Religious Affiliation and Its Implications for Political Orientations in Romania

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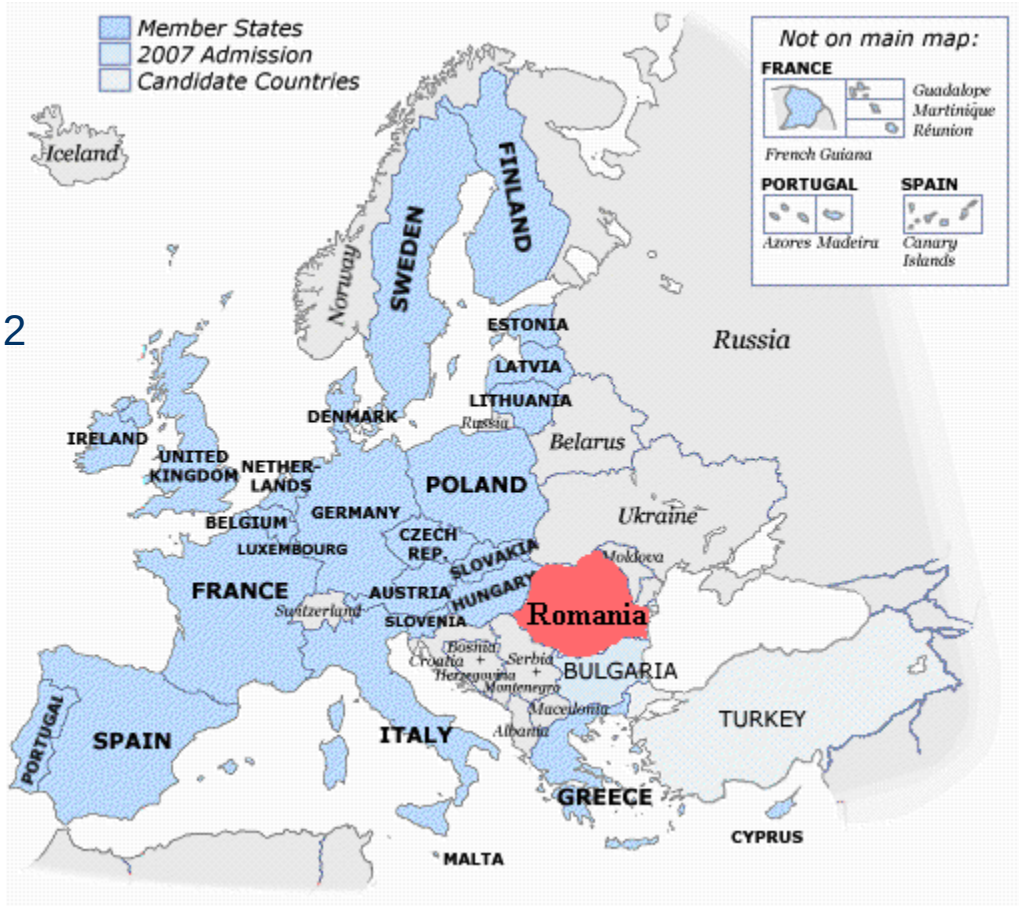
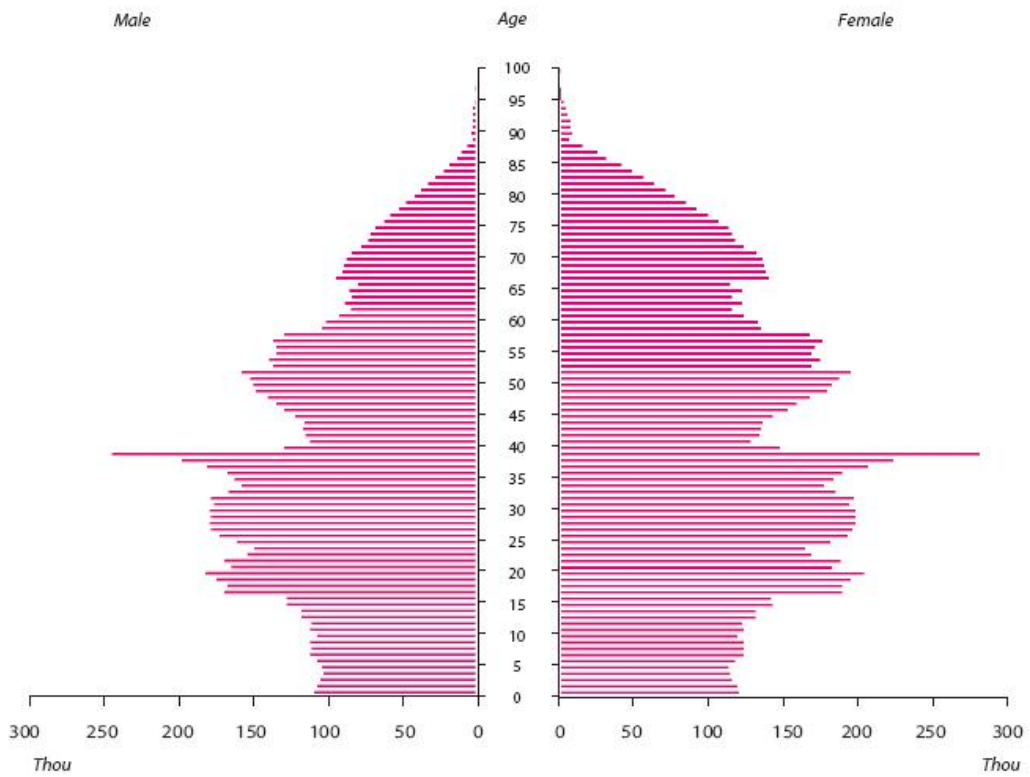
Romania – short presentation

