6.8</td>
<td>7.4*</td>
<td>6.9</td>
<td>6.9</td>
</tr>
<tr>
<td>B) Manage Problems</td>
<td>7.2</td>
<td>7.1</td>
<td>7.1</td>
<td>7.5*</td>
<td>7.1</td>
<td>7.2</td>
</tr>
<tr>
<td>C) Solving Problems</td>
<td>6.8</td>
<td>6.9</td>
<td>6.5</td>
<td>7.6*</td>
<td>7.1</td>
<td>6.7</td>
</tr>
<tr>
<td>D) Adapt Living Abroad</td>
<td>6.5</td>
<td>6.6</td>
<td>6.2</td>
<td>7.5*</td>
<td>6.7</td>
<td>6.4</td>
</tr>
<tr>
<td>E) Taking Risk</td>
<td>6.0</td>
<td>6.5*</td>
<td>6.0</td>
<td>6.7*</td>
<td>6.1</td>
<td>6.2</td>
</tr>
</tbody>
</table>

**C. Motives For Working In The Foreign Countries And Risk Attitudes**

Please evaluate the importance of the following motives for you to go or not to go to live/work abroad, on a scale of 1 (low importance) to 9 (high importance).

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Non-migrant</th>
<th>Migrant</th>
<th>North</th>
<th>South &amp; East</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Higher Income and Better Job</td>
<td>7.3</td>
<td>7.4</td>
<td>7.4</td>
<td>7.0*</td>
<td>6.6</td>
<td>7.8*</td>
</tr>
<tr>
<td>B) Family Friends Living There</td>
<td>6.9</td>
<td>6.2*</td>
<td>6.8</td>
<td>6.2*</td>
<td>6.4</td>
<td>6.8*</td>
</tr>
<tr>
<td>C) Novelty Seeking</td>
<td>6.7</td>
<td>6.5</td>
<td>6.5</td>
<td>6.9</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>D) Different Culture</td>
<td>5.0</td>
<td>5.1</td>
<td>5.0</td>
<td>5.3</td>
<td>5.1</td>
<td>5.0</td>
</tr>
<tr>
<td>E) Different Climate</td>
<td>5.1</td>
<td>4.6*</td>
<td>4.9</td>
<td>4.9</td>
<td>5.3</td>
<td>4.6*</td>
</tr>
<tr>
<td>F) Crime and/or Terrorism</td>
<td>6.7</td>
<td>6.2*</td>
<td>6.6</td>
<td>6.4</td>
<td>6.2</td>
<td>6.8*</td>
</tr>
<tr>
<td>G) Health Risks</td>
<td>6.7</td>
<td>6.1*</td>
<td>6.6</td>
<td>6.1</td>
<td>5.9</td>
<td>6.9*</td>
</tr>
<tr>
<td>H) Weakening Ties with Family</td>
<td>6.1</td>
<td>5.7*</td>
<td>6.1</td>
<td>5.4*</td>
<td>5.7</td>
<td>6.1</td>
</tr>
<tr>
<td>I) Not Suitable For Family</td>
<td>6.0</td>
<td>5.4*</td>
<td>6.0</td>
<td>5.2*</td>
<td>5.2</td>
<td>6.2*</td>
</tr>
</tbody>
</table>

* = Significant on the 0.05 level (Mann-Whitney U-test). N = 540.

### 3.4. Analysis of Variance: Effect Size and Interaction Terms

The non-parametric tests indicated the importance of person-centred characteristics and (perceived) competence about international travel and migration. The non-parametric tests, however, cannot indicate (i) the strengths of relationships and (ii) the interactions between the factors and the covariates:

i. The ANOVA (analysis of variance) procedure is used to partition the observed variance in a particular variable into components attributable to different sources of variation. We employed the ANOVA procedure to uncover the significance of three factors (gender, migration experience and region of origin) in the variations in the dependent variables.

ii. The effect-size measures establish the strength of the relationship between two variables. We also examine the importance of a covariate—that of age—in the variations in migration decisions by young Europeans. The eta squared statistics
measure. The eta squared statistics measures effect size in the ANOVA. The eta
squared is sum of squares for the effect divided by the total sum of squares. The
partial eta squared (PES) is a similar measure “in which the effects of other
independent variables and interactions are partialled out” (Richardson, 2011,
135). The higher the value of the PES, the higher the effect size.

iii. The ANOVA procedure is also used to uncover main and interaction effects
about three factors and one covariate.

