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**Catch me if I fall:
Cross-cultural differences in willingness to take
financial risks as a function of social and state
'cushioning'**

Claudia R. Schneider, Dennis D. Fehrenbacher, and Elke U. Weber

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of social and state ‘cushioning’**

Claudia R. Schneider
Department of Psychology
Columbia University
New York, NY 10027, USA
E-Mail: claudia.r.schneider@psych.columbia.edu

Dennis D. Fehrenbacher
Department of Accounting
Monash University
Caulfield East, VIC 3145, Australia
E-Mail: dennis.fehrenbacher@monash.edu

Elke U. Weber
Department of Psychology
Columbia Business School
Columbia University
New York, NY 10027, USA
E-Mail: euw2@columbia.edu

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Abstract

In an increasingly interconnected world, knowledge about cross-cultural differences in perceptions and behavior contributes to successful collaboration and understanding, from the political and economic to the personal domain. Willingness to take risks is an important variable in many business and financial decisions that has been shown to be influenced by cultural factors. The current study investigates the relationship between financial risk-taking and cultural factors, in particular the availability of social and state ‘cushioning’, i.e. the extent of the social-personal support net and state welfare net available to decision makers in different cultures. It does so by comparing large scale representative household data and self-reports on willingness to take financial risks across three countries, Austria, Italy and the United States that differ in their state support net. We find support for social cushioning and an interactive relationship between social and state cushioning. Furthermore, results indicate that independent from characteristics of social or state nets, basic biological and demographic factors (sex, age and wealth) persist in influencing risk-taking willingness.

Keywords: cushion hypothesis, willingness to take financial risks, cross-cultural comparison

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Introduction

Risk perception and risk-preferences shape human behavior and decision making in virtually every area of life. From deciding whether to do a bungee jump, go ahead with a cosmetic surgery or invest in a currently promising stock, our willingness to risks influences how we decide and behave in many situations.

In addition to individual differences in risk-preference, some studies have investigated cultural differences in risk-taking (Weber and Hsee 1998, Hofstede 1980, 1991, Hofstede et al. 2010). The way people are socialized and educated in a given culture influences their behavior as an individual, a part of society or within organizations. As such, risk-taking may also be shaped by cultural identity (Weber et al. 1998). However, studies of risk-taking in a business or management context tend to be limited to particular cultures (Birnberg 2011). In an increasingly interconnected world and global commerce, it is of great importance to understand how human behavior and, in particular, risk preferences are shaped by the cultural context. Managers of international teams or CEOs of multinational corporations need to understand and take into account differences in risk attitudes among employees of various cultures and backgrounds and of customers in different countries.

Despite the importance of understanding cultural similarities and differences in risk-taking, the topic has received little attention from researchers in economics, management and psychology (see Weber and Hsee 2000 for a review). Only recently have researchers begun to ask whether “culture, as proxied by national background, may also influence economic behavior” (Cadsby et al. 2007 p. 243). In this study, we tackle one particularly important

potential difference between cultures: the tendency to engage in risky financial activities.¹ It has been acknowledged that individuals facing the same decision making problem choose different paths as the result of differences in attitude towards risk. Individuals' risk attitude has been measured in different ways in business and management (MacCrimmon and Wehrung 1990; Sitkin and Weingart 1995), economics (Holt and Laury 2002, Choi et al. 2007), accounting (Shields et al. 1989; Williams et al. 2008), psychology (Slovic 1977; Botella et al. 2008) or finance (Gneezy et al. 2003, Rose et al. 2010).

This study goes beyond individual differences in risk-taking and focuses instead on national patterns of willingness to take risks. More specifically, we investigate the potential influence of the 'cushion' hypothesis, proposed by Weber and Hsee (1998) and introduce a new 'state' cushioning hypothesis. Cross-cultural management research has contrasted Eastern and Western cultures by characterizing Eastern societies as collectivist-interdependent and Western societies as individualistic-interdependent societies (Maheswaran and Shavitt 2000). The taxonomy used by Hofstede (1991, 1980; Hofstede et al. 2010) is arguably the most widely used and validated (Chow et al. 1996; Chow et al. 1997; Salter et al. 2008). However, differences willingness to take risks across countries cannot be solely attributed to the difference in collectivism versus individualism. Thus, we incorporate the 'cushion' hypothesis (Weber and Hsee 1998, Hsee and Weber 1999) into our study as another potential explanation of differing risk preferences in cultures. The cushion hypothesis predicts that a decision maker's social support network critically influences his or her willingness to take risks. Furthermore, we extend the 'social' cushion hypothesis and introduce the 'state' cushion hypothesis, which predicts that a country's state support network (government aid and welfare) may also influence risk-taking willingness. We examine the influence of these social and state cushion predictors on risk-taking in three different countries, known to differ on these dimensions, while controlling for variables known to affect risk preference, including the decision maker's age, gender, and economic status (Friend and Blume 1975; Dohmen et al. 2011).

Consequently, our study extends earlier literature by providing a test of the validity and generalizability of the Weber and Hsee (1998) cushion hypothesis in two ways; first, by using different countries across two continents for cross-country comparison; second, by using large representative samples of household heads. Household heads are important economic entities

¹When the terms risk and uncertainty are distinguished, risk involves the existence of objective probabilities of states, whereas uncertainty indicates the absence of objective probabilities (Knight 2005). In this research the terms risk and uncertainty will be used interchangeably.

who contributed to the development of the global financial crises through excessive financial risk-taking (Diamond and Rajan 2009). Thus, knowledge about influence factors on willingness to take financial risks of household heads is very important. Moreover, we examine a further possible culture-level contributor to risk-taking (state cushioning) and use control variables (i.e. age, sex, and wealth) for factors known to influence risk preferences (Friend and Blume 1975; Dohmen et al. 2011). The paper is structured as follows. First, we review literature on culture and risk preferences and introduce the ‘cushion’ hypothesis. We discuss how different disciplines have conceptualized and measured risk and distinguish between risk perception and risk preference. Next we discuss the methodology of our study, focusing on strengths and weaknesses in using household surveys. We then present our results and their implications, as well as limitations of our study.

Literature Review and Development of Hypotheses

Culture influences behavior. In business contexts there is evidence of cultural differences in organizational and management controls (Chow et al. 1996; Harrison and McKinnon 1999), in organizational information sharing, a practice which adds to an organization’s wealth of knowledge (Chow et al. 1999; Schulz et al. 2009), or in operations management and marketing (Hope and Muhlemann 2001; Tse et al. 1988).

A recent study by Rieger et al. (2014) investigates such cultural influences on behavior, in particular risk preferences. Via an international survey Rieger et al. (2014) find that the degree of risk aversion significantly varies across countries. In line with the idea of our study, Rieger et al. (2014) conclude that risk attitudes do not only depend on economic conditions but also on cultural factors. Despite the importance of potential differences in risk-taking between cultures different researchers point out that evidence of cultural differences in risk-taking is still limited (e.g. Cadsby et al. 2007, Rieger et al. 2014).

Differences across disciplines and literatures in the way risk, risk-taking, and culture are defined and measured constitute part of the problem. In order to avoid misunderstandings, we first define our understanding of risk, risk-taking and culture. Subsequently, we formulate our hypotheses.

