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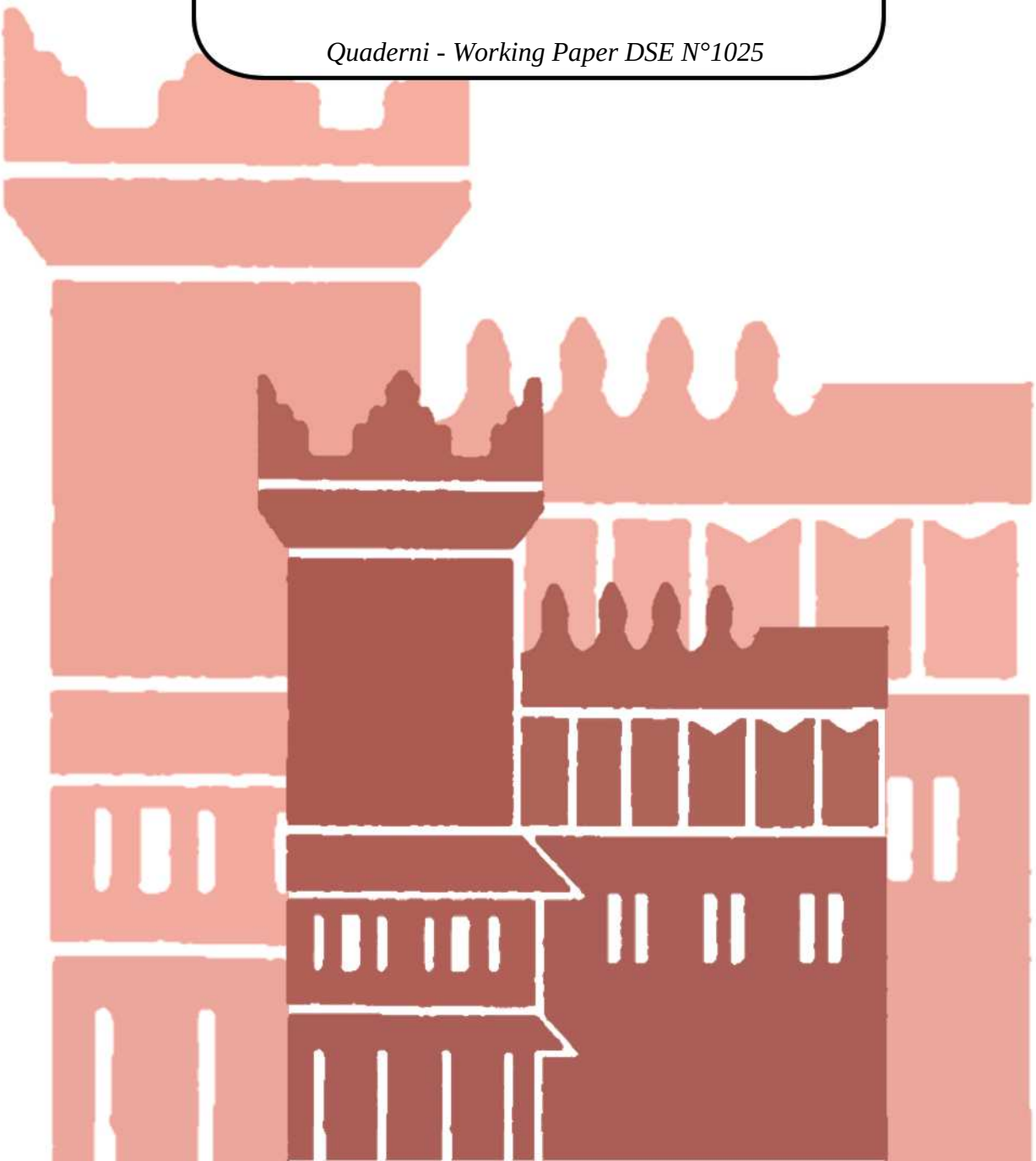

Time-varying individual risk attitudes over the Great Recession: A comparison of Germany and Ukraine*

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Abstract

We use the panel data of the German Socio-Economic Panel (SOEP) and of the Ukrainian Longitudinal Monitoring Survey (ULMS) to investigate whether risk attitudes have primary (exogenous) determinants that are valid in different stages of economic development and in a different structural context, comparing a mature capitalist economy and a transition economy. We then analyze the stability of the risk measures over time. Between 2007 and 2012 we have the Great Recession, which had a mild impact in the German labor market while it had a more profound impact on the Ukrainian labor market. This enables us to investigate whether and how the crisis impacted on the risk attitudes in the two countries. By focusing on self-employment we also investigate whether the reduced willingness to take risks as a consequence of the Great Recession affects labor market dynamics and outcomes.

JEL Classification: J64, J65, P50.

Keywords: Risk attitudes, Great Recession, time variation, labor market outcomes, Germany, Ukraine

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1. Introduction

Most economic models treat preferences as given and time-invariant. In an early influential paper, Stigler and Becker (1977) are adamant that persons do not change their preferences (for example their tastes) and that change in behavior is linked entirely to changes in their opportunity sets. In recent years, a small but growing empirical literature, which often complements survey data with experimental data, investigates whether economic actors' preferences are indeed time-invariant or whether idiosyncratic life events (e.g., health shocks, death of relatives and friends, financial losses or job loss) and general shocks (e.g., natural catastrophes, violent conflict, or large macroeconomic shocks) experienced by individuals trigger persistent changes in these preferences. The main focus of this literature is risk attitudes.

Of particular interest for our study are those papers that deal with the link between risk attitudes and economic shocks or the economic environment. Our overview of such papers is not meant to be exhaustive; we only consider papers that feed well into our own work as far as the posed research question is concerned. Guiso, Sapienza and Zingales (2014) survey the investing clients of an Italian bank before and after the 2008 financial crisis. They find that the financial crisis increases average risk aversion of these investors. It is very striking that even those investors who did not experience any losses during the crisis are more risk averse than before it occurred. Hence, the general experience of the financial crisis drives changes in risk attitudes and not individual outcomes in connection with it. With a complementary lab experiment the authors try to establish that it is fear brought on by the crisis that lowers the willingness to take risks. The study by Cohn et al. (2015) is very much in the same spirit. In a lab experiment the authors find evidence for countercyclical risk aversion, having financial

professionals as participants in the experiment. Drawing on the priming method from psychology they prime participants of the experiment to be either in a boom or in a bust condition. According to the authors the priming method ensures that the psychological impact of booms and busts on risk preferences is isolated from confounding factors that are potentially many. Their main result says that financial professionals primed in the bust condition have a lower willingness to take financial risks than their counterparts who have been primed in the boom condition. Like Guiso et al. (2014) they also establish that it is fear that triggers more risk aversion. The study by Malmendier and Nagel (2011) takes a more long-term view of the impact of macroeconomic shocks on risk attitudes in the financial sphere. Using data from the U.S. Survey of Consumer Finances between 1960 and 2007 the authors show that individuals who in their lives have experienced low returns on their stock and bond investments are prone to exhibit more risk aversion when it comes to future investment decisions and are more pessimistic about future returns than those individuals who thus far had high returns. They also show that more recent experiences affect risk taking behavior and expectations more than experiences lying in a more distant past.

The last important study that we briefly discuss is by Sahm (2012). The author uses hypothetical gamble responses across the 1992 to 2002 waves of the Health and Retirement Study[1] to investigate whether risk tolerance is time-variant. Modelling risk tolerance with a time-varying and a time constant component and using the panel to separate within-person and between-person variation in risk attitudes, Sahm finds that nearly three quarters of the systematic variation is driven by persistent differences between individuals. The rest of the variation, which Sahm considers the time-variant part, is driven by age and macroeconomic conditions: older individuals are less willing to tolerate risk and an improvement in macroeconomic conditions is linked to increased risk tolerance. It is also striking that changes in income and wealth and major life events like job displacement and the diagnosis of a

[1] The Health and Retirement Study is a large biennial panel survey of U.S. residents over the age of 50 and their spouses.

serious health condition hardly affect risk tolerance. An additional important result is that the unexplained transitory variation is larger than the systematic variation by an order of magnitude.

We use data from the German Socio-Economic Panel (SOEP) and the Ukrainian Longitudinal Monitoring Survey (ULMS). These large and nationally representative household data sets ask identical questions soliciting risk attitudes of respondents across the two countries over a time span that includes the Great Recession. Our study thus contributes to the literature in at least three ways. It is to our knowledge the first paper that compares risk attitudes and their determination in representative samples of two countries that find themselves at very different stages of the development process.[2] While Germany is a mature capitalist economy we can characterize Ukraine as a "laggard" transition economy. As a first task we study whether primary determinants of risk attitudes are the same across the two countries and whether the link between these determinants and risk attitudes is stable over time. Second, we investigate how a large macroeconomic shock impacts on individual risk attitudes in the two countries, by analyzing data on risk attitudes before and after the Great Recession. In particular, since Ukraine had a more severe recession than Germany and a larger and more persistent increase in unemployment after the financial crisis we can see whether these differences translate into more systematic variation over time in the Ukrainian case. Third, we examine data on the entire working age populations, in contrast to those cited papers that discuss the impact of economic shocks on risk attitudes of particular sub-groups of the labor force.

We find that primary determinants are similar across the two countries, and that rank-order stability of risk attitudes is rather high. At the same time we observe transitory changes in stated risk attitudes, but only a tiny fraction of this variation over time is explained by idiosyncratic life events or changes in socioeconomic conditions. The bulk of the variation is due to measurement error, which is

[2] Vieider et al. (2015) compare data on 2939 students who participated in experiments in 30 countries.

sizable and larger in Ukraine than in Germany. Importantly, we observe shifts in the distribution of risk attitudes that are related to macroeconomic conditions. In particular, we observe that people's willingness to take risks falls during the Great Recession. We discuss a potential chain of causation that, triggered by the reduced willingness to take risks, affects labor market dynamics and outcomes. For example, since persons who are more willing to take risks are more likely to become self-employed or start their own business (see, e.g., Caliendo et al., 2014) or are more mobile (see, e.g., Jaeger et al., 2010) a general increase in risk aversion might lower take-up rates of self-employment, geographic mobility, and job mobility. Hence, the negative effects of the Great Recession on the economy might be prolonged via the channel of risk attitudes. In this paper, we demonstrate this chain of causation by concentrating on self-employment.

While our study predominantly contributes to basic research on the link between risk attitudes and economic shocks, the presented results also have relevant implications for the medium- to long-term modernization and development prospects of the Ukrainian economy. Our results clearly show that Ukrainians are on average far more risk averse than Germans who in turn also have a low average disposition to take risks when compared with the average U.S. citizen for example (Fehr et al., 2006; Falk et al., 2015). The literature finds willingness to take risks to be positively associated with workers' mobility across sectors, occupations and jobs, as well as workers' geographic mobility.[3] Since mobility across these dimensions is an important ingredient in the medium- and long-term development towards a fully-fledged market economy (Haltiwanger, Lehmann and Terrell, 1993), the very pronounced reluctance of Ukrainians to take risks will not completely impede but it will certainly slow down the post-Soviet modernization and development process of the Ukrainian economy. Our study also shows that the Great Recession has even further lowered the average willingness to take risks among

[3] We discuss this literature in section 5 of the paper.

Ukrainian workers independent of their individual labor market experience, thus making this modernization process even more arduous.

The rest of the paper has the following structure. The next section discusses the SOEP and ULMS data and the measures of risk attitudes that we employ. Section 3 provides a descriptive analysis of risk attitudes and their determinants in Germany and Ukraine and investigates how stable the determination process is across specific domains and over time. This is followed in section 4 by evidence on the time-variance of risk attitudes and on the factors driving the change in individual risk attitudes. Section 5 then discusses how reduced willingness to take risks influences labor market outcomes and self-employment in particular. A final section gives some conclusions.

2. Data and Risk Measures

In the paper we use data from the German Socio-Economic Panel (SOEP) and the Ukrainian Longitudinal Monitoring Survey (ULMS), which are both household surveys representative of the adult populations living in the respective country.[4] The SOEP is an annual panel data set and was started in 1984 covering West Germany and extended to East Germany in 1990. A detailed general description of the structure of the SOEP can be found in Schupp and Wagner (2002) and Wagner et al. (2007).[5] The ULMS is also a panel data set, which has arguably the most comprehensive questionnaire on labor market issues of any transition economy. Thus far four waves have been collected (in 2003, 2004, 2007 and 2012). The structure of the panel and the contents of its household and individual questionnaires

[4] Specifically, we use the soep.v30 data (doi:10.5684/soep.v30).
[5] See http://www.diw.de/en/soep for detailed information about the SOEP and http://www.diw.de/en/diw_01.c.504352.en/soep_v30.html for specific information about the data set soep.v30 that we use for analysis.

are discussed in Lehmann, Muravyev and Zimmermann (2012) in a detailed fashion.[6] To make the two surveys as comparable as possible we restrict the surveyed individuals in both cases to persons between 17 and 72 years of age.

In both data sets we can draw on identical modules regarding risk attitudes of the adult populations. In 2004 and 2009 a module on risk attitudes was introduced into the SOEP, while the same module was added to the ULMS in 2007 and 2012. The module asks respondents about their willingness to take risks in general and in specific life domains (car driving, financial matters, sports and leisure, career and health). Regarding risk taking in general, the question asks: "How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? Please tick a box on the scale, where the value 0 means: 'not at all willing to take risks' and the value 10 means: 'very willing to take risks'. You can use the values in between to make your estimate." The same scale was used for the domain-specific risk questions, which did not ask about respondents' willingness to take risks in general, but specified particular contexts: car driving, financial matters, sports and leisure, career and health. When we compare changes in domain-specific willingness to take risks in Germany and Ukraine, we hence consider five-year intervals in both countries, i.e. 2004-2009 in Germany and 2007-2012 in Ukraine. Clearly, the starting dates of these intervals differ. Fortunately, the general risk question was included in the SOEP in 2006, 2008 and all subsequent years. For the German case, we, therefore, also look at changes in answers to the general risk question between 2006 and 2011 in order to cover roughly the same period that we have when we analyze these changes in Ukraine (the years 2007 and 2012).[7]

[6] We should mention that the oversight of the entire ULMS project from the development of the survey instruments to the quality control of the collected and processed data of the four waves was in the hands of one of us (Lehmann).

[7] We should stress that the last Ukrainian survey was done before Yanukovich was overthrown and the conflict between Russia and Ukraine erupted.

Whether the answers to survey questions can be sensibly interpreted in terms of actual risk-taking behavior is a concern that has been addressed by Dohmen et al. (2011). The authors employ an experimental set-up to validate the answers to the survey questions in a representative sample of 450 individuals, who are first asked the above cited general risk question and then make choices in a real-stakes lottery experiment. The responses to the general risk question predict actual risk taking in the experimental lottery. The authors thus express confidence that the responses given in the large SOEP survey are a validated survey measure of risk taking, which predominantly reflects genuine risk attitudes and not heterogeneity in how individuals perceive the states of the world. Even though the responses of the Ukrainian subjects have not been directly validated in an analogous experiment, we are confident that the self-assessed survey measures of risk taking are also a valid reflection of the underlying risk attitudes of Ukrainian respondents.

3. Descriptive evidence in comparative perspective

3.1 Individual risk measures

We start off with a comparison of the distribution of the answers to the general risk question, taking responses from the years when the risk module was introduced for the first time in the two surveys, i.e. 2004 in Germany and 2007 in Ukraine (Figure 1). In the German case the mode is at five, with slightly more than a fifth of respondents saying that they are neither very cautious nor willing to take too many risks. The Ukrainian distribution is instead bimodal with a share of 20% of respondents saying that they are not willing to take any risk, while around 16% give a value of five. Inspection of Figure 1 also shows that in the Ukrainian distribution we have much more mass to the left of the value five than in the German distribution, where the mass is more symmetrically distributed around the value five. Consequently, on average the Ukrainian respondents are much less willing to take risks than their

German counterparts. It is, however, also noteworthy that the share of those very willing to take risks is about three times larger in Ukraine than in Germany (3% versus 1%).

The comparison of domain specific risk attitudes across the two countries leads to somewhat different patterns. When it comes to risk attitudes in career matters (the first panel of Figure A1 in the appendix) the distribution of German respondents shows the mode at the value zero with roughly 20%, while in the Ukrainian distribution the mode at value zero is more pronounced with roughly 27%. Inspection of this panel allows us to state that the willingness to take risks in career matters is lower among Ukrainians than among Germans. This is even more so when it comes to the domain of car driving, as the second panel of Figure A1 attests. Of particular interest is the third panel, which documents risk attitudes in financial matters. In both countries, a complete unwillingness to take any risk dominates the distributions, but what is striking and somewhat surprising is the larger share of Ukrainian respondents who are willing to take substantial risks when it comes to financial decisions. In health matters (panel four), on the other hand, Ukrainian individuals are much more reluctant to take any risk: a third of respondents indicate the value zero and the distribution is much more skewed to the left than in the German case, where only a fifth of respondents are completely unwilling to take any risk and where the shares are more equally distributed between values one and five. The last panel of Figure A1 deals with risk attitudes in the sphere of sport and leisure, where Ukrainians again are on average substantially more risk averse than Germans.

In summary, when it comes to risk taking in general, Ukrainian individuals are far more risk averse on average than respondents in Germany. However, in both countries respondents show less willingness to take risks in specific domains than in a general context. It is also very striking that on average Ukrainian respondents are more risk-loving than their German counterparts when it comes to financial decisions while in all other domains we observe the reverse.

3.2 The determinants of individual risk measures

The main exogenous factors determining individual risk attitudes are arguably gender, age, parents' education and height as was demonstrated by Dohmen et al. (2011) with the SOEP data of the 2004 wave. In this paper we present results that confirm these factors as simultaneous important determinants of risk attitudes. Our main purpose here consists in demonstrating how equally important these factors are across the two countries and how stable these determinants are over time.

Before turning to these results we take a brief comparative look at how age, gender differences and differences in parents' education impact on the distributions of the general risk measure. The distributions of risk attitudes by age and gender in the two countries are shown in Figure 2. Inspection of the four panels of the figure enables us to draw several conclusions. First, we find a positive monotonic relationship between age and risk aversion for men and women in both countries; as we move along the age axis the willingness to take risk declines markedly. Second, women are more risk averse than men, an observation widely confirmed in the literature. Third, Ukrainian women have a higher proclivity to avoid risk than their German counterparts. Inspection of Figure 3 enables us to compare the distributions of the general risk measure of German respondents with parents who have high or low education. A parent is classified as having high education if s/he has at least "Abitur" or "Fachabitur". Respondents whose fathers have high education are somewhat more willing to take risks than respondents whose fathers have low education. We get very similar patterns when we compare respondents' measures interacted with mother's education, although the changes are somewhat more pronounced as we compare respondents who have mothers with low education to respondents with mothers of high education. The picture in Ukraine is similar to that of Germany as Figure 4 shows. Note that in Ukraine we classify a parent as having high education if s/he has at least some university education. When we switch from individuals who have fathers with low education to individuals with fathers of high education we get a clear shift to more risk-loving behavior. The same holds if we look at

mother's education. In contrast to the German case, a switch from low to high father's or mother's education roughly doubles the number of respondents willing to take large risks.

We now turn to regression analysis to assess whether the relationships between the above cited exogenous factors and risk attitudes are statistically significant in a multivariate model. Since the dependent variable, willingness to take risks, is measured in intervals on a scale from zero to ten, our preferred estimates are derived from interval regressions.[8] We also performed OLS and probit regressions, and show in data appendices B and C that the results are qualitatively very similar to the interval regression estimates presented in the text.[9] All regression results show robust standard errors that allow for clustering at the household level.

Columns 1 and 4 of Table 1 show the results of the most basic specification where we have only included exogenous characteristics of the individuals. Women are less willing to take risks as are older individuals, while taller persons have a higher propensity to take risks. The coefficients of these three variables are statistically significant at the 1% level. The negative impact of gender and age is larger in the Ukrainian sample than in the German sample; back-of-the-envelope calculations show that the confidence intervals of the coefficients on gender and age do not overlap in the two countries. Height, on the other hand, has roughly an equal impact on willingness to take risks in both Germany and Ukraine. Next, we add parents' education as regressors (columns 2 and 5). Both German and Ukrainian respondents with a parent who has high educational attainment express a greater willingness to take risks than respondents with a parent who is in the low education category. While the coefficient

[8] See footnote 10 of Dohmen et al. (2011) for a brief summary of interval regression techniques.
[9] In the probit models, we collapse the eleven-point scale into a dichotomous variable: a response from zero to five on the scale is assigned a value of zero, while a response of six or higher on the scale is classified as one.

estimates on the father's and mother's high education variables are slightly larger in the Ukrainian case they are less precisely estimated although statistically significant at conventional levels.[10]

Income and wealth variables are important controls when estimating the propensity to take risks, because income and wealth can cushion bad realizations when relatively risky behavior underpins individuals' decision making. Of course, these controls might be potentially endogenous since greater willingness to take risks can lead to more income and wealth. Nevertheless, we follow Dohmen et al. (2011) and condition on income and wealth in our regressions in order to see how robust the coefficient estimates are that we have presented thus far. In the German case household income and relative satisfaction with personal income are both positively correlated with willingness to take risks, while household net wealth is not significant (column 3). Household income and relative satisfaction with personal income are not statistically significant among Ukrainian respondents, while self-assessed financial position is positively correlated with the willingness to take risks. Most importantly, the coefficient estimates on the exogenous variables are clearly robust to the inclusion of income and wealth variables apart from the estimate on mother's high education in the Ukrainian case.

We have eight waves of the German survey and two years of the Ukrainian survey in which the question on general risk attitudes is asked. We use the responses to this question to check the stability of the determination process of general risk attitudes over time when we only include exogenous variables in the regressions. Inspection of Table 2 leads us to several conclusions. First, gender, age and height are in all eight years in Germany statistically significant predictors of risk attitudes, while in Ukraine gender and age maintain but height loses its significance in 2012. In the German case father's high education is significantly related to willingness to take risks in five out of eight years, the coefficient on mother's high education, on the other hand, shows significance only in three years. In

[10] Our coefficient estimates in columns 1 and 2 differ slightly from those in Table 1 of Dohmen et al. (2011) since we restrict our German sample to the age range of 17 to 72 and have thus fewer observations.

Ukraine, father's high education is an important predictor in 2007 and 2012, while the coefficient on mother's high education is close to zero and not significant in 2012. Thus, the three factors related directly to the respondents and the variable "father's high education" appear as quite stable determinants over time. It is also noteworthy that significant estimates are of similar size across the years, both in Germany and Ukraine. Finally, adding a large number of controls does not change these assessments in a major way as Dohmen et al. (2011) showed for Germany and as Table A1 in the appendix attests for Ukraine.

