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# Can Religion Insure against Aggregate Shocks to Happiness? The Case of Transition Countries\*

Olga Popova<sup>†</sup>

## Abstract

This paper focuses on the effects of reforms and religion on happiness in transition economies. Previous literature suggests that religiousness insures happiness against individual stressful life events, such as unemployment, disability, or marital separation. I estimate an econometric model to study if religion also insures against aggregate shocks to happiness, such as reforms and various changes in political, economic, and social life. The model accounts for the endogeneity of religion and analyzes the effects of religion on life satisfaction, and perceptions of the current economic and political situation in transition countries.

## Abstrakt

Tato práce se zaměřuje na dopady reform a náboženství na štěstí v tranzitivních ekonomikách. Předchozí literatura naznačuje, že religiozita pojišťuje štěstí proti jednotlivým stresujícím životním událostem, jako je nezaměstnanost, zdravotní postižení nebo rozpad manželství. Navrhuji ekonometrický model pro studium otázky, zda náboženství také pojišťuje proti agregátním šokům ve štěstí, jako jsou reformy a různé změny v politickém, hospodářském a společenském životě. Tento model bere v úvahu endogenitu náboženství a analyzuje vliv náboženství na životní spokojenost a vnímání současné ekonomické a politické situaci v tranzitivních zemích.

*Keywords:* happiness, life satisfaction, religion, reforms, transition

*JEL Classification:* C21, I31, P20, Z12

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# 1 Introduction

Although transition economies demonstrate stable economic growth and progress in the market reform process (EBRD, 2006), the adaptation of people to the transition period and to the new conditions of a market economy is not yet over. People from transition economies still, in fact, report lower levels of life satisfaction than people from developed market economies.<sup>1</sup> Moreover, life satisfaction in transition countries is not just lower than in developed economies, but it decreased during the transition period (see Sanfey and Teksoz, 2007; Easterlin, 2009).<sup>2</sup>

According to existing literature, socio-demographic and economic determinants of subjective well-being are typically the same for transition as for developed countries: among other determinants, happiness is found to be U-shaped in age; women and wealthier, educated, employed, married people are likely to be happier.<sup>3</sup> The reasons for a decrease in life satisfaction during the transition period have not been studied extensively in previous literature. Existing studies relate this decrease in life satisfaction with high inflation, income inequality and poor governance quality in transition countries (Sanfey and Teksoz, 2007), the fall in real GDP per capita during transition (Easterlin, 2009), high macroeconomic instability, insufficient provision of public goods and human capital depreciation in transition countries (Guriev and Zhuravskaya, 2009). The research on developed countries underlines that life satisfaction is negatively affected by economic instability. For example, high unemployment, income inequality and inflation tend to have negative effect on life satisfaction (see Clark and Oswald, 1994; Di Tella et al., 2001, among others). In

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<sup>1</sup>According to World Values Survey and World Database of Happiness (see Table 1).

<sup>2</sup>The terms "life satisfaction" and "happiness" are used in the paper interchangeably. Throughout the paper we refer to the definition of happiness as given by Veenhoven in the World Database of Happiness: "*happiness is the degree to which an individual judges the overall quality of her/his life as-a-whole favorably*" (<http://worlddatabaseofhappiness.eur.nl>; Bibliography, Ch.2).

<sup>3</sup>The determinants of happiness during economic transition in a cross-country setting are explored by Hayo and Seifert (2003), Hayo (2007), Sanfey and Teksoz (2007), Easterlin (2009), and Guriev and Zhuravskaya (2009). The determinants of happiness to be similar to developed countries are found by studies that use a single transition country for the analysis (for instance, Russia by Veenhoven, 2001 and Graham et al., 2004; Kyrgyzstan by Namazie and Sanfey, 2001; Hungary in Lelkes, 2006; Kazakhstan by Kalyuzhnova and Kambhampati, 2008; among others).

this research I argue that the market reform process and subsequent changes and instability in the economic and social situation during transition are likely to be painful, negatively affecting life satisfaction. Such effects of the transition period reforms on life satisfaction could be an additional explanation for the decrease in happiness during transition. I relate decrease in happiness with the effects of major reforms in the transition period, such as privatization, price liberalization, enterprise restructuring and others.

Another contribution of this paper is related to studying the so-called insurance effect of religion in the case of aggregate shocks. As highlighted in previous research, personal religiousness may insure life satisfaction against declines during stressful idiosyncratic life events. These idiosyncratic shocks such as changes in individual income, employment or social status decrease a person's happiness, although religious people are likely to recover from such shocks faster because of different values, attitudes, and norms in their life (see Clark and Lelkes, 2006; Dehejia et al., 2007, among others). In this research I consider reforms during transition as aggregate shocks to happiness and study the insurance effect of religion in relation to aggregate shocks. To overcome the problem of potential endogeneity in the relationship between happiness and religion, I propose to use historical religious propensity as an instrumental variable for religion.

Different responses of religious and non-religious people to aggregate happiness shocks may imply their different attitudes toward reforms, and, thus, different speed of reform implementation in countries with different religious propensity. The analysis of this paper sheds light on the differences in happiness levels between developed market economies and transition countries, and differences in the speed of reform implementation in transition countries. Life satisfaction, perception of the current economic situation, and perception of the current political situation are used as dependent variables in three model specifications. The data used in this study are taken from the Life in Transition Survey (LiTS) of EBRD, EBRD Transition Indi-

cators, and World Christian Database.

As the results of this paper indicate, major reforms in transition affected individual life satisfaction and perceptions of the economic and political situation. These effects were positive for some reforms and negative for others. Religious people are likely to be satisfied with their life and the economic and political situation. Religious people are also likely to suffer less from the negative effects of reforms; that is, religion insures against aggregate shocks to happiness. Other findings of the paper suggest that life satisfaction and perceptions of economic and political situation are U-shaped in age, more educated people are likely to be happier and satisfied with the economic and political situation, the employed are satisfied more than the unemployed, happiness increases with households size and marriage, and divorce decreases happiness.

The rest of the paper is organized as follows. The next section presents a review of relevant literature. In further sections I describe the methodology and identification strategy, data and discuss estimation results. The final section concludes.

## **2 Literature**

For a long time economists have not paid attention to self-reported individual well-being, leaving this area for philosophical, psychological, and sociological research. Data on self-reported happiness were used for the first time in economic research by Easterlin (1974, 1995) who investigated the relationship between income, economic growth, and well-being. The economics of happiness as a discipline started its intensive development after the paper by Kahnemann (1997), who underlined the usefulness of data on self-reported happiness for measuring individual experienced utility. Nowadays, happiness data are widely used in economic empirical research as a measure of individual utility, which was previously investigated mostly theoretically.

To date, different aspects of life satisfaction and its determinants in developed countries have been investigated within economics. The most prominent research analyzes happiness and relative income, income inequality, religiousness, unemployment, the role of democracy, crime, health, education, urbanization, inflation, GDP and GDP growth; climate changes and environmental pollution.<sup>4</sup>

The first theoretical model of religious participation is by Azzi and Ehrenberg (1975), who construct a multi-period utility maximization problem where a household (both wife and husband) decides about work, leisure, and a non-market activity such as participation in religious activities. The authors also discuss the determinants of religious participation and reasons for becoming religious. First, as the authors point out, an individual believes that participation in religious activities today brings him/her additional after-life satisfaction. Second, an individual may like socializing with people who attend religious organizations. Religious participation in this case brings him/her additional life satisfaction today. Third, an individual may attend a religious organization because of social pressure from the community in which he/she lives. In this case it is not determined what effect religious participation has on today's happiness.

After a theoretical paper by Azzi and Ehrenberg (1975), researchers started empirical investigation of the link between happiness and religiousness. One of the earliest empirical studies is Ellison (1991) who tests different aspects of religious activity. The author finds that the effect of church attendance on happiness is indirect. Church attendance strengthens religious belief which influences happiness directly. Religiousness also decreases the loss in happiness during negative life events. This finding was further tested by scholars (Clark and Lelkes, 2006; Dehejia et al., 2007; among others), and Clark and Lelkes (2006) defined it as the insurance effect of

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<sup>4</sup>For details about the mentioned effects, see Alesina et al., 2004; Clark and Oswald, 1994; Di Tella et al, 2001 and 2003; Dynan and Ravina, 2007; Easterlin, 1995 and 2001; Ellison, 1991; Ferreri-Carbonell, 2005; Frey and Stutzer, 2000; Gerdtham and Johannesson, 2001; Hadaway, 1978; Luttmer, 2005; Michalos and Zumbo, 2000; Morawetz et al., 1977; Powdthavee, 2005; Rehdanz and Maddison, 2005; Welsch, 2007; Winkelmann and Winkelmann, 1998, among others.



religiousness. As Clark and Lelkes (2006) argue, religiousness insures against such idiosyncratic life events as unemployment or marital separation, though this insurance effect of religiousness on happiness may differ across different religious denominations. The authors explain the insurance role of religion by arguing that during stressful life events the support that a person receives from a religious organization, or from religious belief itself, is a substitute for social support. Dehejia et al. (2007) discuss the insurance effects of religion further. The authors using US data argue that religious participation, namely contributions to religious organizations and church attendance, partially helps to insure consumption and happiness against changes in individual income. The authors underline that this result has an important policy implication for public social insurance: in regions with high religious participation, people would need public insurance less. Again the insurance effect of religion is found to be effective for idiosyncratic shocks to happiness only.

Recent empirical studies address various aspects of the relationship between religion, happiness and economic indicators. For instance, Guiso et al. (2003) find positive correlation between religiousness and attitudes towards economic growth. Mookerjee and Beron (2005), using data on happiness across 60 countries (both developed and developing), find that greater religious diversity in a country decreases average happiness in a country. It implies that mono-religious countries report on average greater happiness levels than poli-religious countries.

One of the studies on the relationship between religion and happiness in transition is Lelkes (2006) who uses data from a Hungarian survey. As the author argues, more economic freedom as the result of transition increases the happiness of entrepreneurs, but more freedom in ideology does not affect the happiness of religious people. Another finding of this paper is that religious people are, on average, happier than non-religious, and they are less affected by changes in their individual income because income is not among the main sources of their happiness. Clark and Lelkes (2009), while discussing the relationship between religiosity and life sat-

isfaction, take into account both individual religiosity (churchgoing, praying, self-identification with some religious denomination) and average religiosity in a region (percentage of religious people in a region). The authors find positive correlation not only between individual religiosity and individual life satisfaction, but also between average religiosity in a region and individual life satisfaction. As Clark and Lelkes (2009) point out, both religious people and atheists are likely to be happier in more religious regions.

There exist, however, a potential endogeneity problem in the relationship between happiness and religion that has not yet been closely investigated in the literature. Indeed, since among the reasons to become religious are socializing and support as well as the belief in after-life satisfaction (as pointed out by Azzi and Ehrenberg, 1975), some time constant personal unobservable characteristics, for instance, optimism or pessimism, love for socializing activities, trustfulness, and others that do matter for personal happiness are likely to be correlated with personal religiousness too. There is also a potential temporal endogeneity: while facing tragic life events that reduce individual happiness, people are likely to become religious so to maintain themselves during these events. There are few studies that address the religion endogeneity problem in a context different from studying the relationship between happiness and religion. For instance, Gruber (2005) studies the relationship between religious participation and various economic and social indicators, such as education, income, disability, marriage, and divorce, and uses the ancestral density in the area as an instrument for religious density, which is the number of people in a given area who share the same religious denomination with the respondent. This instrument predicts religious density well: predicted religious density is strongly correlated with religious participation. As such this instrument is valid for the estimation of the effects of religious participation on economic outcomes. Recently Bettendorf and Dijkgraaf (2010) have also employed a simultaneous equations approach to correct for endogeneity of religion in studying the effect of religion on

income. The potential endogeneity problem in the relationship between happiness and religion has been discussed in recent studies, for instance, by Dehejia et al., 2007; Clark and Lelkes, 2009, but not yet addressed in research.

This paper contributes to existing literature in several ways. First, I use an instrumental variable approach to overcome the endogeneity problem in a relationship between happiness and religion. Second, I study the effects of aggregate shocks, such as various reforms, on happiness and the insurance effect of religion in relation to aggregate shocks. As reviewed above, to date the insurance effect of religion has been studied in previous literature in relation to idiosyncratic shocks only. Using the data from transition countries as a special laboratory for studying both idiosyncratic and aggregate shocks to happiness, I also further investigate the determinants of happiness in transition countries and analyze not only the relationship between religiousness and life satisfaction, but also between religiousness and perceptions of the current economic and political situation.

## **3 Methodological Framework**

### **3.1 The Features of Subjective Data**

The analysis of previous research underlines several potential econometric problems we should be aware of while doing this research. Some scholars doubt the use of subjective data for analysis because of possible measurement errors and, thus, biased estimates. Frey and Stutzer (2002a,b) suggest the following main criteria for happiness data that should be used in research: reliability, validity, consistency, and possibility of comparisons across nations. Reliability stands for stable correlation between different measurements of happiness. As it was shown by previous studies, different measures of happiness (life satisfaction) are well-correlated with each other (Di Tella et al., 2003; Blanchflower and Oswald, 2004; Konow and Earley, 2007). Self-reported subjective well-being very closely approximates individuals' ex-

perienced utility (Kahnemann, 1997). That is, happiness measures are valid because a person is able to identify and compare his or her own happiness without errors. Consistency in happiness implies that not only does a person judge him/herself as happy, but social interactions confirm it. Happiness can be compared across nations (Di Tella and MacCulloch, 2006). Previous research have shown that all these criteria are satisfied for the self-reported data on happiness (for review and details, see Frey and Stutzer, 2002a, 2002b).

Happiness and life satisfaction is usually assessed by the following types of questions: ‘Taking all things together, would you say you are very happy, quite happy, not very happy, or not at all happy?’; ‘All things considered, how satisfied are you with your life as a whole these days on the ten-point scale: 1 = dissatisfied, and 10 = satisfied; percent ‘satisfied’. Thus, true individual happiness is not observed, it is a latent variable. Instead, we observe a discrete categorical variable which is measured on a ranking scale. For such cases, ordered probit or ordered logit estimation techniques are applied (Maddala, 1983). In the LiTS data that are used for this research, the question about happiness is as follows: ‘To what extent do you agree with the following statement: All things considered, I am satisfied with my life now, Strongly disagree = 1, Disagree=2, Neither disagree nor agree =3, Agree=4, Strongly agree=5’.

The other concern is that happiness can not be compared across individuals because everybody is different and judges his or her own happiness according to his or her own valuation scale (for instance, 8 out of 10 points on a happiness scale for one individual may have a different value for another individual). However, most happiness studies, including this research, tend to investigate various determinants of happiness but not the absolute value of individual happiness. For such a purpose, as Frey and Stutzer (2002b) point out, self-reported data on individual happiness are suitable.

## 3.2 The Model

In this research I am interested in the effects of reforms and religion on happiness and perceptions of the economic and political situation. The system of structural equations in which happiness and religion are considered as latent variables is formulated similarly to Bettendorf and Dijkgraaf (2010). In contrast to Bettendorf and Dijkgraaf (2010), I include happiness, not income, as one of the endogenous variables. The resulting system of structural equations expressed using the matrix notation (as in Kmenta, 1997) is

$$\mathbf{B}\mathbf{y}_{itc} + \mathbf{\Gamma}\mathbf{x}_{itc} = \mathbf{u}_{itc},$$

where subscript  $i$  stands for individual, subscript  $t$  stands for time, and subscript  $c$  stands for country.  $\mathbf{B}$  is a  $G \times G$  matrix of coefficients on endogenous variables;  $\mathbf{y}_{itc}$  is a  $G \times 1$  vector of endogenous variables;  $\mathbf{\Gamma}$  is a  $G \times K$  matrix of coefficients on exogenous variables;  $\mathbf{x}_{itc}$  is a  $K \times 1$  vector of exogenous variables; and  $\mathbf{u}_{itc}$  is a  $G \times 1$  vector of stochastic disturbances. A detailed representation of the system is included in the Appendix. There are  $G = 11$  endogenous variables and  $K = 34$  exogenous variables. The vector  $\mathbf{y}_{itc}$  includes  $happiness_{itc}$  which is self-reported individual life satisfaction;  $religion_i$  which is self-reported individual religiousness; and 9 interaction terms  $religion_i \times reform_{tc}$ . The vector  $\mathbf{x}_{itc}$  includes 9 variables  $reform_{tc}$  accounting for aggregate shocks in transition, namely large scale privatization, small scale privatization, enterprise restructuring, price liberalization, trade and foreign exchange system reform, competition policy reform, banking reform and interest rate liberalization, securities markets and non-bank financial institutions, and overall infrastructure reform;  $histrelig_c$  which is historical religious propensity in country  $c$ ; 9 interaction terms  $histrelig_c \times reform_{tc}$ ; and observable individual socio-economic characteristics, such as age, gender, education, marital and employment status, etc.