- **Population (2006):**
  - 21.6 millions
- **Surface:**
  - 237.4 thousands km^2
- **Life expectancy:**
  - 72 years

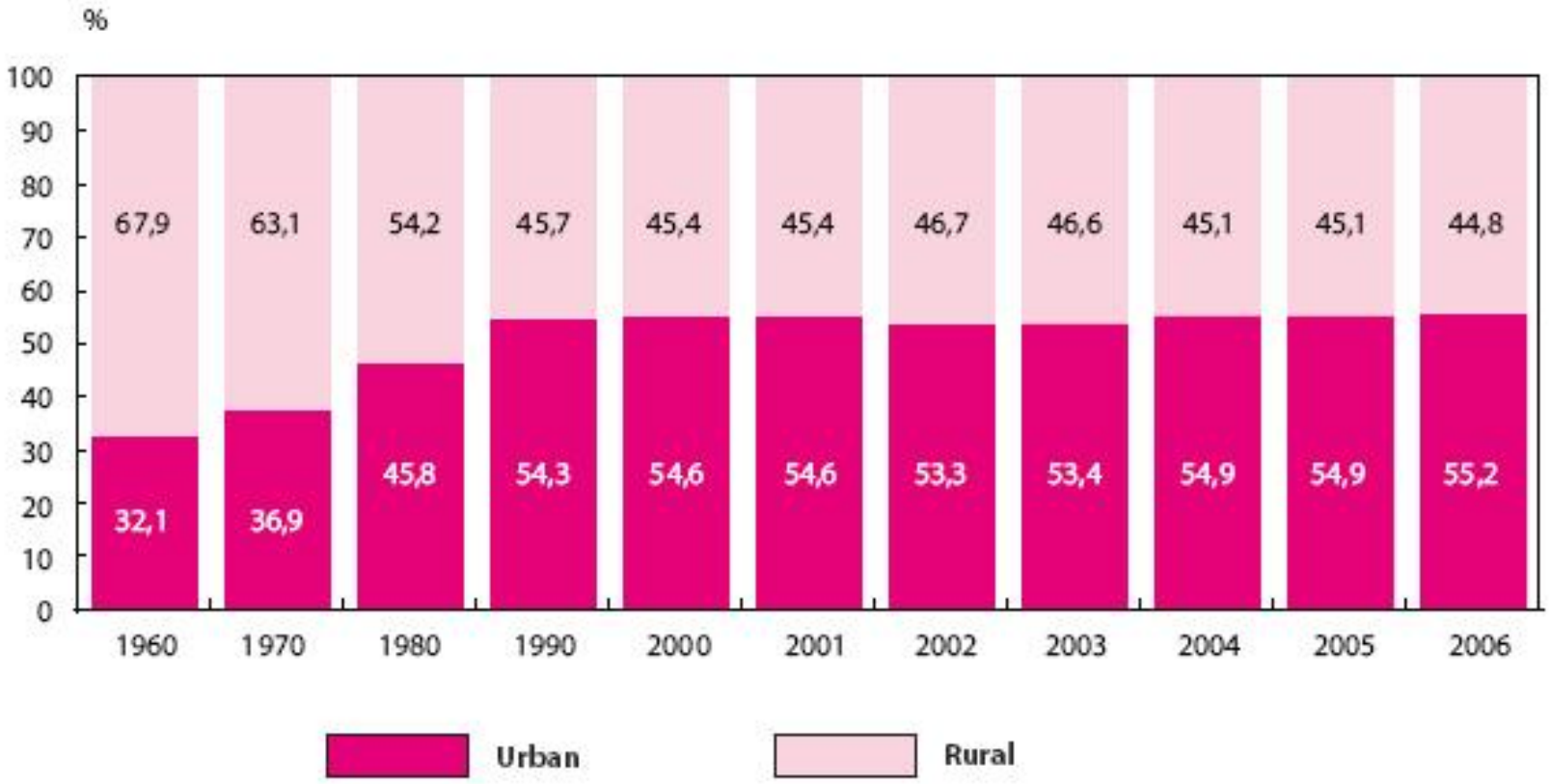


Population by age and sex on July 1, 2006



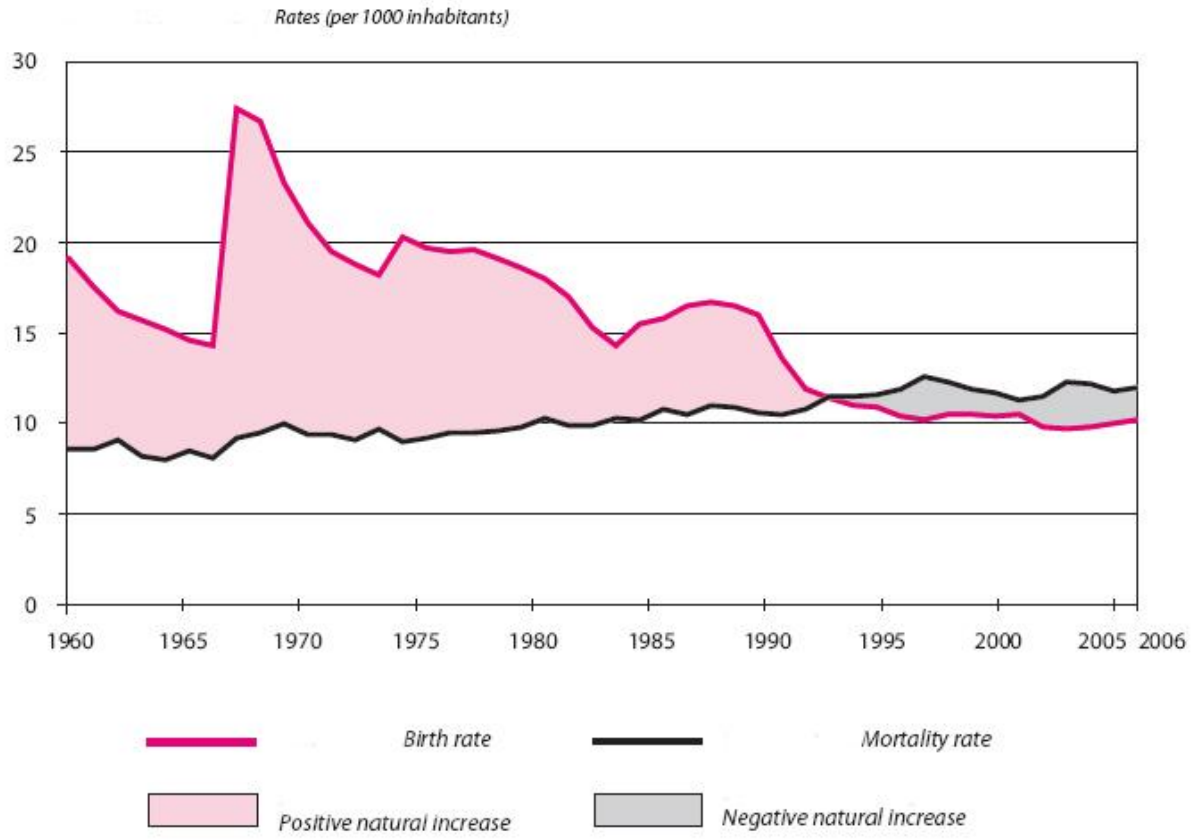