We next explore determinants and stability across different domain-specific contexts for the years 2004 and 2009 in the German case and for the years 2007 and 2012 in the Ukrainian case. As we can see in the upper panel of Table 3a (the German case in 2004) gender, age, height and father's high education are significant predictors across all contexts while mother's high education has an impact only in the financial domain, in sports and leisure and in career matters. Women are especially risk averse when it comes to driving and financial matters; older individuals, on the other hand, are particularly reluctant to take risks when it comes to their career and sports. The impact of height is relatively uniform across all domains, while father's high education increases the willingness to take more risks, particularly in financial matters and sports.

Turning to the Ukrainian case in 2007 (the lower panel of Table 3a), gender and age are important determinants of risk attitudes in all domains. Taller Ukrainians, however, profess a larger willingness to take risks only in financial, career and health matters. Father's high education has no impact on risk attitudes when it comes to driving and health; while mother's high education is significant in all domains with the exception of health. Females express a much lower willingness to take risks than their male counterparts when it comes to driving and sports or leisure. The other determinants roughly have an equal impact on risk attitudes across all domains.

For comparative purposes we have also added the estimates of the determinants of the general risk attitudes (column 1 in Table 3a). Comparing the coefficients on the determinants of risk attitudes of specific domains and of a general context we can establish that the impacts of these determinants are qualitatively similar. As this holds not only for the SOEP data of 2004 but also for the ULMS data of 2007 we can strengthen the evidence provided in Dohmen et al. (2011) for a common underlying risk attitude that straddles all contexts.

A stable link between the mentioned exogenous determinants and risk attitudes over time can be inferred from the German estimates for 2009 and the Ukrainian estimates in 2012 (Table 3b). This stable link is particularly strong in the SOEP data where the individual-specific determinants gender, age and height are virtually always significant. Father's high education is significant in all domains while mother's high education only has a positive impact on risk taking in sports and career matters. The Ukrainian estimates show a stable link over time in particular for gender, age and father's high education. Height and mother's high education, on the other hand, have no predictive power in the 2012 ULMS estimates. So, in the German case all three individual-specific determinants and father's high education underlie the determination of general and domain specific risk attitudes over time, while in the Ukrainian estimates this is restricted to gender, age and father's high education. Hence a common underlying risk attitude seems to not only straddle all contexts but also time.

4. Time-variance of risk attitudes

4.1 Correlations of risk measures over time

How stable are risk measures over time in Germany and Ukraine? Since we have repeated responses on the general risk measure in both countries we can analyze the correlations between two points in time.

Before we turn to these correlations, we briefly discuss the results of re-tests, in which respondents were asked the general risk question twice during intervals of four to six weeks. Dohmen et al. (2007) report on two re-tests. The first was conducted among 300 respondents to the 2006 wave of the SOEP between 28 and 53 days after the regular SOEP interview. The re-test consisted of a short questionnaire that included the question about general risk attitudes. Roughly 30 percent of the re-tested individuals gave the exact same answer as in the original 2006 survey and the raw correlation of responses in the 2006 survey and the re-test was 0.62 for the whole sample and 0.615 for the restricted sample of those respondents who did not report any significant events in the time interval between the two interviews. The second re-test provided repeated responses to the general risk questions of 192 participants in the SOEP pre-test fielded in 2005. Again, the correlation in answers is 0.62. Dohmen et al. (2007) conclude from these results that the observed changes in the given risk measures are not caused by changing risk attitudes of individuals but predominantly driven by measurement error. Beauchamp et al. (2015) conduct a re-test among 500 respondents to the Screening Across the Lifespan Twin Study (SALTY) in Sweden and find a test-retest correlation after a time lag of a few months of 0.63 for the general risk question and of 0.67 for the domain-specific question about willingness to take risks in financial matters.

We further investigate the hypothesized stability of risk attitudes over time by looking at the correlation of the risk measures over differing time spans. In Figures 5 and 6 we plot the correlation of risk measures against the days between interviews for five-year intervals (2004 – 2009 and 2006 – 2011 for Germany and 2007 – 2012 for Ukraine). One point in a cluster is the raw correlation of the risk measures of all individuals who have the same number of days between interviews. Since the relationship between the correlation and days between interviews might not be linear, we use a fractional polynomial regression to fit the data, and weigh an observation, i.e. a correlation at a

particular interval length, by the number of responses on which the correlation is based.[11] The fitted line allows us to infer that on average the correlation decreases only slightly over time in the German case, hovering around 0.45 (ignoring estimates at the boundaries of the interval). [12] There are no glaring differences regarding the correlation values with respect to gender, as a comparison of the panels by gender of Figure 5 reveals.[13]

The Ukrainian plots show much lower correlations than in the case of Germany. Ignoring outliers (and estimates at the boundary of the observed range), the slightly concave fitted line reaches values between 0.3 and 0.2 if we use the whole sample (the upper left panel of Figure 6). What is striking is that we have a substantial number of negative correlations implying that individuals, in considerable numbers, give responses in 2012 that are very far from the responses given in 2007. Such extreme changes in the responses given are essentially absent among German individuals. A comparison by gender shows slightly lower correlation values for men with the fitted line giving a range between 0.17 and 0.2, while the fitted line for women ranges between 0.38 and 0.21. These comparative results are very similar when we look at domain-specific risk attitudes for the intervals 2004 – 2009 in Germany and 2007 – 2012 in Ukraine.[14]

These large differences in the correlation values of the German and Ukrainian data are confirmed when we calculate Spearman rank correlation coefficients for general and domain specific risk attitudes. The first panel of Table 4 presents the results for the whole German samples in periods 2004 – 2009 and 2006 – 2012 and for the whole Ukrainian sample in the period 2007 – 2012. In the

[11] We regress the correlation variable on the number of days, which are modeled as a fractional polynomial. For a lucid exposition of fractional polynomial regression models, see Royston, Ambler and Sauerbrei (1999).
[12] The correlation in answers is somewhat higher than 0.5 when about 12 months have elapsed. At an interval length of about 9 years the correlation still exceeds 0.4. If we assume that the drop in the correlation over a 5-week interval to 0.62 can be ascribed to measurement error, we can conclude from the graph that risk attitudes are rather rank-order stable over relatively long time horizons. There are no discernible differences in the values of correlation for men and women when we look at the entire period between 2004 and 2013, for which we have information on the general risk measure.
[13] Outliers at boundaries of intervals with particularly low correlation values are mainly driven by women.
[14] These results are not shown here but available upon request.

years 2006 and 2012 individuals were only asked the general risk question in the SOEP survey. The Spearman rank correlations are at least 20 percentage points larger in the German case whether we inspect the general risk or the domain specific risk measures. For taking risks in health matters the correlation is particularly low in the Ukrainian case.

Slicing the data by gender, age and the existence or absence of an unemployment spell we capture potential heterogeneity in the stability of the recorded risk measures. While we find no differences in the Spearman rank correlations calculated for men and women (apart from taking risks in driving matters in the Ukrainian sample), individuals in the age range of 15 to 24 years in both the German and Ukrainian samples have lower correlations than their older counterparts in all risk measures but the measure related to health. Finally, only in the German case does the experience of an unemployment spell seem to lead to less stability of the risk measures over time as the last panel of Table 4 shows.[15]

4.2 Determinants of changes of individual risk attitudes over time

The persistently lower correlations among Ukrainian respondents are clearly puzzling. Either measurement error is more pronounced in the Ukrainian data, or there are more heterogeneous changes in risk attitudes in Ukraine than in Germany. To better understand the causes of this difference, we regress the changes of the various risk measures on a multitude of covariates that differ across individuals. The small literature on the time-varying nature of risk attitudes suggests that various factors might trigger changes in these attitudes, including changes of household wealth and household income, the occurrence of major life events as well as macroeconomic changes and changes in the occupied labor market state (see, e.g. Sahm 2012). We group these factors in Table 5 in three broad domains: (i) idiosyncratic changes in economic conditions, (ii) changes in general economic conditions,

[15] However, since these differences are not very large, our conjecture is that these differences are not statistically significant at conventional levels.

and (iii) major life events and changes in sociodemographic conditions. Changes in individuals' economic conditions relate to income, wealth and employment status. For both the German and Ukrainian sample we can compute changes in household income, while changes in household wealth can only be inferred in the German data. For Ukraine we use "change in financial position of the household", which is a categorical variable taking values between -6 (i.e., a change from far above the average to far below the average) and +6 (i.e., the polar opposite change). Changes in economic conditions are proxied by changes in the regional unemployment rate and in regional GDP growth. Major life events and changes in sociodemographic conditions pertain to health, marital status and the number of non-adult children in the household. The self-assessed health variable can take on the values indicated in Table 5 plus a fifth value, "satisfactory health", which is the state between "poor health" and "good health". The variable "improving health" comprises all movements from a lower to a higher self-assessed health status, while "worsening health" implies a movement in the opposite direction. The other factors related to changing life circumstances are self-explanatory. A third block of covariates deals with the labor market, where we introduce dummies for each potential transition between the three labor market states: employment, unemployment and out of the labor force. In our regressions, we condition on initial conditions in health and labor market status at the start of the period. Since the dependent variable is given in intervals from -10 to +10, we again use interval regression techniques.[16]

The estimates in Table 5 indicate that changes in household income do not affect willingness to take risks in any of the analyzed samples and periods. For Germany, changes in household wealth do not predict changes in risk attitudes, while the small significant positive coefficient on the variable "changes in financial position" implies that improvements in the financial position of the household slightly raise the willingness of the surveyed Ukrainian individuals to take risks.

[16] We also perform OLS regressions, which give very similar coefficient estimates. They are not shown here but available upon request.

The estimated impacts of labor market transitions do not provide a clear pattern, but indicate that individuals who become unemployed tend to become more willing to take risks. This effect is stronger in Ukraine and significant in the German case only in the period 2004 – 2009. There are several explanations for this result. For example, it is feasible to think about situations where individuals who lost their jobs are willing to take more risks to get back into employment. An alternative explanation might be that those who are still employed during times of an economic downturn (as is the case for Germany in 2004) might fear unemployment, but once the state of unemployment is realized they might perceive that their exposure to risk is lower. In the German case, transitions between employment and out of the labor force, going in both directions, lower the respondents' willingness to take risks.

The three periods over which we estimate changes in risk measures include the Great Recession, implying that respondents experience a strong deterioration of the macroeconomic environment. The literature that discusses the impact of a changing macroeconomic environment on risk attitudes finds convincing evidence of countercyclical risk aversion (Bucciol and Miniaci, 2013; Cohn et al., 2015; and Guiso et al., 2014). This finding is clearly confirmed in our analysis since the negative estimates of the constants in all three regressions are large in absolute value. When the onset of the Great Recession is a very recent event, i.e., in the period 2004 – 2009, the conditional average general risk measure falls by nearly 1.4 between these two years as we go from boom to bust. This is a very large effect, which is attenuated in the later periods for Germany and Ukraine when the Great Recession is no longer in its acute stage. However, regional changes in unemployment and GDP do not have a significant impact on individual risk attitudes beyond the effect of economy-wide changes that are captured by the constant term in Germany. In Ukraine, on the other hand, the effect of economy-wide changes works through changes in regional unemployment.

As far as health is concerned we find that Germans whose health improves in the period 2004 – 2009 become slightly more risk-loving, while this effect is absent in the Ukrainian case. Ukrainians, in turn, whose health deteriorates, become more risk averse, while risk measures of German respondents do not change with worsening health. The change of life circumstances that is significant in one German and the two Ukrainian specifications is related to marital status. Respondents who become married between the two interview dates declare a lower willingness to take risks than those individuals whose marital status has not changed. This effect is particularly strong in the Ukrainian case. None of the other changes in life circumstances predict changes in the risk measures of German and Ukrainian respondents.

In the SOEP we have responses for the general risk question in eight waves, which allows us to estimate well-identified fixed effects regressions of the general risk measure on variables related to household income and wealth, as well as individuals' life events and labor market status. In column 1 of Table 6 changes in health and marital status and age drive changes in general risk attitudes, while changes in a person's labor market status have no predictive power. When we add year dummies, health and marital status retain their predictive power and the coefficient point estimates on these variables are hardly altered, while the labor market states variables remain completely irrelevant with the addition of year dummies. The coefficient estimates on the time dummies are particularly illuminating. In the year 2009, when German GDP fell by nearly six percent, the conditional average risk measure falls by nearly 0.8 points. This negative effect is common to all respondents and occurs in our opinion because of this precipitous worsening of macroeconomic conditions. This evidence and the results from the difference equations of Table 5 thus point to a scenario where an important determinant of changes in general risk attitudes besides life events is not the realization of changing labor market status of individuals but profound changes of the macroeconomic environment, and potentially the associated perception of increased labor market risk. In both countries, the Great

Recession triggers a general decline of individuals' willingness to take risks. Whether this increase in risk aversion has implications for the behavior of individuals in the labor market will be the topic of the next section.

The determinants of changes in risk attitudes in the five specific domains are shown in Table A2a and A2b for Germany in the period 2004 – 2009[17] and in Table A2c and A2d for Ukraine in the period 2007 – 2012. In these tables we have the same three broad domains of factors potentially impacting on the changes in risk attitudes as in Table 5.

The effects of labor market transitions on changes in domain-specific risk attitudes are not very clear cut in the German case. Our conjecture that persons flowing from employment into unemployment might exhibit more risk loving in general because they are willing to take risks in career matters is not really born out in the German case, since the coefficient regarding career matters, albeit positive, is not significant at conventional levels. In actual fact, changes in regional unemployment and regional GDP are not significant predictors of the change of any domain-specific risk attitude.

German respondents whose health improves become slightly more risk-loving in sports and leisure activities, while Germans with worsening health become more cautious in career matters. Exiting the state of disability makes respondents more willing to take financial risks, while individuals who lose their partner are more willing to engage in risky behavior in financial matters and in sports and leisure. The risk measures of those who became married in the period are significantly lower in the domains of driving, sports and leisure as well as health. One important life event that is a significant predictor of changes in the general risk measure is the arrival of young children into the household. Such an event significantly lowers respondents' risk-loving behavior in driving and financial matters in

[17] As mentioned in the data section, questions about risk attitudes in specific contexts entered the SOEP survey only in 2004 and 2009.

the German case. The large (in absolute value) negative coefficients on the constant term in all domains are also very worth reporting.

Ukrainians separating from jobs and flowing into unemployment show a higher propensity to take risks only in the sphere of sports and leisure. On the other hand, like in the German case individuals flowing from employment into unemployment are not becoming more risk-loving in career matters although the coefficient is large and positive and the probability level of the estimate is close to 10%. In contrast, flows from employment to out of the labor lower persons' willingness to take risks as far as career issues are concerned. Finally Ukrainians who are unemployed at the beginning of the period become more risk averse over time in career matters. So, while in the Ukrainian case risk attitudes are slightly more affected by changes in labor market status than in the German case, labor market experience is also here not the main channel through which changes in risk attitudes are determined. One of the main drivers of the lowering of risk attitudes in all domains but driving is the change in the regional unemployment rate, while changes in regional GDP determine risk attitudes only in financial and career matters.

A positive change in the financial position of the household makes Ukrainian individuals slightly more risk-loving in financial matters, while worsening health lowers the willingness to take risks in this domain substantially. Individuals who become married exhibit more risk aversion in all domains, but statistical significance for this change in life circumstances is only obtained when it comes to sports and leisure. Similar to the German case the constant term drives most of the negative change of risk attitudes in all domains.

These results are very much in line with those when analyzing the determination of changes in risk attitudes in general. Individual risk attitudes in all life domains fall over the Great Recession not so much because of individual life events or the changing labor market status of individuals but because of

large changes of the macroeconomic environment, which are potentially associated with the perception of increased labor market risk.

5. The general increase in risk aversion and behavior impacting on labor market outcomes

The analysis has so far uncovered that changes in individuals' labor market status during the period that spans the Great Recession are associated with relatively mild changes in risk attitudes. One might therefore be inclined to jump to the conclusion that interdependencies between changes in labor market outcomes and changes in risk attitudes are minor. However, the estimates in Table 5 and 6 revealed pronounced changes in average risk attitudes over time. Adding year dummies alone to the regression in Column 1 of Table 6 leads to a 10-fold increase in the explained within-person variation in risk attitudes. These changes in risk attitudes coincide with changes in aggregate economic conditions. This is also evident from Column 3 of Table 6, which shows that the regional GDP growth rate alone explains half of the within-variation in risk attitudes that is related to calendar time and captured by the year dummies. For Germany we have established that changes in risk attitudes are particularly marked in the year of the financial crisis; for Ukraine we lack data for 2009. The finding of strong changes in average risk attitudes in Germany, where the macroeconomic consequences of the crisis were less severe than in Ukraine, is remarkable.[18] It suggests that the shift in the distribution of willingness to take risks that accompanies the crisis is not only triggered by the realized decline in economic prosperity but also induces by changing expectations and the perception of increased uncertainty.

We conjecture – building on the large literature that documents relationships between risk attitudes and labor market choices, such as the choice of self-employment (e.g., Van Praag and Cramer, 2001; Cramer et al., 2002; Ekelund et al., 2005), sectoral choice (e.g. Fuchs-Schündeln and Schündeln,

[18] Since we do not have data on risk attitudes measured in 2009 in Ukraine, we can only speculate about the size of the fall in average willingness to take risks, but extrapolating from the findings for Germany we conjecture that average risk attitudes dropped sharply in Ukraine in 2009.

2005), occupational choice (DeLeire and Levy, 2004; Bonin et al., 2007; Fouarge et al., 2014) and choice of employment contract (Guiso et al., 2006; Dohmen and Falk, 2011) – that the reduced willingness to take risks has sizable effects on labor market outcomes. In particular, we expect an adverse effect on sectoral, occupational and job mobility as well as on workers' geographic mobility (Jaeger et al., 2010). We illustrate this below by focusing on the decision to become self-employed since entrepreneurship has been argued to be an important driver of economic activity.

In Table 7a we report probit estimates for the probability of being self-employed in Germany. Risk attitudes are significantly associated with a higher probability of being self-employed. The size of this effect is large: an increase in willingness to take risks by one standard deviation is associated with a 2.444 percentage point higher probability of being self-employed in 2004 (see Column 1 of Table 7a), i.e. a 29 percent increase in the self-employment rate, which equals 8.5 percent in our German estimation sample for 2004.[19] Beta coefficients of linear probability models (see Appendix) indicate that risk attitudes explain a larger part of the self-employment probability than income, wealth, gender or parental education. Risk attitudes in career matters explain an even larger fraction of the variation in self-employment probabilities.

Table 7b indicates that risk attitudes are also strongly related to the probability of being self-employed in Ukraine (see also Skriabikova et al., 2015). The estimated marginal effect reported in Column 1 of Table 7b implies that a one-standard deviation increase in willingness to take risks in 2007 (which roughly corresponds to an increase in 3 points on the 11-point risk scale) is associated with a 2.2 percentage-point increase in the probability of being self-employed, a large effect given that the self-employment probability in the 2007 Ukrainian sample is 6.9 percent. Since risk attitudes are a

[19] .Given that risk attitudes are measured with considerable error, estimates of the effect of risk attitudes are likely attenuated towards zero. This is confirmed by regressions in which we use the modal answer to the general risk question as a measure of risk attitudes. Under the assumption that measurement error has a mode of zero, i.e., that individuals are most likely to assess their willingness to take risk correctly, the modal answer measures the true willingness to take risks with more precision.

key determinant of the decision to become self-employed, we expect that fewer Ukrainians become self-employed during the crisis when willingness to take risks declines, unless individuals are "pushed" into self-employment. This is in fact what we find when exploring data on the timing of the self-employment decision in Ukraine, where we have retrospective data in 2007 and 2012 on the date when individuals became self-employed. Admittedly, our sample of self-employed Ukrainians is small, but it is obvious from the data that only half as many individuals become self-employed in the non-agricultural sector in 2009 compared to 2006. On the other hand, between 2007 and 2012 we see a rise of self-employment entirely due to more self-employed in agriculture. We take this as evidence that some workers are pushed into subsistence agriculture in Ukraine in the aftermath of the crisis.[20]

Clearly, the reduction in entry into self-employment[21] is arguably not only driven by changes in risk attitudes. There are certainly other factors that affect the self-employment decision and its timing, such as aggregate demand conditions. But the direction of the effects of worsening economic conditions is ambiguous as some individuals might be pushed into self-employment as a last resort. However, it is clear that changes in risk attitudes will play an important role. The effect of changing risk attitudes on the inflow into self-employment is only the tip of an iceberg. In fact, since risk attitudes affect a myriad of labor market choices, in particular investment decisions and decisions that relate to changing status quo, we expect a fall in willingness to take risks to reduce mobility and workers' investments. Increased risk aversion during economic crises is therefore likely to decelerate worker adjustments and thereby to dampen the speed of economic recovery.

[20] It is noteworthy that when we restrict the sample to self-employed in agriculture there is only very weak or an insignificant relationship between risk attitudes and this employment state (see columns 3 and 4 of Table 7b).

[21] We can ignore agricultural self-employment in the case of Germany since the share of this group among all self-employed remains between 3 and 4 percent throughout the period. For Ukraine, we see a definite reduction in entry into non-agricultural self-employment also between 2007 and 2012, while the share of the agricultural self-employed working for the most part in subsistence agriculture rises from 9 to 28 percent.

6. Conclusions

Using national representative panel surveys for Germany and Ukraine we analyze risk attitudes in comparative perspective. We employ self-assessed risk measures, on a scale from 0 (completely unwilling to take risks) to 10 (fully prepared to take risks). This measure captures individuals' risk attitudes. Our descriptive analysis establishes that in general and in all but the financial domain Ukrainians are more risk averse than Germans. We also find that in both countries women are less prone to undertake risky decisions and that the gender difference is particularly strong in the Ukrainian case. In addition, risk aversion increases with age, which is in line with findings in the literature. We also show that individuals whose parents are well educated are more risk loving than individuals whose parents have relatively little education.

These three determinants plus height are often considered to be the main primary (exogenous) factors shaping risk attitudes in general and in specific life domains. In a multi-variate regression framework that uses interval regression techniques we find confirmation of this proposition: age, gender, parents' education and height are highly significant predictors of risk attitudes in general and in specific life domains in both countries. When we add covariates related to wealth and income, which are arguably endogenous, the significance of these primary (exogenous) determinants remains high. We also establish that the process of determination of risk attitudes is stable over time.

As a second focus our paper analyzes the time variation of individual risk attitudes, using panel data on risk attitudes. We cite several re-tests that show that even when the interval between interviews is very short the correlation of the answers given is roughly 0.6. Given the short time span between interviews we explain this seemingly low correlation with measurement error and not with changed individual risk attitudes. Since the correlations decline only mildly even when the interval between interviews becomes very long we conclude that risk attitudes are quite rank-order stable over relatively

long time horizons. A comparison of the correlations of German and Ukrainian respondents shows that these correlations are much lower in the Ukrainian case. In order to see whether this difference is due to larger measurement error or the more severe labor market situation in Ukraine we regress changes in individual risk attitudes on three blocks of determinants: idiosyncratic changes in economic conditions; changes in general economic conditions; and major life events and changes in sociodemographic conditions. The regressions dealing with risk attitudes in general or in specific life domains give us very similar results. Large changes in the macroeconomic environment are the main driver of changes in risk attitudes in both countries, while individual life events or the changing labor market status of individuals play a rather minor role. The impact of the macroeconomic environment is particularly strong in the Ukrainian case.