True variable  $happiness_{itc}^*$  is latent and its ordered alternatives are observed:

with low  $happiness_{itc}^*$  a person is not satisfied with life; with  $happiness_{itc}^* > \mu_1$  a person is more satisfied with life; with  $happiness_{itc}^* > \mu_2$  a person is even more satisfied with life, and so on. Thresholds  $\mu_j$  are increasing and unknown:

$$happiness_{itc} = j \text{ if } \mu_{j-1} < happiness_{itc}^* \leq \mu_j; \mu_0 = -\infty \text{ and } \mu_m = \infty, j = 1..J$$

The observed choice of being religious,  $religion_i$ , is a discrete variable, while true religiousness,  $religion_i^*$ , is latent:

$$religion_i = \begin{cases} 1 & \text{if } religion_i^* > 0 \\ 0 & \text{otherwise} \end{cases}$$

To study the direct effects of reforms and religion, I include variables  $reform_{tc}$  and  $religion_i$  into the equation for happiness. The interaction terms between  $religion_i$  and  $reform_{tc}$  are introduced to study indirect or insurance effects of religion and test whether religion insures individuals against aggregate shocks. This approach is similar to the one suggested by Clark and Lelkes (2006) and Dehejia et al. (2007) for studying the insurance effect of religion in the case of idiosyncratic shocks. If the direct effect of a particular aggregate shock, i.e., the coefficient on  $reform_{tc}$ , is negative, then a positive sign on the respective interaction term implies an insurance effect of religion; if the direct effect of the event is positive, then, symmetrically, the sign on its interaction term with religion should be negative. Three specifications are used to account for three different dependent variables: life satisfaction, perception of current economic situation, and perception of current political situation.

To receive the system of reduced form equations, we solve the structural form equations for the values of endogenous variables (Kmenta, 1997). The resulting system is

$$\mathbf{y}_{itc} = \mathbf{\Pi} \mathbf{x}_{itc} + \boldsymbol{\nu}_{itc},$$

where  $\Pi$  is a  $G \times K$  matrix of reduced form coefficients and  $\nu_{itc}$  is a  $G \times 1$  vector of reduced form disturbances.

### 3.3 Estimation Strategy

The estimation of the happiness equation, which is the first one in the system of the structural equation without controlling for the endogeneity of  $religion_i$  and interaction terms  $religion_i * reform_{tc}$ , may result in potentially biased and inconsistent estimators of coefficients on these variables. The main source of this potential bias is in simultaneity and unobserved individual heterogeneity. As found in previous literature, religiousness affects happiness. But there is also a potential temporal effect of happiness on religiousness: unhappy people are likely to become religious, especially during stressful life events. Thus, reverse causality has a negative impact and the estimates without controlling for endogeneity are biased downwards. Some of the individual unobservable time constant characteristics captured by the error term  $u_{itc}$  may also bias the estimators due to a correlation with  $religion_i$  and thus with interaction terms  $religion_i * reform_{tc}$ . Intuitively, this correlation may be positive (e.g., a more trustful person is likely to be religious) leading to estimators being biased downwards. However, the variety of individual psychological characteristics may affect both religiousness and happiness at the same time with different degrees. These characteristics may also affect differently the propensity to belong to a particular religious denomination. Therefore, the sign of correlation and thus the direction of bias may be ambiguous. For example, it is hard to determine who (pessimists or optimists, less sociable or more sociable persons) are likely to become religious and whether or not these characteristics affect different religious denominations differently.

The approach to the estimation of the model is as follows. First, the Hausman (1978) endogeneity test is performed to check whether  $religion_i$  and, thus, interaction terms  $religion_i * reform_{tc}$  are indeed endogenous. I separately estimate the

"reduced form" for  $religion_i$  and every interaction term  $religion_i * reform_{tc}$  by regressing it on all exogenous variables, obtain the residuals, and then include the vector of obtained residuals into the happiness equation and test for significance. I perform the test for joint significance of residuals with the null hypothesis that religion and all interaction terms with it are exogenous, and alternative that at least one suspected variable is endogenous. I also separately test the significance of each residual term included into the structural equation. If the coefficients on residuals are significant, then the null hypothesis of respective variable exogeneity is rejected.

To solve the problem of  $religion_i$  endogeneity, we should have an instrument, that is, an appropriate measure for religiousness that is not person specific. As an instrument for individual religiousness  $religion_i$ , I propose historical religious propensity in a given country,  $histrelig_c$ , which is the number of people of a given religion in a given country at the beginning of the 20th century. As IVs for the interaction terms I use the interaction terms of the mentioned IV for  $religion_i$  and the variables  $reform_{tc}$ , i.e.,  $histrelig_c * reform_{tc}$ . A valid instrument should be correlated with personal religiousness, i.e.,  $cov(religion_i, histrelig_c) \neq 0$ , but not correlated with unobservable happiness characteristics, i.e.,  $cov(histrelig_c, u_{1itc}) = 0$ .

The historical religious propensity is likely to be correctly excluded from the happiness equation. According to the psychological study by Lyubomirsky et al. (2005), personal happiness depends on genetics, individual activities and life circumstances, including current demographic and environmental factors, life status and personal life history. Thus, current happiness is not altered by the historical environmental characteristics, such as historical religious propensity in our case. Historical presence of religious people in a region is also likely to be uncorrelated with unobservable current individual happiness characteristics.<sup>5</sup> Since it is not possible to test for IV

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<sup>5</sup>It could be expected that the repression of religion under communism or people transfers from religious to non-religious regions made formerly religious regions more unhappy. In this case the fall of communism could potentially bring extra happiness to formerly religious regions. Thus, historical religious propensity may not be correctly excluded from equation (1) in this case or be



validity in an exactly identified case (see, e.g., Cameron and Trivedi, 2005), I assume that chosen IVs are valid by construction. As pointed out by Tomka (1994) and Need and Evans (2001), personal religiousness in post-communist countries has been suppressed by communism to a lesser extent than the functioning of religious institutions. Thus, historical and current religious propensity are likely to be correlated and our instruments are not weak.<sup>6</sup> To insure that instrumental variables are chosen correctly, I also check that partial correlations of chosen instruments and endogenous variables are non-zero and perform the first stage F-test for weak IV as proposed by Stock and Yogo (2005).

Given that proposed instruments are not weak and valid, at the first stage I estimate the system of reduced form equations to get the predicted value of  $\hat{religion}_i$ ,  $\hat{religion}_i$  and the predicted values for each of the 9 interaction terms  $\hat{religion}_i * \hat{reform}_{tc}$ . At the second stage, I use  $\hat{religion}_i$  and all the  $\hat{religion}_i * \hat{reform}_{tc}$  to estimate the structural form of happiness equation by ordered logit (as described by, e.g., Cameron and Trivedi, 2005) bootstrapping standard errors to correct them for using  $\hat{religion}_i$  and  $\hat{religion}_i * \hat{reform}_{tc}$  instead of  $religion_i$  and  $religion_i * reform_{tc}$ .

In a cross-country analysis the variance of the error term is never the same across different countries because of different effects of explanatory variables, i.e., the homoskedasticity assumption fails (Wooldridge, 2002). To account for this, I use heteroskedasticity robust standard errors. Standard errors are also clustered by region to account for possible similarities in characteristics of people living in the same region. It results in 60 clusters according to the number of regions in the data which is large enough (more than 50) to have no inference problem (Donald and

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endogenous as is personal religiousness. However, as pointed out by Easterlin (2009), all transition countries experienced a similar decline in happiness after the fall of communism. Therefore, the potential depressive effect of communism on happiness in formerly religious regions and happiness recovery after the fall of communism may be neglected.

<sup>6</sup>As Putnam (1993) shows, trust across Italian regions today is perfectly explained by trust centuries ago. This argument may also explain the correlation between current and historical religious propensity since the propensity to trust and the propensity to be religious are likely to be related to each other.

Lang, 2007).

First, all the models are estimated without interaction terms, then interaction terms are added. It should be noted, however, that dropping interaction terms out of the model could result in biased and inconsistent estimators due to misspecification. To check the robustness of the results to the choice of estimation method, I redefine the dependent variable into a zero/one (all dissatisfied/all satisfied) scale and estimate the linear probability model (LPM) with the same IVs.<sup>7</sup>

## 4 Data

The main dataset that is used in this research is the Life in Transition Survey (LiTS). It was jointly conducted in 2006 by the EBRD and World Bank and covers all 29 transition countries.<sup>8</sup> The survey is based on nationally representative samples with 1000 respondents selected randomly from each transition country and contains information on attitudes, values and socio-economic characteristics of respondents. One more advantage of this survey is the possibility to treat it as a panel because the information is collected in such a way that individuals are asked about their past experiences and attitudes, about their life before, throughout, and after the transition. The survey initially contains 29000 observations. I exclude Tajikistan from research since the sample for Tajikistan in LiTS contains 70 percent of Christians which is not consistent with the WCD data on the major denomination in Tajikistan being Islam. I also exclude Turkey from the initial sample due to the unavailability of EBRD transition indicators for this country. Finally, I exclude from the sample

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<sup>7</sup>Note that the model without interaction terms also has a different interpretation of coefficients on the main effects (Ozer-Balli and Sorensen, 2010). As such, in a correctly specified LPM with interaction terms, the coefficients on the main effects of reforms are the partial derivatives of the respective variable evaluated when religion is equal to zero, while in a model without the interaction terms the partial derivatives are evaluated when religion is equal to its mean.

<sup>8</sup>In line with general classification the transition countries are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey, Ukraine, and Uzbekistan.

observations where a respondent refused to answer the question or where values for major variables are missing (mainly, for the variables that serve as dependent in our specifications). Finally, the result is about 19 to 27 thousand observations, depending on specification and dependent variable used.

The data on historical IV for religion are from the World Christian Database (WCD), which provides statistical information on all world religions. Particularly, the variables of our interest are the adherents of a given religion in a given country in the year 1900, and the adherents of a given religion in a given country in 1900 as a per cent of total population. The data are collected on the basis of church statistics, government censuses, United Nations statistics, and estimates of informed experts and published by Brill, Netherlands.

I also use the EBRD transition indicators as the data on reforms (aggregate shocks) in transition countries. The EBRD transition indicators have the range from 1 to 4.3 (4+) where a higher index reflects higher progress in the corresponding area of reforms, namely large scale privatization, small scale privatization, enterprise restructuring, price liberalization, trade and foreign exchange system, competition policy, banking reform and interest rate liberalization, securities markets and non-bank financial institutions, and overall infrastructure reform.

All the summary statistics for the data and detailed description of variables used for analysis are presented in Tables 2-4. Table 2 describes all the variables used for the estimation. Dependent variables are life satisfaction, perception of economic situation and perception of political situation. Explanatory variables are a respondent's religion (or its IV, the number of people of a given religion in a given country in 1900), EBRD transition indicators, a respondent's age and age squared divided by 100, gender, variables for education, number of children, variables accounting for idiosyncratic shocks (adopted children, marriage and divorce during the transition period 1990-2006), household size, household consumption expenditures, and respondent's employment status. Table 3 presents descriptive statistics for the data.

Table 4 gives the distribution of answers for the dependent variables. For all dependent variables more than 7 percent of respondents answer that they are strongly satisfied with life or the economic and political situation in their country, 27 to 36 percent are satisfied, 15 to 23 percent are neither dissatisfied nor satisfied, 21 to 29 percent are not satisfied, 10 to 20 percent are not satisfied at all. In the case when dependent variables are redefined into a zero/one scale, 41 to 57 percent are satisfied.

## 5 Results and Discussion

This section discusses the direct and indirect effects of religion and reforms on happiness, perceptions of the economic and political situation, and the robustness check of obtained results. The main results for all three specifications are presented in Tables 5 to 10. Table 5 presents estimation results when life satisfaction has been used as a dependent variable. Tables 6 and 7 present the results for perceptions of the current economic and political situation as dependent variables, respectively. For each specification we present the estimation results of ordered logit without instruments for religion and interaction terms and ordered logit with instruments to account for endogeneity of religion and interaction terms. As the robustness check, Tables 8 to 10 include the results of three specifications estimated by a linear probability model with and without IVs.

Since the results of endogeneity tests (see Table A1 in the Appendix) reject the exogeneity hypothesis of religion and interaction terms in all three specifications, ordered logit estimation without instruments produces biased and inconsistent results due to the endogeneity problem. Notably, the results of joint endogeneity tests hold for both ordered logit and LPM. For this reason we do not comment much on the estimation results without instruments. According to the results of the first stage F-test, the proposed instruments are also not weak (see Table A2 in the Appendix).

Thus, the results of the ordered logit and LPM with instruments are unbiased and consistent.

In Tables A3 to A5 in the Appendix the changes in predicted probabilities of different replies to life satisfaction and perceptions questions for different religiousness values are presented.

The positive coefficient's estimates in the ordered logit imply that with an increase in the respective regressor, the probability of the lowest category ("strongly disagree") decreases and the probability of the highest category ("strongly agree") increases. The signs of the ordered logit coefficient's estimates are inconclusive regarding the effects of regressors on the predicted probabilities of middle categories (Greene, 2003; Hayo, 2007). To understand the effects of the explanatory variables on the predicted probabilities of middle categories, I also compute the marginal effects of the explanatory variables. The marginal effects for the ordered logit without controlling for endogeneity of religion and interaction terms are presented in Tables A6a to A8a in the Appendix. The marginal effects for the ordered logit with the use of instruments to control for endogeneity of religion and interaction terms are presented in Tables A6b to A8b in the Appendix.

## **5.1 Religion, Reforms and Life Satisfaction: Direct Effects**

The estimation of the model without interaction terms produces biased and inconsistent estimators due to the misspecification of model. Particularly, in all the specifications without interaction terms, the coefficient on religion is significantly biased downwards and the effect of religion on life satisfaction and perceptions of the economic and political situation is negative. As shown in Tables 5 to 7, while controlling for endogeneity of religion and interaction terms, religion affects happiness in transition countries positively in all three specifications: life satisfaction, and perceptions of the economic and political situation. As described above, a positive effect of religion on life satisfaction has been found in previous literature already,

but without controlling for endogeneity (see Ellison, 1991; Clark and Lelkes, 2006 and 2009; Lelkes, 2006, among others). Higher religiousness increases the predicted probabilities of being satisfied and strongly satisfied (see Tables A3 to A5 in the Appendix). As such, a hypothetical move from 0 to 100 percent religious increases the probability of being satisfied and strongly satisfied, on average, by 3 and 2 percentage points, respectively. This result is even stronger for perceptions of the political situation: higher religiousness implies about a 6 percent increase in satisfaction with the political situation. The increase in religiousness by 1 standard deviation increases the probability of being strongly satisfied with life by 8.9% and satisfied with life by 25.1%. The marginal effects of religion in other specifications are less than in the case of life satisfaction, but still sound: 7.7% and 21.8% for perceptions of the economic situation and 5.3% and 14.6% for perceptions of the political situation (see Tables A6b to A8b in the Appendix).