Source: * * * Romanian Statistical Yearbook, National Institute of Statistics, Bucharest, Romania, 2007, p.39

Population by area (July 1, 2006)



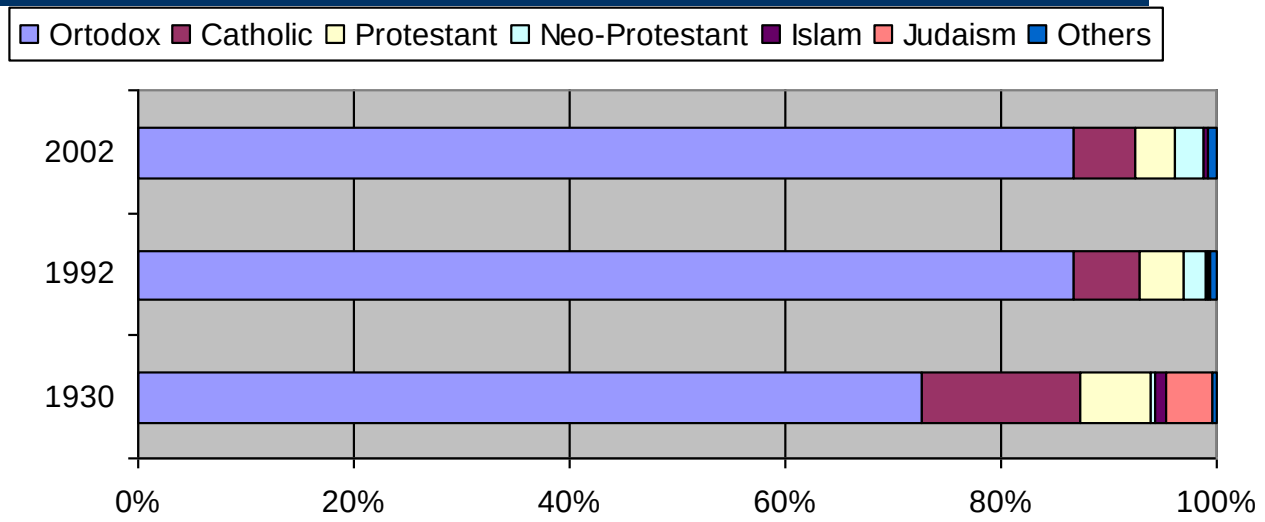
Source: * * * Romanian Statistical Yearbook, National Institute of Statistics, Bucharest, Romania, 2007, p.40