The observed increase in risk aversion over the Great Recession in both countries can influence individual labor market behavior with negative repercussions for the economy at large. For example, since risk attitudes are positively influencing take up rates of entrepreneurship a reduced willingness to take risks will translate into a lower birthrate of firms. We find evidence for this mechanism in Germany and Ukraine where as a consequence of the Great Recession entry rates into self-employment are lowered. Since our standardized risk measure positively impacts on entry rates into self-employment both in Germany and Ukraine, risk attitudes strike us as an important channel through which a recovery from large negative economic shocks might be slowed down. In future work we intend to look at other labor market outcomes in the two countries that are affected by rising risk aversion and thus buttress our notion that risk attitudes are an important channel through which individual behavior affects the labor market and the economy at large after an economic downturn.

As highlighted in the paper, Ukrainians have a particularly low willingness to take risks, a willingness further lowered by the Great Recession. This very high average risk aversion among

Ukrainians may be not very surprising given the performance of the Ukrainian economy, of the political system and of the Ukrainian state during the first 25 years of transition. As stressed by Aslund (2015), the capture of the state and of the political system by oligarchs early on has led to wide-spread rent-seeking in the Ukrainian economy, to a dominance of oligarchic interests in parliament and to ubiquitous corruption at all levels of the state. We conjecture that these developments had an additional impact on the risk attitudes of Ukrainian citizens. Reforms need to be implemented in the short-term, which eliminate or at least attenuate these large distortions if Ukraine wants to escape for good from her post-Soviet legacy. The results of our study show one channel of human behavior, risk attitudes, that may make this escape more cumbersome and longer lasting than perhaps initially thought.

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Tables

Table 1: Primary determinants of General Risk Attitudes

	Germany - 2004				Ukraine - 2007		
	(1)	(2)	(3)		(4)	(5)	(6)
Female	-0.567***	-0.584***	-0.545***	Female	-1.128***	-1.155***	-1.141***
	(0.0448)	(0.0473)	(0.0507)		(0.111)	(0.117)	(0.121)
Age	-0.0308***	-0.0290***	-0.0305***	Age	-0.0535***	-0.0496***	-0.0491***
	(0.00123)	(0.00129)	(0.00146)		(0.00282)	(0.00305)	(0.00321)
Height	0.0293***	0.0282***	0.0251***	Height	0.0216***	0.0187**	0.0164**
	(0.00273)	(0.00285)	(0.00308)		(0.00715)	(0.00747)	(0.00767)
Father's high education		0.268***	0.168***	Father's high education		0.392**	0.447**
		(0.0548)	(0.0615)			(0.181)	(0.186)
Mother's high education		0.267***	0.282***	Mother's high education		0.416**	0.264
		(0.0715)	(0.0799)			(0.193)	(0.201)
Ln(household net income)			0.227***	Ln(household income)			0.0967
			(0.0348)				(0.0881)
Household net wealth 2002			0.00232	Financial position			0.206***
(in 100.000 Euros)			(0.00269)				(0.0548)
Satisfaction Personal Income			0.0512***	Satisfaction Personal Income			0.0738
			(0.00874)				(0.0535)
Constant	0.642	0.722	0.289	Constant	2.123*	2.381*	1.259
	(0.504)	(0.526)	(0.567)		(1.276)	(1.334)	(1.482)
Observations	19,929	17,775	15,081	Observations	6,127	5,579	5,215

Interval regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2002 wave of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 2: Primary determinants of General Risk Attitudes

	Germany				
	2004	2006	2008	2009	2010
Female	-0.584***	-0.507***	-0.706***	-0.636***	-0.828***
	(0.0473)	(0.0452)	(0.0495)	(0.0482)	(0.0524)
Age	-0.0290***	-0.0226***	-0.0193***	-0.0287***	-0.0238***
	(0.00129)	(0.00122)	(0.00128)	(0.00128)	(0.00135)
Height	0.0282***	0.0237***	0.0149***	0.0162***	0.0119***
	(0.00285)	(0.00266)	(0.00276)	(0.00286)	(0.00301)
Father's high education	0.268***	0.149***	0.141**	0.179***	0.0676
	(0.0548)	(0.0537)	(0.0573)	(0.0561)	(0.0567)
Mother's high education	0.267***	0.174**	0.125*	0.0833	0.126*
	(0.0715)	(0.0688)	(0.0726)	(0.0708)	(0.0714)
Constant	0.722	1.577***	2.725***	2.174***	3.393***
	(0.526)	(0.492)	(0.512)	(0.529)	(0.559)
Observations	17,775	17,494	15,619	15,595	14,641

	Germany			Ukraine	
	2011	2012	2013	2007	2012
Female	-0.682***	-0.676***	-0.883***	-1.155***	-1.158***
	(0.0499)	(0.0477)	(0.0568)	(0.117)	(0.100)
Age	-0.0231***	-0.0217***	-0.0136***	-0.0496***	-0.0460***
	(0.00130)	(0.00128)	(0.00149)	(0.00305)	(0.00261)
Height	0.0160***	0.0121***	0.00438	0.0187**	-0.00414
	(0.00289)	(0.00275)	(0.00316)	(0.00747)	(0.00626)
Father's high education	0.131**	-0.00232	0.0933	0.392**	0.359**
	(0.0574)	(0.0545)	(0.0625)	(0.181)	(0.145)
Mother's high education	-0.0525	0.00219	0.0187	0.416**	0.0401
	(0.0695)	(0.0674)	(0.0751)	(0.193)	(0.143)
Constant	2.848***	3.693***	4.421***	2.381*	6.150***
	(0.536)	(0.509)	(0.586)	(1.334)	(1.135)
Observations	15,255	15,567	13,698	5,579	6,600

Interval regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 3a: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2004					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.584***	-1.024***	-0.766***	-0.612***	-0.508***	-0.676***
	(0.0473)	(0.0604)	(0.0544)	(0.0555)	(0.0609)	(0.0574)
Age	-0.0290***	-0.0418***	-0.0182***	-0.0576***	-0.0503***	-0.0306***
	(0.00129)	(0.00171)	(0.00153)	(0.00155)	(0.00185)	(0.00159)
Height	0.0282***	0.0323***	0.0278***	0.0327***	0.0364***	0.0171***
	(0.00285)	(0.00359)	(0.00327)	(0.00331)	(0.00367)	(0.00341)
Father's high education	0.268***	0.128*	0.406***	0.548***	0.330***	0.215***
	(0.0548)	(0.0703)	(0.0637)	(0.0644)	(0.0737)	(0.0708)
Mother's high education	0.267***	0.0886	0.173**	0.310***	0.336***	0.118
	(0.0715)	(0.0958)	(0.0867)	(0.0853)	(0.0925)	(0.0923)
Constant	0.722	-0.922	-1.919***	0.175	-0.831	1.047*
	(0.526)	(0.665)	(0.604)	(0.612)	(0.678)	(0.629)
Observations	17,775	16,956	17,625	17,630	16,502	17,769
	Ukraine - 2007					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-1.155***	-2.477***	-0.750***	-1.401***	-0.792***	-0.838***
	(0.117)	(0.201)	(0.131)	(0.141)	(0.158)	(0.130)
Age	-0.0496***	-0.0632***	-0.0535***	-0.0670***	-0.0704***	-0.0327***
	(0.00305)	(0.00484)	(0.00327)	(0.00359)	(0.00420)	(0.00337)
Height	0.0187**	-0.000792	0.0167*	0.0142	0.0222**	0.0181**
	(0.00747)	(0.0120)	(0.00855)	(0.00895)	(0.0101)	(0.00857)
Father's high education	0.392**	-0.125	0.355*	0.438**	0.642***	0.344
	(0.181)	(0.306)	(0.191)	(0.212)	(0.218)	(0.211)
Mother's high education	0.416**	0.415	0.303	0.363*	0.398*	0.209
	(0.193)	(0.307)	(0.205)	(0.219)	(0.232)	(0.215)
Constant	2.381*	4.949**	1.993	3.280**	1.802	0.117
	(1.334)	(2.142)	(1.528)	(1.593)	(1.814)	(1.539)
Observations	5,579	3,068	5,189	4,465	4,157	5,452

Interval regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 3b: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2009					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.636***	-0.897***	-0.918***	-0.779***	-0.584***	-0.801***
	(0.0482)	(0.0669)	(0.0654)	(0.0630)	(0.0715)	(0.0645)
Age	-0.0287***	-0.0401***	-0.0152***	-0.0617***	-0.0576***	-0.0306***
	(0.00128)	(0.00177)	(0.00174)	(0.00173)	(0.00208)	(0.00170)
Height	0.0162***	0.0294***	0.0129***	0.0189***	0.0267***	0.00845**
	(0.00286)	(0.00388)	(0.00389)	(0.00378)	(0.00422)	(0.00374)
Father's high education	0.179***	0.138*	0.465***	0.441***	0.332***	0.279***
	(0.0561)	(0.0739)	(0.0741)	(0.0718)	(0.0805)	(0.0722)
Mother's high education	0.0833	-0.143	0.143	0.152*	0.269***	0.155*
	(0.0708)	(0.0917)	(0.0920)	(0.0877)	(0.0998)	(0.0907)
Constant	2.174***	-0.365	-0.0961	2.609***	0.789	2.389***
	(0.529)	(0.720)	(0.719)	(0.701)	(0.782)	(0.693)
Observations	15,595	14,955	15,456	15,428	14,131	15,586
	Ukraine - 2012					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-1.158***	-1.926***	-0.564***	-0.848***	-0.601***	-0.681***
	(0.100)	(0.197)	(0.101)	(0.111)	(0.121)	(0.110)
Age	-0.0460***	-0.0420***	-0.0377***	-0.0534***	-0.0529***	-0.0164***
	(0.00261)	(0.00519)	(0.00264)	(0.00292)	(0.00335)	(0.00294)
Height	-0.00414	0.00739	0.00636	0.00826	0.00898	0.00417
	(0.00626)	(0.0111)	(0.00643)	(0.00705)	(0.00747)	(0.00725)
Father's high education	0.359**	0.298	0.341**	0.371**	0.500***	0.386**
	(0.145)	(0.250)	(0.144)	(0.151)	(0.161)	(0.157)
Mother's high education	0.0401	-0.286	0.0689	0.134	-0.0163	-0.00630
	(0.143)	(0.255)	(0.145)	(0.153)	(0.161)	(0.158)
Constant	6.150***	2.209	2.752**	3.277**	3.231**	1.689
	(1.135)	(2.020)	(1.167)	(1.275)	(1.353)	(1.312)
Observations	6,600	3,040	6,589	5,911	5,022	6,614

Interval regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 4: Spearman rank correlations

		Germany				Ukraine	
		2004-2009		2006-2012		2007-2012	
	Risk question	Corr	P-value	Corr	P-value	Corr	P-value
All	General	0.437	0.000	0.446	0.000	0.244	0.000
	Driving	0.508	0.000	.	.	0.203	0.000
	Financial	0.46	0.000	.	.	0.181	0.000
	Sport/Leisure	0.508	0.000	.	.	0.271	0.000
	Career	0.444	0.000	.	.	0.224	0.000
	Health	0.413	0.000	.	.	0.096	0.000
Men	General	0.429	0.000	0.443	0.000	0.212	0.000
	Driving	0.479	0.000	.	.	0.163	0.000
	Financial	0.476	0.000	.	.	0.167	0.000
	Sport/Leisure	0.521	0.000	.	.	0.243	0.000
	Career	0.432	0.000	.	.	0.229	0.000
	Health	0.416	0.000	.	.	0.087	0.000
Women	General	0.408	0.000	0.413	0.000	0.2	0.000
	Driving	0.489	0.000	.	.	0.08	0.093
	Financial	0.404	0.000	.	.	0.161	0.000
	Sport/Leisure	0.466	0.000	.	.	0.229	0.000
	Career	0.434	0.000	.	.	0.191	0.000
	Health	0.385	0.000	.	.	0.073	0.000
15-24	General	0.381	0.000	0.286	0.000	0.251	0.000
	Driving	0.407	0.000	.	.	0.174	0.011
	Financial	0.361	0.000	.	.	0.084	0.054
	Sport/Leisure	0.465	0.000	.	.	0.22	0.000
	Career	0.31	0.000	.	.	0.118	0.014
	Health	0.372	0.000	.	.	0.079	0.052
25-49	General	0.424	0.000	0.449	0.000	0.228	0.000
	Driving	0.504	0.000	.	.	0.127	0.001
	Financial	0.47	0.000	.	.	0.163	0.000
	Sport/Leisure	0.472	0.000	.	.	0.226	0.000
	Career	0.43	0.000	.	.	0.22	0.000
	Health	0.4	0.000	.	.	0.116	0.000
50+	General	0.433	0.000	0.463	0.000	0.17	0.000
	Driving	0.51	0.000	.	.	0.272	0.000
	Financial	0.466	0.000	.	.	0.139	0.000
	Sport/Leisure	0.482	0.000	.	.	0.242	0.000
	Career	0.441	0.000	.	.	0.174	0.000
	Health	0.415	0.000	.	.	0.065	0.014

Table 4, continued: Spearman rank correlations

		Germany				Ukraine	
		2004-2009		2006-2012		2007-2012	
No unemployment spell	General	0.444	0.000	0.449	0.000	0.236	0.000
	Driving	0.527	0.000	.	.	0.216	0.000
	Financial	0.472	0.000	.	.	0.178	0.000
	Sport/Leisure	0.522	0.000	.	.	0.264	0.000
	Career	0.46	0.000	.	.	0.217	0.000
	Health	0.424	0.000	.	.	0.092	0.000
Unemployment spell	General	0.403	0.000	0.43	0.000	0.236	0.000
	Driving	0.436	0.000	.	.	0.143	0.017
	Financial	0.405	0.000	.	.	0.186	0.000
	Sport/Leisure	0.455	0.000	.	.	0.284	0.000
	Career	0.378	0.000	.	.	0.243	0.000
	Health	0.368	0.000	.	.	0.115	0.002

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 5. Determinants of changes in general risk attitudes in Germany and Ukraine

	Germany				Ukraine	
	(1)	(2)	(3)	(4)	(5)	(6)
	2004-09	2004-09	2006-12	2006-12	2007-12	2007-12
Change in HH income (%)	-0.00175	-0.00155	-0.0191	-0.0191	0.0323	0.0307
	(0.0149)	(0.0150)	(0.0188)	(0.0188)	(0.0609)	(0.0615)
Change in HH wealth(%)/Change in financial position	-0.000143	-0.000140	-0.000600	-0.000606	0.104**	0.0981**
	(9.70e-05)	(9.65e-05)	(0.000454)	(0.000452)	(0.0474)	(0.0474)
Olf-Employment	-0.289**	-0.284**	-0.305**	-0.305**	0.242	0.235
	(0.137)	(0.137)	(0.147)	(0.147)	(0.251)	(0.250)
Unemployment-Employment	-0.0857	-0.0838	-0.197	-0.198	-0.368	-0.371
	(0.208)	(0.208)	(0.234)	(0.234)	(0.536)	(0.541)
Employment-Olf	-0.163*	-0.163*	-0.174*	-0.176*	0.0336	0.0816
	(0.0902)	(0.0902)	(0.0924)	(0.0926)	(0.198)	(0.199)
Employment-Unemployment	0.529***	0.521***	-0.0996	-0.108	0.592*	0.608*
	(0.177)	(0.177)	(0.195)	(0.195)	(0.332)	(0.335)
Unemployed	-0.0776	-0.0941	0.0342	0.0291	0.267	0.316
	(0.155)	(0.154)	(0.178)	(0.177)	(0.375)	(0.377)
Olf	0.197***	0.195***	-0.0101	-0.00975	0.183	0.198
	(0.0707)	(0.0707)	(0.0797)	(0.0797)	(0.158)	(0.158)
Change in regional unemployment rate 2004-09	0.0162		0.00815		-0.247***	
	(0.0141)		(0.0155)		(0.0729)	
Regional GDP growth rate 2004-09		0.00118		0.0139		-0.00282
		(0.00985)		(0.00924)		(0.00713)
Bad health	0.0149	0.0146	0.342	0.337	0.498	0.535
	(0.203)	(0.203)	(0.211)	(0.212)	(0.407)	(0.407)
Poor health	-0.0698	-0.0688	-0.123	-0.122	0.0615	0.0635
	(0.0860)	(0.0860)	(0.0880)	(0.0880)	(0.185)	(0.185)
Good health	0.0220	0.0240	-0.110*	-0.109*	-0.344**	-0.335**
	(0.0572)	(0.0572)	(0.0633)	(0.0633)	(0.154)	(0.154)
Very good health	-0.136	-0.130	0.0480	0.0479	-0.596	-0.555
	(0.0995)	(0.0994)	(0.110)	(0.110)	(0.384)	(0.389)
Improving health	0.187***	0.191***	0.0160	0.0166	-0.200	-0.208
	(0.0692)	(0.0691)	(0.0728)	(0.0728)	(0.172)	(0.172)
Worsening health	-0.0161	-0.0144	-0.102	-0.102	-0.408**	-0.402**
	(0.0574)	(0.0573)	(0.0629)	(0.0629)	(0.162)	(0.163)
Became disabled	-0.0601	-0.0566	-0.110	-0.110	0.161	0.181

	(0.124)	(0.125)	(0.118)	(0.118)	(0.197)	(0.199)
No more disabled	-0.00914	-0.00671	-0.101	-0.0941	-0.0731	-0.0904
	(0.218)	(0.218)	(0.241)	(0.242)	(0.168)	(0.169)
Became widowed	0.0209	0.0203	-0.116	-0.118	-0.343	-0.328
	(0.205)	(0.206)	(0.213)	(0.213)	(0.254)	(0.255)
Became married	-0.175	-0.174	-0.260**	-0.258**	-0.555***	-0.572***
	(0.119)	(0.120)	(0.104)	(0.104)	(0.173)	(0.173)
Became separated	0.166	0.168	0.117	0.124	0.0392	0.0355
	(0.159)	(0.159)	(0.148)	(0.147)	(0.272)	(0.272)
New children<16 in HH	0.0404	0.0418	-0.177	-0.179	0.0551	0.0795
	(0.132)	(0.132)	(0.130)	(0.130)	(0.220)	(0.222)
No more children<16 in HH	-0.00570	-0.00725	0.0199	0.0216	-0.231	-0.223
	(0.0849)	(0.0850)	(0.0874)	(0.0873)	(0.197)	(0.200)
Constant	-1.320***	-1.368***	-0.550***	-0.677***	-0.243	-0.540***
	(0.0670)	(0.0624)	(0.0900)	(0.0832)	(0.148)	(0.132)
Observations	10,022	10,022	7,809	7,809	3,456	3,456

Interval regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from -10 to 10, where -10 indicates a complete reversal from "very willing to take risks" to "not at all willing to take risks" and 10 indicates the opposite. Change in financial position (for Ukraine) can take values from -6 to +6, where -6 indicates a complete reversal from far above the average to far below the average and +6 indicates the opposite. Default categories are: satisfactory health, no change in health, no change in disability condition, no change in marital status, no change in the presence (or lack of) children with age<16 in the household, stayer in employment.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table 6. Fixed effects general risk attitudes for Germany: 2004-2013

	(1)	(2)	(3)
Age	-0.0255***		-0.0197***
	(0.00245)		(0.00245)
Log(HH income)	0.0204	0.00989	0.0160
	(0.0160)	(0.0157)	(0.0158)
HH wealth/100000	0.000977	0.000913	0.000673
	(0.00175)	(0.00176)	(0.00178)
Unemployed	0.0245	0.0258	0.0212
	(0.0410)	(0.0403)	(0.0408)
Out of labor force	0.0123	2.13e-05	0.00848
	(0.0281)	(0.0276)	(0.0279)
Health	0.0809***	0.0809***	0.0829***
	(0.0103)	(0.0102)	(0.0103)
Disabled	-0.0337	-0.0366	-0.0279
	(0.0413)	(0.0406)	(0.0410)
Widowed	-0.330***	-0.335***	-0.348***
	(0.106)	(0.105)	(0.105)
Married	-0.254***	-0.275***	-0.267***
	(0.0498)	(0.0494)	(0.0495)
Separated/divorced	-0.0499	-0.0723	-0.0672
	(0.0678)	(0.0669)	(0.0675)
Children<16 in HH	-0.0287	-0.0369	-0.0316
	(0.0286)	(0.0282)	(0.0285)
2006		0.314***	
		(0.0193)	
2008		-0.0729***	
		(0.0211)	
2009		-0.783***	
		(0.0213)	
2010		-0.263***	
		(0.0223)	
2011		-0.0314	
		(0.0224)	
2012		0.129***	
		(0.0230)	
2013		-0.192***	
		(0.0251)	
Regional GDP growth rate			0.0670***
			(0.00163)
Constant	5.560***	4.490***	5.234***
	(0.136)	(0.0738)	(0.135)
Observations	109,194	109,194	109,194
R-squared	0.004	0.044	0.023
Number of persons	25,402	25,402	25,402

The dependent variables are measured on a scale from 0 to 10, where 10 indicates "very willing to take risks" and 0 "not at all willing to take risks". Health variable ranges from 1 (very bad) to 5 (very good). Default categories are: not disabled, employed, single, no children with age<16 in the household and – in the regressions year dummies, year 2004.
Robust standard errors in brackets allow for clustering at the individual level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.
Source: SOEP [based on Version 30, full sample]

Table 7a. Probit regressions all self-employed Germany: 2004-2013

	(1) 2004	(2) 2006	(3) 2008	(4) 2009	(5) 2010	(6) 2011	(7) 2012	(8) 2013
Standardized general risk	0.0240***	0.0311***	0.0266***	0.0175***	0.0257***	0.0267***	0.0261***	0.0312***
	(0.00257)	(0.00301)	(0.00259)	(0.00285)	(0.00303)	(0.00336)	(0.00275)	(0.00296)
Female	-0.0228***	-0.0201**	-0.0147**	-0.0111	-0.00606	-0.0107	-0.0164**	-0.0151*
	(0.00651)	(0.00789)	(0.00748)	(0.00784)	(0.00840)	(0.00905)	(0.00723)	(0.00778)
Father's high education	0.0428***	0.0460***	0.0480***	0.0490***	0.0426***	0.0505***	0.0352***	0.0261***
	(0.00959)	(0.0110)	(0.0100)	(0.0106)	(0.0111)	(0.0120)	(0.00958)	(0.00985)
Mother's high education	0.0432***	0.0594***	0.0520***	0.0577***	0.0519***	0.0448***	0.0354***	0.0352***
	(0.0131)	(0.0152)	(0.0132)	(0.0143)	(0.0147)	(0.0148)	(0.0119)	(0.0129)
Household net wealth	0.00102	0.000952	0.00191***	0.00189***	0.00171***	0.00177***	0.00492***	0.00519***
(in 100.000 Euros)	(0.000642)	(0.000632)	(0.000692)	(0.000677)	(0.000642)	(0.000668)	(0.000861)	(0.000856)
Ln(household net income)	0.00965**	0.000144	0.00352	0.00264	0.00340	0.000793	-0.00589	-0.00205
	(0.00444)	(0.00451)	(0.00413)	(0.00428)	(0.00468)	(0.00490)	(0.00412)	(0.00453)
Age	0.00284***	0.00297***	0.00303***	0.00333***	0.00322***	0.00293***	0.00296***	0.00314***
	(0.000207)	(0.000245)	(0.000208)	(0.000235)	(0.000242)	(0.000269)	(0.000207)	(0.000228)
Height	0.00129***	0.00141***	0.00110***	0.00161***	0.00171***	0.00152***	0.00115***	0.000994**
	(0.000352)	(0.000423)	(0.000424)	(0.000433)	(0.000468)	(0.000495)	(0.000381)	(0.000403)
Observations	11,351	9,434	10,168	9,321	8,361	7,639	9,583	8,542
Mean of dependent variable	0.085	0.096	0.088	0.091	0.090	0.093	0.086	0.090

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". All risk measures are standardized. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher.