A growing experimental and empirical literature has produced a variety of measures for assessing individual risk attitude, with the aim of capturing this important component of decision making and better predicting risk-taking. The ways in which different disciplines

such as economics, management and psychology operationalize and measure risk varies considerably. However, there is agreement across disciplines (Kahnemann and Tversky 1979, Sitkin and Pablo 1992, Weber and Hsee 1999) that risk-taking behavior depends on the individual and the situation. Still, the terminology, conceptualization and causal relations of general predispositions to take risk (risk attitude/preference), contextual predisposition to take risk (risk propensity), or individual situational assessments of risk (risk perception) may differ widely. We mainly use the term *risk preference* to refer to individuals' general predisposition to take risk and *risk perception* to describe individuals' perception of specific risky situations. Following Weber and Milliman (1997) we define risk preference as the "tendency to be attracted or repelled by alternatives that are perceived as risky" (p. 142) and support their view that "risk preference may be a stable personality trait, and that the effect of situational variables on choice may be the result of changes in risk perception" (p. 142). This is in line with Sitkin and Weingart (1995) who find that risk perception mediates the influence of situational features on decision making under risk. Weber, Blais and Betz (2002) refer to this as perceived-risk attitude, as it captures people's attraction to risk as they see it, rather than as it is operationalized by experimenters or theorists (e.g., equating risk with variance).

An early definition of culture indicates the many facets it encompasses. Tylor (1871) states that culture is "that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society" (p.1). As culture is defined by a plethora of aspects, for simplicity reasons we proxy culture by national background. In the following we describe aspects of cultures that have been associated with risk-taking, which leads us to the hypotheses.

In management, economics, and psychology research, the taxonomy used by Hofstede (1991, 1980; Hofstede et al. 2010) is arguably the most widely used and validated (Chow et al. 1996; Weber and Hsee 1999, 2000). Hofstede's (1980) comprehensive review of cultural differences identifies four aspects of national culture: individualism, uncertainty avoidance, masculinity, and power distance. In a subsequent study, The Chinese Culture Connection (1987) identifies another cultural aspect, that of Confucian dynamism.² The aspects of *uncertainty avoidance* and *individualism* have been directly associated with risk preferences (Bontempo et al. 1997, Weber and Hsee 1998, Rieger et al. 2014). Given that nations can be distinguished on these

² Hofstede (1991) and Hofstede et al. (2010) add the aspects Long-term vs. Short-term Orientation and Indulgence versus Restraint to their framework.

dimensions and that some of these dimensions predict risk-taking, one can derive links between nations and risk-taking.

Uncertainty avoidance is related to a preference for rules and standardized procedures (Hofstede 1991, 1980, Hofstede et al. 2010). High uncertainty avoidance cultures consist of a majority of people who accept only familiar risks and fear ambiguous and unknown situations. They look for structures and rules that make events interpretable and predictable. In contrast, people from low uncertainty avoidance cultures tend to be comfortable with ambiguous and unknown situations and unusual risks. Hofstede et al. (2010) differentiate uncertainty and risk: uncertainty is a diffuse feeling that is not focused on a particular object without probability attached to it; risk focuses on something specific and can be expressed by probabilities. Hence uncertainty avoidance is not associated with risk preference according to them. However, Keil (1995) and Keil et al. (2000), in a project continuation vs. discontinuation decision, find a strong inverse relationship between risk propensity and risk perception in low but not in high uncertainty avoidance cultures and conclude that this association may translate into a greater willingness of decision makers in low uncertainty avoidance cultures to continue a risky project. In their scenario, risk averse participants should favor project termination. Bontempo et al. (1997) also include uncertainty avoidance in their conjoint expected risk model in order to predict cross-cultural differences in risk perception. Bartke and Schwarze (2008) investigate another important aspect of culture, namely religion. They find that risk aversion is determined by religion, such that there is greater risk aversion among Muslims than Protestants and conclude that risk-taking willingness decreases with the comprehensiveness and strictness of behavioral rules of religions. Halek and Eisenhauer (2001) find that immigrants to the USA not born in the USA are less risk averse than US citizens. However, they do not distinguish between the countries of origin of the various immigrant groups.

Another aspect of culture that has been previously linked to risk preferences is *individualism*. Individualism describes the importance of individual freedom and responsibility. People in individualist societies tend to take care of themselves, tend to be emotionally independent in organizations, and emphasize individual initiative and achievement (Hofstede et al. 2010; Hofstede 1991, 1980). By drawing on this cultural aspect of individualism, one potential explanation for differences in risk preferences between cultures has been developed and termed the *cushion hypothesis* (Weber and Hsee 1998, Hsee and Weber 1999). The cushion hypothesis was developed from the finding that Chinese MBA students were significantly less risk averse than American MBA students in choices between risky options and sure outcomes

involving positive as well as negative frames. A major distinction between the two cultures is that the Chinese culture is collectivist and the American culture is individualist (Hofstede et al. 2010; Hofstede 1991, 1980; Triandis 1983). In collectivist societies (in contrast to individualist societies) individuals are born into extended families that protect them in exchange for loyalty (in contrast to each person taking care of her/himself). Individuals are emotionally dependent (and not independent) in an organization and emphasize belonging to organizations (in contrast to individual initiative and achievement). As compared to Americans, Chinese have a larger close social network to rely on. Extended family bonds do not only express themselves in large family gatherings in family temples, but also in financial support when individuals are in need. Thus, negative outcomes of risky financial alternatives may be less severe to Chinese individuals than American individuals given that Chinese can rely on family support. Weber and Hsee (1998) show that the extended social network serves as a ‘cushion’, with the result that Chinese (and only those Chinese with extensive social networks) perceive risks in the same uncertain financial options as less risky than Americans. Consequently, the cushion hypothesis explains different levels of risk-taking through differences in risk perceptions. The cushion hypothesis only provides a mechanism for risk sharing for outcomes that can be transferred between members of an extended family social network, e.g., money, but not health or grades. This prediction was supported by non-significant differences in risk preferences between Chinese and American students in medical and educational settings (Hsee and Weber 1999).

Furthermore, the cushion hypothesis is not necessarily a cultural phenomenon, but may be the result of individual social networks. When Hsee and Weber (1999) controlled for the number of people from whom individuals can request financial help when in need, the variable nationality became insignificant. Weber and Hsee (1998) confirm the cushion hypothesis involving students from the USA (young Western culture), China (Asian culture), Germany and Poland (older Western culture). Thus, the cushion hypothesis argues that social diversification may work as a collective risk diversification and insurance in mitigating the negative outcomes of risky options.

We test the cushion hypothesis as it applies to individual social support networks in our study:

H1: The more extensive social cushioning, the greater is the willingness to take financial risks.

Parallel to the important role social context and support may play in influencing and shaping individual's perception of risk and risk preferences, the state and state support can be viewed as a further context factor. Thus, our study goes beyond the social support network cushion investigated by Hsee and Weber (1999), and investigates the additional influence of the state's support network, as proxied by a country's welfare regime. Different countries possess different welfare regimes. We define welfare regime as a country's laws and practices pertaining to the existence, extent, and availability of government welfare and other state support. The three countries we selected for our study possess different welfare systems in terms of social assistance benefits for needy individuals (Epping-Andersen 1990). On a welfare continuum, Austria has the most elaborated government support net for people in need, Italy is classified lower than Austria but still higher than the USA, and the USA is at the bottom of the continuum, i.e. offering least government support (Epping-Andersen 1990, for a classification review see Arts and Gelissen 2002). According to Epping-Andersen (1990) the USA is a liberal welfare regime, Italy is a conservative welfare regime, and Austria a social-democratic welfare regime.

Following the logic of the cushion hypothesis, a state-supported cushion that offers help when in need may influence risk perception in financial decision making and thus affect risky decisions. Thus, the state cushion hypothesis would predict least risk aversion for Austrians due to a lower perception of risk of uncertain financial options and highest risk aversion for Americans. It is suggested that state cushioning considerations may play a crucial role in disseminating underlying factors in cross-cultural risky financial decision making. Thus, it seems valid and feasible to introduce the state cushioning hypothesis into risk-taking willingness research.