Birth rate, mortality and natural increase



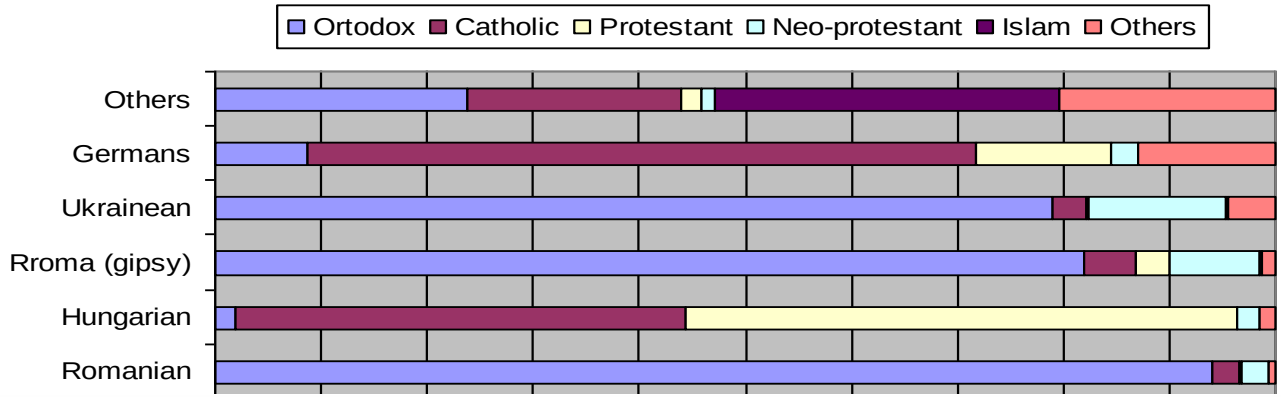
Source: * * * Romanian Statistical Yearbook, National Institute of Statistics, Bucharest, Romania, 2007, p.41

Religious data from censuses (1)



	1930	1992	2002
Others	0,50%	0,70%	0,82%
Judaism	4,19%	0,04%	0,03%
Islam	1,03%	0,25%	0,31%
Neo-Protestant	0,42%	2,01%	2,72%
Protestant	6,53%	4,12%	3,71%
Catholic	14,74%	6,07%	5,62%
Ortodox	72,59%	86,81%	86,79%

Religious data from 2002 census



Ethnic affiliation / Religion	Romanian	Hungarian	Rroma (gipsy)	Ukrainean	Germans	Others	Total
Ortodox	18.251.823	28.287	438.162	48.262	5.246	46.195	**18.817.975**
Catholic	506.453	606.678	26.458	1.988	37.582	38.826	**1.217.985**
Protestant	20.817	745.532	17.198	143	7.714	3.709	**795.113**
Neo-protestant	502.014	29.525	45.849	7.904	1.422	2.533	**589.247**
Islam	3.310	56	805	33	26	63.027	**67.257**
Others	115.180	21.729	6.668	2.768	7.774	39.258	**193.377**
Total	**19.399.597**	**1.431.807**	**535.140**	**61.098**	**59.764**	**193.548**	**21.680.954**

Methodology and data sources

Survey methodology

- Sample - 750 respondents
- Support from students for data collection
- Organized using random walk method
- 28 counties (with a higher representation of Bucharest) from a total of 42
- Face-to-face interview (around 40 minutes) based on a print questionnaire
- Field research – April-May 2007