Previous literature suggests negative effects of some macroeconomic variables (e.g., unemployment, income inequality or inflation) on happiness (see Clark and Oswald, 1994; Di Tella et al., 2001, among others). The effects of economic reforms on happiness have not been yet investigated in previous studies. Since transition period reforms affected various dimensions of economic, political and social life in transition countries and happiness is affected by macroeconomic instabilities, I expect that reforms in transition countries are likely to affect happiness too. Such expectation is also in line with the data and arguments of previous research (for instance, Sanfey and Teksoz, 2005; Lelkes, 2006, Easterlin, 2009) that in the transition period individual happiness decreases. I study how progress in major reforms, namely large and small scale privatization, enterprise restructuring, price liberalization, trade and foreign exchange system, competition policy, banking reform and interest rate liberalization, securities markets and non-bank financial institutions, and overall infrastructure reform, affect individual happiness in transition countries.

As the results of this study indicate, while happiness, perceptions of the eco-

economic and political situation, are negatively affected by large scale privatization and positively by price liberalization (not significant in the case of life satisfaction), the effects of other reforms differ for happiness and perceptions of the economic and political situation. Life satisfaction is negatively affected by competition policy and infrastructure reform and positively by small scale privatization, governance reform and enterprise restructuring. Perceptions of the economic situation are negatively affected by small scale privatization and positively by trade and foreign exchange system reform, competition policy and infrastructure reform. Perceptions of the political situation are negatively affected by trade and foreign exchange system reform and the results are not significant for the remaining reforms.

Consistently with most findings in happiness literature, I find that life satisfaction is U-shaped in age; women are happier than men (though the result is not significant); happiness increases with the degree of education; household size positively affects happiness; divorce lowers life satisfaction and marriage increases it (the result is not significant for perceptions of the economic and political situation); the unemployed are less happy than the employed.

## **5.2 Religion, Reforms and Life Satisfaction: Interaction Effects**

As we underlined above, some reforms may have negative effects on life satisfaction and perceptions of the economic and political situation and some may have positive effects. As expected, interaction effects in most of the cases are found to be positive if the direct effect of reform is negative, and negative if the direct effect of reform is positive. As the paper finds, religion can insure life satisfaction against negative effects of large scale privatization, competition policy and overall infrastructure reforms. Perceptions of the economic and political situation can be insured against the negative effect of small scale privatization. In the case of life satisfaction, the

interaction effects of small scale privatization, governance reform and enterprise restructuring are found to be negative while direct effects of these reforms are positive. In the case of perceptions of the economic situation, significant negative interaction effects are found for trade and foreign exchange system reform, competition and overall infrastructure reforms. In the case of perceptions of the political situation, significant negative interaction effects are found for price liberalization and competition policy reform. For the rest of reforms the sign of the interaction term is typically opposite the sign of the direct effect but not significant.

Thus, the main finding of this paper is that religion indeed insures against some aggregate shocks: religious people have lower decreases in happiness than non-religious people. The effect holds in the opposite direction too: if the main effect from reform is positive, religious people tend to benefit in happiness less than non-religious. Therefore, religion in general tends to reduce the happiness vulnerability due to aggregate shocks.

### **5.3 Robustness Check**

To show that the results are not driven by the choice of estimation method, I also present the results obtained by using the linear probability model. Redefining the dependent variables into a zero/one scale (all dissatisfied/all satisfied) reduces the variation in happiness and perceptions of the economic and political situation, but allows the robustness of results obtained by using ordered logit to be checked. The coefficients of the linear probability model are comparable with the joint marginal effects obtained by using ordered logit for the categories. However, given the aggregation of the dependent variable, one would expect noisier and lower coefficient estimates obtained by using the linear probability model in comparison to ordered logit.

As shown in Tables 8 to 10, the results obtained by using the linear probability model are in fact less significant than in the case of ordered logit, especially in the



specifications for perceptions of the economic and political situation. The magnitude of coefficient estimates from the LPM for most variables is lower than the marginal effects of explanatory variables on the probabilities of being satisfied and strongly satisfied when summed up. In the case when instrumental variables are used, the size of this difference between LPM and ordered logit is typically comparable with the marginal effect on the middle category "neither disagree, nor agree", observations on which are excluded when a dependent variable for LPM is constructed (see Tables A6b to A8b in the Appendix). Thus, the magnitudes of the effects of explanatory variables on dependent variables are robust to the estimation method used.

As the results indicate, in all three specifications the signs of estimated coefficients obtained by using the linear probability model are the same as the signs of marginal effects obtained by using ordered logit for the categories "agree" and "strongly agree" with a few exceptions, where, nonetheless, the coefficients are not significant in both methods. Thus, the insurance effect of religion against aggregate shocks to happiness and perceptions of economic and political situation is found also using the linear probability model.

#### **5.4 The Effects of Controlling for Endogeneity**

The estimation of the model without controlling for endogeneity of religion and interaction terms produces biased and inconsistent estimators. As shown in Tables 5 and 8, the estimation of ordered logit and LPM without controlling for endogeneity produces the estimate of the coefficient on religion which is, as expected, biased downwards in the specification for life satisfaction. Also, in the specifications for perceptions of the economic and political situation, marginal effects of religion become larger after controlling for endogeneity. Given the downward bias in the estimate of the coefficient for religion when we do not control for endogeneity, we may expect that the source of endogeneity is not solely in the time constant unobservables that are likely to affect both happiness and religiousness, as described above, but also

in simultaneity between happiness and religion. Since instability during transition period is stressful for people and makes them unhappy, there may be a temporal reaction: unhappy people are likely to become religious during stressful life events. Thus, when we do not control for endogeneity (in both ordered logit and LPM), this negative reverse causality between happiness and religiousness biases the coefficients downwards.

The interaction coefficients are also changing in all specifications after controlling for endogeneity. For most interaction terms, the absolute value of coefficients gets larger in all specifications in both ordered logit and LPM. Thus, controlling for endogeneity makes the insurance effects stronger. This is an expected change since direct effects of religion also become larger.

Controlling for endogeneity of religion and interaction terms changes the estimated coefficients in LPM and marginal effects in ordered logit in the same direction, though the size of the change for some variables is less when LPM is used. This difference may again be because of the aggregation of the dependent variable.

## 6 Conclusion

Religiousness insures happiness against individual stressful life events and, therefore, religious people are more likely to adapt easier to idiosyncratic shocks and feel happier during various changes (Clark and Lelkes, 2006; Lelkes, 2006; Dehejia et al., 2007). This paper accounts for the endogeneity of religion in the happiness equation and consider major economic reforms in transition countries as aggregate shocks to happiness. As underlined in the paper, the insurance effect of religion found in previous literature for idiosyncratic shocks is also applicable for overcoming the effects of aggregate shocks. I argue that religion may also insure against negative aggregate shocks to happiness and reduce the happiness vulnerability in the case of positive shocks. This result is robust to the choice of estimation method and holds

for all three specifications in the paper, namely life satisfaction, and perception of the current economic and political situation. In line with previous research the paper also finds that happiness is U-shaped in age, more educated people are happier, the employed are happier than the unemployed, and happiness increases with household size and marriage and decreases with divorce.

As this paper argues, people in more religious countries are likely to be more satisfied with life, and the economic and political situation. Higher religiousness is associated with a strong increase in the probabilities of being satisfied and strongly satisfied: an increase in religiousness by 1 standard deviation increases the probability of being strongly satisfied with life by 8.9% and satisfied with life by 25.1%. In a hypothetical case when a country moves from 0 to 100 percent religious, the share of satisfied and strongly satisfied people increases, on average, by 3 and 2 percentage points, respectively. Thus, the happiness ranking of religious countries is likely to be higher.

A decrease in happiness observed in transition countries during the transition period may be due to the negative effects of reforms, e.g., large scale privatization and overall infrastructure reform. Because of the insurance effect of religion found in this paper, transition countries with higher shares of religious people are likely to experience reforms with less vulnerability in happiness. This may also imply that reforms in more religious countries are likely to gain support and be implemented faster than in less religious countries.

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# Appendix

## A1. Model Details

The system of structural equations is

$$\mathbf{B}\mathbf{y}_{itc} + \mathbf{\Gamma}\mathbf{x}_{itc} = \mathbf{u}_{itc}, \text{ where}$$

$$\mathbf{y}_{itc} = \begin{bmatrix} happiness_{itc}^* \\ religion_i^* \\ religion_i^* \times reform1_{tc} \\ \vdots \\ religion_i^* \times reform9_{tc} \end{bmatrix}, \quad \mathbf{x}_{itc} = \begin{bmatrix} reform1_{tc} \\ \vdots \\ reform9_{tc} \\ histrelig_c \\ histrelig_c \times reform1_{tc} \\ \vdots \\ histrelig_c \times reform9_{tc} \\ socecon1_{itc} \\ \vdots \\ socecon15_{itc} \end{bmatrix}, \quad \mathbf{u}_{itc} = \begin{bmatrix} u_{1itc} \\ u_{2itc} \\ u_{3itc} \\ \vdots \\ u_{11itc} \end{bmatrix}$$

(11 × 1) (34 × 1) (11 × 1)

$$\mathbf{B} = \begin{bmatrix} 1 & -\beta_{12} & -\beta_{13} & \cdots & -\beta_{111} \\ -\beta_{21} & 1 & 0 & \cdots & 0 \\ -\beta_{31} & 0 & 1 & & \vdots \\ \vdots & \vdots & & \ddots & 0 \\ -\beta_{111} & 0 & \cdots & 0 & 1 \end{bmatrix},$$

(11 × 11)

$$\mathbf{\Gamma} = \begin{bmatrix} -\gamma_{11} & \cdots & -\gamma_{19} & 0 & \cdots & 0 & -\gamma_{120} & \cdots & -\gamma_{134} \\ 0 & \cdots & 0 & -\gamma_{210} & \cdots & -\gamma_{219} & -\gamma_{220} & \cdots & -\gamma_{234} \\ 0 & \cdots & 0 & -\gamma_{310} & \cdots & -\gamma_{319} & -\gamma_{320} & \cdots & -\gamma_{334} \\ \vdots & & \vdots & \vdots & & \vdots & \vdots & & \vdots \\ 0 & \cdots & 0 & -\gamma_{1110} & \cdots & -\gamma_{1119} & -\gamma_{1120} & \cdots & -\gamma_{1134} \end{bmatrix}$$

(11 × 34)

The system of reduced form equations is

$$\mathbf{y}_{itc} = \mathbf{\Pi}\mathbf{x}_{itc} + \mathbf{v}_{itc}, \text{ where}$$

$$\mathbf{\Pi} = \begin{bmatrix} \pi_{11} & \pi_{12} & \cdots & \pi_{134} \\ \pi_{21} & \pi_{22} & \cdots & \pi_{234} \\ \vdots & \vdots & & \vdots \\ \pi_{111} & \pi_{112} & \cdots & \pi_{1134} \end{bmatrix}, \quad \mathbf{v}_{itc} = \begin{bmatrix} v_{1itc} \\ v_{2itc} \\ \vdots \\ v_{11itc} \end{bmatrix}$$

(11 × 34) (11 × 1)



## A2. Main Tables

**Table 1. World Happiness.**

Country	Very Happy (%)	Satisfied (%)	Country	Very Happy (%)	Satisfied (%)
Denmark	44.9	90.8	Japan	27.8	51.4
Finland	24.1	88.3	Peru	30.8	49.8
Colombia	47.1	88.1	Republic of Korea	9.6	46.3
Iceland	46.6	86.7	Poland	17.4	45.6
Puerto Rico	53.3	85.2	Viet Nam	48.6	44.1
Switzerland	39.9	84.8	Egypt	18.1	43.4
Netherlands	45.9	84.2	Portugal	18.0	43.4
Northern Ireland	46.1	84.0	Algeria	16.1	43.3
Sweden	36.6	82.1	South Africa	38.5	42.0
Austria	35.4	81.7	Hungary	16.7	41.8
Canada	44.0	80.7	Slovakia	8.0	41.7
Belgium	42.4	80.4	Estonia	6.5	41.6
Germany West	18.9	79.6	Turkey	34.5	40.6
Ireland	42.0	79.0	Romania	3.6	40.2
Luxembourg	35.4	78.9	Montenegro	8.1	39.7
United States	39.0	78.7	Serbia	12.0	39.4
Norway	30.0	78.4	Morocco	30.8	38.4
Germany East	20.3	78.0	Bosnia and Herzegovina	21.7	37.9
Mexico	56.5	77.7	Jordan	12.8	37.0
Australia	42.9	76.9	Uganda	26.2	35.9
New Zealand	33.3	75.9	Latvia	6.6	34.8
Great Britain	32.5	75.7	Bangladesh	14.8	31.9
Spain	20.1	74.7	Azerbaijan	11.3	31.2
Italy	18.2	74.6	Iraq	13.2	30.9
Malta	31.1	72.5	Lithuania	3.8	30.9
Singapore	28.7	70.6	Macedonia	19.1	30.7
Venezuela	56.8	69.9	Armenia	6.3	28.5
Slovenia	15.2	68.7	Russian Federation	6.0	28.0
Argentina	33.0	68.4	Georgia	11.7	24.6
France	31.3	65.1	Ukraine	5.8	23.7
Israel	27.2	65.0	Belarus	4.9	23.4
Saudi Arabia	44.3	64.5	Tanzania	56.2	20.6
Nigeria	66.8	63.7	Moldova	6.0	18.5
Chile	36.0	62.6	Zimbabwe	19.9	18.0
Brazil	22.0	62.5	Bulgaria	7.8	16.8
Greece	18.2	62.3	Pakistan	19.6	8.3
Indonesia	20.4	60.9	Albania	9.7	n/a
Czech Republic	10.9	53.7			
Philippines	38.4	53.5			
Croatia	12.8	53.5			
China	11.5	52.9			
India	25.3	52.8			
Kyrgyzstan	19.8	52.5			
Iran	23.0	51.5			

*Sources:* World Values Survey (2005), World Database of Happiness (2005). *Notes:* Countries are ranked according to the percentage of those satisfied with life. Transition countries are shaded. Happiness measure: 'Taking all things together, would you say you are very happy, quite happy, not very happy, or not at all happy?' Life satisfaction measure: 'All things considered, how satisfied are you with your life as a whole these days?' Ten-point scale: 1 = dissatisfied, and 10 = satisfied; percent 'satisfied'-scores 7-10.