Hypothesis 2 consequently states:

H2: The more extensive state cushioning, the greater is the willingness to take financial risks by members of a country.

In addition to individual main effects of social and state cushioning on risk-taking, the two variables may interact. For instance, assuming that there is no third factor driving both social and state cushioning effects, the two could act as substitutes, predicting that in countries with low state cushioning, such as the USA, social cushioning might play a more important role compared to countries with high state cushioning, such as Austria, in which a social support

network might be less important due to readily available government aid. Our third and last hypothesis thus claims:

H3: Social and state cushioning interact in influencing risk-taking willingness.

Methodology

The household surveys

We used data from the Luxembourg Wealth Study Database (LWS) which incorporates behavioral questions regarding individuals' financial risk-taking willingness as well as several demographic and economic indicators (refer to subsequent sections for detailed descriptions of the variables). Table 1 gives an overview of the surveys that provide representative data of the national population of different countries. Data collection and analysis is conducted by professional bodies possessing a long track record and high expertise. Since the survey is interview-based and not self-administered, a high level of data quality can be expected.

Using household data from representative samples from different countries, is a large improvement over the typical practice in psychological research to use university students as respondents (Guala 2005), who may not be representative. Economic students, for example, who face investment decisions are found to be approximately half as likely as students from other subjects to be concerned with fairness considerations (Marwell and Ames 1981). Frank et al. (1993), analysing prisoner's dilemma results and charitable giving, conclude that economics students are more likely than other individuals to practice free-riding. Furthermore, the size of our dataset allows us to draw reliable conclusions about the questions under investigation. Thus, the use of household data for research on risk preferences seems appropriate and may add to the fund of knowledge (cf. Dohmen et al. 2011).

However, there are several drawbacks using household surveys. Only the household heads are interviewed, involving more male than female respondents. In addition, there is often a relatively long time lag from survey to data availability, and researchers do not have direct and full control over the questions asked. Still, this data set provides a unique opportunity to enrich the previous literature and to test hypotheses with representative data. The variable financial risk-taking willingness, provided in the data sets of all three countries, has been used in experimental studies (Weber and Hsee, 1998; Hsee and Weber 1999) and is thus comparable to other studies.

Table 1: Survey outline and definitions household head

Country	Survey outline	Definition household head
Austria	<p><i>Origin:</i> The Austrian survey is called the Survey of Household Financial Wealth and has been administered by the Oesterreichische Nationalbank (National Bank of Austria).</p> <p><i>Aims/Focus:</i> It aims at providing a comprehensive picture of the distribution and composition of financial wealth.</p> <p><i>Information included:</i> income, household composition, assets, debt and wealth. Wealth data were collected at the household level.</p> <p><i>N:</i> 2556 households were interviewed in a multistage, stratified sampling design.</p>	A self-declared household head or household member with the most accurate knowledge about household finances.
Italy	<p><i>Origin:</i> The Italian data originates from the Survey of Household Income and Wealth (SHIW) administered by the Bank of Italy. It is a cross-sectional and partly longitudinal interview survey.</p> <p><i>Aims/Focus:</i> The focus of the survey is to provide information on household microeconomic behavior within Italy.</p> <p><i>Information included:</i> demographic characteristics, income, wealth and expenditure.</p> <p><i>N:</i> In 2004 approximately 8,000 households were sampled with a two-stage stratified sampling, with the stratification of the municipalities by region and demographic size. Our sample consists of 2,808 households who answered all questions relevant to our study.</p>	Person primarily responsible for the household budget.
USA	<p><i>Origin:</i> The Survey of Consumer Finances (SCF) has been administered by the Federal Reserve Board and the US Department of Treasury.</p> <p><i>Aims/Focus:</i> The focus of the study is to provide detailed information on US families' balance sheets and their use of financial services.</p> <p><i>Information included:</i> household composition, education, health, housing and wealth, assets, pensions and labour force participation.</p> <p><i>N:</i> The main sample is a stratified, multi-stage area probability sample (a geographically-based random sample) to provide a broad distribution of the population. Our relevant sample consists of 4519 households.</p>	Economically dominant person.

Dependent Variable

Table 2 shows the questions used for determining willingness to take financial risks in each country. All surveys use a simple self-report measure of risk preference that has been documented to predict consequential real-world risky decisions as well or better than risk preference inferred from choices between financial lotteries. Dohmen et al. (2011) demonstrate the behavioral validity of such a question to predict the choices made by German respondents in a paid lottery experiment. Results suggest that information on risk attitude can be collected by using relatively easy to use instruments in surveys that predict incentive compatible choices in real-stake lottery experiments. Hsee and Weber (1999) note that the use of lottery choices to determine risk preferences across cultural settings are open to alternative explanations. For example, different choices may be due to different calibration of probabilistic thinking of Asian nationals as compared to Western nationals (Wright et al. 1983). Additionally, the use of different currencies and buying power conditions in respective

countries may lead to different choices of lotteries which may not reflect different risk preferences. This is why Hsee and Weber (1999) use investment scenarios involving stocks and savings accounts to determine risky choice in their second study. The elements of these scenarios are relatively similar to the questions of the household surveys regarding willingness to take financial risks.

Although the questions asked in the three countries vary slightly, willingness to take financial risks is defined and measured via savings and investment behavior for all three countries (Table 2). This is an asset in light of the fact that risk-taking has been shown to be domain specific (DOSPERT; Weber, Blais, Betz, 2002; Blais and Weber, 2006), i.e., that risk perception and behavior may differ between financial, health/safety, ethical, social, or recreational risky decisions. Moreover, all questions are measured on a four point scale which allows us to group respondents into four financial risk-taking willingness categories, hereafter short referred to as risk categories (risk category 1 = highly risk averse, risk category 2 = risk averse, risk category 3 = risk seeking, risk category 4 = highly risk seeking). All of these facts make the data comparable across countries.

The data in the three samples were collected at somewhat different points in time, at times determined by the professional bodies responsible for the data collection, however in a relatively narrow time frame between June 2004 and July 2005. Economic conditions that may strongly influence financial risk-taking (see the longitudinal data analysed by Weber et al. (2013), collected before, during, and after the financial crisis of 2008) did not change very much over this time period. More specifically, the Austrian data was collected in Summer/Autumn 2004, the Italian data between February and July 2005 and the US data between July to December 2004. Thus, we believe it is relatively safe to assume that the data set is not biased by changing economic conditions.

Table 2: Survey questions for measuring financial risk-taking willingness and definition of risk categories

Country	Survey question	Answer choices (risk categories)
Austria	“For savings I prefer secure investment instruments and avoid risk”	1 = completely applicable 2 = rather applicable 3 = rather not applicable 4 = completely inapplicable
Italy	“When managing your financial investments, would you describe yourself as someone who looks for:”	1 = low returns, without any risk of losing your capital 2 = a reasonable return, with a good degree of security for your invested capital 3 = a good return, with reasonable security for your invested capital 4 = very high returns, regardless of a high risk of losing part of your capital
USA	“Which of the statements on this page comes closest to the amount of financial risk that you and your spouse/partner are willing to take when you save or make investments?”	1 = not willing to take any financial risks 2 = take average financial risks expecting to earn average returns 3 = take above average financial risks expecting to earn above average returns 4 = take substantial financial risks expecting to earn substantial returns

Independent Variables and Data Analysis

We proxy culture by nationality. The three countries in our sample are ordered by welfare regime and thus state cushioning, i.e. the degree to which a state provides a welfare net. Based on Epping-Andersen (1990), the three countries are rank ordered as follows: Austria is the country with the highest state cushioning or best welfare system, the USA the country with the lowest state cushioning or weakest welfare system, and Italy in between. We create a welfare regime variable (WELFREG: 1 = Austria, 2 = Italy, 3 = USA) to test for differences between the three countries using the four category financial risk-taking willingness variable (RISK) as outcome.³

The social cushioning predictor variables are selected in order to mimic Weber and Hsee’s (1998) measures as closely as possible, given the information in our data set. Weber and Hsee (1998) used the number of people a respondent lives with and the number of people a respondent could approach if he or she needed financial help or material support as indicators of the size of an individual’s social network. Similar indicators are regularly available through household surveys. In the LWS the number of people individuals live with is captured

³ A control analysis that did not assume equal spacing of the countries on to the level of welfare regime was also conducted and is described in the control analysis section below. It showed the same results as our main analysis.

by household size and could proxy the first indicator. We do not include this proxy for comparison reasons, as this indicator is not used in Weber and Hsee's (1998) final model.