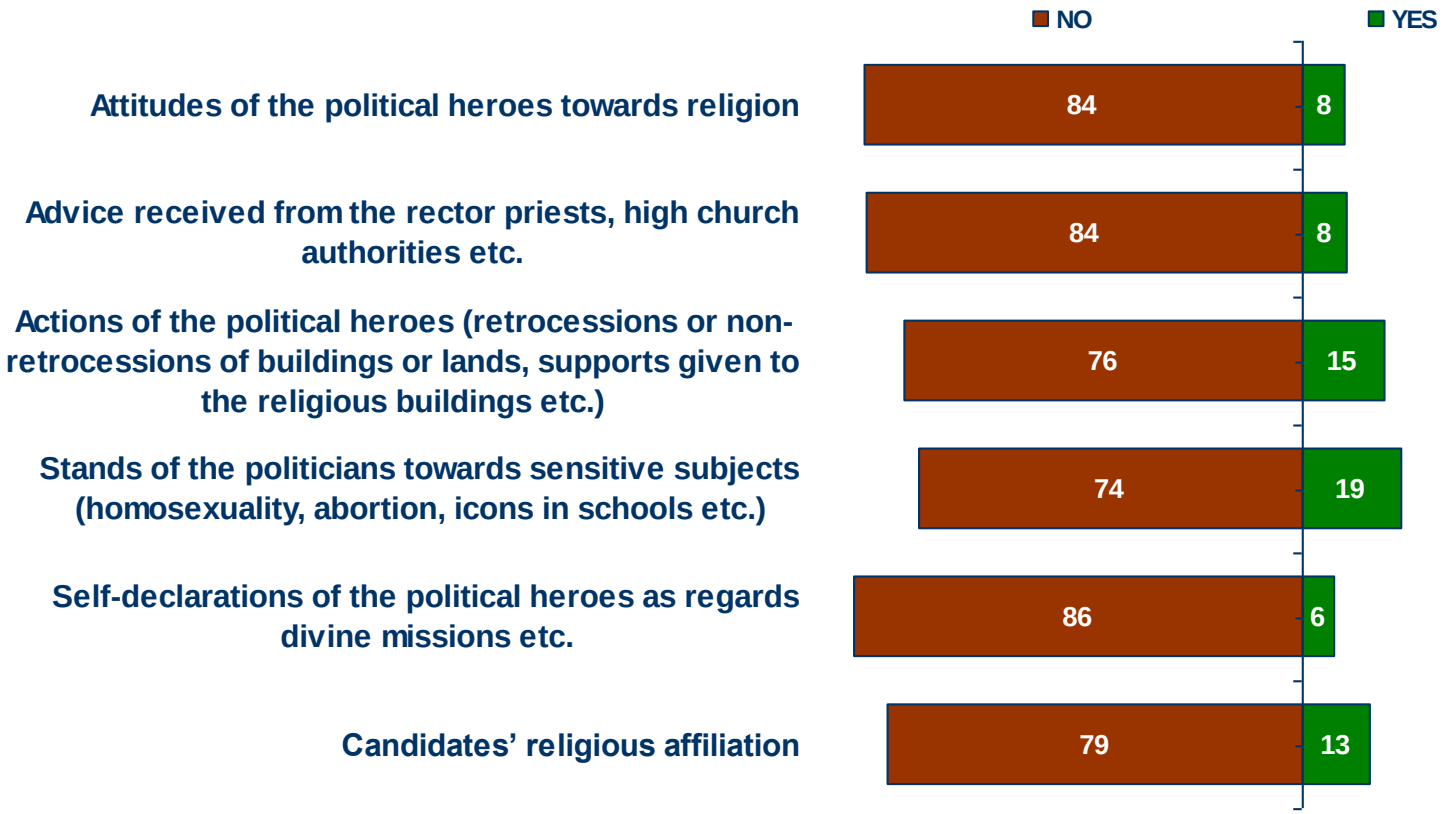
Methodology and data sources

Questionnaire presentation

- **First section** - socio-demographic profile (age, civil status, gender, level of education, number of marriages, number of children etc)
- **Second section** - position on the economic level (level of personal and household monthly income, additional income-bringing activities, intention to start own business etc)
- **Third section** - life conception and some religious aspects (religious beliefs, fasts, prayers, financial contributions, religious over electoral options, religious freedom etc)

Influence on political options

Factors descriptions(1)



Influence on political options

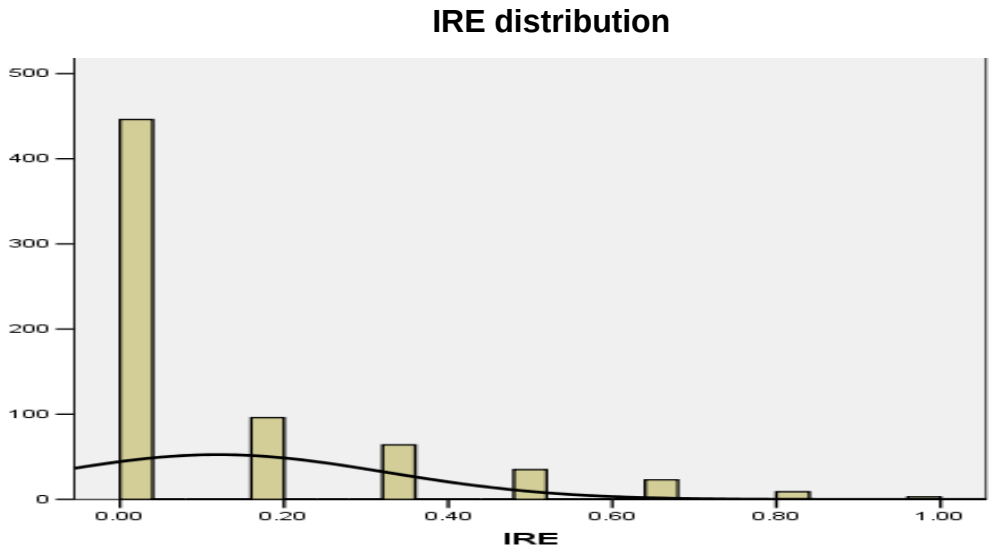
Factors descriptions(2)

- **IRE1** -Attitudes of the political heroes towards religion (ex. self-declaration of the candidates as „free thinkers”)
- **IRE2** - Advices received from the rector priests, high church authorities etc
- **IRE3** -Actions of the political heroes (retrocession or non-retrocession of buildings or lands, supports given to the religious buildings etc.)
- **IRE4** -Stands of the politicians towards sensitive subjects (homosexuality, abortion, icons in schools etc.)
- **IRE5** -Self-declarations of the political heroes as regards divine missions etc .
- **IRE6** -Candidates’ religious affiliation .