3.5. Person-centred Characteristics, Risk Traits, and Travelling to Foreign Countries

The participants considered crime and terrorism and health concerns major deterrents across all
socio-demographic groups. Concerns about poor hygiene and natural disasters were rather less
important deterrents. Factors of gender and region of origin proved the essential when testing for
differences about travel deterrents (Table 3). The PES values indicated that the region of origin
was of a substantially higher strength (regarding influence) than gender. Participants from the
South/East expressed significantly greater concerns about the above-mentioned travel deterrents
than participants from the North. Prior migration experience mitigated concerns about
crime/terrorism, health risks, and poor accommodation. The North sample contained a higher
number of migrants than the South/East sample. The interaction terms were significant for a
combination of migration experience and region of origin on the one hand, and concerns about
health, hygiene, accommodation and crime/terrorism on the other. This finding indicates that
migration experience helped to mitigate these concerns for the participants in the North sample.

3.6. Competence-based Risk-taking and Abilities to Manage Risks

Migration experience was key in explaining variances in the ability to adapt flexibly, manage
problems, solve problems, adapt to life abroad and take risks (Table 3). The highest values of PES
associated with the ability to adapt to life abroad and solve problems related to life abroad. There
is a clear relationship between migration experience and competence-based risk-taking. Gender
was also important regarding the risk-taking question. This finding may refer to a general risk-
averse trait and a lower risk tolerance by females. Age emerged as significant to the ability to
manage risks while living abroad. The older participants were more likely to indicate that they had
this ability. No interaction term was significant for the ability to respond to risks and challenges.
This finding confirms that migration experience is significant for the competence-based risk taking
and cannot be mitigated by gender and region of origin.
### Table 3: Analysis of Variance

<table>
<thead>
<tr>
<th>Correlated Model</th>
<th>Intercept</th>
<th>Age</th>
<th>Gender</th>
<th>Migrant Region</th>
<th>Gender* Migrant Region</th>
<th>Gender* Region</th>
<th>Gender* Migrant* Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Person-centred Characteristics, Risk Trait, and Travelling to Foreign Countries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor Hygiene</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.095</td>
<td>0.046</td>
<td>0.326</td>
<td>0.000</td>
<td>0.184</td>
</tr>
<tr>
<td>Health Concerns</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.392</td>
<td>0.001</td>
<td>0.049</td>
<td>0.000</td>
<td>0.414</td>
</tr>
<tr>
<td>Weather</td>
<td>Sig. 0.001</td>
<td>0.000</td>
<td>0.156</td>
<td>0.708</td>
<td>0.835</td>
<td>0.147</td>
<td><strong>0.012</strong></td>
</tr>
<tr>
<td>Crime Terrorism</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.106</td>
<td>0.000</td>
<td>0.048</td>
<td>0.000</td>
<td>0.494</td>
</tr>
<tr>
<td>Poor Accommodation</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.294</td>
<td>0.294</td>
<td>0.046</td>
<td>0.000</td>
<td>0.170</td>
</tr>
<tr>
<td>Political Unrest</td>
<td>Sig. 0.200</td>
<td>0.000</td>
<td>0.603</td>
<td>0.028</td>
<td>0.341</td>
<td>0.670</td>
<td>0.476</td>
</tr>
<tr>
<td>Local Customs Religion</td>
<td>Sig. 0.001</td>
<td>0.000</td>
<td>0.926</td>
<td>0.047</td>
<td>0.970</td>
<td>0.006</td>
<td>0.087</td>
</tr>
<tr>
<td>Natural Disasters</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.438</td>
<td>0.036</td>
<td>0.208</td>
<td>0.000</td>
<td><strong>0.043</strong></td>
</tr>
<tr>
<td><strong>B. Competence-based Risk-taking and Abilities to Manage Risks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adapt Flexibly</td>
<td>Sig. 0.011</td>
<td>0.000</td>
<td>0.890</td>
<td>0.879</td>
<td>0.002</td>
<td>0.528</td>
<td>0.097</td>
</tr>
<tr>
<td>Manage Problems</td>
<td>Sig. 0.010</td>
<td>0.000</td>
<td>0.023</td>
<td>0.975</td>
<td>0.014</td>
<td>0.150</td>
<td>0.986</td>
</tr>
<tr>
<td>Solving Problems</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.064</td>
<td>0.226</td>
<td>0.000</td>
<td>0.779</td>
<td>0.612</td>
</tr>
<tr>
<td>Adapt Living Abroad</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.460</td>
<td>0.609</td>
<td>0.000</td>
<td>0.853</td>
<td>0.732</td>
</tr>
<tr>
<td>Taking Risk</td>
<td>Sig. 0.002</td>
<td>0.000</td>
<td>0.599</td>
<td>0.010</td>
<td>0.000</td>
<td>0.395</td>
<td>0.876</td>
</tr>
<tr>
<td><strong>C. Motives for Working in the Foreign Countries and Risk Attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Income Better Job</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.621</td>
<td>0.940</td>
<td>0.949</td>
<td>0.000</td>
<td>0.855</td>
</tr>
<tr>
<td>Family Friends Living There</td>
<td>Sig. 0.001</td>
<td>0.000</td>
<td>0.900</td>
<td>0.002</td>
<td>0.007</td>
<td>0.295</td>
<td>0.939</td>
</tr>
<tr>
<td>Novelty Seeking</td>
<td>Sig. 0.518</td>
<td>0.000</td>
<td>0.563</td>
<td>0.294</td>
<td>0.118</td>
<td>0.369</td>
<td>0.446</td>
</tr>
<tr>
<td>Different Culture</td>
<td>Sig. 0.394</td>
<td>0.000</td>
<td>0.177</td>
<td>0.208</td>
<td>0.293</td>
<td>0.785</td>
<td>0.597</td>
</tr>
<tr>
<td>Different Climate</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.094</td>
<td>0.178</td>
<td>0.410</td>
<td>0.108</td>
<td>0.294</td>
</tr>
<tr>
<td>Crime and/or Terrorism</td>
<td>Sig. 0.006</td>
<td>0.000</td>
<td>0.194</td>
<td>0.018</td>
<td>0.637</td>
<td>0.004</td>
<td>0.669</td>
</tr>
<tr>
<td>Health Risks</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.979</td>
<td>0.017</td>
<td>0.604</td>
<td>0.000</td>
<td>0.796</td>
</tr>
<tr>
<td>Weakening Ties with Family</td>
<td>Sig. 0.007</td>
<td>0.000</td>
<td>0.304</td>
<td>0.072</td>
<td>0.001</td>
<td>0.420</td>
<td>0.386</td>
</tr>
<tr>
<td>Not Suitable for Family</td>
<td>Sig. 0.000</td>
<td>0.000</td>
<td>0.027</td>
<td>0.017</td>
<td>0.017</td>
<td>0.000</td>
<td>0.779</td>
</tr>
</tbody>
</table>
3.7. Motives for Working in Foreign Countries as Related to Attitudes to Risk