The number of earners in a household (NUMEARN), however, serves as a plausible proxy for the number of people a respondent could approach when in financial need. In case of only one earner all financial responsibility for the family lies only on one person, if something goes wrong no immediate financial help is available. On the contrary, if there are two or more earners in a household, decision makers might be more willing to take financial risk since material support is readily available.

In addition, the number of children living in the same household may give indication of how much material support by others a respondent may have in later stages of his or her life. Although, of course, dependent children cannot provide immediate financial help, they can still constitute a relevant support network for more long term financial decisions since they can support their parents once they are grown up. Thus, we use the information of number of children under 18 living in the same household (NUMCH18), which is available for all countries under investigation, as a further proxy.

Furthermore, we incorporate three control variables, age (AGE), sex (SEX, 0 = male, 1 = female) and wealth (WEALTH), into our model, which have been shown to influence risk preferences (Friend and Blume 1975; Croson and Gneezy 2009; Dohmen et al. 2011). Female as compared to male, older as compared to younger and poorer as compared to wealthier individuals tend to be more risk averse (Friend and Blume 1975; Croson and Gneezy 2009; Dohmen et al. 2011).⁴

The wealth variable is computed as the difference between TFA1 and TD, both available in the household surveys for all three countries. TFA1 is the total financial assets calculated by the sum of deposit accounts, bonds, stocks and mutual funds. TD is the total debt reflecting the sum of all available debts including home secured, vehicle loans, total instalment debt, educational loans, other loans from financial institutions, and informal debt. TFA1 and TD are

⁴ Weber, Blais, Betz (2002) show that gender differences in risk-taking are completely mediated by differences in the perceptions of risk, and Gao et al. (2014) show partial mediation for the age difference in risk-taking. A similar potential explanation for the influence of wealth on risk-taking is that wealthier individuals perceive situations as less risky compared to poorer people who are very conscious of their monetary constraints.

comparable figures across nations in 2002 USD using Consumer Price Indices and Purchase Power Parities (OECD 2005). We calculate WEALTH as TFA1-TD. We test our hypotheses using a multiple linear regression model.

Results

Descriptive Analysis

We begin by comparing risk-taking willingness by country on a descriptive basis. Figure 1 shows the mean self-reported levels of willingness to take financial risks for each country. For all three countries, willingness to take risk means lie below two, i.e. people across all investigated countries are on average risk averse rather than risk seeking. However, a clear difference between the two European countries and the United States can be detected. While Austria and Italy seem to be quite similar in risk-taking willingness, they are both clearly different from the United States which scores higher, i.e. there is a notably higher proportion of US Americans who report willingness to engage in financially risky options than Italians and Austrians. Risk-taking willingness in Austria and Italy does not differ notably. This pattern, at first hand, is not in line with the state cushion hypothesis which predicts individuals in countries with stronger state support networks, approximated by the availability of government aid and welfare, to be less risk averse or more risk seeking.

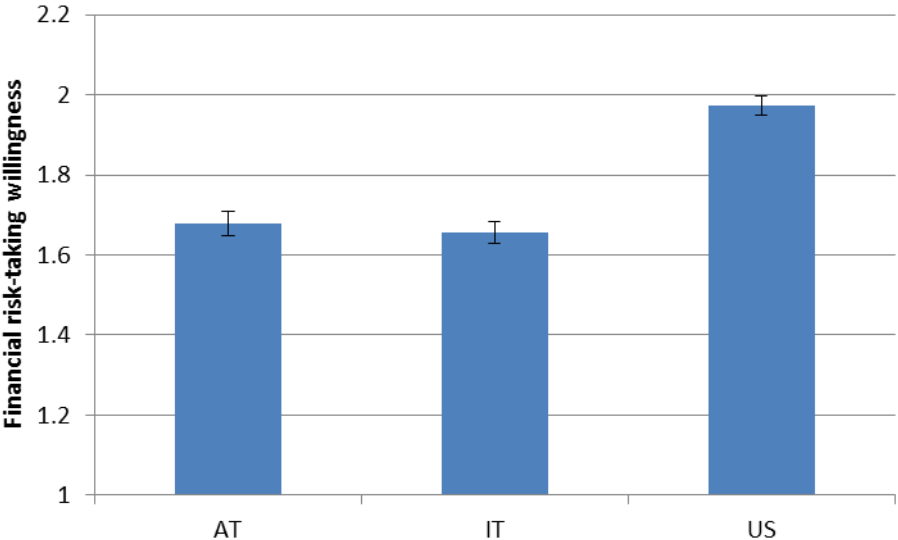


Figure 1: Financial risk-taking willingness per country (country means of risk categories 1 (low risk-taking willingness) to 4 (high risk-taking willingness); error bars denote standard error of the mean at a 95% confidence interval)

For a more nuanced picture, it seems useful to assess financial risk-taking willingness by looking at the number of choices for each risk-taking category in all three countries. Table 3 and Figure 2 show risk-taking willingness counts and percentages of the respondents selecting one of the four risk categories per country. Consistent with the mean levels of risk-taking in Figure 1, Figure 2 and Table 3 confirm that people in all three countries are more likely to be risk averse than risk seeking in their willingness to take financial risks.

Table 3 shows that for Austria and Italy, percentages decrease monotonically from risk category 1 to 4. In the US more people select risk 2 (41.47%) compared to risk 1 (33.15%), consistent with a more risk seeking nature of US Americans compared to Austrians and Italians. Comparing countries per category an interesting pattern can be observed. Austria and Italy score higher in category 1 (highly risk averse) than the US. For categories 2 to 4 the US scores higher compared to Austria and Italy, with the difference getting larger with greater levels of risk seeking which clearly suggests higher risk-taking willingness for US Americans compared to Europeans.