**Table 2. Variables Description.**

Variable	Detailed Description
Life Satisfaction	To what extent do you agree with the following statement: All things considered, I am satisfied with my life now, Strongly disagree = 1, Disagree=2, Neither disagree nor agree =3, Agree=4, Strongly agree=5. Source: LiTS
Perception of Current Economic Situation	To what extent do you agree with the following statement: The economic situation in this country is better today than around 1989, Strongly disagree = 1, Disagree=2, Neither disagree nor agree =3, Agree=4, Strongly agree=5. Source: LiTS
Perception of Current Political Situation	To what extent do you agree with the following statement: The political situation in this country is better today than around 1989, Strongly disagree = 1, Disagree=2, Neither disagree nor agree =3, Agree=4, Strongly agree=5. Source: LiTS
Life Satisfaction, redefined into 0/1	Dummy variable =1 if the respondent answered Agree=4, Strongly agree=5 on the question about life satisfaction, and 0 if the answer was Strongly disagree = 1, Disagree=2. Observations with the answer Neither disagree nor agree=3 are dropped. Source: author's calculations
Perception of Current Economic Situation, redefined into 0/1	Dummy variable =1 if the respondent answered Agree=4, Strongly agree=5 on the question about the perception of current economic situation, and 0 if the answer was Strongly disagree = 1, Disagree=2. Observations with the answer Neither disagree nor agree=3 are dropped. Source: author's calculations
Perception of Current Political Situation, redefined into 0/1	Dummy variable =1 if the respondent answered Agree=4, Strongly agree=5 on the question about the perception of current political situation, and 0 if the answer was Strongly disagree = 1, Disagree=2. Observations with the answer Neither disagree nor agree=3 are dropped. Source: author's calculations
Ln (Number of people of given religion in a given country in 1900)	Data based on church statistics, government censuses, United Nations statistics, and estimates of informed experts. Source: WCD, author's calculations.
Religion	Dummy variable =1 if the respondent answered Buddhist, Jewish, Christian, Muslim, Other to the question "What is your religion?", and 0 if the answer was Atheistic/Agnostic/None. Source: LiTS, author's calculations
Large, Small Scale Privatization, Enterprise Restructuring, Price Liberalization, Trade and Foreign Exchange System, Competition Policy, Banking Reform and Interest Rate Liberalization, Securities Market and Non-Bank Financial Institutions, Overall Infrastructure Reform	Change in corresponding EBRD transition index calculated as a difference between index score in 2006 and index score in 1989 for each transition country. EBRD transition indices have the range from 1 to 4.3 (4+) where the higher the index reflects higher progress in corresponding area of reforms (large scale privatization, small scale privatization, enterprise restructuring, price liberalization, trade and foreign exchange system, competition policy, banking reform and interest rate liberalization, securities markets and non-bank financial institutions, overall infrastructure reform). Source: EBRD transition indicators, author's calculations
Age	Age of respondent. Source: LiTS
Age Squared/100	Source: LiTS, author's calculations
Male	Dummy for the gender of respondent: Male 1, Female 0. Source: LiTS
Basic School	Dummy variable =1 if the highest degree that respondent obtained is basic education, and 0, otherwise. Source: LiTS
Secondary School	Dummy variable =1 if the highest degree that respondent obtained is secondary education, and 0, otherwise. Source: LiTS
Vocational/Professional School	Dummy variable =1 if the highest degree that respondent obtained is professional, vocational school/training, and 0, otherwise. Source: LiTS
Higher Degree (University, College)	Dummy variable =1 if the highest degree that respondent obtained is higher professional degree (university, college), and 0, otherwise. Source: LiTS
Postgraduate Degree	Dummy variable =1 if the highest degree that respondent obtained is postgraduate degree, and 0, otherwise. Source: LiTS
Children	Number of children less than 14 years old. Source: LiTS
Children Born/Adopted 1990-2006	Dummy variable =1 if respondent had a child (birth or adoption) during 1990-2006, and 0, otherwise. Source: LiTS, author's calculations
Married 1990-2006	Dummy variable=1 if respondent got married (lived in a couple) during 1990-2006, and 0, otherwise. Source: LiTS, author's calculations
Divorced 1990-2006	Dummy variable = 1 if respondent divorced during 1990-2006, and 0, otherwise. Source: LiTS, author's calculations
Household Size	Source: LiTS
Household Consumption Expenditures Equalized Using the Modified OECD Scales	Household consumption per month in USD. OECD-modified scales assign to each household a value in proportion to needs of every member: a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child. Source: LiTS
Employment	Dummy variable =1 if respondent worked at least one hour during last 7 days, and 0, otherwise. Source: LiTS

**Table 3. Descriptive Statistics.**

Variable	Obs	Mean	Std. Dev.	Min	Max
Life Satisfaction	27381	3.101	1.148	1	5
Perception of Current Economic Situation	25136	2.737	1.268	1	5
Perception of Current Political Situation	24312	2.811	1.227	1	5
Life Satisfaction, redefined into 0/1	20995	0.579	0.494	0	1
Perception of Current Economic Situation, redefined into 0/1	21187	0.416	0.493	0	1
Perception of Current Political Situation, redefined into 0/1	19157	0.445	0.497	0	1
Religion	27392	0.898	0.302	0	1
Ln (Number of people of given religion in a given country in 1900)	26403	14.018	2.209	3.912	17.935
Large Scale Privatization	27392	2.179	0.786	0	3
Small Scale Privatization	27392	2.406	1.026	0	3.330
Governance and Enterprise Restructuring	27392	1.469	0.723	0	2.670
Price Liberalization	27392	2.510	0.957	0	3.330
Trade and Foreign Exchange System	27392	2.629	0.892	0	3.330
Competition Policy	27392	1.349	0.676	0	2.670
Banking Reform and Interest Rate Liberalization	27392	1.994	0.734	0	3.000
Securities Markets and Non-Bank Financial Institutions	27392	1.458	0.727	0	3.000
Overall Infrastructure Reform	27392	1.504	0.640	0	2.340
Age	27390	46.906	17.720	17	97
Age Squared/100	27390	25.142	17.655	2.890	94.090
Male	27392	0.416	0.493	0	1
Basic School	27392	0.185	0.389	0	1
Secondary School	27392	0.264	0.441	0	1
Vocational/Professional School	27392	0.304	0.460	0	1
Higher Professional Degree (University, College)	27392	0.184	0.387	0	1
Postgraduate Degree	27392	0.009	0.092	0	1
Number of children	27392	0.513	0.912	0	9
Children Born/Adopted between 1990-2006	27392	0.310	0.462	0	1
Married between 1990-2006	27392	0.246	0.431	0	1
Divorced between 1990-2006	27392	0.046	0.210	0	1
Household Size	27392	1.987	0.775	1	6.5
Household Consumption Expenditures Equalized Using the Modified OECD Scales	27329	7.529	0.894	0.981	10.252
Employment	27392	0.484	0.500	0	1

*Source:* LITS, EBRD transition indicators, WCD, author's calculations. *Notes:* LITS database initially contains 29000 observations from 29 countries. Observations with missing or uncertain answers to the questions about Life Satisfaction, Perception of Current Economic Situation, and Perception of Current Political Situation were removed from the database. Observations for Tajikistan were removed from the database due to inconsistency in religion data with WCD. Observations for Turkey were removed from the database due to absence of EBRD transition indicators. The number of observations slightly differs for different variables due to missing values.

**Table 4. Distribution of answers for dependent variables.**

Answer	Frequency (obs.)	Percent	Cumulative
<b>Life Satisfaction</b>			
To what extent do you agree with the following statement: All things considered, I am satisfied with my life now			
(1) Strongly disagree	2836	10.36	10.36
(2) Disagree	6003	21.92	32.28
(3) Neither disagree nor agree	6386	23.32	55.60
(4) Agree	9876	36.07	91.67
(5) Strongly agree	2280	8.33	100
Total	27381	100	
<b>Life Satisfaction, redefined</b>			
(0) Strongly disagree and Disagree	8839	42.10	42.10
(1) Agree and Strongly agree	12156	57.90	100
Total	20995	100	
<b>Perception of Current Economic Situation</b>			
To what extent do you agree with the following statement: The economic situation in this country is better today than around 1989			
(1) Strongly disagree	5032	20.02	20.02
(2) Disagree	7335	29.18	49.20
(3) Neither disagree nor agree	3949	15.71	64.91
(4) Agree	6863	27.30	92.21
(5) Strongly agree	1957	7.79	100
Total	25136	100	
<b>Perception of Current Economic Situation, redefined</b>			
(0) Strongly disagree and Disagree	12367	58.37	58.37
(1) Agree and Strongly agree	8820	41.63	100
Total	21187	100	
<b>Perception of Current Political Situation</b>			
To what extent do you agree with the following statement: The political situation in this country is better today than around 1989			
(1) Strongly disagree	4310	17.73	17.73
(2) Disagree	6314	25.97	43.70
(3) Neither disagree nor agree	5155	21.20	64.90
(4) Agree	6736	27.71	92.61
(5) Strongly agree	1797	7.39	100
Total	24312	100	
<b>Perception of Current Political Situation, redefined</b>			
(0) Strongly disagree and Disagree	10624	55.46	55.46
(1) Agree and Strongly agree	8533	44.54	100
Total	19157	100	

Source: LiTS, author's calculations.

**Table 5. Religion and Life Satisfaction.**

	Dependent Variable: Life Satisfaction				
	[1]	Ordered Logit		Ordered Logit with IV	
		[2]	[3]	[4]	[5]
Religion		-0.132 ***	0.808 **	-0.138 *	1.381 ***
Large Scale Privatization		-0.273 ***	(0.088)	(0.073)	(0.283)
Small Scale Privatization		0.026	(0.113)	(0.095)	(0.584)
Governance and Enterprise Restructuring		-0.218	(0.145)	(0.112)	(1.005)
Price Liberalization		0.191	(0.177)	(0.154)	(1.111)
Trade and Foreign Exchange System		-0.056	(0.066)	(0.164)	(0.885)
Competition Policy		0.345 ***	(0.104)	(0.066)	(1.530)
Banking Reform and Interest Rate Liberalization		-0.328 ***	(0.091)	(0.088)	(0.952)
Securities Markets and Non-bank Institutions		0.639 ***	(0.098)	(0.099)	(0.844)
Overall Infrastructure Reform		-0.223 **	(0.115)	(0.101)	(0.983)
Religion*Large Scale Privatization		-	(0.190)	(0.111)	(0.859)
Religion*Small Scale Privatization		-	0.742 **	-	2.372 ***
Religion*Governance and Enterprise Restructuring		-	0.271 *	-	-3.194 ***
Religion*Price Liberalization		-	-0.839 ***	-	-3.433 ***
Religion*Trade and Foreign Exchange System		-	-0.002	-	-0.253
Religion*Competition Policy		-	-0.729 **	-	0.731
Religion*Banking Reform and Interest Rate Liberalization		-	-0.059	-	2.200 **
Religion*Securities Markets and Non-Bank Financial Institutions		-	0.363 **	-	-0.235
Religion*Overall Infrastructure Reform		-	0.605 ***	-	-0.292
Age		-0.049 ***	(0.195)	-	2.134 **
Age Squared/100		0.053 ***	(0.004)	(0.004)	(0.004)
Male		-0.002	(0.026)	(0.028)	(0.030)
Basic School		0.012	(0.107)	(0.109)	(0.094)
Vocational/Professional School		0.318 ***	(0.124)	(0.123)	(0.120)
Higher Professional Degree (University, College)		0.074 *	(0.110)	(0.171 *)	(0.106)
Postgraduate Degree		0.373 ***	(0.116)	(0.469 ***)	(0.117)
Number of Children		0.729 ***	(0.130)	(0.738 ***)	(0.136)
Children Born/Adopted between 1990-2006		0.066	(0.032)	(0.031)	(0.030)
Married between 1990-2006		-0.025	(0.051)	(0.020)	(0.054)
Divorced between 1990-2006		0.115 ***	(0.039)	(0.046)	(0.051)
Household Size		-0.438 ***	(0.058)	(0.055)	(0.054)
Household Consumption Expenditures Equalized Using the Modified OECD Scales		0.207 ***	(0.030)	(0.203 ***)	(0.031)
Employment		0.528 ***	(0.034)	(0.478 ***)	(0.039)
Number of Observations		0.314 ***	(0.030)	0.256 ***	(0.026)
		27316	27316	26329	26329

Source: author's calculations. Notes: Estimated coefficients are reported in columns [1] and [3]; no instruments are used; in column [4] religion is instrumented; in column [5] religion and all interaction terms are instrumented. The natural logarithm of the number of people of a given religion in a given country in 1990 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; for ordered logit with IV, standard errors are bootstrapped. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table 6. Religion and Perception of Current Economic Situation.**

	Dependent Variable: Perception of Economic Situation				
	[1]	[2]	[3]	[4]	[5]
Religion			1.350 *** (0.064)	-0.254 *** (0.067)	1.339 *** (0.459)
Large Scale Privatization		-0.232 *** (0.072)	-1.548 *** (0.352)	-0.967 *** (0.061)	-1.524 ** (0.620)
Small Scale Privatization		0.339 *** (0.132)	-0.200 (0.224)	0.349 *** (0.129)	-0.897 *** (0.290)
Governance and Enterprise Restructuring		-0.034 (0.097)	0.294 (0.405)	-0.050 (0.082)	-0.673 (0.554)
Price Liberalization		0.552 *** (0.193)	0.339 * (0.203)	0.552 *** (0.184)	0.717 ** (0.285)
Trade and Foreign Exchange System		-0.132 (0.108)	1.375 *** (0.351)	-0.155 (0.126)	0.663 (0.452)
Competition Policy		0.348 *** (0.111)	0.572 (0.425)	0.339 *** (0.092)	1.529 *** (0.483)
Banking Reform and Interest Rate Liberalization		-0.486 *** (0.108)	-0.848 *** (0.251)	-0.464 *** (0.109)	-0.566 (0.516)
Securities Markets and Non-bank Institutions		0.319 ** (0.136)	0.841 *** (0.226)	0.301 *** (0.119)	0.219 (0.393)
Overall Infrastructure Reform		0.433 *** (0.106)	0.168 (0.283)	0.448 *** (0.111)	2.083 *** (0.719)
Religion*Large Scale Privatization		-	0.587 * (0.350)	-	0.575 (0.616)
Religion*Small Scale Privatization		-	0.581 *** (0.203)	-	1.294 *** (0.268)
Religion*Governance and Enterprise Restructuring		-	-0.400 (0.412)	-	0.546 (0.566)
Religion*Price Liberalization		-	0.178 (0.177)	-	-0.229 (0.311)
Religion*Trade and Foreign Exchange system		-	-1.529 *** (0.354)	-	-0.797 * (0.478)
Religion*Competition Policy		-	-0.250 (0.415)	-	-1.216 *** (0.479)
Religion*Banking Reform and Interest Rate Liberalization		-	0.378 (0.276)	-	0.084 (0.555)
Religion*Securities Markets and Non-Bank Financial Institutions		-	-0.521 * (0.291)	-	0.103 (0.407)
Religion*Overall Infrastructure Reform		-	0.306 (0.301)	-	-1.614 ** (0.690)
Age		-0.041 *** (0.006)	-0.042 *** (0.006)	-0.040 *** (0.006)	-0.042 *** (0.006)
Age Squared/100		0.040 *** (0.006)	0.042 *** (0.005)	0.040 *** (0.006)	0.042 *** (0.006)
Male		-0.022 (0.023)	-0.024 (0.022)	-0.030 (0.020)	-0.028 (0.020)
Basic School		-0.094 (0.091)	-0.086 (0.093)	-0.095 (0.094)	-0.092 (0.097)
Secondary School		0.047 (0.101)	0.055 (0.104)	0.044 (0.102)	0.050 (0.105)
Vocational/Professional School		-0.159 * (0.097)	-0.144 (0.101)	-0.161 * (0.096)	-0.148 (0.098)
Higher Professional Degree (University, College)		0.108 (0.098)	0.125 (0.098)	0.102 (0.112)	0.120 (0.109)
Postgraduate Degree		0.466 ** (0.214)	0.487 ** (0.210)	0.378 * (0.209)	0.397 * (0.213)
Number of Children		0.016 (0.022)	0.011 (0.022)	0.011 (0.024)	0.003 (0.024)
Children Born/Adopted between 1990-2006		0.102 *** (0.033)	0.099 *** (0.034)	0.107 *** (0.037)	0.102 *** (0.038)
Married between 1990-2006		0.012 (0.030)	0.014 (0.031)	0.006 (0.028)	0.008 (0.030)
Divorced between 1990-2006		-0.204 *** (0.053)	-0.206 *** (0.052)	-0.205 *** (0.052)	-0.202 *** (0.053)
Household Size		0.152 *** (0.023)	0.151 *** (0.022)	0.156 *** (0.022)	0.152 *** (0.021)
Household Consumption Expenditures Equalized Using the Modified OECD Scales		0.287 *** (0.028)	0.283 *** (0.027)	0.289 *** (0.033)	0.285 *** (0.032)
Employment		0.165 *** (0.042)	0.160 *** (0.041)	0.162 *** (0.039)	0.161 *** (0.039)
Number of Observations		25078	25078	24185	24185

*Source:* author's calculations. *Notes:* Estimated coefficients are reported in columns. In columns [2] and [3] no instruments are used; in column [4] religion is instrumented; in column [5] religion and all interaction terms are instrumented. The natural logarithm of the number of people of a given religious denomination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; for ordered logit with IV, standard errors are bootstrapped. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table 7. Religion and Perception of Current Political Situation.**