Motives for (not) going to live/work abroad are quite diverse and may differ across members of the same socio-economic group. The culture-informed differences between the North and the South/East generated the highest differences in PES values, while the gender-based risk traits and competence-based differences in attitudes to risk provided significantly lower explanatory power. Income and job opportunities were the strongest motives for going abroad given by the participants from the South/East. The very high levels of unemployment rates in the tertiary graduates of Italy and Spain (37% and 44% respectively in 2016) explain this finding. Also, wage levels in the East (Romania, Latvia, and Slovakia) were among the lowest in the EU28. Participants from the South/East stated family concerns and health risks as major motives for not going to live abroad. The health risk concerns may partially be explained by the low proportion of migrants in the South/East sample (the interaction term was significant for the combination of migration experience and region of origin). Finally, family reasons were stated as an important motive to stay by females, non-migrants, and people with no migration experience.

4. Conclusions

Human behaviour can be extremely complex. Any specific behaviour, including risk-taking, can be influenced by a high number of variables. Barsky et al. (1995, 575), for example, studied correlations between (subjective) risk-aversion and specific risky behaviours, such us drinking, smoking, migration history, and the absence of health and life insurance. They found “tremendous variability in the behaviours, so only a small fraction of their variance is explained by risk tolerance (or any covariate).” The estimated R2 for risk tolerance and immigration, for example, was 0.303, but only 0.065 for drinking and 0.100 for no health insurance. The R2 values in our study were of similar magnitudes and ranged from 0.041 for weather concerns to 0.163 for fears of poor hygiene. Our study firstly investigated the importance of person-centred characteristics for attitudes to risk about foreign travel. Hypothesis 1 stated gender and cultural factors are important in the tolerating of the risks associated with travel to foreign countries. Travel deterrents proved to relate to a mixture of person-centred characteristics and competence-based risk taking. Some risks associated with travelling abroad had a clear gender dimension (fears of political unrest), but most attitudes to risks were mixtures of gender-based risk traits and culture-informed attitudes to risks (concerns related to health, hygiene and natural disasters). Culture-based attitudes to risks proved the most powerful for explaining the overall variance in attitudes to travel deterrents. The PES values were the highest for natural disasters and health and hygiene concerns. The interaction terms for migration history and region of origin were significant for the above-mentioned travel deterrents. This finding indicates that a greater exposure to foreign travel and migration may have partially influenced the culture-based attitudes to risk by participants from the North (UK, Germany, and Sweden). Age proved of quite minor importance about attitudes to risk in our research, but the sample composition constrains this finding.