Table 3: Risk-Taking Willingness Counts per Country

Country	Risk 1		Risk 2		Risk 3		Risk 4		Total	N	%
	N	%	N	%	N	%	N	%			
Austria	1208	47.26	1015	39.71	280	10.95	53	2.07	2556	100	
Italy	1379	49.11	1039	37.00	363	12.93	27	0.96	2808	100	
USA	1498	33.15	1874	41.47	916	20.27	231	5.11	4519	100	

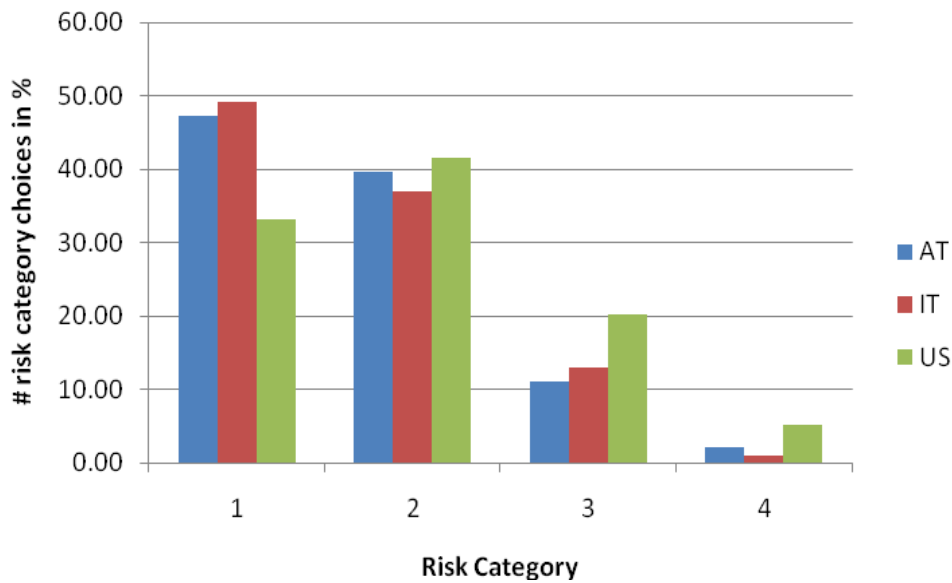


Figure 2: Risk-Taking Willingness per Country and Risk Category (y-axis denotes the number of times a specific risk category was chosen in per cent of all respondents per country)

Table 4 to 7 show summary statistics of the wealth and demographic variables clustered according to the risk-taking willingness variable (RISK) for each country. A difference in the means between the four risk groups gives a first indication that the independent variables influence risk-taking willingness within each country.

Taking Italy (Table 5) as an example, the average (highly) risk seeking individual (RISK=4) tends to have more children (NUMCH=0.63) and more earners in the household (NUMEARN = 1.52) than the average (highly) risk averse individual (RISK=1; NUMCH = 0.3; NUMEARN = 0.87). The average risk seeking individual tends to be younger (AGE = 49.74), is more likely to be male (SEX = 3.70, i.e. only 3.7% chance of female), and possesses a higher net wealth (WEALTH = 56,523.93\$) than the average risk averse individual (AGE = 59.98; SEX = 38.07, i.e. 38.07% chance of female; WEALTH = 29,582.95\$). We investigate

statistical significances of differences overall and per country by multiple linear regressions in the subsequent section.

Table 4: Financial Risk-Taking Willingness in Austria by Demographics and Wealth Variables

Risk		NUMCH	NUMEARN	AGE**	SEX**	WEALTH**
1	Mean	0.42	2.43	54.64	0.4056	21,713.70
	N	1,208	1,208	1,208	1,208	1,208
	Minimum	0	1	19	0	-349,025
	Maximum	6	3.50	91	1	1,256,200
	Std. Error of Mean	0.03	0.03	0.42	0.01	2,263.55
2	Mean	0.52	2.55	50.44	0.3143	29,948.33
	N	1,015	1,015	1,015	1,015	1,015
	Minimum	0	1	19	0	-372,300
	Maximum	5	3.50	85	1	1,914,200
	Std. Error of Mean	0.03	0.03	0.44	0.01	3,947.80
3	Mean	0.47	2.51	46.75	0.3107	44,590.65
	N	280	280	280	280	280
	Minimum	0	1	18	0	-365,200
	Maximum	4	3.50	84	1	1,117,620
	Std. Error of Mean	0.05	0.07	0.86	0.03	9,509.89
4	Mean	0.53	2.15	47.74	0.3774	48,810.81
	N	53	53	53	53	53
	Minimum	0	1	23	0	-119,000
	Maximum	3	3.50	78	1	514,200
	Std. Error of Mean	0.13	0.15	1.96	0.07	17,651.54
Total	Mean	0.47	2.48	51.97	0.3584	28,051.66
	N	2,556	2,556	2,556	2,556	2,556
	Minimum	0	1	18	0	-372,300
	Maximum	6	3.50	91	1	1,914,200
	Std. Error of Mean	0.02	0.02	0.29	0.01	2,199.24

Notes: classification variable: RISK (risk-taking willingness, on an ordinal scale, from 1 (low financial risk-taking willingness) to 4 (high financial risk-taking willingness), as defined by Table 2); independent variables: NUMCH (number of children under 18), NUMEARN (number of earners, 0 = no earners, 1 = one earner, 1.5 = at least one earner, 2 = two earners, 2.5 = at least two earners, 3 = three earners, 3.5 = at least three earners), AGE (age of household head), SEX (sex of household head, 0 = male (recoded from 1=male in original dataset), 1 = female (recoded from 2=female in original dataset); thus mean for SEX simultaneously constitutes percentage of women in the respective category), WEALTH (financial standing, calculated as TFA1 (total financial assets, sum of deposit accounts, bonds, stocks and mutual funds) - TD (total debt, sum of all available debts including home secured, vehicle loans, total instalment debt, educational loans, other loans from financial institutions, and informal debt)); ** - significant influence on risk at the 0.01 level based on multiple regression as shown in Table 8.

Table 5: Financial Risk-Taking Willingness in Italy by Demographics and Wealth Variables

Risk		NUMCH	NUMEARN**	AGE**	SEX**	WEALTH**
1	Mean	0.30	0.87	59.98	0.3807	29,582.95
	N	1,379	1,379	1,379	1,379	1,379
	Minimum	0	0	19	0	-192,430.25
	Maximum	5	4	94	1	2,289,033.47
	Std. Error of Mean	0.02	0.03	0.41	0.01	2,223.62
2	Mean	0.41	1.18	54.75	0.2849	46,850.04
	N	1,039	1,039	1,039	1,039	1,039
	Minimum	0	0	19	0	-190,000
	Maximum	4	5	94	1	2,150,229.04
	Std. Error of Mean	0.02	0.03	0.43	0.01	3,071.99
3	Mean	0.48	1.21	53.27	0.2590	62,868.19
	N	363	363	363	363	363
	Minimum	0	0	18	0	-253,000
	Maximum	5	5	88	1	2,460,817.22
	Std. Error of Mean	0.04	0.05	0.69	0.02	8,032.46
4	Mean	0.63	1.52	49.74	0.370	56,523.93
	N	27	27	27	27	27
	Minimum	0	0	35	0	-152,000
	Maximum	3	4	72	1	637,842.33
	Std. Error of Mean	0.17	0.15	1.97	0.04	29,913.81
Total	Mean	0.37	1.03	57.08	0.3262	40,533.97
	N	2,808	2,808	2,808	2,808	2,808
	Minimum	0	0	18	0	-253,000
	Maximum	5	5	94	1	2,460,817.22
	Std. Error of Mean	0.01	0.02	0.28	0.01	1,920.61

Notes: classification variable: RISK (risk-taking willingness, on an ordinal scale, from 1 (low financial risk-taking willingness) to 4 (high financial risk-taking willingness), as defined by Table 2); independent variables: NUMCH (number of children under 18), NUMEARN (number of economically active persons, persons receiving income, in household), AGE (age of household head), SEX (sex of household head, 0 = male (recoded from 1=male in original dataset), 1 = female (recoded from 2=female in original dataset); thus mean for SEX simultaneously constitutes percentage of women in the respective category), WEALTH (financial standing, calculated as TFA1 (total financial assets, sum of deposit accounts, bonds, stocks and mutual funds) - TD (total debt, sum of all available debts including home secured, vehicle loans, total instalment debt, educational loans, other loans from financial institutions, and informal debt)); ** - significant influence on risk at the 0.01 level based on multiple regression as shown in Table 8.