Influence on political options

Factors descriptions (2) and the model

- Level of education (NPP)
- Sex of person (GP)
- Life satisfaction as a result of local factors actions (SPL)
- Frequency for religious events attendance (FSR)



Influence on political options

Econometric model

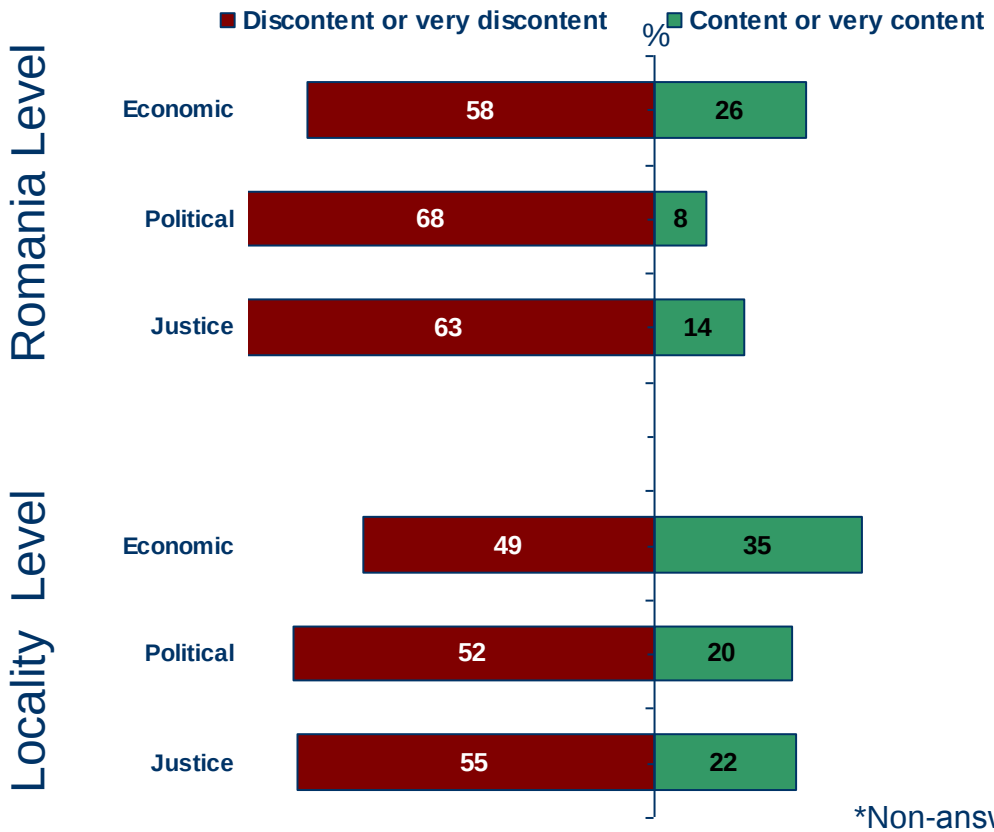
$$IRE_i = a_0 + a_1 NPP_i + a_2 GP_i + a_3 SPL_i + a_4 FSR_i + \varepsilon_i \qquad \varepsilon_i \to N(0, \sigma_\varepsilon^2).$$

Parameters	a_0	*NPP*	*GP*	*SPL*	*FSR*	*F*	*N*
Estimators	0.089 (0.037)	–0.008*** (0.005)	0.037** (0.017)	0.013*** (0.007)	0.020* (0.008)	4.177	635