	Dependent Variable: Perception of Current Political Situation				
	[1]	[2]	[3]	[4]	[5]
Religion	-0.063 (0.076)	0.732 ** (0.076)	0.732 ** (0.337)	-0.088 (0.081)	0.888 * (0.483)
Large Scale Privatization	-0.923 *** (0.064)	-1.063 *** (0.064)	-1.063 *** (0.230)	-0.917 *** (0.066)	-0.844 *** (0.311)
Small Scale Privatization	0.404 *** (0.148)	-0.147 (0.148)	-0.147 (0.205)	0.408 *** (0.146)	-0.466 (0.323)
Governance and Enterprise Restructuring	0.292 *** (0.087)	0.446 * (0.087)	0.446 * (0.254)	0.284 *** (0.092)	0.012 (0.349)
Price Liberalization	0.543 *** (0.198)	0.629 ** (0.198)	0.629 ** (0.250)	0.554 *** (0.195)	1.307 *** (0.287)
Trade and Foreign Exchange System	-0.374 *** (0.109)	0.244 (0.109)	0.244 (0.313)	-0.389 *** (0.138)	-1.028 ** (0.411)
Competition Policy	-0.111 (0.113)	0.166 (0.113)	0.166 (0.234)	-0.139 (0.117)	0.481 (0.350)
Banking Reform and Interest Rate Liberalization	-0.046 (0.135)	-0.184 (0.135)	-0.184 (0.149)	-0.034 (0.139)	0.467 (0.359)
Securities Markets and Non-bank Institutions	-0.013 (0.119)	0.525 *** (0.119)	0.525 *** (0.191)	-0.008 (0.101)	-0.159 (0.393)
Overall Infrastructure Reform	0.344 *** (0.115)	-0.137 (0.115)	-0.137 (0.293)	0.349 *** (0.120)	1.061 (0.881)
Religion*Large Scale Privatization	-	0.151 (0.253)	0.151 (0.253)	-	-0.063 (0.316)
Religion*Small Scale Privatization	-	0.587 *** (0.186)	0.587 *** (0.186)	-	0.914 *** (0.290)
Religion*Governance and Enterprise Restructuring	-	-0.210 (0.246)	-0.210 (0.246)	-	0.209 (0.357)
Religion*Price Liberalization	-	-0.131 (0.190)	-0.131 (0.190)	-	-0.819 *** (0.271)
Religion*Trade and Foreign Exchange system	-	-0.606 ** (0.292)	-0.606 ** (0.292)	-	0.677 (0.453)
Religion*Competition Policy	-	-0.295 (0.275)	-0.295 (0.275)	-	-0.628 * (0.373)
Religion*Banking Reform and Interest Rate Liberalization	-	0.134 (0.215)	0.134 (0.215)	-	-0.527 (0.415)
Religion*Securities Markets and Non-Bank Financial Institutions	-	-0.548 ** (0.246)	-0.548 ** (0.246)	-	0.154 (0.430)
Religion*Overall Infrastructure Reform	-	0.520 * (0.285)	0.520 * (0.285)	-	-0.684 (0.890)
Age	-0.027 *** (0.005)	-0.028 *** (0.005)	-0.028 *** (0.005)	-0.027 *** (0.006)	-0.028 *** (0.006)
Age Squared/100	0.027 *** (0.005)	0.028 *** (0.005)	0.028 *** (0.005)	0.027 *** (0.005)	0.028 *** (0.005)
Male	0.013 (0.018)	0.012 (0.018)	0.012 (0.017)	0.012 (0.022)	0.012 (0.022)
Basic School	0.006 (0.103)	0.010 (0.103)	0.010 (0.104)	0.006 (0.105)	0.006 (0.107)
Secondary School	0.206 ** (0.106)	0.208 ** (0.104)	0.208 ** (0.104)	0.198 ** (0.099)	0.203 ** (0.098)
Vocational/Professional School	-0.008 (0.103)	-0.002 (0.103)	-0.002 (0.103)	-0.007 (0.100)	0.002 (0.100)
Higher Professional Degree (University, College)	0.326 *** (0.111)	0.332 *** (0.111)	0.332 *** (0.110)	0.322 *** (0.119)	0.335 *** (0.118)
Postgraduate Degree	0.833 *** (0.184)	0.838 *** (0.184)	0.838 *** (0.173)	0.830 *** (0.156)	0.843 *** (0.145)
Number of Children	0.021 (0.020)	0.018 (0.020)	0.018 (0.020)	0.018 (0.021)	0.012 (0.021)
Children Born/Adopted between 1990-2006	0.057 (0.036)	0.056 (0.036)	0.056 (0.037)	0.066 ** (0.033)	0.063 ** (0.034)
Married between 1990-2006	0.013 (0.037)	0.013 (0.037)	0.013 (0.038)	0.006 (0.031)	0.008 (0.032)
Divorced between 1990-2006	-0.153 ** (0.071)	-0.154 ** (0.071)	-0.154 ** (0.069)	-0.152 ** (0.068)	-0.152 ** (0.066)
Household Size	0.180 *** (0.019)	0.179 *** (0.019)	0.179 *** (0.018)	0.179 *** (0.021)	0.176 *** (0.020)
Household Consumption Expenditures Equalized Using the Modified OECD Scales	0.164 *** (0.023)	0.161 *** (0.023)	0.161 *** (0.023)	0.165 *** (0.027)	0.163 *** (0.027)
Employment	0.130 *** (0.042)	0.130 *** (0.042)	0.130 *** (0.041)	0.130 *** (0.037)	0.131 *** (0.037)
Number of Observations	24255	24255	24255	23406	23406

*Source:* author's calculations. *Notes:* Estimated coefficients are reported in columns. In columns [2] and [3] no instruments are used; in column [4] religion is instrumented; in column [5] religion and all interaction terms are instrumented. The natural logarithm of the number of people of a given religious denomination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; for ordered logit with IV, standard errors are bootstrapped. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table 8. Religion and Life Satisfaction, Linear Probability Model.**

	Dependent Variable: Life Satisfaction (zero/one)				
	1	LPM			LPM with IV
	2	3	4	5	
Religion	-0.036 ** (0.014)	0.009 (0.065)	-0.144 *** (0.027)	0.291 (0.409)	
Large Scale Privatization	-0.082 *** (0.025)	-0.315 *** (0.063)	-0.069 *** (0.025)	-0.597 *** (0.186)	
Small Scale Privatization	0.002 (0.031)	-0.035 (0.046)	0.010 (0.030)	0.831 *** (0.250)	
Governance and Enterprise Restructuring	-0.042 (0.043)	0.316 *** (0.057)	-0.067 (0.042)	0.777 *** (0.174)	
Price Liberalization	0.048 (0.046)	0.087 (0.060)	0.025 (0.044)	-0.019 (0.258)	
Trade and Foreign Exchange System	-0.010 (0.019)	0.088 (0.060)	0.008 (0.019)	-0.084 (0.361)	
Competition Policy	0.086 *** (0.031)	-0.005 (0.070)	0.093 *** (0.032)	-0.551 *** (0.195)	
Banking Reform and Interest Rate Liberalization	-0.092 *** (0.022)	-0.016 (0.042)	-0.098 *** (0.023)	-0.044 (0.238)	
Securities Markets and Non-bank Institutions	0.189 *** (0.026)	0.034 (0.039)	0.180 *** (0.026)	0.272 (0.258)	
Overall Infrastructure Reform	-0.074 ** (0.034)	-0.105 *** (0.031)	-0.076 ** (0.033)	-0.638 *** (0.200)	
Religion*Large Scale Privatization		0.240 *** (0.071)	-	0.533 *** (0.191)	
Religion*Small Scale Privatization		0.035 (0.044)	-	-0.835 *** (0.251)	
Religion*Governance and Enterprise Restructuring		-0.383 *** (0.080)	-	-0.861 *** (0.165)	
Religion*Price Liberalization		-0.040 (0.062)	-	0.043 (0.243)	
Religion*Trade and Foreign Exchange system		-0.093 (0.066)	-	0.098 (0.365)	
Religion*Competition Policy		0.077 (0.078)	-	0.658 *** (0.203)	
Religion*Banking Reform and Interest Rate Liberalization		-0.086 * (0.049)	-	-0.034 (0.242)	
Religion*Securities Markets and Non-Bank Financial Institutions		0.189 *** (0.049)	-	-0.103 (0.266)	
Religion*Overall Infrastructure Reform		0.035 (0.048)	-	0.556 *** (0.201)	
Age	-0.019 *** (0.001)	-0.020 *** (0.001)	-0.018 *** (0.001)	-0.018 *** (0.001)	
Age Squared/100	0.019 *** (0.001)	0.020 *** (0.001)	0.018 *** (0.001)	0.018 *** (0.001)	
Male	-0.006 (0.008)	-0.005 (0.008)	-0.011 (0.009)	-0.012 (0.009)	
Basic School	0.027 (0.026)	0.024 (0.026)	0.036 (0.028)	0.042 (0.027)	
Secondary School	0.109 *** (0.032)	0.102 *** (0.032)	0.115 *** (0.034)	0.123 *** (0.032)	
Vocational/Professional School	0.058 ** (0.028)	0.054 ** (0.027)	0.063 ** (0.029)	0.069 ** (0.028)	
Higher Professional Degree (University, College)	0.142 *** (0.031)	0.138 *** (0.031)	0.144 *** (0.033)	0.154 *** (0.029)	
Postgraduate Degree	0.191 *** (0.038)	0.190 *** (0.038)	0.180 *** (0.037)	0.199 *** (0.037)	
Number of Children	0.009 (0.008)	0.008 (0.008)	0.008 (0.008)	0.009 (0.008)	
Children Born/Adopted between 1990-2006	0.002 (0.014)	0.003 (0.014)	0.002 (0.015)	0.000 (0.017)	
Married between 1990-2006	0.028 ** (0.012)	0.027 ** (0.012)	0.033 ** (0.013)	0.033 ** (0.014)	
Divorced between 1990-2006	-0.121 *** (0.016)	-0.121 *** (0.015)	-0.124 *** (0.014)	-0.126 *** (0.015)	
Household Size	0.042 *** (0.008)	0.040 *** (0.008)	0.049 *** (0.009)	0.050 *** (0.008)	
Household Consumption Expenditures Equalized Using the Modified OECD Scales	0.116 *** (0.007)	0.112 *** (0.008)	0.122 *** (0.007)	0.122 *** (0.009)	
Employment	0.080 *** (0.009)	0.078 *** (0.009)	0.076 *** (0.009)	0.076 *** (0.008)	
Number of Observations	20940	20940	20192	20192	20192

Source: author's calculations. Notes: Life satisfaction redefined into zero (all dissatisfied)/one (all satisfied)/one (all satisfied)/zero (all dissatisfied)/one (all satisfied) scale is used as dependent variable. The natural logarithm of the number of people of a given religious denomination in a given country in 1990 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.



**Table 9. Religion and Perception of Current Economic Situation, Linear Probability Model.**

Dependent Variable: Perception of Economic Situation (zero/one)	LPM				
	1	2	3	4	5
Religion		-0.057 *** (0.016)	0.093 *** (0.123)	-0.249 *** (0.024)	-0.092 (0.008)
Large Scale Privatization		-0.268 *** (0.020)	-0.347 *** (0.106)	-0.251 *** (0.019)	0.207 (0.301)
Small Scale Privatization		0.079 *** (0.024)	-0.053 *** (0.069)	0.093 *** (0.022)	0.606 *** (0.222)
Governance and Enterprise Restructuring		-0.004 (0.032)	0.155 (0.116)	-0.053 ** (0.027)	-0.082 (0.333)
Price Liberalization		0.142 *** (0.038)	0.100 * (0.101)	0.097 *** (0.034)	0.151 (0.280)
Trade and Foreign Exchange System		-0.029 (0.029)	0.242 *** (0.220)	-0.002 (0.028)	-0.490 (0.465)
Competition Policy		0.069 ** (0.032)	0.086 (0.100)	0.096 *** (0.031)	-0.089 (0.264)
Banking Reform and Interest Rate Liberalization		-0.112 *** (0.033)	-0.206 *** (0.142)	-0.115 *** (0.033)	-0.261 (0.240)
Securities Markets and Non-bank Institutions		0.086 *** (0.032)	0.188 *** (0.158)	0.050 (0.033)	-0.179 (0.180)
Overall Infrastructure Reform		0.113 *** (0.029)	-0.026 (0.116)	0.131 *** (0.029)	0.133 (0.294)
Religion*Large Scale Privatization		-	0.079 (0.104)	-	-0.474 (0.314)
Religion*Small Scale Privatization		-	0.140 *** (0.092)	-	-0.524 ** (0.216)
Religion*Governance and Enterprise Restructuring		-	-0.176 (0.128)	-	0.035 (0.339)
Religion*Price Liberalization		-	0.037 (0.090)	-	-0.062 (0.278)
Religion*Trade and Foreign Exchange system		-	-0.279 *** (0.206)	-	0.498 (0.481)
Religion*Competition Policy		-	-0.025 (0.106)	-	0.199 (0.282)
Religion*Banking Reform and Interest Rate Liberalization		-	0.098 (0.141)	-	0.180 (0.226)
Religion*Securities Markets and Non-Bank Financial Institutions		-	-0.098 ** (0.199)	-	0.214 (0.185)
Religion*Overall Infrastructure Reform		-	0.156 (0.149)	-	-0.020 (0.306)
Age		-0.011 *** (0.002)	-0.013 *** (0.003)	-0.008 *** (0.002)	-0.010 *** (0.002)
Age Squared/100		0.011 *** (0.002)	0.012 *** (0.002)	0.009 *** (0.002)	0.010 *** (0.002)
Male		-0.003 (0.006)	-0.004 (0.011)	-0.014 * (0.008)	-0.018 ** (0.008)
Basic School		-0.029 (0.021)	-0.038 * (0.046)	-0.011 (0.022)	-0.017 (0.022)
Secondary School		0.013 (0.023)	0.004 (0.048)	0.030 (0.023)	0.027 (0.022)
Vocational/Professional School		-0.028 (0.023)	-0.032 (0.048)	-0.014 (0.024)	-0.016 (0.023)
Higher Professional Degree (University, College)		0.039 (0.025)	0.036 (0.036)	0.047 * (0.026)	0.048 * (0.026)
Postgraduate Degree		0.104 ** (0.051)	0.105 ** (0.093)	0.091 * (0.048)	0.119 ** (0.051)
Number of Children		0.004 (0.006)	0.004 (0.009)	0.001 (0.006)	0.003 (0.006)
Children Born/Adopted between 1990-2006		0.023 ** (0.009)	0.025 * (0.024)	0.024 ** (0.010)	0.027 *** (0.009)
Married between 1990-2006		0.006 (0.008)	0.002 (0.020)	0.015 * (0.008)	0.009 (0.009)
Divorced between 1990-2006		-0.041 *** (0.015)	-0.040 *** (0.022)	-0.049 *** (0.014)	-0.053 *** (0.015)
Household Size		0.045 *** (0.007)	0.041 *** (0.013)	0.057 *** (0.008)	0.054 *** (0.008)
Household Consumption Expenditures Equalized Using the Modified OECD Scales		0.075 *** (0.005)	0.065 *** (0.011)	0.089 *** (0.005)	0.077 *** (0.007)
Employment		0.038 *** (0.010)	0.038 *** (0.013)	0.030 *** (0.010)	0.034 *** (0.010)
Number of Observations		21135	21135	20397	20397

*Source:* author's calculations. *Notes:* Perception of economic situation redefined into zero (all dissatisfied)/one (all satisfied) scale is used as dependent variable. The natural logarithm of the number of people of a given religion dominates in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table 10. Religion and Perception of Current Political Situation, Linear Probability Model.**