Table 6: Financial Risk-Taking Willingness in the USA by Demographics and Wealth Variables

Risk		NUMCH	NUMEARN**	AGE**	SEX**	WEALTH**
1	Mean	0.66	0.81	51.77	0.3672	439,495.82
	N	1,498	1,498	1,498	1,498	1,498
	Minimum	0	-1	18	0	-12,249,780
	Maximum	7	2	95	1	140,079,200
	Std. Error of Mean	0.03	0.02	0.46	0.01	147,674.82
2	Mean	0.65	1.13	51.14	0.1585	2,562,889.63
	N	1,874	1,874	1,874	1,874	1,874
	Minimum	0	-1	19	0	-78,381,800
	Maximum	6	2	92	1	561,700,000
	Std. Error of Mean	0.02	0.02	0.35	0.01	415,577.46
3	Mean	0.80	1.22	48.59	0.1114	2,808,011.94
	N	916	916	916	916	916
	Minimum	0	-1	19	0	-121,378,200
	Maximum	6	2	89	1	206,442,000
	Std. Error of Mean	0.04	0.02	0.44	0.01	484,012.60
4	Mean	0.81	1.15	49.34	0.1169	6,777,790.68
	N	231	231	231	231	231
	Minimum	0	-1	20	0	-43,070,000
	Maximum	4	2	83	1	183,882,350
	Std. Error of Mean	0.07	0.05	0.97	0.02	1,568,704.56
Total	Mean	0.69	1.04	50.74	0.2160	2,124,148.81
	N	4,519	4,519	4,519	4,519	4,519
	Minimum	0	-1	18	0	-121,378,200
	Maximum	7	2	95	1	561,700,000
	Std. Error of Mean	0.02	0.01	0.23	0.01	220,451.42

Notes: classification variable: RISK (risk-taking willingness, on an ordinal, from 1 (low financial risk-taking willingness) to 4 (high financial risk-taking willingness), as defined by Table 2); independent variables: NUMCH (number of children under 18), NUMEARN (number of economically active persons, persons receiving income, in household, 0 = No earners, 1= At least 1, 2 = At least 2, -1 = household head and spouse/partner report 0 earnings, but reported household income >> 0), AGE (age of household head), SEX (sex of household head, 0 = male (recoded from 1=male in original dataset), 1 = female (recoded from 2=female in original dataset); thus mean for SEX simultaneously constitutes percentage of women in the respective category), WEALTH (financial standing, calculated as TFA1 (total financial assets, sum of deposit accounts, bonds, stocks and mutual funds) - TD (total debt, sum of all available debts including home secured, vehicle loans, total instalment debt, educational loans, other loans from financial institutions, and informal debt)); ** - significant influence on risk at the 0.01 level based on multiple regression as shown in Table 8.

Effects of Social and State Cushioning

Table 7 shows the results of the stepwise multiple linear regression analysis. As suggested by the descriptive data (Figures 1 and 2, Table 3), Step 1 of the regression confirms the statistical significance of the difference in willingness to take financial risk between the three countries.

In line with Weber and Hsee (1998) we use our social cushioning variables, i.e. number of children under 18 (NUMCH) and number of earners (NUMEARN) in a household (Step 1,

Table 7) in order to proxy individual social support networks (**H1**). We find both predictors to be highly significant. There is a positive relationship between both factors and RISK respectively (NUMCH $p = 0.01$; NUMEARN $p = 0.00$), i.e. the more children and earners in a household the higher is the financial risk-taking willingness; which speaks in favour of social cushioning.

In contrast to Hsee and Weber's Study 2 (1999), culture remains significant as the social cushion predictors are added to the equation. In their study that contrasted American with Chinese respondents, nationality became insignificant when controlling for the financial help factor (measured in terms of number of people an individual could approach when in need of financial help or material support, Hsee and Weber, study 2, 1999). One explanation for the difference in results, aside from the fact that different countries were compared, is the fact that our proxies for immediate financial help are different and only constitute a subset of factors used in Hsee and Weber (1999). However, it is also possible that cultural factors in the three countries of this study may influence risk-taking, above and beyond differences in social cushioning.

One such cultural difference may be the extent of state cushioning, i.e. effects on risk-taking arising from government organized support differences (**H2**). Indeed, risk-taking willingness differs across the three countries under investigation; however, the relationship is in the opposite direction to that predicted by the state cushion hypothesis. People in countries with less state cushioning seem to be more risk seeking.⁵

We find a significant positive relationship between WELFREG and RISK ($p = 0.00$, Beta = 0.17, Table 7, Step 2), i.e. the lower state cushioning (WELFREG values from 1 = Austria (highest state cushioning) to 3 = USA (lowest state cushioning)) the higher is financial risk-taking willingness. For example, individuals in the US American culture are found to be significantly more risk seeking in financial risk-taking willingness compared to Austrians and Italians, despite less risk cushioning by a state support net. Thus, the results do not support H2.

There might be more complex factors at play shaping state cushioning influences on risk preferences than those in our simple model. First of all, the results appear stable since they are not affected by the social support variables (NUMCH, NUMEARN, Step 2, Table 7). Maybe only the more immediate social network translates into different risk perceptions and risk preferences and not the more distant state support network. However, the case of the USA

⁵ A country-only model is presented in the control analysis in Table 9 Step 1.

presents itself as more complex. We have discussed that there is a variety of factors that determine a culture. The foundation of a social state and the establishment of social networks is only one part. The US American culture, as a younger Western culture determined by frontier spirits (Hofstede 1980, 1991), scores lower in uncertainty avoidance than Italy and Austria. Uncertainty avoidance has been associated with risk perception. Keil et al. (2000) find a stronger inverse relationship between risk propensity/risk-taking willingness and risk perception in low as compared to high uncertainty avoidance cultures. Thus, individuals in the USA may generally perceive risky situations less threatening resulting in higher risk-taking willingness. Thus, uncertainty avoidance as mediator in the risk propensity – risk perception relationship finds more support in our cultural setting than state cushioning in terms of providing an explanation for differences in risk-taking willingness.

Our data are only correlational, preventing us from any conclusions on causality. It seems unlikely, however, that a lower state cushioning would result in more risk-seeking people. It might be that US Americans are more risk-seeking in nature, due to the mentioned frontier spirit for example, which in the long run lead to a government which provides less cushioning since its people are less risk averse and rather dislike government interference. After all, humans create their own environment.

To further test our results on the effects of social cushioning, we added several control variables, in particular (SEX), age (AGE) and total net wealth (WEALTH) in Step 2 of our regression (Table 7). These factors have been shown to influence risk preference in Friend and Blume (1975), Croson and Gneezy (2009) or Dohmen et al. (2011). Consistent with those results, all control variables are significant at the 0.01 level. Pearson correlations indicate that age and risk-taking are inversely correlated. Thus, the lower the age the higher is the financial risk-taking willingness. Sex and risk as well are inversely correlated, with females less likely to take financial risk compared to males (SEX variable 0 = male and 1 = female). Wealth and risk exhibit a positive correlation, with greater total net assets increasing financial risk-taking willingness.

Interestingly, in Step 2 of the regression analysis, the number of children in a household is no longer significant, whereas culture and the number of earners are still significant. Thus, when controlling for age, sex and wealth, some direct social cushion characteristics partly become less important. However, this might be due to multicollinearity⁶ between the variables as

⁶ In order to test for multicollinearity, we use the variance inflation factor (VIF) as well as Pearson's correlation coefficient. VIF values higher than 10 are generally regarded as problematic (Chatterjee and Hadi 2006).

wealth and age might be interrelated with the number of children. Furthermore, there are limitations concerning the use of the number of children variable as a proxy for social cushioning, discussed in the limitations section.