* $\alpha = 0.02$, ** $\alpha = 0.03$ *** $\alpha = 0.08$

The measure of satisfaction regarding the following aspects

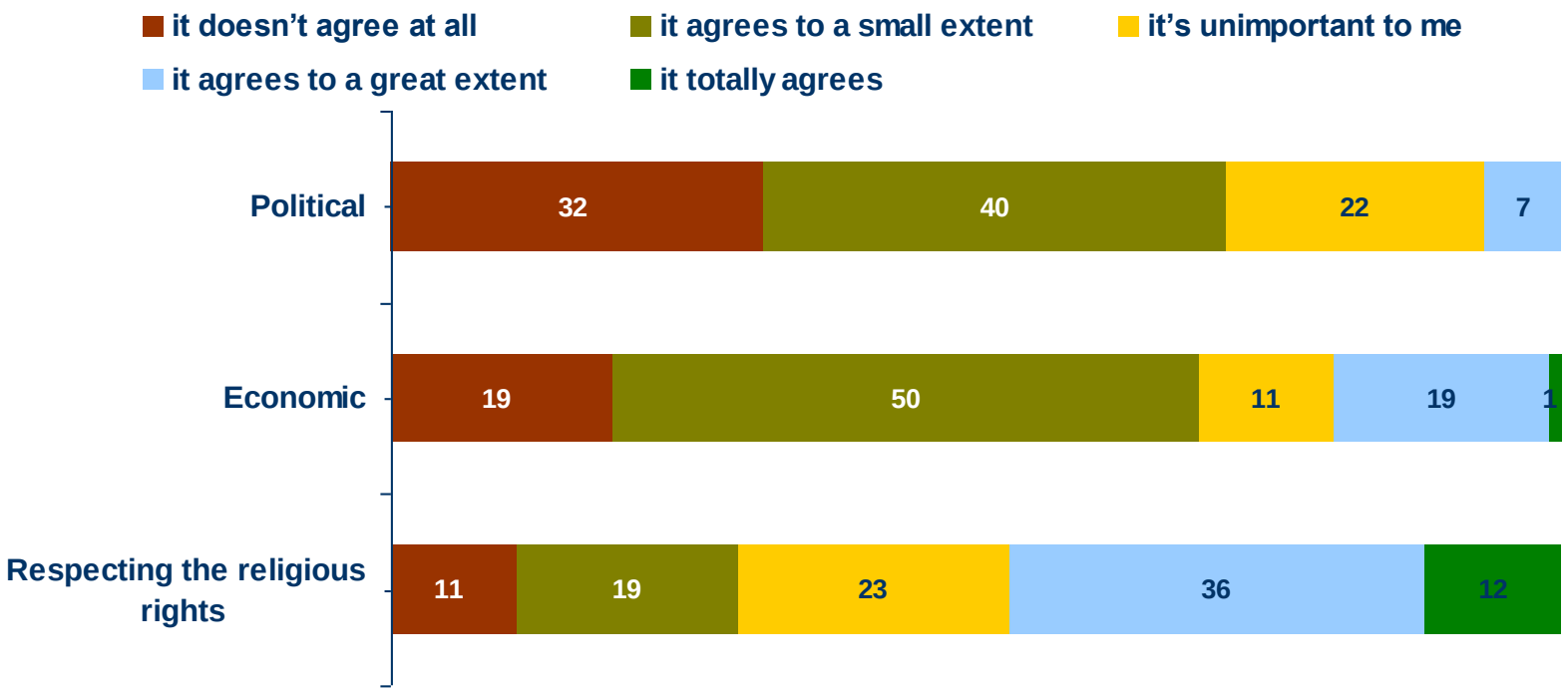
The main characteristics of the variables used in the econometrics models (1)



*Non-answers and “indifferent” categories are not shown on the graphic

To what extent the direction where Romania is heading to agrees with your aspirations?

The main characteristics of the variables used in the econometrics models (2)



Analysis of life satisfaction

Factors descriptions(1)

We took into account some aspects related to economic, political and justice domains present at local and national levels. The purpose is to measure the life satisfaction of persons (SP).

For each model used to determinate life satisfaction are taken into account **economic factors**, **personal characteristics** and **religious factors**.

Economic factors (VE)
- **Monthly income of person (VLP)**
- **Monthly income of household (VLG)**
- **Characteristic of a household member to have an economic activity abroad (AES)**
- **Intention of person to start own business (PPA)**
- **Dimension of locality (where the person lives) (DLL)**

Personal factors (VP)
- **Level of education (NPP)**
- **Sex of respondent (GP)**
- **Marital status (SCP)**

Religious factors (CR)
- **Religious events attendance (FSR)**

Analysis of life satisfaction

- Using one of the variable SPL, SPN or SPG for measuring the level of satisfaction we defined the following model

$$GS_i = a_0 + \mathbf{a}_1\mathbf{VE}_i + \mathbf{a}_2\mathbf{VP}_i + \mathbf{a}_3\mathbf{CR}_i + \varepsilon_i$$

- Where $\mathbf{VE}_i, \mathbf{VP}_i$ şi $\mathbf{CR}_i$ are vectors variable defined by the previous mentioned variables.

- The GS_i is defined using one of the variable SPL, SPN or SPG, the residual variable is normal distributed having the mean equal with 0.

Analysis of satisfaction, financial contributions and influence of church in elections by groups

		SPL	*SPN*	*SPG*	*PPB*	*IRE*
Marital status						
	NC(0)	2.61(0.93)	2.41(0.83)	2.53(0.69)	9.83(18.69)	0.14(0.25)
	C(1)	2.53(0.81)	2.32(0.73)	2.47(0.61)	6.00(13.31)	0.11(0.23)
Statistical *F* and	***p-value***	-	-	-	7.364 (0.01)	-
Gender						
	M(0)	2.59(1.00)	2.35(0.66)	2.48(0.49)	6.31(0.66)	0.15(0.94)
	F(1)	2.56(0.85)	2.38(0.78)	2.52(0.66)	9.53(18.07)	0.11(0.21)
Statistical *F* and	***p-value***	-	-	-	5.146(0.03)	3.59(0.06)
Personal incomes (monthly averages)	**< 300**	2.63(0.95)	2.42(0.85)	2.54(0.74)	13.54(22.15)	0.14(0.28)
	300-600	2.51(0.92)	2.26(0.79)	2.41(0.63)	10.05(16.8)	0.12(0.25)
	600-1000	2.58(0.80)	2.36(0.75)	2.48(0.59)	7.20(16.38)	0.11(0.20)
	1000-1500	2.73(0.85)	2.50(0.75)	2.65(0.67)	2.52(6.85)	0.11(0.19)
	> 1500	2.40(0.81)	2.35(0.73)	2.45(0.65)	2.64(0.65)	0.25(0.30)
Statistical *F* and	***p-value***	-	-	1.910 (0.1)	9.273 (0.00)	-
TOTAL AP		2.57(0.88)	2.37(0.788)	2.50(0.66)	8.26(16.79)	0.13(0.241)