	Dependent Variable: Perception of Political Situation (zero/one)							
	1	2	3	4	5			
Religion	-0.004	(0.019)	0.183 ***	(0.064)	-0.144 ***	(0.030)	0.111 **	(0.054)
Large Scale Privatization	-0.266 ***	(0.016)	-0.300 ***	(0.064)	-0.253 ***	(0.016)	0.381	(0.411)
Small Scale Privatization	0.111 ***	(0.030)	-0.038	(0.051)	0.122 ***	(0.030)	1.094 ***	(0.357)
Governance and Enterprise Restructuring	0.069 **	(0.027)	0.167 **	(0.083)	0.034	(0.024)	0.302	(0.432)
Price Liberalization	0.152 ***	(0.046)	0.208 ***	(0.062)	0.120 ***	(0.047)	0.360	(0.324)
Trade and Foreign Exchange System	-0.112 ***	(0.032)	-0.004	(0.071)	-0.091 ***	(0.034)	-1.335 **	(0.575)
Competition Policy	-0.048	(0.037)	0.000	(0.064)	-0.033	(0.034)	-0.539	(0.408)
Banking Reform and Interest Rate Liberalization	0.002	(0.041)	0.014	(0.043)	-0.001	(0.042)	0.416	(0.343)
Securities Markets and Non-bank Institutions	-0.010	(0.028)	0.080 *	(0.043)	-0.032	(0.028)	-0.386	(0.279)
Overall Infrastructure Reform	0.117 ***	(0.035)	-0.026	(0.077)	0.128 ***	(0.035)	-0.494	(0.331)
Religion*Large Scale Privatization	-	-	0.035	(0.068)	-	-	-0.658	(0.418)
Religion*Small Scale Privatization	-	-	0.159 ***	(0.047)	-	-	-0.991 ***	(0.348)
Religion*Governance and Enterprise Restructuring	-	-	-0.112	(0.082)	-	-	-0.256	(0.433)
Religion*Price Liberalization	-	-	-0.074	(0.052)	-	-	-0.250	(0.316)
Religion*Trade and Foreign Exchange system	-	-	-0.104 *	(0.064)	-	-	1.269 **	(0.594)
Religion*Competition Policy	-	-	-0.054	(0.075)	-	-	0.508	(0.410)
Religion*Banking Reform and Interest Rate Liberalization	-	-	-0.017	(0.054)	-	-	-0.405	(0.332)
Religion*Securities Markets and Non-Bank Financial Institutions	-	-	-0.092 *	(0.052)	-	-	0.342	(0.280)
Religion*Overall Infrastructure Reform	-	-	0.161 **	(0.070)	-	-	0.629 *	(0.346)
Age	-0.005 ***	(0.002)	-0.008 ***	(0.001)	-0.003 **	(0.002)	-0.007 ***	(0.002)
Age Squared/100	0.005 ***	(0.001)	0.007 ***	(0.001)	0.004 ***	(0.001)	0.007 ***	(0.002)
Male	0.006	(0.006)	0.005	(0.006)	0.001	(0.006)	-0.004	(0.007)
Basic School	0.016	(0.025)	0.005	(0.026)	0.031	(0.026)	0.014	(0.025)
Secondary School	0.079 ***	(0.027)	0.069 **	(0.027)	0.091 ***	(0.027)	0.079 ***	(0.027)
Vocational/Professional School	0.024	(0.027)	0.017	(0.028)	0.036	(0.027)	0.024	(0.028)
Higher Professional Degree (University, College)	0.117 ***	(0.031)	0.112 ***	(0.031)	0.122 ***	(0.031)	0.116 ***	(0.032)
Postgraduate Degree	0.206 ***	(0.040)	0.204 ***	(0.039)	0.210 ***	(0.039)	0.231 ***	(0.043)
Number of Children	0.003	(0.005)	0.002	(0.005)	0.001	(0.005)	0.003	(0.005)
Children Born/Adopted between 1990-2006	0.016	(0.010)	0.017 *	(0.010)	0.020 **	(0.010)	0.024 ***	(0.009)
Married between 1990-2006	0.008	(0.009)	0.003	(0.010)	0.011	(0.009)	0.002	(0.009)
Divorced between 1990-2006	-0.048 **	(0.020)	-0.047 **	(0.019)	-0.050 **	(0.017)	-0.061 ***	(0.018)
Household Size	0.060 ***	(0.006)	0.054 ***	(0.004)	0.067 ***	(0.007)	0.060 ***	(0.007)
Household Consumption Expenditures Equalized Using the Modified OECD Scales	0.052 ***	(0.004)	0.040 ***	(0.006)	0.062 ***	(0.005)	0.044 ***	(0.006)
Employment	0.028 **	(0.012)	0.030 ***	(0.011)	0.022 *	(0.012)	0.027 **	(0.011)
Number of Observations	19106	19106	19106	18448	18448	18448	18448	18448

Source: author's calculations. Notes: Perception of political situation redefined into zero (all dissatisfied)/one (all satisfied)/one (all satisfied)/one (all dissatisfied) scale is used as dependent variable. The natural logarithm of the number of people of a given religious domination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Robust standard errors clustered by region are in parentheses; \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

### A3. Supplementary Tables

**Table A1. Testing for Endogeneity of Religion and Interaction Terms.**

Dependent Variable:	Life Satisfaction		Perception of Economic Situation		Perception of Political Situation	
	Ordered Logit	LPM	Ordered Logit	LPM	Ordered Logit	LPM
	[2]	[3]	[4]	[5]	[6]	[7]
Religion Residuals	0.808** (0.354)	0.331*** (0.085)	1.350*** (0.377)	0.354*** (0.093)	0.732** (0.337)	0.225** (0.092)
Residuals (Religion*Large Scale Privatization)	0.742** (0.298)	0.214*** (0.069)	0.587* (0.350)	0.044 (0.079)	0.151 (0.253)	0.030 (0.066)
Residuals (Religion*Small Scale Privatization)	0.271* (0.167)	0.048 (0.040)	0.581*** (0.203)	0.146*** (0.038)	0.587*** (0.186)	0.160*** (0.046)
Residuals (Religion*Governance and Enterprise Restructuring)	-0.839*** (0.233)	-0.266*** (0.073)	-0.400 (0.412)	-0.080 (0.110)	-0.210 (0.246)	-0.097 (0.077)
Residuals (Religion*Price Liberalization)	-0.002 (0.221)	-0.009 (0.060)	0.178 (0.177)	0.063 (0.048)	-0.131 (0.190)	-0.071 (0.054)
Residuals (Religion*Trade and Foreign Exchange system)	-0.729** (0.318)	-0.202*** (0.073)	-1.529*** (0.354)	-0.357*** (0.094)	-0.606** (0.292)	-0.116 (0.073)
Residuals (Religion*Competition Policy)	-0.059 (0.282)	0.076 (0.069)	-0.250 (0.415)	-0.027 (0.099)	-0.295 (0.275)	-0.054 (0.075)
Residuals (Religion*Banking Reform and Interest Rate Liberalization)	-0.363** (0.158)	-0.167*** (0.047)	0.378 (0.276)	0.035 (0.071)	0.134 (0.215)	-0.027 (0.057)
Residuals (Religion*Securities Markets and Non-Bank Financial Institutions)	0.605*** (0.203)	0.164*** (0.047)	-0.521* (0.291)	-0.110* (0.066)	-0.548** (0.246)	-0.093* (0.053)
Residuals (Religion*Overall Infrastructure Reform)	-0.039 (0.195)	0.024 (0.053)	0.306 (0.301)	0.142 (0.099)	0.520* (0.285)	0.159** (0.069)
Joint Significance Test Statistics, chi2(10)	106.87***	16.48***	252.85***	19.97***	94.96***	24.19***
Number of Observations	27316	20940	25078	21135	24255	19106

*Source:* author's calculations. *Notes:* Regressions contain the whole set of explanatory variables. Robust standard errors clustered by region are in parentheses. \*\*\*, \*\* and \* stand for 10%, 5% and 1% significance levels, respectively. Residuals are obtained from separate OLS regressions of each respective variable on the whole set of explanatory variables. Residuals for religion and interaction terms with religion are jointly significant for all three model specifications for both ordered logit and LPM; therefore, the null hypothesis of exogeneity is rejected.

**Table A2. Testing for Weak IV.**

First Stage Dependent Variable	First Stage F-statistics for Joint Significance of Instruments	Partial Correlation of Endogenous Variable with its IV
[1]	[2]	[3]
Religion	2458.29*** (0.000)	0.554
Religion*Large Scale Privatization	2380.81*** (0.000)	0.732
Religion*Small Scale Privatization	2230.73*** (0.000)	0.769
Religion*Governance and Enterprise Restructuring	2569.69*** (0.000)	0.797
Religion*Price Liberalization	2211.39*** (0.000)	0.732
Religion*Trade and Foreign Exchange system	2283.63*** (0.000)	0.706
Religion*Competition Policy	2644.81*** (0.000)	0.818
Religion*Banking Reform and Interest Rate Liberalization	2433.43*** (0.000)	0.720
Religion*Securities Markets and Non-Bank Financial Institutions	2368.71*** (0.000)	0.790
Religion*Overall Infrastructure Reform	2308.03*** (0.000)	0.739

*Source:* author's calculations. *Notes:* each first stage regression contains the whole set of instrumental variables (one for religion and 9 for interaction terms with religion) and explanatory variables. The natural logarithm of the number of people of a given religious domination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. P-values are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively. Weak Instrument Test proposed by Stock and Yogo (2005) has been used. First stage F-statistics are significant for all 10 first stages; therefore, the null hypothesis of the weak IV is rejected. Partial correlations also suggest a non-zero correlation between the proposed instrument and respective endogenous variable.

**Table A3. Life Satisfaction, Predicted Probabilities of Giving Different Replies.**

	Mean	Std. Err.	[95% Conf. Interval]	
Religion and All Other Variables at Mean				
Pr(strongly disagree)	0.090	0.005	0.081	0.100
Pr(disagree)	0.220	0.007	0.208	0.233
Pr(neither disagree nor agree)	0.254	0.005	0.243	0.265
Pr(agree)	0.366	0.009	0.349	0.384
Pr(strongly agree)	0.070	0.002	0.066	0.075
Religion at Min, All Other Variables at Mean				
Pr(strongly disagree)	0.101	0.014	0.075	0.132
Pr(disagree)	0.235	0.021	0.195	0.278
Pr(neither disagree nor agree)	0.256	0.007	0.238	0.269
Pr(agree)	0.345	0.029	0.286	0.401
Pr(strongly agree)	0.064	0.011	0.044	0.087
Religion at Max, All Other Variables at Mean				
Pr(strongly disagree)	0.081	0.007	0.068	0.095
Pr(disagree)	0.205	0.011	0.183	0.227
Pr(neither disagree nor agree)	0.249	0.005	0.240	0.259
Pr(agree)	0.387	0.015	0.358	0.416
Pr(strongly agree)	0.078	0.004	0.070	0.087

*Source:* author's calculations. *Notes:* Simulations are performed using CLARIFY software. First, the model is estimated by ordered logit, controlling for endogeneity and 1000 sets of simulated coefficients are drawn. Predicted probabilities of different replies are calculated based on the sets of simulated coefficients and different values of religion and means of other explanatory variables.

**Table A4. Perceptions of Economic Situation, Predicted Probabilities of Giving Different Replies.**

	Mean	Std. Err.	[95% Conf. Interval]	
Religion and All Other Variables at Mean				
Pr(strongly disagree)	0.174	0.008	0.157	0.190
Pr(disagree)	0.321	0.007	0.307	0.334
Pr(neither disagree nor agree)	0.177	0.005	0.167	0.188
Pr(agree)	0.267	0.008	0.251	0.283
Pr(strongly agree)	0.061	0.003	0.057	0.066
Religion at Min, All Other Variables at Mean				
Pr(strongly disagree)	0.184	0.029	0.135	0.249
Pr(disagree)	0.325	0.022	0.280	0.365
Pr(neither disagree nor agree)	0.174	0.007	0.158	0.184
Pr(agree)	0.258	0.034	0.189	0.324
Pr(strongly agree)	0.059	0.012	0.039	0.085
Religion at Max, All Other Variables at Mean				
Pr(strongly disagree)	0.158	0.010	0.138	0.179
Pr(disagree)	0.307	0.008	0.293	0.322
Pr(neither disagree nor agree)	0.180	0.006	0.168	0.191
Pr(agree)	0.286	0.010	0.269	0.306
Pr(strongly agree)	0.068	0.004	0.061	0.077

*Source:* author's calculations. *Notes:* Simulations are performed using CLARIFY software. First, the model is estimated by ordered logit, controlling for endogeneity and 1000 sets of simulated coefficients are drawn. Predicted probabilities of different replies are calculated based on the sets of simulated coefficients and different values of religion and means of other explanatory variables.

**Table A5. Perceptions of Political Situation, Predicted Probabilities of Giving Different Replies.**

	Mean	Std. Err.	[95% Conf. Interval]	
Religion and All Other Variables at Mean				
Pr(strongly disagree)	0.160	0.008	0.145	0.175
Pr(disagree)	0.272	0.009	0.254	0.288
Pr(neither disagree nor agree)	0.231	0.006	0.219	0.241
Pr(agree)	0.274	0.008	0.260	0.289
Pr(strongly agree)	0.064	0.003	0.058	0.070
Religion at Min, All Other Variables at Mean				
Pr(strongly disagree)	0.199	0.017	0.168	0.232
Pr(disagree)	0.298	0.015	0.269	0.326
Pr(neither disagree nor agree)	0.221	0.008	0.206	0.234
Pr(agree)	0.232	0.018	0.197	0.270
Pr(strongly agree)	0.050	0.006	0.039	0.062
Religion at Max, All Other Variables at Mean				
Pr(strongly disagree)	0.149	0.010	0.130	0.170
Pr(disagree)	0.263	0.010	0.243	0.280
Pr(neither disagree nor agree)	0.232	0.006	0.220	0.242
Pr(agree)	0.288	0.010	0.268	0.310
Pr(strongly agree)	0.069	0.004	0.061	0.077

*Source:* author's calculations. *Notes:* Simulations are performed using CLARIFY software. First, the model is estimated by ordered logit, controlling for endogeneity and 1000 sets of simulated coefficients are drawn. Predicted probabilities of different replies are calculated based on the sets of simulated coefficients and different values of religion and means of other explanatory variables.