Table 7: Stepwise multiple linear regression on financial risk-taking willingness

		B	Std. Error	Beta	t	Sig.	VIF
Step 1	Constant	1.13	0.03		34.69	0.00	
	WELFREG	0.23	0.01	0.24	20.46	0.00**	1.37
	NUMCH	0.02	0.01	0.03	2.54	0.01**	1.09
	NUMEARN	0.11	0.01	0.16	13.39	0.00**	1.40
Step 2	Constant	2.04	0.06		32.23	0.00	
	WELFREG	0.17	0.01	0.17	14.26	0.00**	1.51
	NUMCH	-0.01	0.01	-0.02	-1.43	0.15	1.25
	NUMEARN	0.06	0.01	0.08	6.28	0.00**	1.64
	AGE	-0.01	0.00	-0.13	-11.44	0.00**	1.33
	SEX	-0.25	0.02	-0.14	-13.51	0.00**	1.12
	WEALTH	0.00	0.00	0.08	7.91	0.00**	1.02

Notes: dependent variable: RISK (risk-taking willingness, on an ordinal scale, from 1 (low financial risk-taking willingness) to 4 (high financial risk-taking willingness), as defined by Table 2); variable entered on step 1: WELFREG (welfare regime; on an ordinal scale; 1 = Austria, 2 = Italy, 3 = USA), NUMCH (number of children under 18), NUMEARN (number of economically active persons in household); variables entered on step 2: AGE (age of household head), SEX (sex of household head), WEALTH (financial standing (wealth) calculated as TFA1 (total financial assets) - TD (total debt)); N = 9883; note: WEALTH's B appears as 0.00 since average and range of wealth variable values is extremely large compared to other variables; thus, a unit change in the wealth variable is too small to be recognized as a B-value larger than zero within SPSS. * - significant at the 0.05 level, ** - significant at the 0.01 level.

Control analysis

Based on Epping-Andersen 1990, we treated the degree of state cushioning in the three countries under investigation as a continuous variable by coding their specific welfare regimes as follows: (1=Austria (best welfare system), 2=Italy (medium welfare system), 3=USA (weakest welfare system)). In a control analysis, we treated the three countries as being independent (categorical variables) and not in a specific relationship between one another (ordinal variables), by dummy coding them. We use USA as a baseline group and compare Austria and Italy against it, performing the same several step multiple regression. Results as shown in Table 9 confirm our previous results (Table 8), i.e., we find a significant

However, computing the VIF values per component does not indicate problems in terms of multicollinearity as all components possess a VIF value lower than 1.64. All Pearson's correlations coefficients for the multiple regression and the country specific patterns (which will be discussed in the next section) lie below 0.6. Furthermore, all predictors are exogenous variables (demographics) which are not influenced by a respondent's personal judgement but are exogenously given. Thus, the present mild correlations between predictors do not constitute a problem.

influence of age, sex, wealth and number of earners. Number of children becomes insignificant in Step3.

Table 9: Stepwise multiple linear regression on financial risk-taking willingness using dummy coding

Step		B	Std. Error	Beta	t	Sig.
1	Constant	1.973	0.012		166.253	0
	USvsAT	-0.295	0.02	-0.159	-14.94	0**
	USvsIT	-0.316	0.019	-0.175	-16.482	0**
2	Constant	1.857	0.015		122.431	0
	USvsAT	-0.431	0.024	-0.232	-18.244	0**
	USvsIT	-0.308	0.019	-0.171	-16.028	0**
	NUMCH	0.022	0.009	0.025	2.488	0.013*
	NUMEARN	0.098	0.009	0.137	11.208	0**
3	Constant	2.564	0.047		54.791	0
	USvsAT	-0.303	0.024	-0.164	-12.475	0**
	USvsIT	-0.238	0.019	-0.132	-12.315	0**
	NUMCH	-0.013	0.009	-0.015	-1.384	0.166
	NUMEARN	0.043	0.009	0.06	4.677	0**
	AGE	-0.007	0.001	-0.124	-11.157	0**
	SEX	-0.253	0.018	-0.14	-13.746	0**
	WEALTH	5.97E-09	0	0.074	7.596	0**

Notes: * - significant at the 0.05 level, ** - significant at the 0.01 level.

Relationship of Social and State Cushioning: Country-specific Patterns

The above regressions allowed us to observe factors at play across all three countries. To find empirical evidence for an interactive influence of social and state cushioning on willingness to take financial risk (**H3**), however, we analyse social cushioning within each of the three different welfare regimes. Conducting the regression analysis, obviously without the WELFREG variable which is a constant within each country, on the samples of each single country, unique country-specific patterns could be observed, as shown in Table 8.

The significance levels of the effects of the predictor variables on risk-taking willingness in each country are qualitatively similar to the across-countries regression. For all countries, the control variables age, sex, and wealth significantly influence risk-taking willingness in the same direction described above. Likewise, for all three countries predictor NUMCH becomes insignificant when adding the control variables.

However, there is one notable exception. For Austria the number of earners (NUMEARN) is not significant, i.e., the number of earners in the household does not have a significant influence on risk-taking willingness, controlling for age, sex and wealth. In other words, there seems to be no social cushioning present in Austria, at least with the scope of the cushion as

approximated by our predictors. This might be due to the fact that Austria ranks very high in its state cushioning and thus, potentially eliminating the need for social cushioning; while the USA and Italy, both countries with lower state cushioning, show a significant influence of social cushioning (NUMEARN). This indicates an interaction effect of social and state cushioning such that higher state cushioning renders effects of social cushioning on financial risk-taking willingness unimportant, which could be an indicator that social cushioning can be substituted for state cushioning and vice versa.

Table 8: Multiple linear regression per country

		B	Std. Error	Beta	t	Sig.	VIF
AT	Constant	2.492	0.091		27.251	0	
	NUMCH	-0.029	0.019	-0.034	-1.556	0.12	1.319
	NUMEARN	-0.018	0.015	-0.026	-1.189	0.235	1.324
	AGE	-0.011	0.001	-0.219	-10.284	0**	1.222
	SEX	-0.142	0.033	-0.091	-4.266	0**	1.213
	WEALTH	6.44E-07	0	0.095	4.844	0**	1.044
IT	Constant	2.235	0.096		23.278	0	
	NUMCH	0.009	0.021	0.009	0.414	0.679	1.329
	NUMEARN	0.048	0.018	0.063	2.735	0.006**	1.57
	AGE	-0.008	0.001	-0.158	-6.398	0**	1.83
	SEX	-0.164	0.029	-0.104	-5.672	0**	1.015
	WEALTH	8.94E-07	0	0.124	6.731	0**	1.013
US	Constant	2.466	0.075		32.683	0	
	NUMCH	-0.005	0.012	-0.007	-0.435	0.664	1.186
	NUMEARN	0.11	0.017	0.106	6.545	0**	1.271
	AGE	-0.003	0.001	-0.047	-2.865	0.004**	1.302
	SEX	-0.399	0.032	-0.191	-12.505	0**	1.136
	WEALTH	5.41E-09	0	0.093	6.426	0**	1.026

Notes: * - significant at the 0.05 level, ** - significant at the 0.01 level.

Discussion

Our analysis of panel data on willingness to take financial risks in three countries confirm well established results that age, sex, and wealth influence risk-taking willingness. Wealth influences risk-taking willingness positively across all three countries, in line with Friend and Blume (1975). Confirming earlier findings (Croson and Gneezy 2009; Dohmen et al. 2011), we find relationships that older individuals are more risk averse than younger individuals, and females are more risk averse than males. We find that these relationships hold for countries possessing different welfare regimes (USA, Austria and Italy). This suggests that the influence of these basic biological and demographic factors on willingness to take financial

risk is fairly general, transcending country and possibly organizational and cultural characteristics.