Reported coefficients are Probit marginal effects estimates, evaluated at the means of independent variables. All specifications include a constant. Robust standard errors that allow for clustering at the household level are reported in brackets below the coefficient estimates.

□□□, □□, □ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: SOEP [based on Version 30, full sample]

Table 7b. Probit regressions self-employed for Ukraine: 2007-2012

	(1) All 2007	(2) All 2012	(3) Agr 2007	(4) Agr 2012
Standardized general risk	0.0216***	0.00972**	0.00221*	-0.000759
	(0.00430)	(0.00391)	(0.00122)	(0.00134)
Female	-0.0218*	-0.0490***	-0.00506	0.00119
	(0.0116)	(0.0115)	(0.00332)	(0.00397)
Father's high education	0.00946	0.00613	#	-0.0117***
	(0.0182)	(0.0143)		(0.00331)
Mother's high education	-0.0234	-0.0159	#	-0.00406
	(0.0149)	(0.0122)		(0.00596)
Financial Position	0.00198	-0.00436	0.00171	-0.00401***
	(0.00429)	(0.00370)	(0.00112)	(0.00149)
Ln(household net income)	-0.0197**	-0.0244***	-0.00113	-0.0125***
	(0.00815)	(0.00649)	(0.00243)	(0.00267)
Age	0.000816**	0.00122***	5.46e-05	0.000690***
	(0.000348)	(0.000352)	(6.89e-05)	(0.000164)
Height	-0.00126*	-0.000164	-0.000212*	-1.84e-05
	(0.000728)	(0.000683)	(0.000111)	(0.000265)
Observations	3,252	3,848	2,653	3,661
Mean of dependent variable	0.069	0.071	0.006	0.023

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". All risk measures are standardized. Parent's high education for Ukraine includes those with incomplete higher education and higher.

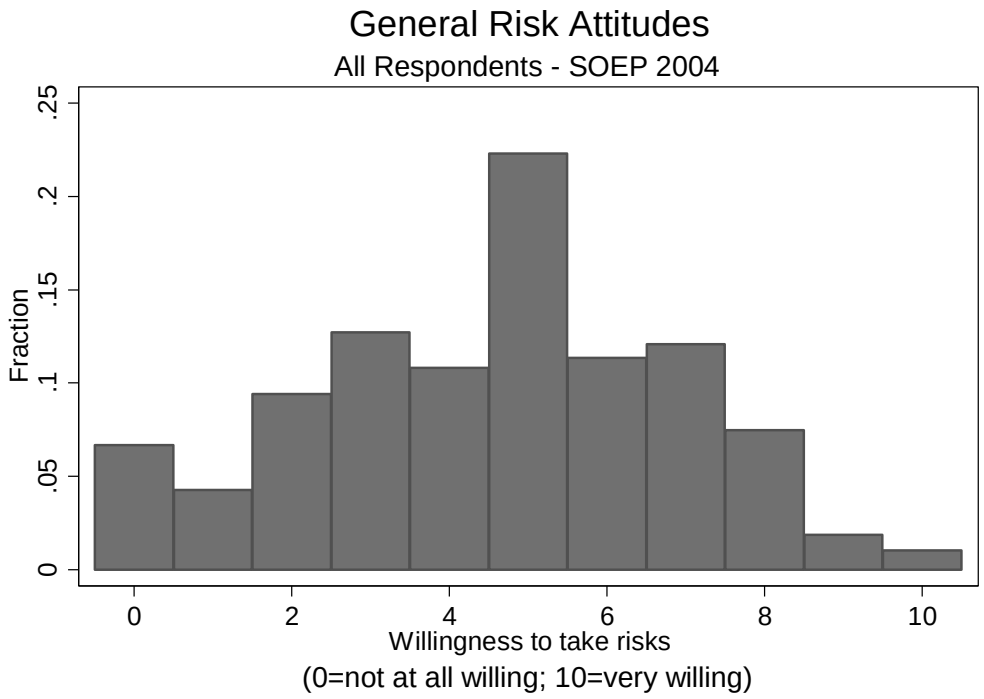
Reported coefficients are Probit marginal effects estimates, evaluated at the means of independent variables. All specifications include a constant. Robust standard errors that allow for clustering at the household level are reported in brackets below the coefficient estimates.

□□□, □□, □ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: ULMS

Figures

Figure 1: Distribution of willingness to take risks in Germany and Ukraine



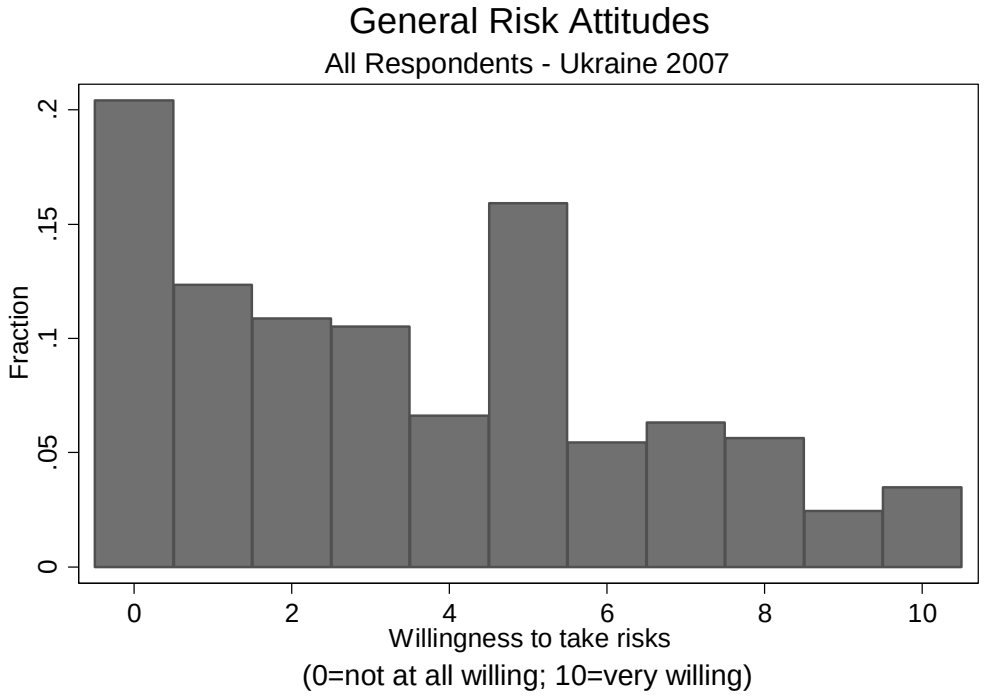


Figure 2: Gender differences in willingness to take risks in Germany and Ukraine

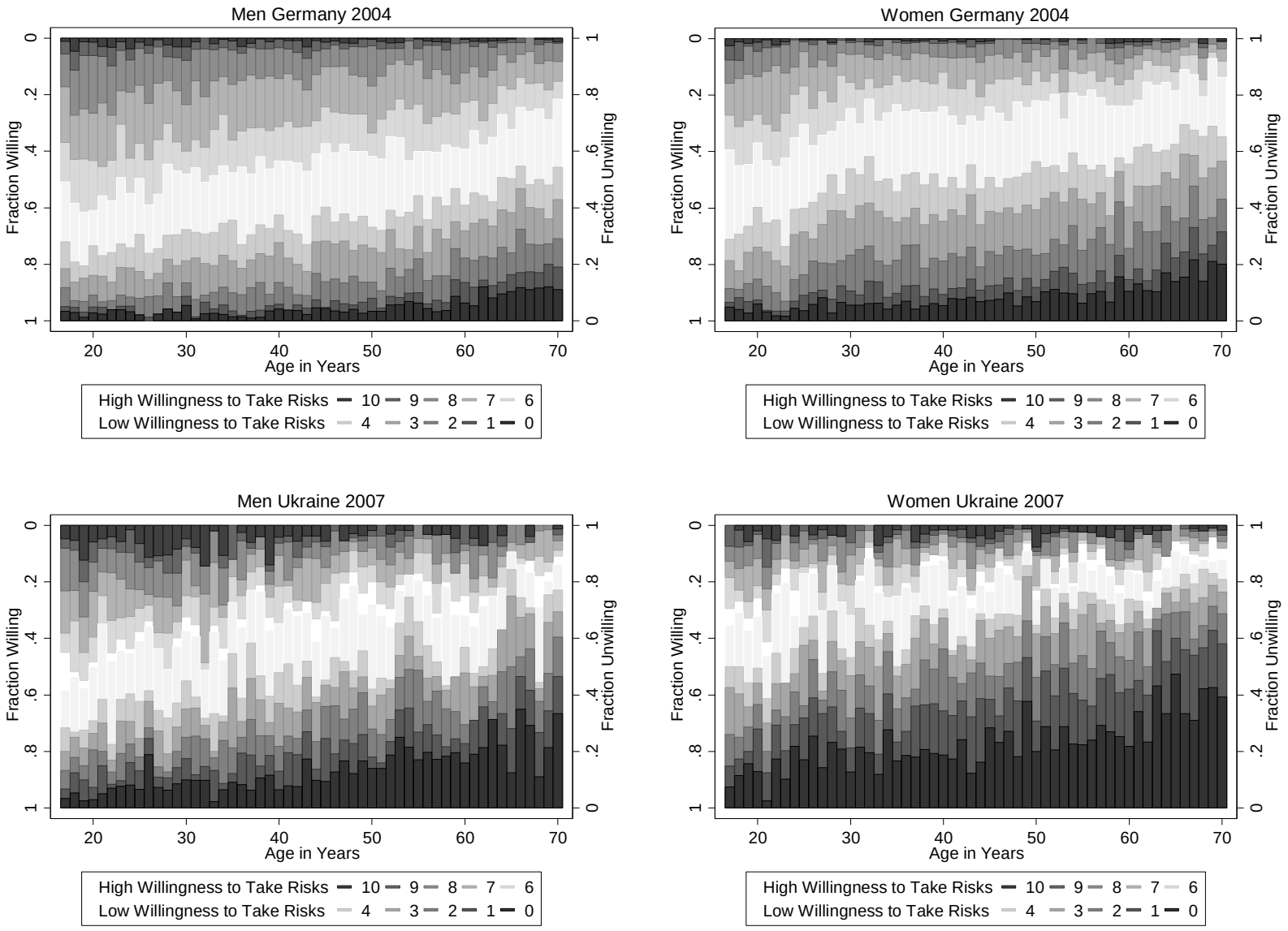
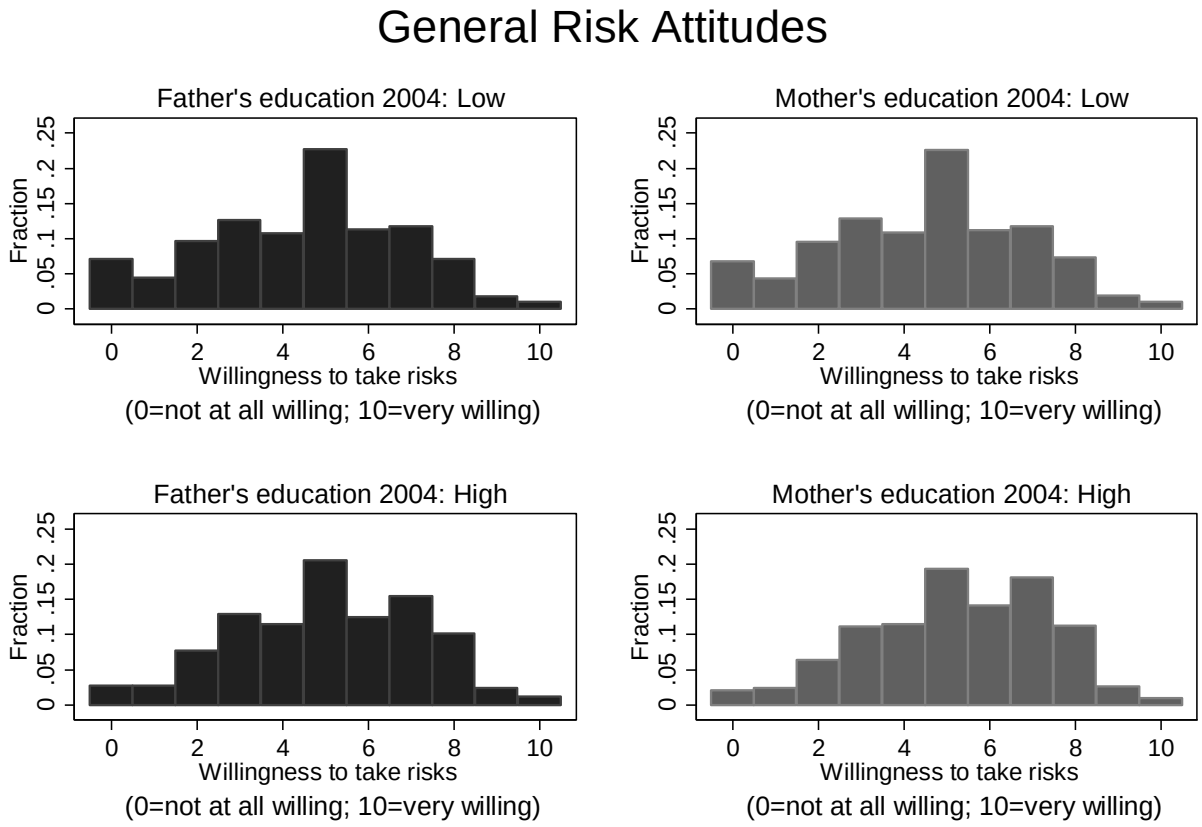
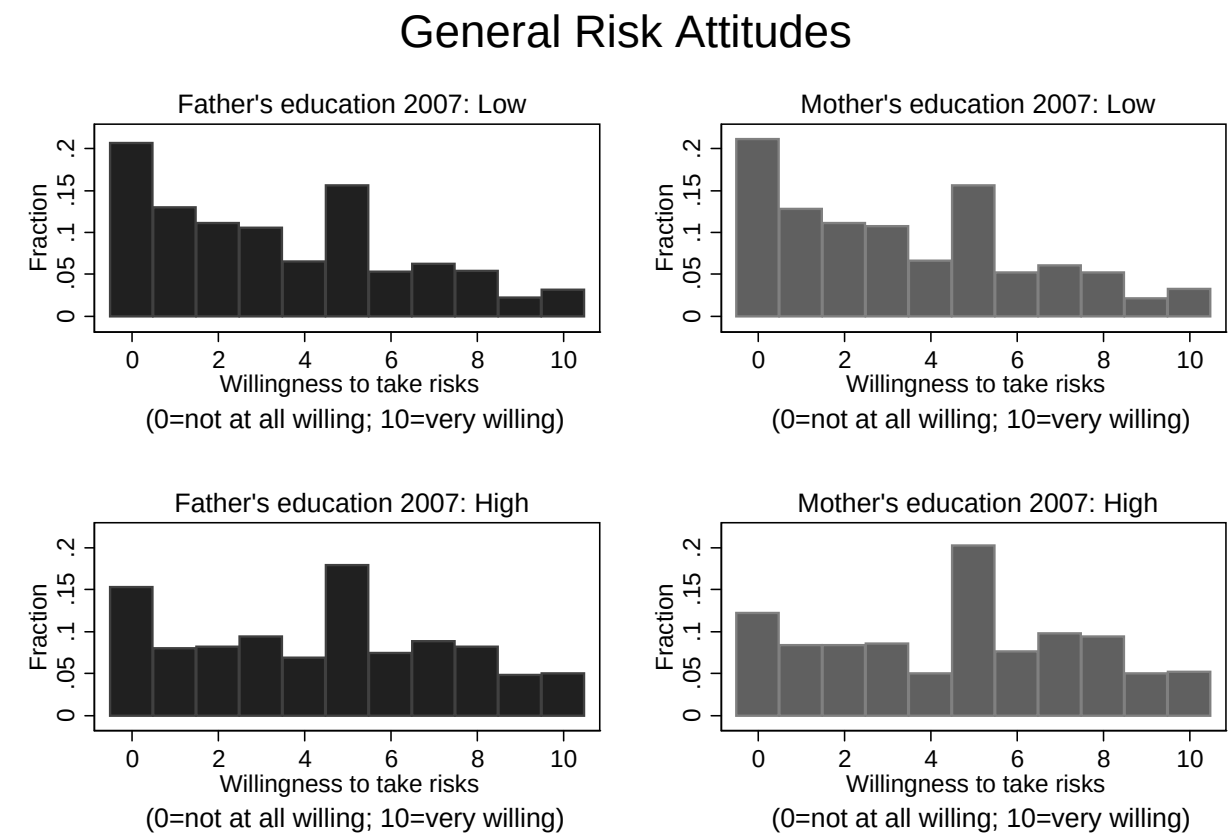


Figure 3: Willingness to take risks in Germany by parental education



Source: SOEP

Figure 4: Willingness to take risks in Ukraine by parental education



Source: ULMS

Figure 5: Correlations between general risk measures conditioned on specific time intervals – Germany

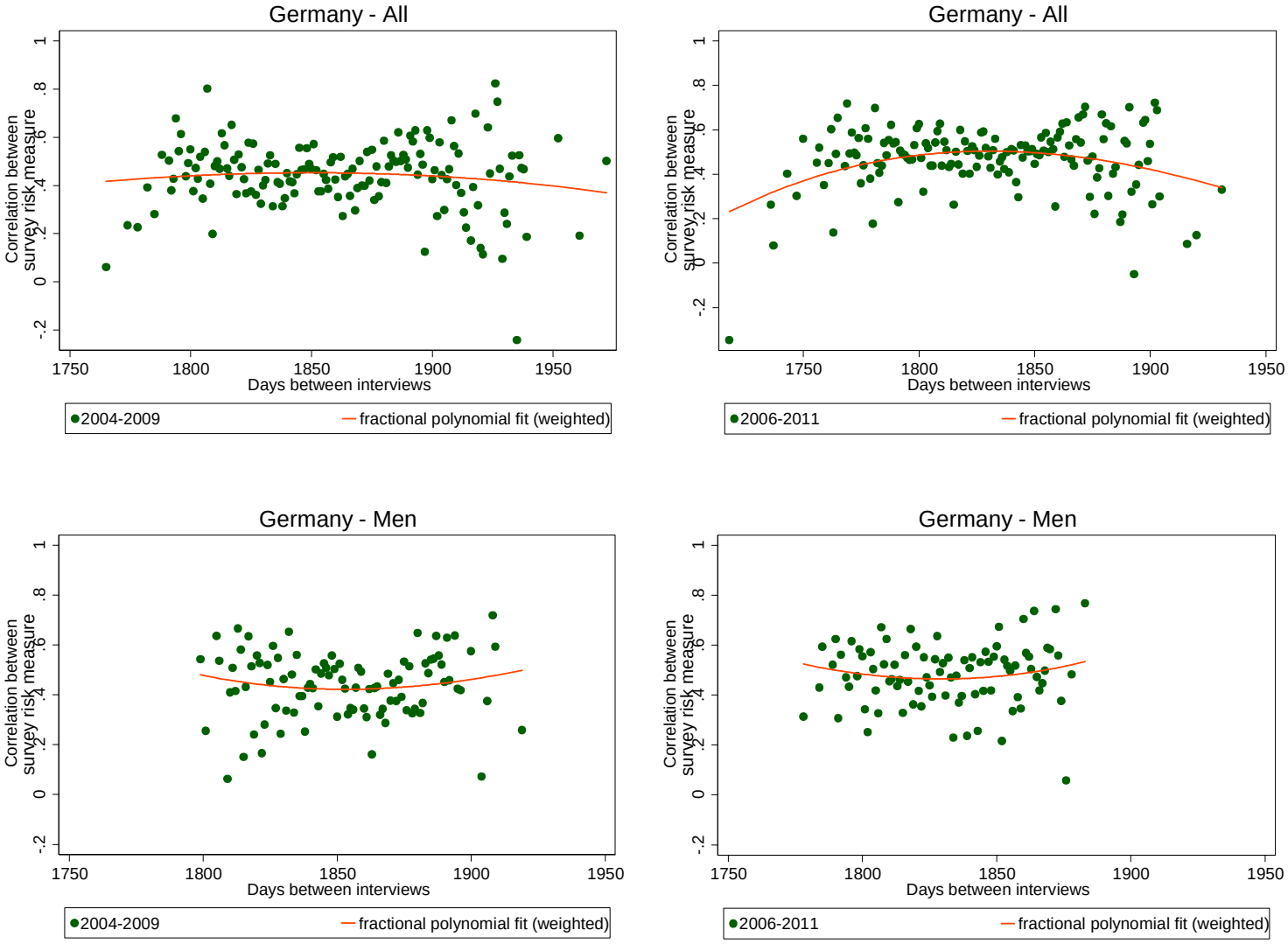


Figure 5 continued: Correlations between general risk measures conditioned on specific time intervals – Germany