**Table A6a. Marginal Effects of Ordered Logit Model for Explaining Life Satisfaction (without IVs).**

Dependent Variable: Life Satisfaction	[1]					
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	
Religion	-0.085 *	-0.103 **	0.004	0.144 **	0.041 ***	
Large Scale Privatization	0.080 ***	0.130 ***	0.033 ***	-0.178 ***	-0.065 ***	
Small Scale Privatization	0.019	0.031	0.008	-0.043	-0.016	
Governance and Enterprise Restructuring	-0.043 ***	-0.071 ***	-0.018 ***	0.097 ***	0.035 ***	
Price Liberalization	-0.015	-0.024	-0.006	0.033	0.012	
Trade and Foreign Exchange System	-0.056 **	-0.091 **	-0.023 *	0.124 **	0.045 **	
Competition Policy	-0.027	-0.045	-0.011	0.061	0.022	
Banking Reform and Interest Rate Liberalization	0.001	0.001	0.000	-0.002	-0.001	
Securities Markets and Non-bank Institutions	-0.012	-0.020	-0.005	0.027	0.010	
Overall Infrastructure Reform	0.014	0.023	0.006	-0.031	-0.011	
Religion*Large Scale Privatization	-0.060 ***	-0.098 **	-0.025 **	0.134 **	0.049 ***	
Religion*Small Scale Privatization	-0.022 *	-0.036 *	-0.009	0.049 *	0.018	
Religion*Governance and Enterprise Restructuring	0.068 ***	0.111 ***	0.028 ***	-0.151 ***	-0.055 ***	
Religion*Price Liberalization	0.000	0.000	0.000	0.000	0.000	
Religion*Trade and Foreign Exchange System	0.059 **	0.096 **	0.024 **	-0.132 **	-0.048 **	
Religion*Competition Policy	0.005	0.008	0.002	-0.011	-0.004	
Religion*Banking Reform and Interest Rate Liberalization	0.029 **	0.048 **	0.012 **	-0.065 **	-0.024 **	
Religion*Securities Markets and Non-Bank Financial Institutions	-0.049 ***	-0.080 ***	-0.020 ***	0.109 ***	0.040 ***	
Religion*Overall Infrastructure Reform	0.003	0.005	0.001	-0.007	-0.003	
Age	0.005 ***	0.008 ***	0.002 ***	-0.011 ***	-0.004 ***	
Age Squared/100	-0.005 ***	-0.009 ***	-0.002 ***	0.012 ***	0.004 ***	
Male	0.001	0.002	0.000	-0.003	-0.001	
Basic School	-0.010	-0.016	-0.005	0.022	0.008	
Secondary School	-0.031 ***	-0.053 ***	-0.018 ***	0.072 ***	0.029 ***	
Vocational/Professional School	-0.015 *	-0.026 *	-0.007 *	0.035 *	0.013 *	
Higher Professional Degree (University, College)	-0.035 ***	-0.063 ***	-0.025 ***	0.086 ***	0.038 ***	
Postgraduate Degree	-0.049 ***	-0.099 ***	-0.060 ***	0.128 ***	0.080 ***	
Number of Children	-0.001	-0.002	-0.001	0.003	0.001	
Children Born/Adopted between 1990-2006	0.002	0.003	0.001	-0.004	-0.001	
Married between 1990-2006	-0.011 ***	-0.018 ***	-0.005 ***	0.024 ***	0.009 ***	
Divorced between 1990-2006	0.042 ***	0.059 ***	0.004 **	-0.081 ***	-0.025 ***	
Household Size	-0.016 ***	-0.027 ***	-0.007 ***	0.036 ***	0.013 ***	
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.039 ***	-0.063 ***	-0.016 ***	0.086 ***	0.032 ***	
Employment	-0.020 ***	-0.033 ***	-0.008 ***	0.045 ***	0.017 ***	
Frequency in % (actual/predicted)	10.36/10.31	21.92/21.92	23.32/23.34	36.07/36.10	8.33/8.33	

*Source:* author's calculations. *Notes:* Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Bootstrapped standard errors are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table A6b. Marginal Effects of Ordered Logit Model for Explaining Life Satisfaction (with IVs).**

Dependent Variable: Life Satisfaction	Life Satisfaction					
	1	2	3	4	5	6
	Strongly Disagree	Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Religion	-0.111 *** (0.021)	-0.183 *** (0.038)	-0.045 *** (0.025)	0.251 *** (0.052)	0.089 *** (0.019)	
Large Scale Privatization	0.209 *** (0.046)	0.078 *** (0.078)	0.085 *** (0.017)	-0.471 *** (0.107)	-0.167 *** (0.037)	
Small Scale Privatization	-0.258 *** (0.027)	0.132 *** (0.132)	-0.104 ** (0.010)	0.581 *** (0.184)	0.206 *** (0.064)	
Governance and Enterprise Restructuring	-0.251 *** (0.022)	0.147 *** (0.147)	-0.101 *** (0.009)	0.564 *** (0.203)	0.200 *** (0.069)	
Price Liberalization	-0.027 (0.030)	0.117 (0.117)	-0.011 (0.011)	0.062 (0.161)	0.022 (0.057)	
Trade and Foreign Exchange System	0.056 (0.048)	0.203 (0.203)	0.023 (0.019)	-0.125 (0.278)	-0.044 (0.098)	
Competition Policy	0.147 * (0.028)	0.126 * (0.126)	0.059 ** (0.010)	-0.330 * (0.174)	-0.117 ** (0.059)	
Banking Reform and Interest Rate Liberalization	0.003 (0.023)	0.112 (0.112)	0.001 (0.010)	-0.007 (0.153)	-0.003 (0.054)	
Securities Markets and Non-bank Institutions	-0.070 (0.019)	0.131 (0.131)	0.028 (0.010)	0.156 (0.178)	0.056 (0.063)	
Overall Infrastructure Reform	0.192 ** (0.029)	0.114 *** (0.114)	0.078 *** (0.008)	-0.431 *** (0.156)	-0.153 *** (0.053)	
Religion*Large Scale Privatization	-0.191 *** (0.038)	0.083 *** (0.083)	-0.077 *** (0.017)	0.431 *** (0.114)	0.153 *** (0.040)	
Religion*Small Scale Privatization	0.258 *** (0.023)	0.133 *** (0.133)	0.104 ** (0.009)	-0.580 *** (0.185)	-0.206 *** (0.064)	
Religion*Governance and Enterprise Restructuring	0.277 *** (0.026)	0.150 *** (0.150)	0.112 *** (0.012)	-0.623 *** (0.207)	-0.221 *** (0.070)	
Religion*Price Liberalization	0.020 (0.030)	0.116 (0.116)	0.008 (0.012)	-0.046 (0.160)	-0.016 (0.056)	
Religion*Trade and Foreign Exchange System	-0.059 (0.051)	0.206 (0.206)	-0.024 (0.020)	0.133 (0.283)	0.047 (0.100)	
Religion*Competition Policy	-0.178 ** (0.032)	0.131 ** (0.131)	-0.072 ** (0.012)	0.399 ** (0.180)	0.142 ** (0.061)	
Religion*Banking Reform and Interest Rate Liberalization	0.019 (0.026)	0.114 (0.114)	0.008 (0.012)	-0.043 (0.156)	-0.015 (0.055)	
Religion*Securities Markets and Non-Bank Financial Institutions	0.024 (0.024)	0.136 (0.136)	0.010 (0.010)	-0.053 (0.187)	-0.019 (0.066)	
Religion*Overall Infrastructure Reform	-0.172 ** (0.034)	0.119 ** (0.119)	-0.070 *** (0.014)	0.387 ** (0.163)	0.137 ** (0.056)	
Age	0.005 *** (0.000)	0.008 *** (0.001)	0.002 *** (0.000)	-0.011 *** (0.001)	-0.004 *** (0.000)	
Age Squared/100	-0.005 *** (0.000)	-0.008 *** (0.001)	-0.002 *** (0.000)	0.012 *** (0.001)	0.004 *** (0.000)	
Male	0.003 (0.002)	0.005 (0.004)	0.000 (0.001)	-0.006 (0.005)	-0.002 (0.002)	
Basic School	-0.010 (0.007)	-0.016 (0.012)	-0.005 (0.004)	0.022 (0.017)	0.008 (0.006)	
Secondary School	-0.032 *** (0.009)	-0.055 *** (0.015)	-0.018 *** (0.006)	0.075 *** (0.021)	0.030 *** (0.009)	
Vocational/Professional School	-0.015 * (0.008)	-0.025 * (0.014)	-0.007 (0.004)	0.035 * (0.019)	0.013 * (0.007)	
Higher Professional Degree (University, College)	-0.036 *** (0.008)	-0.064 *** (0.014)	-0.025 *** (0.008)	0.087 *** (0.020)	0.037 *** (0.009)	
Postgraduate Degree	-0.047 *** (0.006)	-0.094 *** (0.013)	-0.054 *** (0.013)	0.123 *** (0.017)	0.072 *** (0.016)	
Number of Children	-0.002 (0.003)	-0.003 (0.004)	-0.001 (0.001)	0.005 (0.006)	0.002 (0.002)	
Children Born/Adopted between 1990-2006	0.001 (0.004)	0.002 (0.007)	0.000 (0.002)	-0.002 (0.010)	-0.001 (0.003)	
Married between 1990-2006	-0.010 *** (0.004)	-0.016 ** (0.007)	-0.004 * (0.002)	0.022 ** (0.010)	0.008 ** (0.003)	
Divorced between 1990-2006	0.043 *** (0.005)	0.059 *** (0.007)	0.004 (0.002)	-0.082 *** (0.010)	-0.024 *** (0.002)	
Household Size	-0.017 *** (0.002)	-0.028 *** (0.004)	-0.007 *** (0.002)	0.039 *** (0.006)	0.014 *** (0.002)	
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.038 *** (0.004)	-0.062 *** (0.006)	-0.015 *** (0.003)	0.085 *** (0.007)	0.030 *** (0.003)	
Employment	-0.020 *** (0.002)	-0.034 *** (0.003)	-0.008 *** (0.001)	0.046 *** (0.005)	0.016 *** (0.002)	
Frequency in % (actual/predicted)	10.36/10.39	21.92/22.05	23.32/23.31	36.07/36.02	8.33/8.22	

Source: author's calculations. Notes: Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Religion and all interaction terms are instrumented. The natural logarithm of the number of people of a given religious denomination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Bootstrapped standard errors are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table A7a. Marginal Effects of Ordered Logit Model for Explaining Perceptions of Economic Situation (without IVs).**

Dependent Variable: Perceptions of Economic Situation	Perceptions of Economic Situation					
	[1]	[2]	[3]	[4]	[5]	[6]
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	
Religion	-0.259 *** (0.085)	-0.049 *** (0.017)	0.074 *** (0.025)	0.182 *** (0.037)	0.051 *** (0.009)	
Large Scale Privatization	0.221 *** (0.048)	0.165 *** (0.041)	-0.045 *** (0.012)	-0.252 *** (0.057)	-0.090 *** (0.020)	
Small Scale Privatization	0.029 (0.032)	0.021 (0.024)	-0.006 (0.006)	-0.033 (0.036)	-0.012 (0.013)	
Governance and Enterprise Restructuring	-0.042 (0.058)	-0.031 (0.043)	0.009 (0.012)	0.048 (0.066)	0.017 (0.023)	
Price Liberalization	-0.048 * (0.030)	-0.036 * (0.021)	0.010 * (0.006)	0.055 * (0.033)	0.020 * (0.012)	
Trade and Foreign Exchange System	-0.197 *** (0.049)	-0.147 *** (0.040)	0.040 *** (0.012)	0.224 *** (0.056)	0.080 *** (0.020)	
Competition Policy	-0.082 (0.061)	-0.061 (0.045)	0.017 (0.012)	0.093 (0.069)	0.033 (0.025)	
Banking Reform and Interest Rate Liberalization	0.121 *** (0.037)	0.091 *** (0.026)	-0.025 *** (0.008)	-0.138 *** (0.041)	-0.049 *** (0.015)	
Securities Markets and Non-bank Institutions	-0.120 *** (0.033)	-0.090 *** (0.024)	0.024 *** (0.007)	0.137 *** (0.036)	0.049 *** (0.014)	
Overall Infrastructure Reform	-0.024 (0.040)	-0.018 (0.030)	0.005 (0.008)	0.027 (0.046)	0.010 (0.017)	
Religion*Large Scale Privatization	-0.084 * (0.049)	-0.063 * (0.038)	0.017 (0.011)	0.096 * (0.057)	0.034 * (0.020)	
Religion*Small Scale Privatization	-0.083 *** (0.029)	-0.062 *** (0.022)	0.017 *** (0.006)	0.095 *** (0.033)	0.034 *** (0.012)	
Religion*Governance and Enterprise Restructuring	0.057 (0.060)	0.043 (0.044)	-0.012 (0.012)	-0.065 (0.067)	-0.023 (0.024)	
Religion*Price Liberalization	-0.025 (0.040)	-0.019 (0.019)	0.005 (0.015)	0.029 (0.029)	0.010 (0.010)	
Religion*Trade and Foreign Exchange System	0.219 *** (0.041)	0.163 *** (0.040)	-0.044 *** (0.013)	-0.249 *** (0.056)	-0.089 *** (0.020)	
Religion*Competition Policy	0.036 (0.043)	0.027 (0.044)	-0.007 (0.012)	-0.041 (0.068)	-0.014 (0.024)	
Religion*Banking Reform and Interest Rate Liberalization	-0.054 (0.048)	-0.040 (0.029)	0.011 (0.008)	0.062 (0.045)	0.022 (0.016)	
Religion*Securities Markets and Non-Bank Financial Institutions	0.075 * (0.032)	0.056 * (0.032)	-0.015 * (0.009)	-0.085 * (0.047)	-0.030 * (0.017)	
Religion*Overall Infrastructure Reform	-0.044 (0.058)	-0.033 (0.032)	0.009 (0.009)	0.050 (0.049)	0.018 (0.017)	
Age	0.006 *** (0.000)	0.005 *** (0.000)	-0.001 *** (0.000)	-0.007 *** (0.000)	-0.002 *** (0.000)	
Age Squared/100	-0.006 *** (0.000)	-0.004 *** (0.000)	0.001 *** (0.000)	0.007 *** (0.000)	0.002 *** (0.000)	
Male	0.003 (0.003)	0.003 (0.002)	-0.001 (0.001)	-0.004 (0.004)	-0.001 (0.001)	
Basic School	0.013 (0.014)	0.009 (0.010)	-0.003 (0.003)	-0.014 (0.015)	-0.005 (0.005)	
Secondary School	-0.008 (0.015)	-0.006 (0.011)	0.002 (0.003)	0.009 (0.017)	0.003 (0.006)	
Vocational/Professional School	0.021 (0.015)	0.015 (0.010)	-0.004 (0.003)	-0.023 (0.016)	-0.008 (0.005)	
Higher Professional Degree (University, College)	-0.017 (0.013)	-0.014 (0.011)	0.003 (0.002)	0.020 (0.016)	0.008 (0.006)	
Postgraduate Degree	-0.059 *** (0.021)	-0.060 ** (0.028)	0.004 (0.003)	0.080 ** (0.033)	0.035 * (0.019)	
Number of Children	-0.002 (0.003)	-0.001 (0.002)	0.000 (0.000)	0.002 (0.004)	0.001 (0.001)	
Children Born/Adopted between 1990-2006	-0.014 *** (0.005)	-0.011 *** (0.004)	0.003 *** (0.001)	0.016 *** (0.006)	0.006 *** (0.002)	
Married between 1990-2006	-0.002 (0.005)	-0.002 (0.003)	0.000 (0.001)	0.002 (0.005)	0.001 (0.002)	
Divorced between 1990-2006	0.031 *** (0.008)	0.020 *** (0.005)	-0.007 *** (0.002)	-0.033 *** (0.008)	-0.011 *** (0.002)	
Household Size	-0.022 *** (0.003)	-0.016 *** (0.002)	0.004 *** (0.001)	0.025 *** (0.004)	0.009 *** (0.002)	
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.040 *** (0.004)	-0.030 *** (0.003)	0.008 *** (0.001)	0.046 *** (0.004)	0.016 *** (0.002)	
Employment	-0.023 *** (0.006)	-0.017 *** (0.004)	0.005 *** (0.001)	0.026 *** (0.007)	0.009 *** (0.002)	
Frequency in % (actual/predicted)	20.02/19.99	29.18/29.15	15.71/15.72	27.30/27.34	7.79/7.80	

Source: author's calculations. *Notes.* Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Bootstrapped standard errors are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.