We partly support the social cushion hypothesis across countries. Controlling for age, gender and wealth, the number of earners in a household is a predictor for risk-taking behavior. The more earners there are in a household, the more willing the household head is to take financial risk. However, when analysed at the individual country level, support for the hypothesis is weaker in Austria.

The state cushioning hypothesis on its own cannot be evidenced as hypothesized. Americans seem to possess a greater willingness to take financial risks than citizens of the European states of Italy and Austria, despite a weaker state support net. One possible explanation may be that the higher risk-seeking behavior of US Americans is anchored in the country's history. As described above, the 'younger' American culture determined by frontier spirits (Hofstede 1980, 1991) scores lower in uncertainty avoidance. Americans seem to be less risk averse by nature compared to citizens in 'older' European cultures. However, within the generally less risk averse American society, cushioning still plays a role, as evidenced by our finding that the number of earners, i.e. social cushioning, is significantly related to risk-taking willingness. We find evidence for an interaction effect of social and state cushioning such that higher state cushioning renders effects of social cushioning on financial risk-taking willingness unimportant (as discussed for Austria) and vice versa (as discussed for Italy and the USA).

In sum, our results suggest that state cushioning influences the importance of social cushioning. In contrast to Hsee and Weber (1998) for whom nationality became insignificant when controlling for the number of people an individual could turn to for help, we still find a significant nationality effect, even when controlling for the number of earners. However, it needs to be noted that our study only partly measures social cushioning, with the number of earners in a household not being the only but perhaps the most important social cushion determinant. Thus, the difference in results might very well be due to this fact.

Our results also suggest that the welfare regime of a given state may influence the effect of social cushioning on risk-taking. Austria, the country with the most elaborate state welfare net is the only country for which the number of earners is not significant, i.e. social cushioning cannot be evidenced here.

In an increasingly interconnected and diverse global society in which risk preferences and human behavior and decision making are shaped by social and cultural norms as well as state

policies, our findings are important to consider. In intercultural contexts, it is of great importance to understand risk preferences and how human behavior and decision making are shaped by them. In the business world managers of international teams or CEOs of multinational corporations need to understand and take into account differences in risk attitudes among employees of various cultures and backgrounds because behavior differs accordingly. Knowledge on the influence of social and state environments on risk-taking may help managers to better consider employee preferences or to build better risk controls. Given differences, risk controls in businesses or different parts of multinationals should be adaptive. At the same time, independent of characteristics of states that vary in social, political and welfare influences, basic biological and demographic factors (age, sex and wealth) seem to persist in influencing risk-taking willingness. This finding may be also important for management, as it can be expected that independent of characteristics of organizations, age, sex and wealth are likely to be influential in determining individuals' risk behaviour.

Limitations and Future Research Directions

Our study had several limitations. In using household surveys, only the household heads are interviewed, involving more male than female respondents. In addition, researchers do not have direct and full control over the questions asked.

Furthermore, the validity of the use of number of children under 18 in a household (NUMCH) as a proxy for social cushioning is questionable. NUMCH can be seen as a valid proxy for social cushioning, as children constitute a 'long-term' support factor. Households with more children should have more access to financial support through their children once they are grown up compared to households with less or no children. Thus, we expect that these long-term considerations also influence current risk-taking willingness. The validity of this reasoning seems to be supported by the significance of the predictor NUMCH for all countries in Step 1 of the regression analysis. However, in Step 2, when controlling for age, gender and wealth, NUMCH becomes insignificant for all three countries. Since this is not due to multicollinearity between the predictor variables, it may be that the number of children and their potential support in the future does not influence risk considerations in the present as much as we expected.

A further limitation pertaining to state cushioning is country classification. We used the scale provided by Epping-Andersen (1990) to arrange the three countries on a 'welfare continuum'.

However, different scales might put the same countries in a different order (e.g Arts and Gelissen 2002). Of course such variations in classification influences the degree to which state cushioning can be evidenced by statistical analysis and might as well play a partial role why we were unable to evidence a clear state cushioning effect (apart from the discussed limitations pertaining to the US culture and the closeness of Austria and Italy).

Our results also raise questions about the causal direction of observed relationships. The cushion-risk-taking relationship may also work the other way round since people create their environments and influence legislation in the long run, i.e. in this context their government and structures. The less risk averse US Americans may have created a government with less financial support structures since it is less critical to them compared to other countries and because they may dislike too much government involvement and interference in a person's life based on their frontier spirit (Rehm et al. 2012). A last concern would be the existence of a third variable responsible for our observed interaction between state and social cushioning. While we describe a direct interaction effect between state and social cushioning, it has to be kept in mind that this relationship is suggestive. Further studies would have to investigate the potential existence of a third influencing variable.

Based on the limitations above pertaining to our proxies for social cushioning, future research may introduce additional proxies in order to gather more clear-cut evidence for social cushioning. Our study only approximated social cushioning with one predictor (number of earners; since number of children became insignificant). Additional predictors might include information on extended family networks, apart from the mere number of earners in a household; family network closeness, to assess the degree of availability of financial help since socially close and strongly befriended networks potentially offer more help than loose and more distant networks; financial standing of social network, to gauge the amount of financial support that may be available for the person in need which might also influence the degree of risk-taking willingness; and information on how many people one could turn to for financial help, as has already been suggested as a good indicator for social cushioning by Hsee and Weber (1998).

In order to better evidence state cushioning, additional variables to be included in future studies might be availability of government aid, including the degree to which aid is available for different citizens in different circumstances; ease of obtaining government aid, assessing organizational barriers for obtaining government aid; and degree of government aid, offering

an estimate of how much financial help could be available. All these factors might additionally influence risk-taking willingness.

Furthermore, future research should investigate the differences in state cushioning as they depend on the use of differing country classification scales. The aim would be to cross-validate different scales and establish a valid framework for country classification according to welfare regime. Moreover, to detect a state cushioning effect it might be important to use countries which differ significantly in risk-taking willingness (unlike Austria and Italy). Furthermore, an addition of more countries to the study may be beneficial in order to refine predictions on cross-cultural relationships between social and state cushioning. From a management perspective, it may be interesting to observe how different characteristics of organizations may influence risk-taking willingness.

Further studies might moreover combine the use of household data with laboratory experiments. Household surveys provide large representative data sets, lab experiments on the other hand allow to include specific questions under the experimenter's control and to create a more appropriate decision context for gauging financial risk-taking willingness.

Conclusion

'Catch me if I fall' - Risk considerations shape human behavior in many contexts and across cultures. How risky do I judge a specific situation to be? What is at stake for me? Who or what would help me if something goes wrong? It is understood that individuals who have or have access to financial support in case something goes wrong may choose riskier options when facing a decision or may simply perceive a given situation as less risky (Hsee and Weber 1998). Such financial support may stem from a person's social environment, such as immediate or extended family members, the state, in the form of government aid and welfare, or a person's own financial standing, such as the availability of personal funds. This study investigated the influence of these forms of financial support, i.e. social cushioning, state cushioning, and wealth, on financial risk-taking willingness across national boundaries.

Consequently, the present study contributes to the unpacking of different factors that shape financial risk-taking willingness across cultures. It further allows to better judge the interplay between a person's social environment, the state the person lives in and his or her own economic standing, and how all these factors influence risk preferences. As such our study contributes to our understanding of human decision making and behavior across cultures,

helping for example to better predict risk preferences of negotiating parties within different cultural backgrounds. The study might further give indications which tools to apply in order to moderate a person's risk-taking willingness. In general, understanding cultural differences and similarities could help to improve cross-cultural decision making processes and risk assessment.

Future research, preferably combining household data and experimental techniques, might be able to further disentangle the effects and complement each other providing a better and more holistic picture of human financial risk-taking behavior across cultures.

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