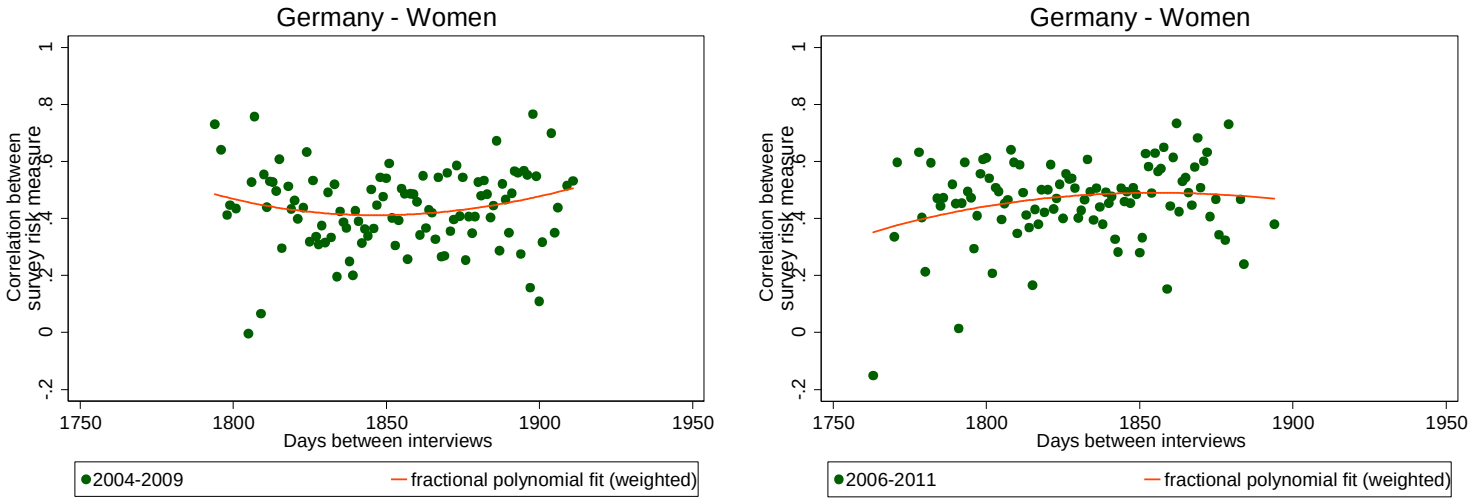
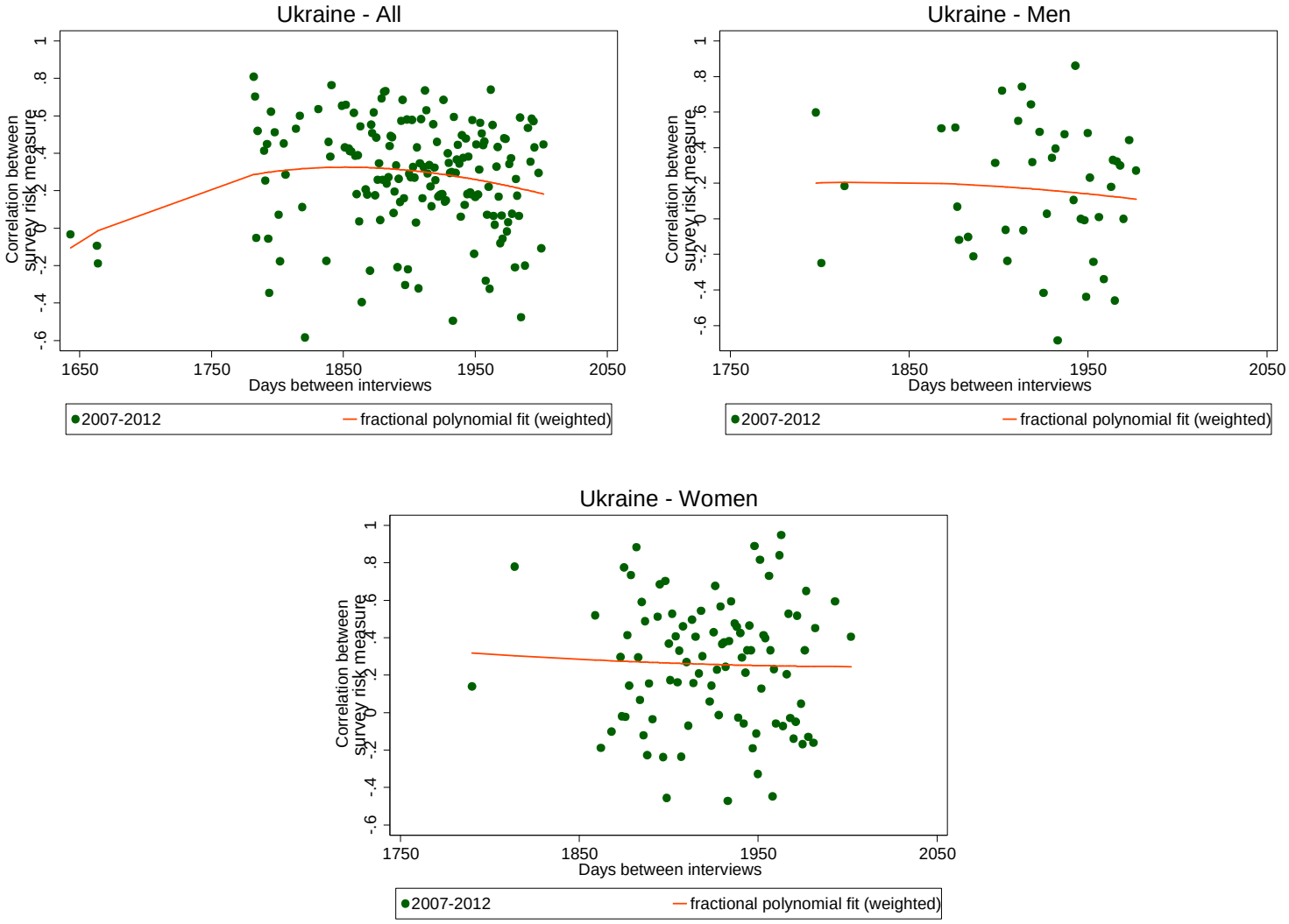


Figure 6: Correlations between general risk measures conditioned on specific time intervals – Ukraine



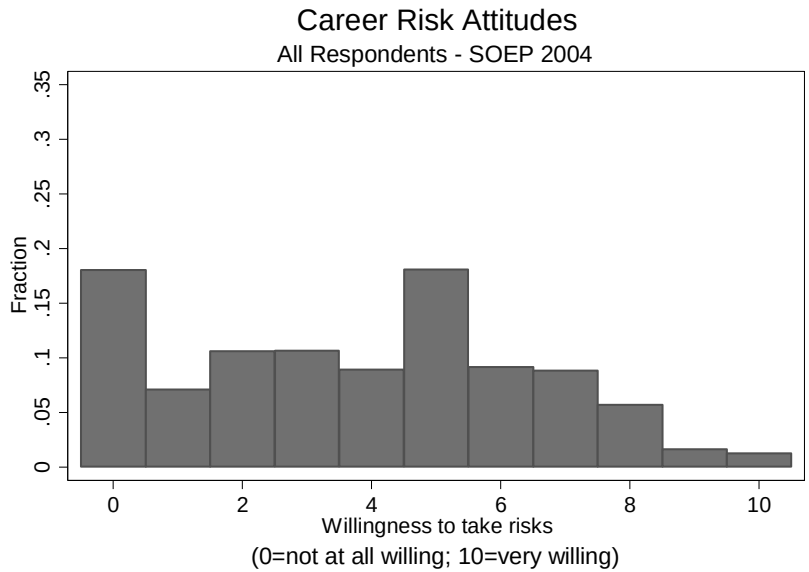
APPENDIX - **Table A1**: Primary determinants of Risk Attitudes in Different Domains of Life 2007 - extended - Ukraine

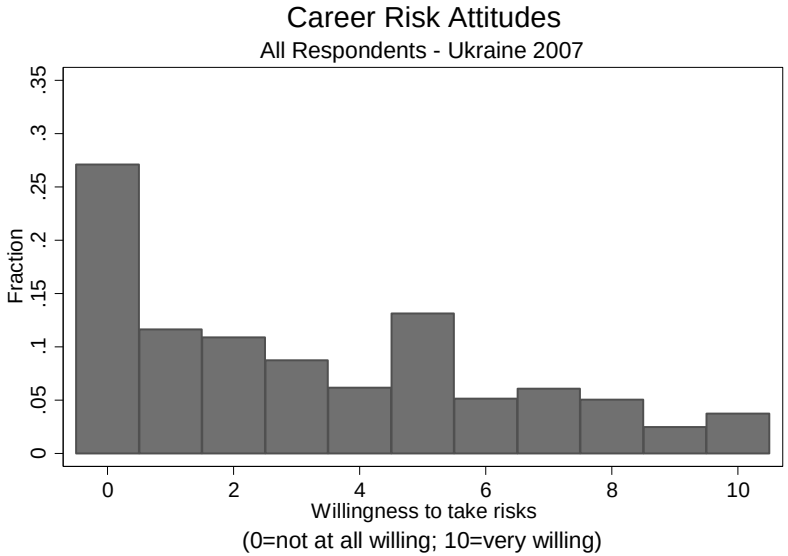
	(1) General	(3) Car driving	(5) Financial matters	(7) Sports/leisure	(9) Career	(11) Health
Female	-1.264***	-2.042***	-0.826***	-1.329***	-1.154***	-0.968***
	(0.164)	(0.286)	(0.187)	(0.195)	(0.217)	(0.187)
Age	-0.0338***	-0.0267**	-0.0411***	-0.0452***	-0.0523***	-0.0243***
	(0.00720)	(0.0119)	(0.00779)	(0.00864)	(0.00915)	(0.00831)
Height	0.00124	-0.00350	0.00243	0.00709	-0.00593	0.0119
	(0.00971)	(0.0166)	(0.0113)	(0.0116)	(0.0128)	(0.0114)
Father's high education	0.326	-0.0271	0.339	0.341	0.659**	0.417
	(0.229)	(0.406)	(0.245)	(0.273)	(0.289)	(0.268)
Mother's high education	0.290	0.112	-0.153	0.0552	-0.237	-0.318
	(0.226)	(0.391)	(0.248)	(0.269)	(0.285)	(0.265)
Married	-0.563**	-1.244***	-0.632**	-1.043***	-0.775***	-0.520*
	(0.238)	(0.413)	(0.255)	(0.283)	(0.289)	(0.283)
Separated/Divorced	-0.0642	-1.377**	-0.132	-0.562	-0.119	-0.302
	(0.310)	(0.537)	(0.340)	(0.360)	(0.381)	(0.358)
Widowed	-0.368	-1.350**	-0.576	-1.175***	-0.634	-0.733*
	(0.354)	(0.641)	(0.371)	(0.449)	(0.470)	(0.396)
Health	0.297***	0.214	0.0887	0.329***	0.0878	0.180
	(0.0972)	(0.165)	(0.109)	(0.122)	(0.132)	(0.116)
Disabled	-0.114	0.604**	-0.147	0.0539	0.0754	0.129
	(0.157)	(0.269)	(0.176)	(0.190)	(0.208)	(0.187)
1 dependent child	0.0910	0.419	0.373**	0.171	0.468**	0.253
	(0.162)	(0.273)	(0.183)	(0.207)	(0.207)	(0.192)
2 dependent children	-0.0890	0.260	0.218	-0.0405	0.126	0.261
	(0.197)	(0.357)	(0.231)	(0.257)	(0.261)	(0.249)
3 dependent children	-0.523	0.152	0.147	-0.0449	0.0629	-0.557
	(0.613)	(0.933)	(0.593)	(0.644)	(0.804)	(0.572)
>3 dependent children	2.039**	3.675**	1.915**	1.916**	0.775	2.369**
	(0.807)	(1.595)	(0.817)	(0.835)	(0.860)	(0.953)
Catholic	0.634	0.271	-0.255	0.163	-0.204	0.0444
	(0.477)	(0.659)	(0.554)	(0.585)	(0.612)	(0.585)
Other Christian	-0.196	-0.226	-0.276	0.0746	-0.174	-0.0597
	(0.429)	(0.566)	(0.490)	(0.508)	(0.539)	(0.520)
Other Non-Christian	0.183	-0.339	0.149	0.453	0.0902	0.192
	(0.445)	(0.606)	(0.516)	(0.529)	(0.557)	(0.544)
No religion	-0.0496	-0.232	-0.0127	0.764	0.287	-0.0102
	(0.461)	(0.631)	(0.524)	(0.545)	(0.585)	(0.571)
Ukrainian	-0.355**	0.126	-0.151	-0.303	-0.0875	0.189
	(0.161)	(0.256)	(0.186)	(0.193)	(0.207)	(0.181)
Higher Education	0.186	-0.00801	0.453**	0.257	0.641**	0.553**
	(0.196)	(0.301)	(0.224)	(0.236)	(0.277)	(0.227)
High School Diploma	0.0414	0.305	0.430**	0.346	0.460*	0.405**
	(0.182)	(0.277)	(0.209)	(0.216)	(0.256)	(0.204)
Enrolled higher education	0.0533	0.170	-0.137	-0.281	0.279	0.00879
	(0.272)	(0.448)	(0.309)	(0.310)	(0.326)	(0.325)
Enrolled other education/training	0.111	-1.398	-0.441	-0.410	-1.068	0.220
	(0.483)	(0.980)	(0.663)	(0.714)	(0.783)	(0.740)
Technicians/Associate professionals	-0.300	-0.259	-0.239	-0.162	-0.510*	0.0743
	(0.252)	(0.422)	(0.263)	(0.297)	(0.293)	(0.285)
Clerks	-0.319	0.0166	-0.0562	-0.0950	-0.433	-0.0121
	(0.344)	(0.628)	(0.389)	(0.414)	(0.421)	(0.404)
Service workers and salesmen	-0.235	-0.0430	-0.431	-0.534	-0.640*	0.0517
	(0.300)	(0.541)	(0.314)	(0.350)	(0.356)	(0.345)

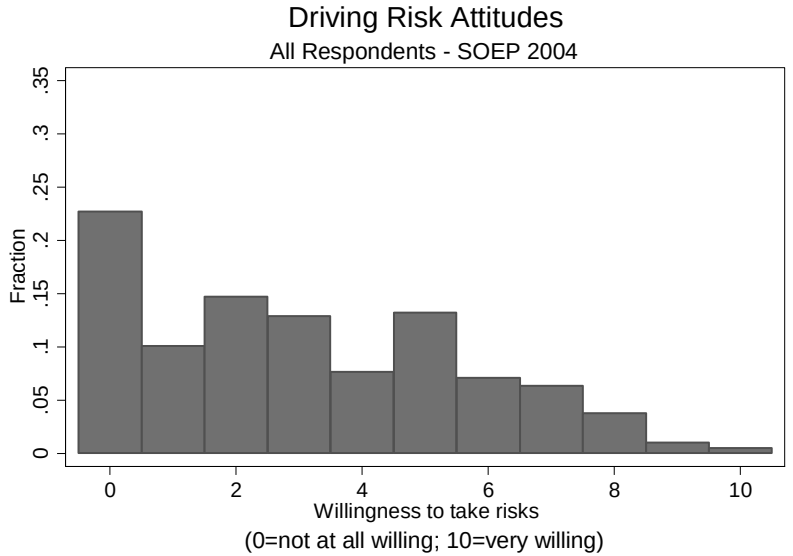
Skilled agriculture, forestry and fishing	0.0119	-0.569	0.0231	0.163	-0.345	-0.117
	(1.032)	(1.221)	(0.925)	(1.218)	(0.969)	(0.948)
Skilled manual workers	-0.272	0.104	-0.0214	-0.148	-0.726**	-0.140
	(0.242)	(0.371)	(0.264)	(0.288)	(0.287)	(0.279)
Plant and machine operators	0.106	0.0861	-0.603*	-0.422	-0.936**	-0.380
	(0.313)	(0.464)	(0.335)	(0.392)	(0.393)	(0.359)
Unskilled occupations	-0.426	0.0230	-0.519*	-0.407	-0.887***	-0.388
	(0.259)	(0.400)	(0.285)	(0.307)	(0.324)	(0.300)
Armed forces	0.998	0.948	0.645	-0.0122	-0.248	-0.747
	(0.737)	(0.965)	(0.738)	(0.624)	(0.775)	(0.685)
Entrepreneurs/Employers	0.834*	0.610	0.838*	-0.133	0.370	0.117
	(0.485)	(0.585)	(0.485)	(0.520)	(0.541)	(0.546)
Self-Employed agriculture	-0.753	-0.640	-0.544	-1.225	-1.736**	-0.809
	(0.923)	(2.808)	(0.923)	(1.038)	(0.776)	(1.245)
Self-Employed not-agriculture	-0.698	-0.645	-0.967	-1.306	-2.830***	0.455
	(0.952)	(2.823)	(0.984)	(1.082)	(0.915)	(1.299)
Unpaid workers	1.624*	0.423	1.409*	1.732*	2.383***	0.809
	(0.866)	(2.738)	(0.848)	(0.918)	(0.594)	(1.183)
Retired	0.143	0.331	0.0724	0.104	0.296	0.0312
	(0.230)	(0.409)	(0.252)	(0.291)	(0.350)	(0.264)
Unemployed	0.0405	0.396	0.102	-0.123	-0.388	-0.178
	(0.310)	(0.498)	(0.370)	(0.375)	(0.432)	(0.359)
Out of labor force	-0.531**	-0.406	-0.333	-0.400	-0.905***	-0.144
	(0.231)	(0.377)	(0.246)	(0.274)	(0.303)	(0.260)
Log HH income	0.122	-0.0633	0.0712	-0.00277	0.212	-0.0947
	(0.108)	(0.172)	(0.119)	(0.129)	(0.134)	(0.129)
Satisfaction life	0.149**	0.105	0.287***	0.242***	0.281***	-0.146
	(0.0761)	(0.129)	(0.0871)	(0.0929)	(0.0973)	(0.0907)
March	-1.960		-0.201	0.429	0.409	0.130
	(2.792)		(1.422)	(1.120)	(0.560)	(2.625)
April	-1.658***	-3.673**	1.490	0.843	1.390	0.800
	(0.410)	(1.519)	(1.953)	(1.472)	(1.932)	(0.587)
May	-0.0715	-3.260*	-0.689	-1.070	-0.818	-1.514**
	(0.607)	(1.671)	(0.823)	(0.809)	(0.659)	(0.734)
June	-0.0233	0.00602	-0.263	-0.315	-0.229	-0.0628
	(0.190)	(0.301)	(0.203)	(0.224)	(0.232)	(0.236)
August	0.519***	0.314	0.574***	0.365	0.280	0.206
	(0.184)	(0.291)	(0.216)	(0.232)	(0.239)	(0.228)
September	0.180	0.113	0.399	0.118	-0.113	0.0859
	(0.242)	(0.420)	(0.268)	(0.319)	(0.336)	(0.287)
October	0.261	0.0231	0.391	-0.0940	0.346	-0.146
	(0.276)	(0.409)	(0.301)	(0.319)	(0.350)	(0.284)
November	0.275	-0.557	0.263	-0.385	0.0504	0.487
	(0.261)	(0.423)	(0.297)	(0.318)	(0.327)	(0.311)
December	0.0643	0.614	0.146	-0.202	-0.0281	0.327
	(0.310)	(0.503)	(0.342)	(0.391)	(0.389)	(0.372)
Constant	3.446*	2.985	3.085	2.792	4.083	0.864
	(1.998)	(3.357)	(2.323)	(2.377)	(2.648)	(2.413)
Observations	3,390	1,862	3,143	2,727	2,580	3,320

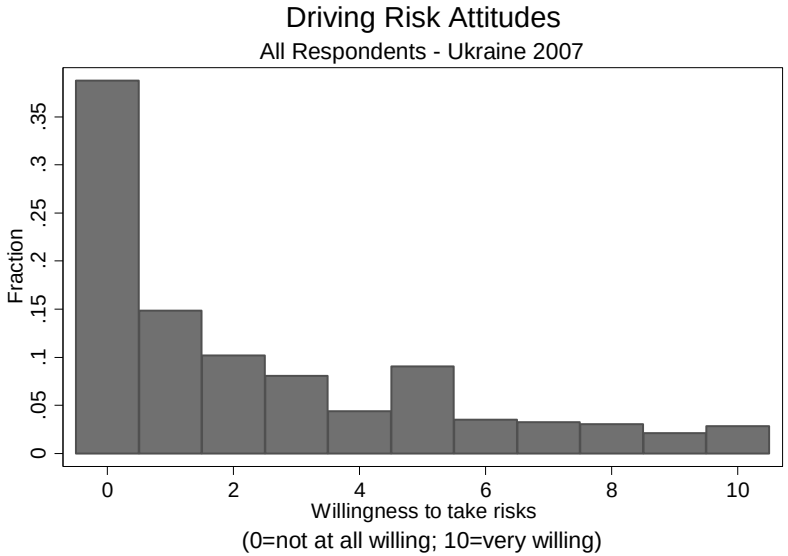
Interval regression coefficient estimates. The dependent variables are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education includes those with incomplete higher education and higher. ". Health variable ranges from 1 (very bad) to 5 (very good). Default categories are: Single, no dependent children, missing answer to religion question, non-Ukrainian, no high school diploma, Managers and professionals, employees, month of interview: July. Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively. *Source:* ULMS

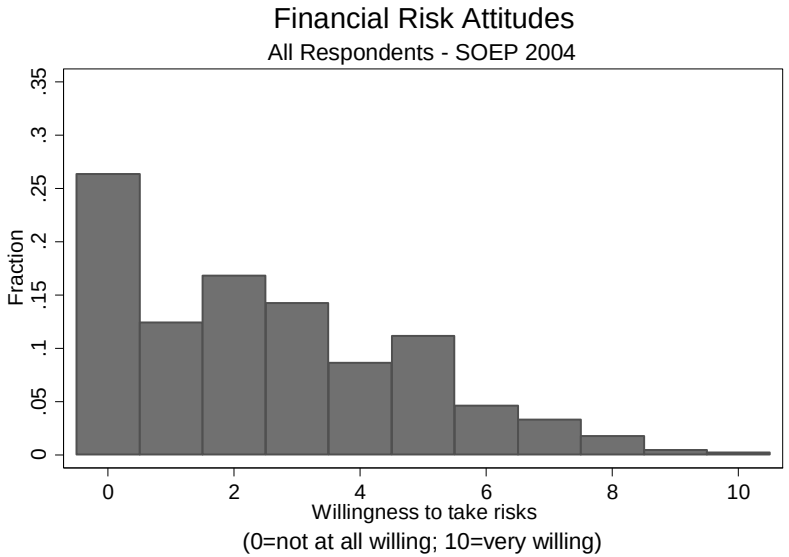
Figure A1: : Primary determinants of Risk Attitudes in Different Domains of Life in Germany and Ukraine