Characteristics of model M1

	Level of satisfaction		
	SPL	SPN	SPG
a_0	2.486 (0.075)	2.214 (0.055)	2.427 (0.046)
FSR	0.061* (0.034)	0.067* (0.031)	0.053** (0.026)
F	4.79	4.67	4.11
N	685	684	688

*α=0.03 **α=0.04

Characteristics of model M2

	Level of satisfaction		
	SPL	SPN	SPG
a_0	2.522 (0.067)	2.251 (0.061)	2.483 (0.051)
FSR	0.069***** (0.035)	0.071* (0.032)	0.046***** (0.027)
SCP	−0.101***** (0.069)	−0.128*** (0.063)	−0.114* (0.053)
F	3.19	4.70	3.90
N	670	669	673

*α=0.03 **α=0.04 ***α=0.05 ****α=0.08 *****α=0.10

Characteristics of model M3

	Level of satisfaction		
	SPL	SPG	SPG
a_0	2.444 (0.063)	2.320 (0.101)	2.300 (0.101)
FSR	0.078* (0.034)	0.051**** (0.027)	0.050***** (0.027)
PPA	0.169*** (0.085)	-	-
NPP	-	0.025****** (0.016)	0.036* (0.016)
SCP	-	-	−0.124* (0.055)
F	4.564 (1%)	2.98 (5%)	3.87 (1%)
N	681	681	666

*α=0.02 **α=0.04 ***α=0.05 ****α=0.06 *****α=0.10

Conclusions (1)

- Local and national factors who influence directly the level of life satisfaction of a person have different contributions.
- All the cases presented show that religious services have an positive influence on level of life satisfaction.
- Regarding the economic factors it looks like the persons who tried to initiate own business have a higher level of satisfaction than those who didn’t try to start a business.

Conclusions (2)

- The level of satisfaction determined by national factors is higher for the person with a higher level of education.
- The level of satisfaction of unmarried persons is higher than the level of satisfaction of married persons.

Influence of religion to intention to start own business

Model description (1)

The dependent variable (PPA) is defined as follows:

$$PPA_i = \begin{cases} 1, \text{ the person started own business} \\ 0, \text{ all other possibilities} \end{cases}$$

The factors variables are:

Marital Status (SCP) with values 1 for married and 0 for unmarried

Level of education (NPP) with natural values between 1(no education) and 10 PhD degree

Frequency for religious services attendance (FSR) with values between 0 (if the person doesn't attend) and 5 (daily attendance)

Influence of religion to intention to start own business

Model description (2)

	Extreme values		PPA=0			PPA=1			Total	
	min	max	m	as	N	m	as	N	m	as
PPA	0	1	-	-	515	-	-	123	0.193	0.395
SCP	0	1	0.350	0.478	515	0.536	0.501	123	0.386	0.487
GP	0	1	0.344	0.476	515	0.561	0.498	123	0.386	0.487
NPP	2	10	5.346	1.549	515	6.163	1.799	123	5.504	1.631
FSR	0	5	1.451	0.948	515	1.504	1.019	123	1.462	0.962

Conclusions:

- A business was started more frequently by a married person
- Male persons are more interested to start own business
- Persons who started own business have a higher level of education than those who didn't start own business
- In general the persons who decided to start the new business have higher frequencies of religious service attendance than the others

Binary models

Model description (1)

$$p_i = \mathrm{P}(PPA_i = 1) = F(\mathbf{a}'\mathbf{X}_i),$$

Goal: Estimation of p_i

F - repartition function of normal or logistic distribution

a’ - vector of parameters which should be estimated using sample data

Binary models

Logit and Probit models description

	Logit	Probit
Parametres (estimator and standard error)		
C	−4.141* (0.4661)	−2.426* (0.2600)
SCP	0.722* (0.2161)	0.421* (0.1230)
NPP	0.283* (0.0619)	0.165* (0.0361)
GP	1.092* (0.2208)	0.631* (0.1244)
FSR	0.187*** (0.1098)	0.106*** (0.0629)
Models characteristics		
AIC	0.9076	0.9057
McFadden R-squared	0.094	0.096
Obs. With PPA=0	514	514
Obs. With PPA=1	124	124

*$\alpha = 0.00$ **$\alpha = 0.08$

Conclusions:

- The variables SCP, GP, NPP and FSR have a significant influence on decision of a person to start or not own business.
- AIC şi McFadden R-squared values show a better quality of Probit model compared with Logit.