Hypothesis 2 proposed previous migration experience is important about the competence-based risk-taking which associates with travel to foreign countries. As for competence-based risk taking, migration history proved a key determinant of attitudes to risk. The R2 values, however, were quite low (0.036–0.088) for particular domains. The rest of the unexplained variance in self-perceived abilities in managing risks can be put down to other sources of perceived competence and unobserved personal traits.

Hypothesis 3 stated motives for (non) migration are situational and context-specific, and impacted by a mixture of factors such as (i) economic pull-push factors, (ii) travel deterrents, (iii) attitudes to risk, (iv) costs/benefit considerations, and (v) family considerations. The risk attitudes which impact motives for working and living in foreign countries obviously were affected by economic and family circumstances. The desire to find a better job and salary on the one hand, and
family concerns on the other, generated the highest PES values. Gender-based risk traits and competence-based risk-taking turned out to be significant for some motives (health risks and family concerns) but generated quite low PES values.

The importance of cross-cultural differences in attitudes to risk (proxied by region of origin) is the most interesting result of this research. Differences in attitudes to risk harbour ed by participants from the North and South/East of Europe were robust and pervasive across most domains of international travel and migration. The North sample had a higher proportion of migrants than the South/East sample did. Competence-based risk taking may partially explain the higher proclivity for risk-taking demonstrated by participants from the North. There are likely to be other sources for higher risk tolerance in Northern Europe, other than migration experience.

Vieider et al. (2012) and L’Haridon and Vieider (2016) and Statman (2011) suggested individual characteristics are able to explain a much lower proportion of the total heterogeneity in risk preferences than the macroeconomic and cultural characteristics of countries when the overall between-country heterogeneity in attitudes to risk is taken into account. On the country level, risk tolerance is significantly and positively correlated with social trust. Participants in our sample came from countries with very diverse levels of trust. Northern Europe demonstrates higher levels of trust than Southern and Eastern Europe. The percentage of people agreeing with the statement “most people can be trusted” is 64 percent in Sweden, 42 percent in Germany, and 30 percent in the UK, but 28 percent in Italy, 26 percent in Slovakia, 24 percent in Latvia, 19 percent in Spain, and 8 percent in Romania (WVS 2016). It turns out that people from Northern Europe may be more trusting of others and optimistic about the outcomes of migration than people from Southern and Eastern Europe.

Further research could explore the possible links between the other person-centred characteristics (trust, happiness, life satisfaction, optimism) on the one hand and attitudes to risk about international travel and migration on the other. Other interesting questions could include (a) determinants of the propensity for repeated migration and (b) the importance of outcome framing and aspirational levels for international travel and migration. One could, for example, suggest that people with a migration history could be more inclined to undertake repeated migration. Migrants also might take more optimistic assumptions when framing potential outcomes of their migration than non-migrants.

5. Acknowledgement

This project has received funding from the European Union’s Horizon 2020 under Grant Agreement No. 649491 – YMOBILITY.
REFERENCES


**ABOUT THE AUTHORS**

*Vladimír Baláž:* Research Professor, Institute for Forecasting, Slovak Academy of Sciences, Bratislava, Slovakia

*Dr. Martina Chrančoková:* Researcher, Institute for Forecasting, Slovak Academy of Sciences, Bratislava, Slovakia

*Dr. Katarína Karasová:* Researcher, Institute for Forecasting, Slovak Academy of Sciences, Bratislava, Slovakia
The International Journal of Interdisciplinary Global Studies is one of seven thematically focused journals in the family of journals that support the Interdisciplinary Social Sciences knowledge community—its journals, book series, conference, and online community. The journal investigates the dynamics of globalization and the transformation of the local.

As well as papers of a traditional scholarly type, this journal invites case studies that take the form of presentations of practice—including documentation of socially-engaged practices and exegeses analyzing the effects of those practices.

The International Journal of Interdisciplinary Global Studies is a peer-reviewed scholarly journal.