Financial Risk Attitudes
All Respondents - SOEP 2004
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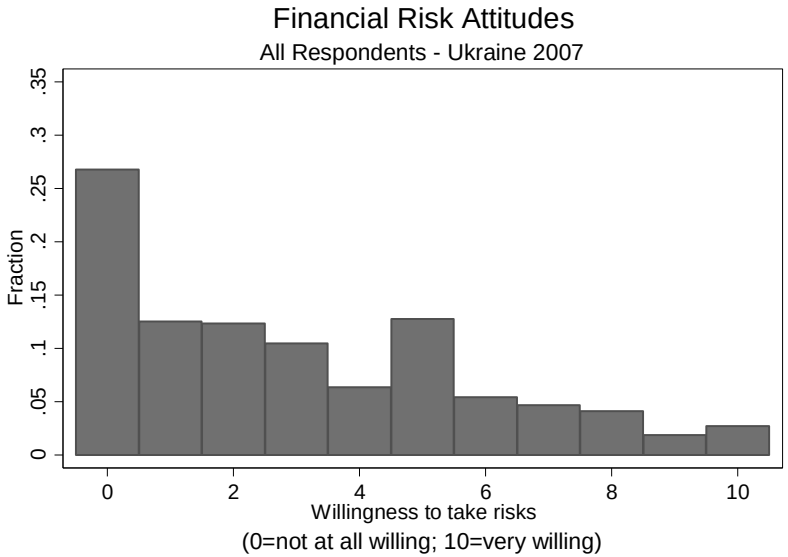
Willingness to take risks
(0=not at all willing; 10=very willing)


Financial Risk Attitudes
All Respondents - Ukraine 2007
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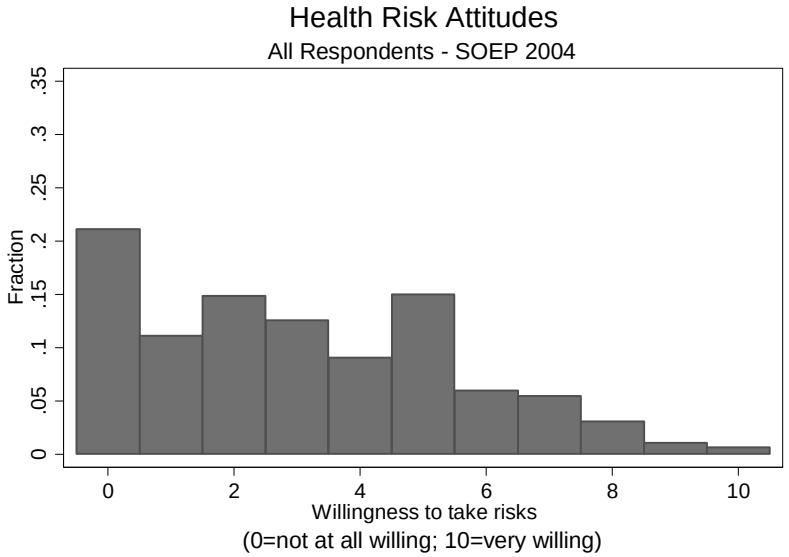
Willingness to take risks
(0=not at all willing; 10=very willing)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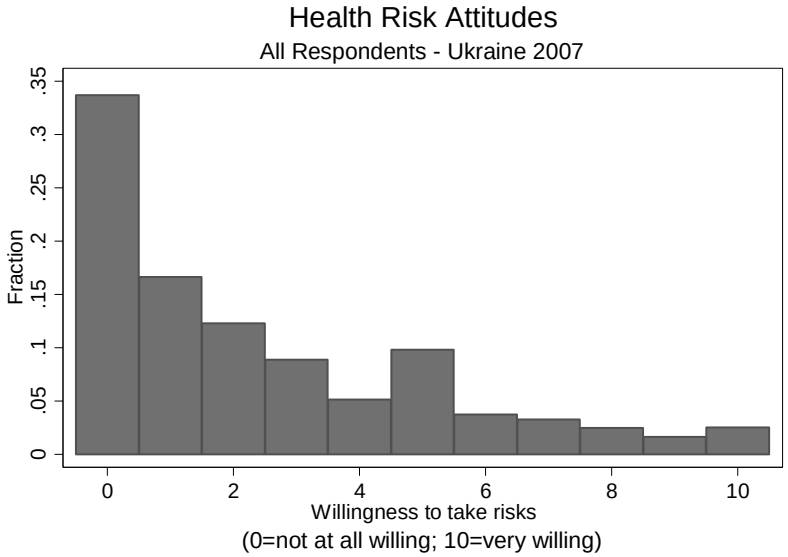
Willingness to take risks
(0=not at all willing; 10=very willing)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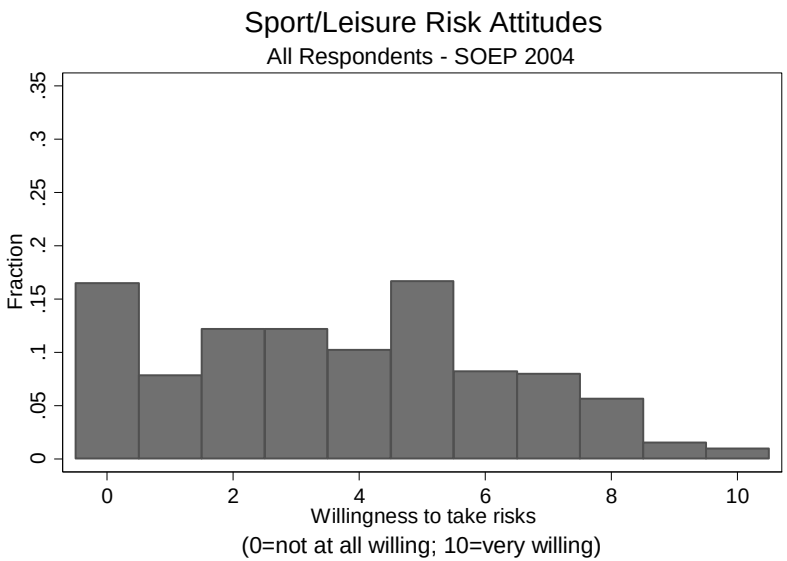
Willingness to take risks
(0=not at all willing; 10=very willing)


Sport/Leisure Risk Attitudes
All Respondents - SOEP 2004
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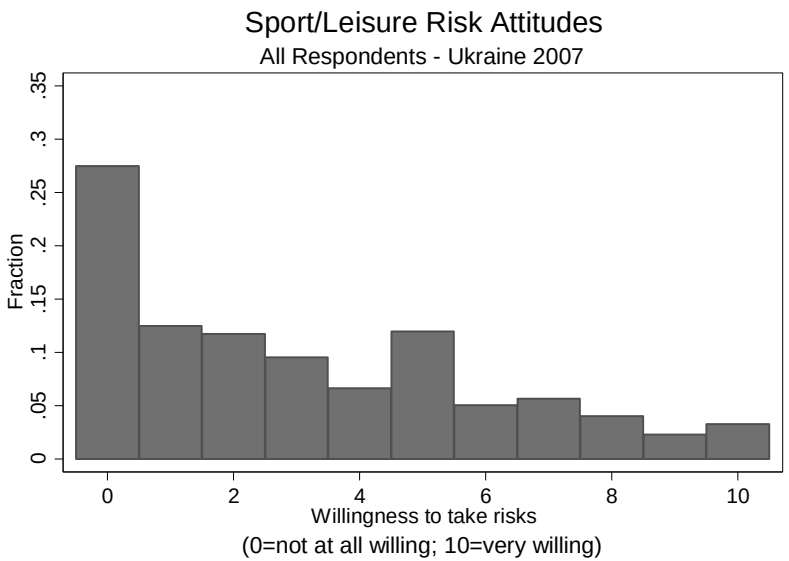
Willingness to take risks
(0=not at all willing; 10=very willing)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All Respondents - Ukraine 2007
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Willingness to take risks
(0=not at all willing; 10=very willing)

Table A2a: Determinants of changes in risk attitudes in other risk domains - Germany 2004-09

	(1) Driving	(2) Driving	(3) Financial	(4) Financial	(5) Leisure/Sport	(6) Leisure/Sport
Change in HH income (%)	0.00680	0.00685	0.00938	0.00922	0.000470	0.000281
	(0.0156)	(0.0157)	(0.0135)	(0.0135)	(0.0209)	(0.0209)
Change in HH wealth(%)	-0.000140	-0.000140	0.000375	0.000372	0.000174	0.000170
	(0.000179)	(0.000180)	(0.000257)	(0.000257)	(0.000110)	(0.000109)
Olf-Employment	0.298**	0.301**	0.0604	0.0583	0.0309	0.0286
	(0.140)	(0.140)	(0.125)	(0.126)	(0.133)	(0.133)
Unemployment-Employment	-0.00489	-0.00489	-0.211	-0.212	-0.295	-0.298
	(0.221)	(0.221)	(0.205)	(0.204)	(0.213)	(0.213)
Employment-Olf	-0.110	-0.110	0.123	0.123	0.0238	0.0226
	(0.0997)	(0.0997)	(0.0901)	(0.0901)	(0.102)	(0.102)
Employment-Unemployment	0.103	0.0982	0.120	0.123	0.0694	0.0737
	(0.210)	(0.209)	(0.165)	(0.165)	(0.197)	(0.196)
Unemployed	-0.163	-0.175	0.189	0.196	0.301**	0.309**
	(0.148)	(0.148)	(0.154)	(0.153)	(0.150)	(0.149)
Olf	0.0615	0.0607	0.143**	0.144**	0.0493	0.0499
	(0.0701)	(0.0701)	(0.0645)	(0.0645)	(0.0708)	(0.0708)
Change in regional unemployment rate 2004-09	0.0101		-0.00792		-0.00932	
	(0.0146)		(0.0132)		(0.0149)	
Regional GDP growth rate 2004-09		0.00939		0.00597		0.00841
		(0.0108)		(0.00985)		(0.0104)
Bad health	0.0780	0.0776	-0.0650	-0.0650	-0.120	-0.120
	(0.204)	(0.205)	(0.198)	(0.199)	(0.194)	(0.194)
Poor health	-0.0224	-0.0228	0.0596	0.0587	-0.108	-0.109
	(0.0878)	(0.0878)	(0.0814)	(0.0814)	(0.0896)	(0.0896)
Good health	-0.0763	-0.0740	-0.0570	-0.0572	-0.110*	-0.110*
	(0.0610)	(0.0610)	(0.0547)	(0.0546)	(0.0609)	(0.0609)
Very good health	-0.000463	0.00444	0.000387	-0.00196	-0.0832	-0.0859
	(0.103)	(0.102)	(0.0913)	(0.0910)	(0.108)	(0.108)
Improving health	0.0430	0.0471	0.0742	0.0735	0.159**	0.159**
	(0.0738)	(0.0737)	(0.0693)	(0.0692)	(0.0749)	(0.0749)
Worsening health	0.0870	0.0877	0.0976*	0.0966*	0.00975	0.00867
	(0.0609)	(0.0609)	(0.0535)	(0.0534)	(0.0613)	(0.0613)
Became disabled	-0.0277	-0.0237	0.0634	0.0633	-0.101	-0.101
	(0.121)	(0.121)	(0.112)	(0.112)	(0.127)	(0.127)
No more disabled	0.129	0.131	0.366	0.364	0.0700	0.0672
	(0.245)	(0.246)	(0.223)	(0.222)	(0.225)	(0.225)

Became widowed	0.121	0.119	0.377*	0.376*	0.516**	0.514**
	(0.179)	(0.179)	(0.212)	(0.212)	(0.214)	(0.214)
Became married	-0.234*	-0.233*	0.00261	0.00216	-0.157	-0.158
	(0.129)	(0.129)	(0.113)	(0.113)	(0.124)	(0.124)
Became separated	0.230	0.232	-0.0400	-0.0403	0.290	0.290
	(0.172)	(0.172)	(0.149)	(0.149)	(0.189)	(0.189)
New children<16 in HH	-0.283**	-0.284**	-0.275*	-0.277*	-0.255*	-0.257*
	(0.140)	(0.140)	(0.148)	(0.148)	(0.151)	(0.151)
No more children<16 in HH	-0.0710	-0.0732	-0.0413	-0.0411	-0.0620	-0.0619
	(0.0865)	(0.0865)	(0.0741)	(0.0741)	(0.0874)	(0.0874)
Constant	-0.510***	-0.566***	-1.135***	-1.132***	-0.984***	-0.984***
	(0.0730)	(0.0684)	(0.0639)	(0.0589)	(0.0724)	(0.0679)
Observations	9,560	9,560	9,962	9,962	9,858	9,858

Interval regression coefficient estimates. The dependent variables are measured on a scale from -10 to 10, where -10 indicates a complete reversal from "very willing to take risks" to "not at all willing to take risks" and 10 indicates the opposite. Default categories are: satisfactory health, no change in health, no change in disability condition, no change in marital status, no change in the presence (or lack of) children with age<16 in the household, stayer in employment.

Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: SOEP [based on Version 30, full sample]

Table A2b: Determinants of changes in risk attitudes in other risk domains - Germany 2004-09

	(1) Career	(2) Career	(3) Health	(4) Health
Change in HH income (%)	-0.000523	-0.000323	0.00597	0.00573
	(0.0163)	(0.0164)	(0.0159)	(0.0157)
Change in HH wealth(%)	-0.000830***	-0.000826***	0.000514***	0.000510***
	(0.000203)	(0.000202)	(0.000196)	(0.000194)
Olf-Employment	0.199	0.202	0.156	0.149
	(0.171)	(0.171)	(0.146)	(0.146)
Unemployment-Employment	0.250	0.251	-0.464*	-0.465*
	(0.274)	(0.275)	(0.238)	(0.237)
Employment-Olf	-0.293**	-0.291**	0.0683	0.0683
	(0.134)	(0.134)	(0.103)	(0.103)
Employment-Unemployment	0.248	0.241	-0.0396	-0.0290
	(0.245)	(0.244)	(0.210)	(0.210)
Unemployed	-0.239	-0.252	0.289*	0.311*
	(0.212)	(0.212)	(0.171)	(0.171)
Olf	0.0850	0.0838	0.194***	0.196***
	(0.0987)	(0.0987)	(0.0735)	(0.0736)
Change in regional unemployment rate 2004-09	0.0142		-0.0208	
	(0.0176)		(0.0154)	
Regional GDP growth rate 2004-09		-0.00440		-0.00398
		(0.0124)		(0.0113)
Bad health	-0.517*	-0.517*	0.205	0.206
	(0.283)	(0.283)	(0.194)	(0.193)
Poor health	-0.230**	-0.227**	-0.0952	-0.0961
	(0.112)	(0.112)	(0.0962)	(0.0961)
Good health	0.0426	0.0439	-0.0792	-0.0821
	(0.0721)	(0.0721)	(0.0643)	(0.0643)
Very good health	0.0949	0.0997	0.0857	0.0776
	(0.126)	(0.126)	(0.110)	(0.110)
Improving health	0.110	0.112	-0.0746	-0.0800
	(0.0886)	(0.0886)	(0.0800)	(0.0800)
Worsening health	-0.103	-0.101	-0.0264	-0.0284
	(0.0724)	(0.0723)	(0.0641)	(0.0640)
Became disabled	-0.0907	-0.0900	-0.265**	-0.270**
	(0.160)	(0.160)	(0.129)	(0.129)
No more disabled	-0.177	-0.171	0.140	0.136
	(0.287)	(0.287)	(0.292)	(0.291)

Became widowed	0.277	0.276	0.329	0.331
	(0.246)	(0.246)	(0.222)	(0.222)
Became married	-0.00532	-0.00466	-0.157	-0.159
	(0.147)	(0.147)	(0.131)	(0.131)
Became separated	0.188	0.189	0.344*	0.341*
	(0.182)	(0.183)	(0.176)	(0.176)
New children<16 in HH	-0.112	-0.109	-0.204	-0.206
	(0.150)	(0.150)	(0.146)	(0.147)
No more children<16 in HH	-0.0579	-0.0591	0.0211	0.0234
	(0.0988)	(0.0988)	(0.0915)	(0.0915)
Constant	-1.022***	-1.048***	-0.838***	-0.769***
	(0.0843)	(0.0788)	(0.0767)	(0.0708)
Observations	8,741	8,741	10,005	10,005

Interval regression coefficient estimates. The dependent variables are measured on a scale from -10 to 10, where -10 indicates a complete reversal from "very willing to take risks" to "not at all willing to take risks" and 10 indicates the opposite. Default categories are: satisfactory health, no change in health, no change in disability condition, no change in marital status, no change in the presence (or lack of) children with age<16 in the household, stayer in employment.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Source: SOEP [based on Version 30, full sample]

Table A2c: Determinants of changes in risk attitudes in other risk domains - Ukraine 2007-2012

	(1) Driving	(3) Driving	(5) Financial	(7) Financial	(9) Leisure/Sport	(11) Leisure/Sport
Change in HH income (%)	0.0465	0.0475	0.0735	0.0654	0.0770	0.0774
	(0.104)	(0.104)	(0.0648)	(0.0654)	(0.0809)	(0.0818)
Change in financial position	0.105	0.103	0.0842*	0.0833*	0.0609	0.0542
	(0.0775)	(0.0771)	(0.0483)	(0.0483)	(0.0556)	(0.0556)
Olf-Employment	0.325	0.317	0.159	0.180	0.00929	0.0101
	(0.486)	(0.485)	(0.281)	(0.281)	(0.295)	(0.295)
Unemployment-Employment	-1.392	-1.409	0.400	0.466	-0.114	-0.116
	(1.320)	(1.317)	(0.588)	(0.595)	(0.573)	(0.574)
Employment-Olf	0.0427	0.0513	0.226	0.257	-0.0919	-0.0661
	(0.330)	(0.331)	(0.191)	(0.192)	(0.226)	(0.227)
Employment-Unemployment	-0.762	-0.748	0.0617	0.0261	0.746*	0.761**
	(0.605)	(0.607)	(0.320)	(0.323)	(0.381)	(0.383)
Unemployed	0.201	0.219	-0.464	-0.498	-0.242	-0.221
	(0.749)	(0.748)	(0.402)	(0.407)	(0.421)	(0.422)
Olf	0.147	0.151	0.0496	0.0541	0.201	0.206
	(0.285)	(0.285)	(0.162)	(0.162)	(0.186)	(0.186)
Change in regional unemployment rate 2004-09	-0.0240		-0.241***		-0.146*	
	(0.121)		(0.0709)		(0.0848)	
Regional GDP growth rate 2004-09		-0.00274		0.0131*		0.000226
		(0.0124)		(0.00728)		(0.00828)
Bad health	0.347	0.341	0.840*	0.876*	0.346	0.338
	(1.050)	(1.044)	(0.447)	(0.448)	(0.522)	(0.522)
Poor health	0.372	0.361	-0.0532	-0.0458	0.00998	0.00663
	(0.363)	(0.361)	(0.191)	(0.192)	(0.228)	(0.228)
Good health	-0.509*	-0.506*	-0.215	-0.196	-0.346*	-0.333*
	(0.278)	(0.277)	(0.161)	(0.161)	(0.181)	(0.181)
Very good health	-1.519**	-1.514*	-0.562	-0.535	-1.220***	-1.202**
	(0.772)	(0.774)	(0.415)	(0.420)	(0.472)	(0.477)
Improving health	-0.449	-0.445	-0.0337	-0.0441	0.135	0.138
	(0.328)	(0.329)	(0.167)	(0.168)	(0.199)	(0.200)
Worsening health	-0.488	-0.488	-0.449***	-0.438***	-0.216	-0.214
	(0.300)	(0.300)	(0.164)	(0.165)	(0.191)	(0.191)
Became disabled	-0.275	-0.273	0.187	0.220	-0.0216	-0.00816
	(0.408)	(0.408)	(0.197)	(0.198)	(0.226)	(0.226)

No more disabled	-0.188	-0.183	-0.396**	-0.420**	-0.333*	-0.339*
	(0.310)	(0.310)	(0.175)	(0.175)	(0.198)	(0.197)
Became widowed	0.325	0.317	-0.230	-0.200	-0.332	-0.337
	(0.467)	(0.466)	(0.273)	(0.274)	(0.335)	(0.334)
Became married	-0.208	-0.214	-0.176	-0.181	-0.452**	-0.461**
	(0.339)	(0.341)	(0.185)	(0.185)	(0.205)	(0.205)
Became separated	-0.102	-0.105	0.152	0.151	-0.218	-0.223
	(0.537)	(0.538)	(0.271)	(0.269)	(0.317)	(0.318)
New children<16 in HH	-0.0243	-0.0276	0.149	0.181	-0.0358	-0.0245
	(0.410)	(0.409)	(0.228)	(0.229)	(0.233)	(0.234)
No more children<16 in HH	-0.0212	-0.0230	-0.127	-0.106	-0.237	-0.239
	(0.368)	(0.368)	(0.201)	(0.203)	(0.236)	(0.238)
Constant	-0.471*	-0.506**	-0.568***	-0.843***	-0.540***	-0.715***
	(0.262)	(0.221)	(0.154)	(0.138)	(0.186)	(0.163)
Observations	1,112	1,112	3,192	3,192	2,469	2,469

Interval regression coefficient estimates. The dependent variables are measured on a scale from -10 to 10, where -10 indicates a complete reversal from "very willing to take risks" to "not at all willing to take risks" and 10 indicates the opposite. Change in financial position can take values from -6 to +6, where -6 indicates a complete reversal from far above the average to far below the average and +6 indicates the opposite. Default categories are: satisfactory health, no change in health, no change in disability condition, no change in marital status, no change in the presence (or lack of) children with age<16 in the household, stayer in employment.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS

Table A2d: Determinants of changes in risk attitudes in other risk domains - Ukraine 2007-2012

	(1) Career	(2) Career	(3) Health	(4) Health
Change in HH income (%)	0.0609	0.0537	0.0811	0.0783
	(0.0736)	(0.0735)	(0.0692)	(0.0698)
Change in financial position	0.0118	0.0103	0.0396	0.0323
	(0.0604)	(0.0601)	(0.0484)	(0.0485)
Olf-Employment	0.0535	0.0524	0.0993	0.0958
	(0.372)	(0.373)	(0.259)	(0.259)
Unemployment-Employment	0.717	0.789	-0.347	-0.313
	(0.723)	(0.717)	(0.530)	(0.536)
Employment-Olf	-0.509*	-0.486*	0.0880	0.143
	(0.274)	(0.274)	(0.199)	(0.199)
Employment-Unemployment	0.610	0.569	0.297	0.320
	(0.412)	(0.419)	(0.367)	(0.368)
Unemployed	-0.867*	-0.908*	-0.0272	0.00862
	(0.503)	(0.497)	(0.385)	(0.390)
Olf	0.323	0.344	0.0423	0.0596
	(0.237)	(0.237)	(0.167)	(0.167)
Change in regional unemployment rate 2004-09	-0.158*		-0.279***	
	(0.0909)		(0.0762)	
Regional GDP growth rate 2004-09		0.0205**		-0.000257
		(0.00943)		(0.00800)
Bad health	0.278	0.304	0.792*	0.824*
	(0.723)	(0.727)	(0.439)	(0.437)
Poor health	-0.00982	0.00518	0.283	0.279
	(0.284)	(0.283)	(0.195)	(0.195)
Good health	-0.376*	-0.347*	-0.461***	-0.438***
	(0.199)	(0.199)	(0.170)	(0.170)
Very good health	-0.736	-0.714	-0.536	-0.485
	(0.477)	(0.482)	(0.485)	(0.489)
Improving health	0.0568	0.0470	-0.525***	-0.528***
	(0.220)	(0.220)	(0.174)	(0.175)
Worsening health	-0.107	-0.0946	0.0645	0.0636
	(0.221)	(0.222)	(0.168)	(0.169)
Became disabled	-0.179	-0.139	0.231	0.265
	(0.285)	(0.288)	(0.209)	(0.210)
No more disabled	-0.179	-0.181	-0.235	-0.256
	(0.230)	(0.228)	(0.177)	(0.178)