**Table A7b. Marginal Effects of Ordered Logit Model for Explaining Perceptions of Economic Situation (with IVs).**

Dependent Variable: Perceptions of Economic Situation	Strongly Disagree		Disagree		Neither Disagree nor Agree		Agree		Strongly Agree	
	[2]	[3]	[4]	[5]	[6]					
Religion	-0.192 *** (0.064)	-0.142 *** (0.051)	0.040 *** (0.015)	0.218 *** (0.074)	0.077 *** (0.027)					
Large Scale Privatization	0.219 ** (0.088)	0.162 ** (0.068)	-0.045 ** (0.020)	-0.249 ** (0.101)	-0.087 ** (0.035)					
Small Scale Privatization	0.129 *** (0.045)	0.095 *** (0.029)	-0.027 *** (0.010)	-0.146 *** (0.047)	-0.051 *** (0.016)					
Governance and Enterprise Restructuring	0.097 (0.081)	0.071 (0.058)	-0.020 (0.016)	-0.110 (0.090)	-0.039 (0.032)					
Price Liberalization	-0.103 ** (0.042)	-0.076 *** (0.030)	0.021 ** (0.010)	0.117 *** (0.046)	0.041 *** (0.016)					
Trade and Foreign Exchange System	-0.095 (0.064)	-0.070 (0.049)	0.020 (0.013)	0.108 (0.074)	0.038 (0.026)					
Competition Policy	-0.220 *** (0.074)	-0.162 *** (0.048)	0.045 *** (0.016)	0.249 *** (0.079)	0.088 *** (0.027)					
Banking Reform and Interest Rate Liberalization	0.081 (0.075)	0.060 (0.054)	-0.017 (0.015)	-0.092 (0.084)	-0.032 (0.030)					
Securities Markets and Non-bank Institutions	-0.032 (0.056)	-0.023 (0.042)	0.006 (0.011)	0.036 (0.064)	0.013 (0.023)					
Overall Infrastructure Reform	-0.299 (0.106)	-0.221 *** (0.075)	0.062 ** (0.025)	0.340 *** (0.116)	0.119 *** (0.040)					
Religion*Large Scale Privatization	-0.083 (0.088)	-0.061 (0.066)	0.017 (0.019)	0.094 (0.100)	0.033 (0.035)					
Religion*Small Scale Privatization	-0.186 *** (0.042)	-0.137 *** (0.026)	0.038 *** (0.011)	0.211 *** (0.043)	0.074 *** (0.015)					
Religion*Governance and Enterprise Restructuring	-0.078 (0.082)	-0.058 (0.059)	0.016 (0.017)	0.089 (0.092)	0.031 (0.033)					
Religion*Price Liberalization	0.033 (0.045)	0.024 (0.033)	-0.007 (0.009)	-0.037 (0.051)	-0.013 (0.018)					
Religion*Trade and Foreign Exchange System	0.115 * (0.069)	0.085 * (0.051)	-0.024 * (0.014)	-0.130 * (0.078)	-0.046 * (0.028)					
Religion*Competition Policy	0.175 ** (0.072)	0.129 *** (0.048)	-0.036 ** (0.015)	-0.198 *** (0.078)	-0.070 *** (0.027)					
Religion*Banking Reform and Interest Rate Liberalization	-0.012 (0.080)	-0.009 (0.059)	0.002 (0.016)	0.014 (0.091)	0.005 (0.032)					
Religion*Securities Markets and Non-Bank Financial Institutions	-0.015 (0.059)	-0.011 (0.043)	0.003 (0.012)	0.017 (0.066)	0.006 (0.023)					
Religion*Overall Infrastructure Reform	0.232 ** (0.101)	0.171 ** (0.072)	-0.048 ** (0.023)	-0.263 ** (0.112)	-0.092 ** (0.039)					
Age	0.006 *** (0.000)	0.004 *** (0.000)	-0.001 *** (0.000)	-0.007 *** (0.001)	-0.002 *** (0.000)					
Age Squared/100	-0.006 *** (0.000)	-0.004 *** (0.000)	0.001 *** (0.000)	0.007 *** (0.001)	0.002 *** (0.000)					
Male	0.004 (0.003)	0.003 (0.002)	-0.001 (0.001)	-0.005 (0.003)	-0.002 (0.001)					
Basic School	0.013 (0.014)	0.009 (0.010)	-0.003 (0.003)	-0.015 (0.016)	-0.005 (0.005)					
Secondary School	-0.007 (0.015)	-0.005 (0.011)	0.001 (0.003)	0.008 (0.017)	0.003 (0.006)					
Vocational/Professional School	0.022 (0.015)	0.015 (0.010)	-0.005 (0.003)	-0.024 (0.016)	-0.008 (0.005)					
Higher Professional Degree (University, College)	-0.017 (0.015)	-0.013 (0.012)	0.003 (0.004)	0.020 (0.018)	0.007 (0.007)					
Postgraduate Degree	-0.050 ** (0.023)	-0.048 * (0.028)	0.005 *** (0.002)	0.065 * (0.035)	0.027 (0.018)					
Number of Children	0.000 (0.003)	0.000 (0.003)	0.000 (0.001)	0.001 (0.004)	0.000 (0.001)					
Children Born/Adopted between 1990-2006	-0.015 *** (0.005)	-0.011 *** (0.004)	0.003 *** (0.001)	0.017 *** (0.006)	0.006 *** (0.002)					
Married between 1990-2006	-0.001 (0.004)	-0.001 (0.003)	0.000 (0.001)	0.001 (0.005)	0.000 (0.002)					
Divorced between 1990-2006	0.031 *** (0.009)	0.020 *** (0.005)	-0.007 *** (0.002)	-0.032 *** (0.008)	-0.011 *** (0.003)					
Household Size	-0.022 *** (0.003)	-0.016 *** (0.002)	0.005 *** (0.001)	0.025 *** (0.003)	0.009 *** (0.001)					
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.041 *** (0.005)	-0.030 *** (0.003)	0.008 *** (0.001)	0.046 *** (0.005)	0.016 *** (0.002)					
Employment	-0.023 *** (0.006)	-0.017 *** (0.004)	0.005 *** (0.001)	0.026 *** (0.006)	0.009 *** (0.002)					
Frequency in % (actual/predicted)	20.02/20.11	29.18/29.28	15.71/15.66	27.30/27.22	7.79/7.73					

Source: author's calculations. Notes: Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Religion and all interaction terms are instrumented. The natural logarithm of the number of people of given religious domination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Bootstrapped standard errors are in parentheses. \*\*\*, \*\* and \* stand for 10%, 5%, and 1% significance levels, respectively.

**Table A8a. Marginal Effects of Ordered Logit Model for Explaining Perceptions of Political Situation (without IVs).**

Dependent Variable: Perceptions of Political Situation	Perceptions of Political Situation					
	[1]	[2]	[3]	[4]	[5]	[6]
	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	
Religion	-0.119 *	-0.062 ***	0.036	0.111 **	0.034 ***	(0.012)
Large Scale Privatization	0.143 ***	-0.017 ***	-0.023 ***	-0.174 ***	-0.063 ***	(0.014)
Small Scale Privatization	0.020	-0.065	-0.003	-0.024	-0.009	(0.012)
Governance and Enterprise Restructuring	-0.060 *	0.023 *	0.010	0.073 *	0.027 *	(0.015)
Price Liberalization	-0.085 **	0.015 ***	0.014 **	0.103 **	0.037 **	(0.015)
Trade and Foreign Exchange System	-0.033	0.067	0.005	0.040	0.014	(0.019)
Competition Policy	-0.022	0.033	0.004	0.027	0.010	(0.014)
Banking Reform and Interest Rate Liberalization	0.025	-0.015	-0.004	-0.030	-0.011	(0.009)
Securities Markets and Non-bank Institutions	-0.071 ***	0.061 ***	0.012 **	0.086 ***	0.031 ***	(0.012)
Overall Infrastructure Reform	0.019	0.058	-0.003	-0.023	-0.008	(0.017)
Religion*Large Scale Privatization	-0.020	0.118	0.003	0.025	0.009	(0.015)
Religion*Small Scale Privatization	-0.079 ***	0.016 ***	0.013 ***	0.096 ***	0.035 ***	(0.011)
Religion*Governance and Enterprise Restructuring	0.028	-0.049	-0.005	-0.035	-0.013	(0.015)
Religion*Price Liberalization	0.018	-0.070	-0.003	-0.021	-0.008	(0.011)
Religion*Trade and Foreign Exchange System	0.082 **	-0.027 **	-0.013 *	-0.099 **	-0.036 **	(0.017)
Religion*Competition Policy	0.040	0.018	-0.006	-0.048	-0.018	(0.016)
Religion*Banking Reform and Interest Rate Liberalization	-0.018	0.020	0.003	0.022	0.008	(0.013)
Religion*Securities Markets and Non-Bank Financial Institutions	0.074 **	-0.058 **	-0.012 **	-0.090 **	-0.033 **	(0.015)
Religion*Overall Infrastructure Reform	-0.070 *	0.015 *	0.011	0.085 *	0.031 *	(0.016)
Age	0.004 ***	0.003 ***	-0.001 ***	-0.005 ***	-0.002 ***	(0.000)
Age Squared/100	-0.004 ***	-0.003 ***	0.001 ***	0.005 ***	0.002 ***	(0.000)
Male	-0.002	-0.001	0.000	0.002	0.001	(0.001)
Basic School	-0.001	0.012	0.000	0.002	0.001	(0.006)
Secondary School	-0.027 **	-0.024 **	0.003 ***	0.034 **	0.013 *	(0.007)
Vocational/Professional School	0.000	0.000	0.000	0.000	0.000	(0.006)
Higher Professional Degree (University, College)	-0.042 ***	-0.038 ***	0.004 **	0.055 ***	0.022 ***	(0.008)
Postgraduate Degree	-0.085 ***	-0.100 ***	-0.018	0.132 ***	0.072 ***	(0.021)
Number of Children	-0.002	-0.002	0.000	0.003	0.001	(0.001)
Children Born/Adopted between 1990-2006	-0.008	-0.006	0.001	0.009	0.003	(0.002)
Married between 1990-2006	-0.002	-0.001	0.000	0.002	0.001	(0.002)
Divorced between 1990-2006	0.022 **	0.016 **	-0.004 *	-0.025 **	-0.009 **	(0.003)
Household Size	-0.024 ***	-0.020 ***	0.004 ***	0.029 ***	0.011 ***	(0.001)
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.022 ***	-0.018 ***	0.004 ***	0.026 ***	0.010 ***	(0.001)
Employment	-0.017 ***	-0.014 ***	0.003 **	0.021 ***	0.008 ***	(0.002)
Frequency in % (actual/predicted)	17.73/17.69	25.97/25.98	21.20/21.23	27.71/27.70	7.39/7.40	

Source: author's calculations. Notes: Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Bootstrapped standard errors are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

**Table A8b. Marginal Effects of Ordered Logit Model for Explaining Perceptions of Political Situation (with IVs).**

Dependent Variable: Perceptions of Political Situation	[1]									
	Strongly Disagree [2]	Disagree [3]	Neither Disagree nor Agree [4]	Agree [5]	Strongly Agree [6]					
Religion	-0.119 *	(0.065)	-0.098 *	(0.054)	0.146 *	(0.079)	0.053 *	(0.029)		
Large Scale Privatization	0.114 ***	(0.042)	0.094 ***	(0.035)	-0.018 **	(0.017)	-0.139 **	(0.051)	-0.050 ***	(0.018)
Small Scale Privatization	0.063	(0.044)	0.052	(0.036)	-0.010	(0.010)	-0.076	(0.053)	-0.028	(0.019)
Governance and Enterprise Restructuring	-0.002	(0.047)	-0.001	(0.035)	0.000	(0.009)	0.002	(0.057)	0.001	(0.021)
Price Liberalization	-0.176 ***	(0.039)	-0.145 ***	(0.048)	0.029 ***	(0.011)	0.215 ***	(0.047)	0.078 ***	(0.018)
Trade and Foreign Exchange System	0.138 **	(0.055)	0.114 **	(0.077)	-0.022 **	(0.019)	-0.169 **	(0.067)	-0.061 **	(0.025)
Competition Policy	-0.065	(0.048)	-0.053	(0.044)	0.011	(0.010)	0.079	(0.057)	0.029	(0.020)
Banking Reform and Interest Rate Liberalization	-0.063	(0.048)	-0.052	(0.038)	0.010	(0.010)	0.077	(0.059)	0.028	(0.021)
Securities Markets and Non-bank Institutions	0.021	(0.053)	0.018	(0.031)	-0.003	(0.010)	-0.026	(0.064)	-0.009	(0.023)
Overall Infrastructure Reform	-0.143	(0.119)	-0.118	(0.047)	0.023	(0.008)	0.174	(0.144)	0.063	(0.052)
Religion*Large Scale Privatization	0.009	(0.043)	0.007	(0.062)	-0.001	(0.017)	-0.010	(0.052)	-0.004	(0.019)
Religion*Small Scale Privatization	-0.123 ***	(0.039)	-0.101 ***	(0.037)	0.020 **	(0.009)	0.150 ***	(0.047)	0.054 ***	(0.017)
Religion*Governance and Enterprise Restructuring	-0.028	(0.048)	-0.023	(0.043)	0.005	(0.012)	0.034	(0.059)	0.012	(0.021)
Religion*Price Liberalization	0.110 ***	(0.035)	0.091 ***	(0.048)	-0.018 ***	(0.012)	-0.134 ***	(0.045)	-0.049 ***	(0.017)
Religion*Trade and Foreign Exchange System	-0.091	(0.061)	-0.075	(0.081)	0.015	(0.020)	0.111	(0.074)	0.040	(0.027)
Religion*Competition Policy	0.084 *	(0.051)	0.070 *	(0.051)	-0.014	(0.012)	-0.103 *	(0.061)	-0.037 *	(0.022)
Religion*Banking Reform and Interest Rate Liberalization	0.071	(0.056)	0.058	(0.044)	-0.012	(0.012)	-0.086	(0.068)	-0.031	(0.024)
Religion*Securities Markets and Non-Bank Financial Institutions	-0.021	(0.058)	-0.017	(0.039)	0.003	(0.010)	0.025	(0.071)	0.009	(0.025)
Religion*Overall Infrastructure Reform	0.092	(0.120)	0.076	(0.055)	-0.015	(0.014)	-0.112	(0.146)	-0.041	(0.053)
Age	0.004 ***	(0.001)	0.003 ***	(0.000)	-0.001 ***	(0.000)	-0.005 ***	(0.001)	-0.002 ***	(0.000)
Age Squared/100	-0.004 ***	(0.001)	-0.003 ***	(0.000)	0.001 ***	(0.000)	0.005 ***	(0.001)	0.002 ***	(0.000)
Male	-0.016	(0.003)	-0.001	(0.004)	0.000	(0.001)	0.002	(0.004)	0.001	(0.001)
Basic School	-0.008	(0.014)	-0.001	(0.012)	0.000	(0.002)	0.001	(0.018)	0.000	(0.006)
Secondary School	-0.026 **	(0.012)	-0.023 **	(0.014)	0.003 **	(0.001)	0.033 **	(0.016)	0.013 *	(0.007)
Vocational/Professional School	-0.003	(0.013)	0.000	(0.013)	0.000	(0.002)	0.000	(0.016)	0.000	(0.006)
Higher Professional Degree (University, College)	-0.042 ***	(0.014)	-0.039 ***	(0.013)	0.004 **	(0.002)	0.055 ***	(0.019)	0.022 **	(0.009)
Postgraduate Degree	-0.085 ***	(0.011)	-0.101 ***	(0.013)	-0.019 *	(0.011)	0.132 ***	(0.018)	0.072 ***	(0.018)
Number of Children	-0.002	(0.003)	-0.001	(0.004)	0.000	(0.000)	0.002	(0.004)	0.001	(0.001)
Children Born/Adopted between 1990-2006	-0.008 *	(0.004)	-0.007 *	(0.007)	0.001 **	(0.001)	0.010 *	(0.006)	0.004 *	(0.002)
Married between 1990-2006	-0.001	(0.004)	-0.001	(0.006)	0.000	(0.001)	0.001	(0.005)	0.000	(0.002)
Divorced between 1990-2006	0.021 **	(0.010)	0.016 **	(0.007)	-0.004 *	(0.002)	-0.025 **	(0.011)	-0.008 **	(0.003)
Household Size	-0.024 ***	(0.003)	-0.020 ***	(0.004)	0.004 ***	(0.001)	0.029 ***	(0.003)	0.010 ***	(0.001)
Household Consumption Expenditures Equalized Using the Modified OECD Scales	-0.022 ***	(0.004)	-0.018 ***	(0.006)	0.004 ***	(0.001)	0.027 ***	(0.004)	0.010 ***	(0.002)
Employment	-0.018 ***	(0.005)	-0.015 ***	(0.003)	0.003 **	(0.001)	0.022 ***	(0.006)	0.008 ***	(0.002)
Frequency in % (actual/predicted)	17.73/17.69		25.97/25.98		21.20/21.18		27.71/27.73		7.39/7.42	

Source: author's calculations. Notes: Marginal effects evaluated at the sample mean of the other variables are reported in columns. For dummy variables the effects of change from zero to one are presented. Religion and all interaction terms are instrumented. The natural logarithm of the number of people of a given religious domination in a given country in 1900 is used as the IV for religion; interactions of respective variables with the IV for religion are used as IVs for interaction terms. Bootstrapped standard errors are in parentheses. \*, \*\*, and \*\*\* stand for 10%, 5%, and 1% significance levels, respectively.

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