Became widowed	0.0380	0.0583	-0.532*	-0.521*
	(0.409)	(0.408)	(0.276)	(0.277)
Became married	-0.345	-0.329	-0.235	-0.253
	(0.232)	(0.230)	(0.190)	(0.190)
Became separated	-0.406	-0.404	-0.512*	-0.521*
	(0.310)	(0.308)	(0.290)	(0.290)
New children<16 in HH	0.258	0.285	-0.204	-0.175
	(0.267)	(0.269)	(0.232)	(0.233)
No more children<16 in HH	0.0155	0.0372	-0.375*	-0.375*
	(0.251)	(0.251)	(0.223)	(0.226)
Constant	-0.616***	-0.798***	-0.0629	-0.395***
	(0.189)	(0.167)	(0.166)	(0.145)
Observations	2,109	2,109	3,359	3,359

Interval regression coefficient estimates. The dependent variables are measured on a scale from -10 to 10, where -10 indicates a complete reversal from "very willing to take risks" to "not at all willing to take risks" and 10 indicates the opposite. Change in financial position can take values from -6 to +6, where -6 indicates a complete reversal from far above the average to far below the average and +6 indicates the opposite. Default categories are: satisfactory health, no change in health, no change in disability condition, no change in marital status, no change in the presence (or lack of) children with age<16 in the household, stayer in employment.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS

Table A3. Probit regressions - modal risk measure - all self-employed Germany: 2004-2013

	(1) 2004	(2) 2006	(3) 2008	(4) 2009	(5) 2010	(6) 2011	(7) 2012	(8) 2013
Standardized general risk (mode)	0.0219***	0.0268***	0.0264***	0.0258***	0.0270***	0.0305***	0.0318***	-0.00302
	(0.00314)	(0.00379)	(0.00333)	(0.00349)	(0.00365)	(0.00391)	(0.00342)	(0.00546)
Female	-0.0269***	-0.0205**	-0.0140	-0.00601	-0.00177	-0.00664	-0.00696	-0.0146
	(0.00785)	(0.00962)	(0.00919)	(0.00934)	(0.01000)	(0.0103)	(0.00894)	(0.00943)
Father's high education	0.0512***	0.0478***	0.0460***	0.0412***	0.0382***	0.0411***	0.0265**	0.0246**
	(0.0118)	(0.0132)	(0.0117)	(0.0120)	(0.0126)	(0.0133)	(0.0113)	(0.0116)
Mother's high education	0.0416***	0.0557***	0.0481***	0.0563***	0.0494***	0.0389**	0.0394***	0.0345**
	(0.0156)	(0.0185)	(0.0155)	(0.0168)	(0.0168)	(0.0169)	(0.0150)	(0.0156)
Household net wealth	0.000807	0.000749	0.00188**	0.00190**	0.00172**	0.00180**	0.00541***	0.00608***
(in 100.000 Euros)	(0.000527)	(0.000488)	(0.000812)	(0.000809)	(0.000774)	(0.000805)	(0.000994)	(0.000944)
Ln(household net income)	0.00658	0.000797	0.00266	0.00420	0.00698	0.00319	-0.00793	0.0337***
	(0.00533)	(0.00551)	(0.00494)	(0.00506)	(0.00559)	(0.00552)	(0.00503)	(0.00365)
Age	0.00293***	0.00301***	0.00311***	0.00318***	0.00319***	0.00296***	0.00314***	0.00335***
	(0.000241)	(0.000304)	(0.000256)	(0.000273)	(0.000285)	(0.000305)	(0.000257)	(0.000285)
Height	0.00129***	0.00135***	0.00129**	0.00168***	0.00181***	0.00148***	0.00140***	0.00103**
	(0.000418)	(0.000507)	(0.000524)	(0.000514)	(0.000553)	(0.000560)	(0.000469)	(0.000492)
Observations	8,005	6,288	7,212	6,786	6,154	5,650	6,602	5,954

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". All risk measures are standardized. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher.

Reported coefficients are Probit marginal effects estimates, evaluated at the means of independent variables. Sample excludes individuals who are older than 73 years or non-participating in the labor market. All specifications include a constant. Robust standard errors that allow for clustering at the household level are reported in brackets below the coefficient estimates.

□□□, □□, □ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: SOEP [based on Version 30, full sample]

Table A4a. Beta regressions all self-employed Germany: 2004-2013

	(1) 2004	(2) 2006	(3) 2008	(4) 2009	(5) 2010	(6) 2011	(7) 2012	(8) 2013
General risk measure	0.0115***	0.0156***	0.0135***	0.00911***	0.0128***	0.0137***	0.0132***	0.0152***
	(0.0927)	(0.113)	(0.106)	(0.0671)	(0.0980)	(0.1000)	(0.101)	(0.123)
Female	-0.0242***	-0.0209**	-0.0152*	-0.0129	-0.00736	-0.0112	-0.0206***	-0.0194**
	(-0.0433)	(-0.0354)	(-0.0269)	(-0.0225)	(-0.0128)	(-0.0193)	(-0.0368)	(-0.0339)
Father's high education	0.0502***	0.0530***	0.0553***	0.0553***	0.0483***	0.0565***	0.0370***	0.0271***
	(0.0610)	(0.0615)	(0.0686)	(0.0684)	(0.0596)	(0.0697)	(0.0485)	(0.0349)
Mother's high education	0.0493***	0.0655***	0.0558***	0.0603***	0.0534***	0.0464***	0.0379***	0.0386***
	(0.0439)	(0.0568)	(0.0542)	(0.0586)	(0.0521)	(0.0455)	(0.0413)	(0.0411)
Household net wealth	0.00214**	0.00177**	0.00429***	0.00397***	0.00362***	0.00366***	0.00976***	0.0101***
(in 100.000 Euros)	(0.0830)	(0.0694)	(0.109)	(0.104)	(0.0986)	(0.102)	(0.138)	(0.144)
Ln(household net income)	0.0111**	0.000376	0.00205	0.00107	0.00274	-1.78e-05	-0.00988**	-0.00483
	(0.0261)	(0.000931)	(0.00515)	(0.00270)	(0.00683)	(-4.42e-05)	(-0.0257)	(-0.0123)
Age	0.00306***	0.00320***	0.00324***	0.00348***	0.00334***	0.00307***	0.00305***	0.00327***
	(0.131)	(0.125)	(0.140)	(0.147)	(0.139)	(0.123)	(0.140)	(0.144)
Height	0.00135***	0.00148***	0.00121***	0.00162***	0.00172***	0.00153***	0.00105**	0.000873**
	(0.0445)	(0.0467)	(0.0401)	(0.0524)	(0.0559)	(0.0491)	(0.0355)	(0.0290)
Constant	-0.371***	-0.383***	-0.343***	-0.396***	-0.437***	-0.390***	-0.282***	-0.280***
Observations	11,351	9,434	10,168	9,321	8,361	7,639	9,583	8,542
R-squared	0.054	0.052	0.063	0.054	0.054	0.051	0.060	0.069

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Sample excludes individuals who are older than 73 years or non-participating in the labor market. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher.

▫▫▫, ▫▫, ▫ indicate significance at the 1%, 5%, and 10% level, respectively. Normalized beta coefficients in parentheses. Robust standard errors

Source: SOEP [based on Version 30, full sample]

Table A4b. Beta regressions - modal risk measure - all self-employed Germany: 2004-2013

	(1) 2004	(2) 2006	(3) 2008	(4) 2009	(5) 2010	(6) 2011	(7) 2012	(8) 2013
General risk measure(mode)	0.0115***	0.0140***	0.0140***	0.0139***	0.0144***	0.0161***	0.0169***	0.0178***
	(0.0877)	(0.0999)	(0.103)	(0.100)	(0.104)	(0.116)	(0.125)	(0.129)
Female	-0.0277***	-0.0208**	-0.0148	-0.00722	-0.00329	-0.00732	-0.0102	-0.0197*
	(-0.0491)	(-0.0352)	(-0.0258)	(-0.0124)	(-0.00570)	(-0.0127)	(-0.0179)	(-0.0338)
Father's high education	0.0581***	0.0540***	0.0524***	0.0472***	0.0431***	0.0467***	0.0276**	0.0249**
	(0.0702)	(0.0630)	(0.0647)	(0.0581)	(0.0532)	(0.0583)	(0.0356)	(0.0318)
Mother's high education	0.0463***	0.0604***	0.0495***	0.0572***	0.0496***	0.0397**	0.0413***	0.0367**
	(0.0412)	(0.0524)	(0.0479)	(0.0555)	(0.0484)	(0.0393)	(0.0438)	(0.0385)
Household net wealth	0.00166**	0.00140**	0.00411***	0.00399***	0.00373***	0.00379***	0.0106***	0.0113***
(in 100.000 Euros)	(0.0724)	(0.0650)	(0.112)	(0.112)	(0.108)	(0.114)	(0.149)	(0.159)
Ln(household net)	0.00800	0.000511	0.000898	0.00296	0.00580	0.00231	-0.0124**	-0.00554
income	(0.0188)	(0.00127)	(0.00222)	(0.00744)	(0.0144)	(0.00575)	(-0.0312)	(-0.0138)
Age	0.00317***	0.00321***	0.00328***	0.00335***	0.00331***	0.00309***	0.00322***	0.00348***
	(0.134)	(0.125)	(0.140)	(0.139)	(0.136)	(0.125)	(0.142)	(0.147)
Height	0.00136***	0.00137***	0.00134**	0.00169***	0.00175***	0.00143**	0.00127**	0.000819
	(0.0446)	(0.0434)	(0.0440)	(0.0542)	(0.0568)	(0.0462)	(0.0421)	(0.0268)
Constant	-0.363***	-0.353***	-0.365***	-0.439***	-0.463***	-0.395***	-0.338***	-0.294***
Observations	8,005	6,288	7,212	6,786	6,154	5,650	6,602	5,954
R-squared	0.053	0.047	0.061	0.059	0.057	0.056	0.067	0.075

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Sample excludes individuals who are older than 73 years or non-participating in the labor market. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher.

▫▫▫, ▫▫, ▫ indicate significance at the 1%, 5%, and 10% level, respectively. Normalized beta coefficients in parentheses. Robust standard errors

Source: SOEP [based on Version 30, full sample]

Table A4c. Beta regressions self-employed Ukraine: 2007-2012

	(1) All 2007	(2) All 2012	(3) Agr 2007	(4) Agr 2012
General risk measure	0.00805***	0.00385**	0.000906	-0.000400
	(0.0910)	(0.0397)	(0.0377)	(-0.00701)
Female	-0.0216*	-0.0501***	-0.00498	0.000283
	(-0.0424)	(-0.0977)	(-0.0360)	(0.000939)
Father's high education	0.00694	0.00672	-0.00393***	-0.0127***
	(0.00863)	(0.00850)	(-0.0178)	(-0.0272)
Mother's high education	-0.0231	-0.0150	-0.00318***	0.000692
	(-0.0268)	(-0.0192)	(-0.0135)	(0.00151)
Financial position	0.00273	-0.00457	0.00177	-0.00676***
	(0.0121)	(-0.0200)	(0.0288)	(-0.0505)
Ln(household net income)	-0.0229***	-0.0291***	-0.00138	-0.0268***
	(-0.0578)	(-0.0763)	(-0.0129)	(-0.118)
Age	0.000888**	0.00123***	7.83e-05	0.00115***
	(0.0435)	(0.0587)	(0.0142)	(0.0938)
Height	-0.00136*	-0.000261	-0.000222	-0.000129
	(-0.0450)	(-0.00887)	(-0.0270)	(-0.00742)
Constant	0.413***	0.317**	0.0446	0.230***
Observations	3,252	3,848	3,126	3,661
R-squared	0.015	0.021	0.004	0.032

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Ukraine includes those with incomplete higher education and higher. Sample excludes individuals who are older than 73 years or non-participating in the labor market.

▫▫▫, ▫▫, ▫ indicate significance at the 1%, 5%, and 10% level, respectively. Normalized beta coefficients in parentheses. Robust standard errors

Source: ULMS

Table A5a. Probit regressions with career risk measure self-employed Germany: 2004 - 2009

	(1) All 2004	(2) All 2009	(3) Agriculture 2004	(4) Agriculture 2009
Standardized career risk measure	0.0350***	0.0368***	0.000492	0.000481
	(0.00244)	(0.00275)	(0.000471)	(0.000472)
Female	-0.0209***	-0.00816	-0.00229*	-0.00215
	(0.00635)	(0.00760)	(0.00121)	(0.00150)
Father's high education	0.0402***	0.0459***	-0.000972	-0.00103
	(0.00924)	(0.0103)	(0.000801)	(0.00130)
Mother's high education	0.0419***	0.0475***	0.000318	0.00283
	(0.0128)	(0.0135)	(0.00192)	(0.00350)
Household net wealth	0.000973	0.00184***	2.53e-05**	7.84e-05**
(in 100.000 Euros)	(0.000622)	(0.000625)	(1.16e-05)	(3.06e-05)
Ln(household net income)	0.00718*	0.00182	-0.000846	-0.00106*
	(0.00424)	(0.00410)	(0.000673)	(0.000542)
Age	0.00313***	0.00364***	0.000123***	0.000129***
	(0.000207)	(0.000235)	(3.31e-05)	(3.89e-05)
Height	0.00121***	0.00141***	7.09e-06	6.75e-05
	(0.000344)	(0.000419)	(6.00e-05)	(7.60e-05)
Observations	11,180	9,191	10,253	8,382

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". All risk measures are standardized. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher. Reported coefficients are Probit marginal effects estimates, evaluated at the means of independent variables. Sample excludes individuals who are older than 73 years or non-participating in the labor market. All specifications include a constant. Robust standard errors that allow for clustering at the household level are reported in brackets below the coefficient estimates.

▫▫▫, ▫▫, ▫ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: SOEP [based on Version 30, full sample]

Table A5b. Probit regressions - career risk measure - self-employed Ukraine: 2007-2012

	(1) All 2007	(2) All 2012	(3) Agr 2007	(4) Agr 2012
Standardized career risk	0.0217***	0.00991**	0.00222*	-0.000775
	(0.00433)	(0.00399)	(0.00123)	(0.00136)
Female	-0.0207*	-0.0490***	-0.00490	0.00119
	(0.0115)	(0.0115)	(0.00326)	(0.00396)
Father's high education	0.00957	0.00602	#	-0.0116***
	(0.0182)	(0.0143)		(0.00331)
Mother's high education	-0.0232	-0.0158	#	-0.00405
	(0.0149)	(0.0122)		(0.00595)
Financial Position	0.00169	-0.00437	0.00168	-0.00401***
	(0.00427)	(0.00370)	(0.00112)	(0.00149)
Ln(household net income)	-0.0196**	-0.0244***	-0.00113	-0.0125***
	(0.00813)	(0.00649)	(0.00244)	(0.00267)
Age	0.000862**	0.00122***	6.17e-05	0.000689***
	(0.000343)	(0.000352)	(6.74e-05)	(0.000163)
Height	-0.00119*	-0.000162	-0.000201*	-1.84e-05
	(0.000721)	(0.000682)	(0.000108)	(0.000265)
Observations	3,264	3,849	2,664	3,662

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". All risk measures are standardized. Parent's high education for Ukraine includes those with incomplete higher education and higher. Reported coefficients are Probit marginal effects estimates, evaluated at the means of independent variables. Sample excludes individuals who are older than 73 years or non-participating in the labor market. All specifications include a constant. Robust standard errors that allow for clustering at the household level are reported in brackets below the coefficient estimates.

□□□, □□, □ indicate significance at the 1%, 5%, and 10% level, respectively.

Source: ULMS

Table A6a. Beta regressions with career risk measure self-employed Germany: 2004-2009

	(1) All 2004	(2) All 2009	(3) Agriculture 2004	(4) Agriculture 2009
Career risk measure	0.0153***	0.0164***	0.000279	0.000283
	(0.140)	(0.146)	(0.0128)	(0.0120)
Female	-0.0239***	-0.0115	-0.00297**	-0.00273
	(-0.0427)	(-0.0199)	(-0.0271)	(-0.0228)
Father's high education	0.0488***	0.0530***	-0.00125	-0.00196
	(0.0592)	(0.0655)	(-0.00747)	(-0.0114)
Mother's high education	0.0486***	0.0540***	-0.000109	0.00262
	(0.0434)	(0.0524)	(-0.000477)	(0.0118)
Household net wealth	0.00208**	0.00396***	0.000225	0.000719**
(in 100.000 Euros)	(0.0808)	(0.105)	(0.0330)	(0.0760)
Ln(household net income)	0.00948**	-0.000793	-0.00151	-0.00237**
	(0.0222)	(-0.00200)	(-0.0176)	(-0.0285)
Age	0.00341***	0.00394***	0.000160***	0.000153***
	(0.145)	(0.165)	(0.0346)	(0.0307)
Height	0.00126***	0.00144***	6.10e-06	9.43e-05
	(0.0416)	(0.0465)	(0.00102)	(0.0147)
Constant	-0.372***	-0.401***	0.000383	-0.0127
Observations	11,180	9,191	10,253	8,382
R-squared	0.065	0.071	0.003	0.008

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Sample excludes individuals who are older than 73 years or non-participating in the labor market. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher.

□□□, □□, □ indicate significance at the 1%, 5%, and 10% level, respectively. Normalized beta coefficients in parentheses. Robust standard errors

Source: SOEP [based on Version 30, full sample]

Table A6b. Beta regressions - career risk measure - self-employed Ukraine: 2007-2012

	(1) All 2007	(2) All 2012	(3) Agr 2007	(4) Agr 2012
Career risk measure	0.00344**	0.00502***	0.000457	0.000718
	(0.0452)	(0.0562)	(0.0217)	(0.0155)
Female	-0.0343***	-0.0548***	-0.00446	-0.00325
	(-0.0747)	(-0.115)	(-0.0353)	(-0.0132)
Father's high education	0.0131	0.00748	-0.00351***	-0.00767
	(0.0183)	(0.0103)	(-0.0177)	(-0.0204)
Mother's high education	-0.0304*	-0.0139	-0.00266**	0.00314
	(-0.0397)	(-0.0193)	(-0.0126)	(0.00847)
Financial position	0.00522	-0.00404	0.000779	-0.00591***
	(0.0254)	(-0.0188)	(0.0138)	(-0.0533)
Ln(household net income)	-0.00586	-0.0231***	-0.000631	-0.0223***
	(-0.0160)	(-0.0618)	(-0.00626)	(-0.115)
Age	0.000320	0.000754**	5.67e-05	0.000806***
	(0.0171)	(0.0382)	(0.0111)	(0.0795)
Height	-0.000691	-0.000462	-9.45e-05	-0.000178
	(-0.0251)	(-0.0167)	(-0.0125)	(-0.0124)
Constant	0.197	0.313**	0.0217	0.205***
Observations	2,843	3,550	2,740	3,388
R-squared	0.008	0.020	0.002	0.027

Dependent variables in all columns are binary variables. Willingness to take risks is measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Ukraine includes those with incomplete higher education and higher. Sample excludes individuals who are older than 73 years or non-participating in the labor market.

▫▫▫, ▫▫, ▫ indicate significance at the 1%, 5%, and 10% level, respectively. Normalized beta coefficients in parentheses. Robust standard errors

Source: ULMS

Appendix B

Table B1: Primary determinants of General Risk Attitudes

	Germany - 2004				Ukraine - 2007		
	(1)	(2)	(3)		(4)	(5)	(6)
Female	-0.555***	-0.572***	-0.533***	Female	-0.957***	-0.986***	-0.968***
	(0.0429)	(0.0453)	(0.0486)		(0.0916)	(0.0973)	(0.0994)
Age	-0.0294***	-0.0277***	-0.0290***	Age	-0.0437***	-0.0404***	-0.0400***
	(0.00116)	(0.00122)	(0.00138)		(0.00230)	(0.00250)	(0.00264)
Height	0.0278***	0.0268***	0.0238***	Height	0.0175***	0.0151**	0.0128**
	(0.00260)	(0.00272)	(0.00293)		(0.00587)	(0.00617)	(0.00629)
Father's high education		0.252***	0.157***	Father's high education		0.354**	0.405***
		(0.0533)	(0.0599)			(0.153)	(0.157)
Mother's high education		0.262***	0.276***	Mother's high education		0.384**	0.263
		(0.0700)	(0.0784)			(0.166)	(0.172)
Ln(household net income)			0.213***	Ln(household income)			0.0603
			(0.0333)				(0.0717)
Household net wealth 2002			0.00223	Financial position			0.168***
(in 100.000 Euros)			(0.00261)				(0.0446)
Satisfaction Personal Income			0.0484***	Satisfaction Personal Income			0.0615
			(0.00825)				(0.0443)
Constant	1.376***	1.441***	1.026*	Constant	3.049***	3.269***	2.543**
	(0.480)	(0.501)	(0.540)		(1.050)	(1.105)	(1.219)
Observations	19,929	17,775	15,081	Observations	6,127	5,579	5,215

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2002 wave of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table B2: Primary determinants of General Risk Attitudes

	Germany				
	2004	2006	2008	2009	2010
Female	-0.572***	-0.501***	-0.693***	-0.617***	-0.812***
	(0.0453)	(0.0440)	(0.0482)	(0.0459)	(0.0507)
Age	-0.0277***	-0.0220***	-0.0187***	-0.0275***	-0.0230***
	(0.00122)	(0.00118)	(0.00125)	(0.00122)	(0.00130)
Height	0.0268***	0.0230***	0.0144***	0.0153***	0.0112***
	(0.00272)	(0.00258)	(0.00269)	(0.00271)	(0.00290)
Father's high education	0.252***	0.146***	0.135**	0.167***	0.0608
	(0.0533)	(0.0527)	(0.0561)	(0.0542)	(0.0555)
Mother's high education	0.262***	0.171**	0.122*	0.0779	0.123*
	(0.0700)	(0.0676)	(0.0713)	(0.0687)	(0.0701)
Constant	1.441***	2.183***	3.279***	2.801***	3.981***
	(0.501)	(0.478)	(0.498)	(0.502)	(0.538)
Observations	17,775	17,494	15,619	15,595	14,641

	Germany			Ukraine	
	2011	2012	2013	2007	2012
Female	-0.672***	-0.665***	-0.866***	-0.986***	-1.004***
	(0.0486)	(0.0466)	(0.0551)	(0.0973)	(0.0879)
Age	-0.0226***	-0.0211***	-0.0130***	-0.0404***	-0.0399***
	(0.00126)	(0.00125)	(0.00144)	(0.00250)	(0.00226)
Height	0.0154***	0.0118***	0.00408	0.0151**	-0.00413
	(0.00280)	(0.00268)	(0.00306)	(0.00617)	(0.00546)
Father's high education	0.125**	-0.00316	0.0933	0.354**	0.331**
	(0.0564)	(0.0535)	(0.0610)	(0.153)	(0.129)
Mother's high education	-0.0516	0.00215	0.0139	0.384**	0.0316
	(0.0685)	(0.0664)	(0.0736)	(0.166)	(0.128)
Constant	3.438***	4.212***	4.950***	3.269***	6.474***
	(0.520)	(0.497)	(0.566)	(1.105)	(0.990)
Observations	15,255	15,567	13,698	5,579	6,600

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher.

Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table B3a: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2004					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.572***	-0.861***	-0.659***	-0.572***	-0.460***	-0.583***
	(0.0453)	(0.0505)	(0.0440)	(0.0489)	(0.0526)	(0.0487)
Age	-0.0277***	-0.0344***	-0.0141***	-0.0509***	-0.0413***	-0.0260***
	(0.00122)	(0.00138)	(0.00121)	(0.00135)	(0.00154)	(0.00132)
Height	0.0268***	0.0257***	0.0220***	0.0284***	0.0307***	0.0139***
	(0.00272)	(0.00298)	(0.00263)	(0.00290)	(0.00315)	(0.00288)
Father's high education	0.252***	0.0701	0.313***	0.479***	0.279***	0.165***
	(0.0533)	(0.0604)	(0.0541)	(0.0594)	(0.0659)	(0.0616)
Mother's high education	0.262***	0.0931	0.158**	0.303***	0.311***	0.102
	(0.0700)	(0.0839)	(0.0741)	(0.0795)	(0.0844)	(0.0815)
Constant	1.441***	0.583	-0.355	1.272**	0.451	2.077***
	(0.501)	(0.553)	(0.486)	(0.537)	(0.583)	(0.532)
Observations	17,775	16,956	17,625	17,630	16,502	17,769
	Ukraine - 2007					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.986***	-1.576***	-0.594***	-1.095***	-0.581***	-0.608***
	(0.0973)	(0.130)	(0.102)	(0.108)	(0.119)	(0.0920)
Age	-0.0404***	-0.0407***	-0.0406***	-0.0510***	-0.0516***	-0.0222***
	(0.00250)	(0.00315)	(0.00250)	(0.00268)	(0.00309)	(0.00238)
Height	0.0151**	-0.00330	0.0127*	0.0111	0.0177**	0.0114*
	(0.00617)	(0.00811)	(0.00659)	(0.00684)	(0.00763)	(0.00607)
Father's high education	0.354**	-0.0285	0.286*	0.370**	0.511***	0.264*
	(0.153)	(0.213)	(0.155)	(0.170)	(0.173)	(0.159)
Mother's high education	0.384**	0.345	0.294*	0.327*	0.369**	0.170
	(0.166)	(0.222)	(0.168)	(0.177)	(0.187)	(0.164)
Constant	3.269***	5.389***	2.941**	3.909***	2.635*	1.815*
	(1.105)	(1.451)	(1.182)	(1.222)	(1.366)	(1.091)
Observations	5,579	3,068	5,189	4,465	4,157	5,452

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher.

Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table B3b: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2009					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.617***	-0.739***	-0.691***	-0.697***	-0.498***	-0.655***
	(0.0459)	(0.0559)	(0.0474)	(0.0536)	(0.0586)	(0.0528)
Age	-0.0275***	-0.0334***	-0.0103***	-0.0536***	-0.0452***	-0.0252***
	(0.00122)	(0.00145)	(0.00125)	(0.00146)	(0.00165)	(0.00139)
Height	0.0153***	0.0241***	0.00912***	0.0157***	0.0212***	0.00681**
	(0.00271)	(0.00322)	(0.00281)	(0.00319)	(0.00344)	(0.00305)
Father's high education	0.167***	0.0875	0.322***	0.367***	0.252***	0.197***
	(0.0542)	(0.0633)	(0.0570)	(0.0634)	(0.0688)	(0.0617)
Mother's high education	0.0779	-0.137*	0.106	0.146*	0.253***	0.133*
	(0.0687)	(0.0792)	(0.0716)	(0.0788)	(0.0868)	(0.0784)
Constant	2.801***	0.929	1.239**	3.475***	1.946***	3.143***
	(0.502)	(0.598)	(0.520)	(0.592)	(0.638)	(0.566)
Observations	15,595	14,955	15,456	15,428	14,131	15,586
	Ukraine - 2012					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-1.004***	-1.124***	-0.459***	-0.703***	-0.498***	-0.477***
	(0.0879)	(0.131)	(0.0833)	(0.0906)	(0.101)	(0.0835)
Age	-0.0399***	-0.0284***	-0.0313***	-0.0439***	-0.0440***	-0.0122***
	(0.00226)	(0.00353)	(0.00215)	(0.00234)	(0.00274)	(0.00218)
Height	-0.00413	0.00571	0.00517	0.00551	0.00622	0.00243
	(0.00546)	(0.00791)	(0.00532)	(0.00575)	(0.00619)	(0.00544)
Father's high education	0.331**	0.141	0.273**	0.298**	0.405***	0.284**
	(0.129)	(0.174)	(0.122)	(0.127)	(0.139)	(0.122)
Mother's high education	0.0316	-0.196	0.0765	0.118	-0.00460	-0.0156
	(0.128)	(0.179)	(0.124)	(0.130)	(0.138)	(0.122)
Constant	6.474***	2.889**	3.414***	4.101***	4.070***	2.708***
	(0.990)	(1.442)	(0.966)	(1.042)	(1.124)	(0.984)
Observations	6,600	3,040	6,589	5,911	5,022	6,614

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table B4a: Primary determinants of General Risk Attitudes – extended models

	Germany				
	2004	2006	2008	2009	2010
Female	-0.533***	-0.519***	-0.732***	-0.623***	-0.790***
	(0.0486)	(0.0511)	(0.0510)	(0.0509)	(0.0569)
Age	-0.0290***	-0.0229***	-0.0187***	-0.0285***	-0.0215***
	(0.00138)	(0.00148)	(0.00136)	(0.00142)	(0.00155)
Height	0.0238***	0.0169***	0.0109***	0.0112***	0.0116***
	(0.00293)	(0.00297)	(0.00286)	(0.00303)	(0.00321)
Father's high	0.157***	0.0848	0.110*	0.144**	0.0903
education	(0.0599)	(0.0627)	(0.0606)	(0.0610)	(0.0650)
Mother's high	0.276***	0.148*	0.0947	0.0851	0.166**
education	(0.0784)	(0.0807)	(0.0770)	(0.0773)	(0.0821)
Ln(HH net	0.213***	0.156***	0.0699**	0.112***	0.0561*
income)	(0.0333)	(0.0316)	(0.0317)	(0.0330)	(0.0334)
HH net wealth/	0.00223	0.00628***	0.00738***	0.00587***	0.00727**
Finan. position	(0.00261)	(0.00200)	(0.00253)	(0.00218)	(0.00282)
Satisf. Personal	0.0484***	0.0465***	0.0440***	0.0287***	0.0310***
Income	(0.00825)	(0.00882)	(0.0101)	(0.00856)	(0.00921)
Constant	1.026*	2.494***	3.394***	3.028***	3.404***
	(0.540)	(0.550)	(0.527)	(0.564)	(0.596)
Observations	15,081	12,746	13,833	12,398	11,131

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2002 (for years 2004 and 2006) and 2007 (for years 2008, 2009 and 2010) waves of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany and for Ukraine in 2012 the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine in 2007 the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".
Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.
Sources: ULMS and SOEP [based on Version 30, full sample]

Table B4b: Primary determinants of General Risk Attitudes – extended models

	Germany			Ukraine	
	2011	2012	2013	2007	2012
Female	-0.618***	-0.645***	-0.863***	-0.968***	-1.005***
	(0.0585)	(0.0513)	(0.0603)	(0.0994)	(0.0901)
Age	-0.0200***	-0.0224***	-0.0138***	-0.0400***	-0.0399***
	(0.00164)	(0.00139)	(0.00161)	(0.00264)	(0.00235)
Height	0.0147***	0.0105***	0.00355	0.0128**	-0.00596
	(0.00337)	(0.00296)	(0.00335)	(0.00629)	(0.00556)
Father's high	0.0830	0.00610	0.0712	0.405***	0.316**
education	(0.0676)	(0.0589)	(0.0681)	(0.157)	(0.131)
Mother's high	0.0584	-0.0743	0.00340	0.263	-0.0106
education	(0.0834)	(0.0724)	(0.0818)	(0.172)	(0.130)
Ln(HH net	0.0225	-0.0550*	-0.0699**	0.0603	-0.0481
income)	(0.0343)	(0.0314)	(0.0349)	(0.0717)	(0.0609)
HH net wealth/	0.00730***	0.0123**	0.0140**	0.168***	0.164***
Finan. position	(0.00211)	(0.00528)	(0.00589)	(0.0446)	(0.0374)
Satisf. Personal	0.0583***	0.0588***	0.0554***	0.0615	-0.00398
Income	(0.00992)	(0.00899)	(0.0100)	(0.0443)	(0.0159)
Constant	2.899***	4.284***	4.905***	2.543**	6.696***
	(0.630)	(0.549)	(0.619)	(1.219)	(1.094)
Observations	10,159	12,661	11,224	5,215	6,273

OLS regression coefficient estimates. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 10, where 0 indicates "not at all willing to take risks" and 10 indicates "very willing to take risks". Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2007 (for years 2011) and 2012 (for years 2012 and 2013) waves of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany and for Ukraine in 2012 the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine in 2007 the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ∗∗∗, ∗∗, ∗ indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Appendix C

Table C1: Primary determinants of General Risk Attitudes

	Germany - 2004				Ukraine - 2007		
	(1)	(2)	(3)		(4)	(5)	(6)
Female	-0.112***	-0.115***	-0.103***	Female	-0.0856***	-0.0865***	-0.0868***
	(0.00916)	(0.00974)	(0.0105)		(0.0127)	(0.0133)	(0.0140)
Age	-0.00492***	-0.00463***	-0.00499***	Age	-0.00479***	-0.00460***	-0.00454***
	(0.000240)	(0.000255)	(0.000291)		(0.000340)	(0.000366)	(0.000390)
Height	0.00458***	0.00457***	0.00417***	Height	0.00150*	0.00144	0.00140
	(0.000530)	(0.000564)	(0.000608)		(0.000884)	(0.000927)	(0.000972)
Father's high education		0.0353***	0.0208	Father's high education		-0.000604	0.00175
		(0.0123)	(0.0134)			(0.0229)	(0.0241)
Mother's high education		0.0662***	0.0609***	Mother's high education		0.0306	0.0100
		(0.0166)	(0.0188)			(0.0225)	(0.0253)
Ln(household net income)			0.0318***	Ln(household income)			0.0137
			(0.00700)				(0.00981)
Household net wealth 2002			1.36e-09	Financial position			0.0136**
(in 100.000 Euros)			(5.66e-09)				(0.00662)
Satisfaction Personal Income			0.0100***	Satisfaction Personal Income			0.00918
			(0.00169)				(0.00629)
Observations	19,929	17,775	15,081	Observations	6,127	5,579	5,215

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2002 wave of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table C2: Primary determinants of General Risk Attitudes

	Germany				
	2004	2006	2008	2009	2010
Female	-0.115***	-0.105***	-0.130***	-0.107***	-0.149***
	(0.00974)	(0.0102)	(0.0102)	(0.00911)	(0.0106)
Age	-0.00463***	-0.00418***	-0.00310***	-0.00397***	-0.00410***
	(0.000255)	(0.000264)	(0.000264)	(0.000234)	(0.000275)
Height	0.00457***	0.00452***	0.00237***	0.00218***	0.00173***
	(0.000564)	(0.000582)	(0.000572)	(0.000502)	(0.000592)
Father's high education	0.0353***	0.0352***	0.0286**	0.0387***	0.0146
	(0.0123)	(0.0124)	(0.0124)	(0.0111)	(0.0125)
Mother's high education	0.0662***	0.0269*	0.0348**	0.00688	0.0234
	(0.0166)	(0.0160)	(0.0158)	(0.0132)	(0.0157)
Observations	17,775	17,494	15,619	15,595	14,641

	Germany			Ukraine	
	2011	2012	2013	2007	2012
Female	-0.124***	-0.136***	-0.161***	-0.0865***	-0.0927***
	(0.0108)	(0.0106)	(0.0112)	(0.0133)	(0.0117)
Age	-0.00462***	-0.00430***	-0.00233***	-0.00460***	-0.00355***
	(0.000281)	(0.000285)	(0.000303)	(0.000366)	(0.000315)
Height	0.00261***	0.00199***	0.000509	0.00144	0.000600
	(0.000598)	(0.000593)	(0.000613)	(0.000927)	(0.000786)
Father's high education	0.0394***	0.00917	0.0264**	-0.000604	0.0163
	(0.0129)	(0.0125)	(0.0131)	(0.0229)	(0.0182)
Mother's high education	-0.00109	0.0135	0.00592	0.0306	0.00910
	(0.0154)	(0.0154)	(0.0160)	(0.0225)	(0.0183)
Observations	15,255	15,567	13,698	5,579	6,600

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher.

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table C3a: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2004					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.115***	-0.0968***	-0.0825***	-0.103***	-0.0832***	-0.0645***
	(0.00974)	(0.00808)	(0.00612)	(0.00884)	(0.00925)	(0.00750)
Age	-0.00463***	-0.00420***	-0.000989***	-0.00686***	-0.00441***	-0.00269***
	(0.000255)	(0.000209)	(0.000151)	(0.000234)	(0.000252)	(0.000194)
Height	0.00457***	0.00256***	0.00150***	0.00360***	0.00355***	0.00155***
	(0.000564)	(0.000458)	(0.000329)	(0.000501)	(0.000530)	(0.000418)
Father's high education	0.0353***	-0.00661	0.0164**	0.0718***	0.0322***	0.0172*
	(0.0123)	(0.00947)	(0.00748)	(0.0116)	(0.0118)	(0.00927)
Mother's high education	0.0662***	0.0241*	0.0312***	0.0446***	0.0541***	0.0148
	(0.0166)	(0.0133)	(0.0103)	(0.0144)	(0.0157)	(0.0120)
Observations	17,775	16,956	17,625	17,630	16,502	17,769
	Ukraine - 2007					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.0865***	-0.248***	-0.0682***	-0.123***	-0.0875***	-0.0770***
	(0.0133)	(0.0235)	(0.0157)	(0.0167)	(0.0183)	(0.0168)
Age	-0.00460***	-0.00615***	-0.00548***	-0.00602***	-0.00682***	-0.00359***
	(0.000366)	(0.000616)	(0.000428)	(0.000461)	(0.000495)	(0.000443)
Height	0.00144	0.00104	0.00124	0.000393	0.00108	0.00277**
	(0.000927)	(0.00155)	(0.00108)	(0.00115)	(0.00124)	(0.00114)
Father's high education	-0.000604	-0.0522	0.0204	0.00792	0.0283	0.0155
	(0.0229)	(0.0373)	(0.0245)	(0.0262)	(0.0254)	(0.0253)
Mother's high education	0.0306	0.0361	0.0138	0.0378	0.0343	0.0356
	(0.0225)	(0.0368)	(0.0274)	(0.0275)	(0.0278)	(0.0277)
Observations	5,579	3,068	5,189	4,465	4,157	5,452

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.
Sources: ULMS and SOEP [based on Version 30, full sample]

Table C3b: Primary determinants of Domain Specific Risk Attitudes

	Germany - 2009					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.107***	-0.0739***	-0.0620***	-0.111***	-0.0787***	-0.0745***
	(0.00911)	(0.00886)	(0.00573)	(0.00885)	(0.00930)	(0.00760)
Age	-0.00397***	-0.00428***	-0.000586***	-0.00693***	-0.00429***	-0.00252***
	(0.000234)	(0.000219)	(0.000136)	(0.000233)	(0.000246)	(0.000187)
Height	0.00218***	0.00273***	0.000332	0.00152***	0.00156***	0.000234
	(0.000502)	(0.000487)	(0.000301)	(0.000491)	(0.000519)	(0.000412)
Father's high education	0.0387***	0.00648	0.0212***	0.0374***	0.0227**	0.00733
	(0.0111)	(0.0104)	(0.00708)	(0.0109)	(0.0111)	(0.00894)
Mother's high education	0.00688	-0.0292**	0.00497	0.0205	0.0380***	0.0205*
	(0.0132)	(0.0116)	(0.00804)	(0.0128)	(0.0142)	(0.0114)
Observations	15,595	14,955	15,456	15,428	14,131	15,586
	Ukraine - 2012					
	General	Driving	Financial	Sport/leisure	Career	Health
Female	-0.0927***	-0.252***	-0.0577***	-0.0670***	-0.0541***	-0.0898***
	(0.0117)	(0.0246)	(0.0139)	(0.0149)	(0.0156)	(0.0151)
Age	-0.00355***	-0.00379***	-0.00326***	-0.00416***	-0.00429***	-0.00159***
	(0.000315)	(0.000659)	(0.000386)	(0.000393)	(0.000442)	(0.000408)
Height	0.000600	0.00109	0.000762	0.00147	0.00153	0.000697
	(0.000786)	(0.00154)	(0.000918)	(0.000987)	(0.00102)	(0.00104)
Father's high education	0.0163	0.0574*	0.0459**	0.0396*	0.0568***	0.0457**
	(0.0182)	(0.0340)	(0.0200)	(0.0208)	(0.0211)	(0.0223)
Mother's high education	0.00910	-0.0172	-0.00862	0.0163	0.00168	0.00901
	(0.0183)	(0.0342)	(0.0214)	(0.0213)	(0.0230)	(0.0226)
Observations	6,600	3,040	6,589	5,911	5,022	6,614

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

Table C4a: Primary determinants of General Risk Attitudes – extended models

	Germany				
	2004	2006	2008	2009	2010
Female	-0.103***	-0.105***	-0.135***	-0.102***	-0.147***
	(0.0105)	(0.0118)	(0.0109)	(0.0101)	(0.0121)
Age	-0.00499***	-0.00455***	-0.00306***	-0.00414***	-0.00387***
	(0.000291)	(0.000337)	(0.000289)	(0.000272)	(0.000328)
Height	0.00417***	0.00353***	0.00194***	0.00170***	0.00161**
	(0.000608)	(0.000674)	(0.000610)	(0.000562)	(0.000675)
Father's high	0.0208	0.0205	0.0239*	0.0424***	0.0255*
education	(0.0134)	(0.0146)	(0.0133)	(0.0124)	(0.0145)
Mother's high	0.0609***	0.0210	0.0309*	-0.00618	0.0204
education	(0.0188)	(0.0197)	(0.0170)	(0.0146)	(0.0184)
Ln(HH net	0.0318***	0.0300***	0.00670	0.0178***	0.0111
income)	(0.00700)	(0.00715)	(0.00663)	(0.00603)	(0.00705)
HH net wealth/	0.000136	0.00339***	0.00158***	0.000702**	0.00130**
Finan. position	(0.000566)	(0.000971)	(0.000606)	(0.000293)	(0.000621)
Satisf. Personal	0.0100***	0.0105***	0.00947***	0.00490***	0.00944***
Income	(0.00169)	(0.00190)	(0.00202)	(0.00160)	(0.00192)
Observations	15,081	12,746	13,833	12,398	11,131

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2002 (for years 2004 and 2006) and 2007 (for years 2008, 2009 and 2010) waves of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany and for Ukraine in 2012 the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine in 2007 the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]

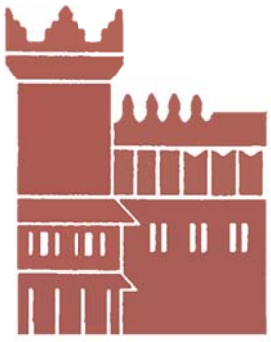
Table C4b: Primary determinants of General Risk Attitudes – extended models

	Germany			Ukraine	
	2011	2012	2013	2007	2012
Female	-0.118***	-0.133***	-0.161***	-0.0868***	-0.0919***
	(0.0131)	(0.0118)	(0.0123)	(0.0140)	(0.0120)
Age	-0.00411***	-0.00480***	-0.00245***	-0.00454***	-0.00363***
	(0.000369)	(0.000320)	(0.000338)	(0.000390)	(0.000329)
Height	0.00228***	0.00166**	0.000443	0.00140	0.000218
	(0.000738)	(0.000661)	(0.000678)	(0.000972)	(0.000810)
Father's high education	0.0375**	0.00833	0.0226	0.00175	0.0186
	(0.0154)	(0.0140)	(0.0146)	(0.0241)	(0.0185)
Mother's high education	0.0211	-0.00401	0.00146	0.0100	-0.00212
	(0.0194)	(0.0171)	(0.0178)	(0.0253)	(0.0196)
Ln(HH net income)	0.0114	-0.000173	-0.00923	0.0137	-0.00475
	(0.00745)	(0.00697)	(0.00703)	(0.00981)	(0.00801)
HH net wealth/ Finan. position	0.00107**	0.00312**	0.00315***	0.0136**	0.0185***
	(0.000496)	(0.00130)	(0.00121)	(0.00662)	(0.00521)
Satisf. Personal Income	0.0150***	0.0142***	0.00849***	0.00918	0.000599
	(0.00210)	(0.00193)	(0.00197)	(0.00629)	(0.00235)
Observations	10,159	12,661	11,224	5,215	6,273

Probit marginal effects estimated at the mean. The dependent variables for Germany and Ukraine are measured on a scale from 0 to 1, where 0 indicates a value below 6 in the original risk question and 1 indicates values 6 to 10. Parent's high education for Germany corresponds to *Abitur* and *Fachabitur* or higher, while for Ukraine it includes those with incomplete higher education and higher. The net wealth variable for Germany is taken from the 2007 (for years 2011) and 2012 (for years 2012 and 2013) waves of the SOEP (in constant 2011 prices, as all the monetary variables) and is expressed in hundreds of thousands of Euros. Being net wealth, this variable can take both positive and negative values. Household wealth is constructed by summing the wealth information of all individuals in the household and subtracting the liabilities, calculated in the same way. The explanatory variable financial position for Ukraine is a categorical variable measured on a scale from 1 to 7, where 1 indicates "far below the average", 4 indicates "about the average" and 7 indicates "far above the average". The levels of satisfaction for current personal income for Germany and Ukraine are two different categorical variables. For Germany and for Ukraine in 2012 the variable takes the values 0 to 10, where 0 indicates a Low level of satisfaction while 10 indicates a High level of satisfaction. For Ukraine in 2007 the variable takes values 1 to 5 where 1 indicates "Very dissatisfied" and 5 indicates "Very satisfied".

Robust standard errors in brackets allow for clustering at the household level; ***, **, * indicate significance at the 1%, 5%, and 10% level, respectively.

Sources: ULMS and SOEP [based on Version 30, full sample]



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