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Religious Activity in Urban and Rural Areas in Germany

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1. Introduction

2. Economic Assumptions on Religious Activity

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5. Summary and Further Research

In 2007 about 61 % of the German population were members of one denomination (Protestant and Catholic)

Of those 61 %

        - 37 % never attend religious service

        - 28 % attend religious service more than one a month

Differences in church attendance are explained by economic theories

USA: e.g. Azzi/Ehrenberg 1975, Durkin/Greeley 1991, Iannaccone 1990, 1995, 1998

Germany: e.g. Heineck 2001, Schmidtchen/Mayer 1993, Schmidtchen 2000

Religious household production (Azzi/Ehrenberg 1975)

- How does belief in life after death affect the household's time allocation

- Based on Becker's allocation of time model (1965)

- Secular consumption depends on commodities and consumption time

- Afterlife's utility depends on time and money spent on religious activity in this life

➔ Trade-off between working/consumption-time and religious activity (opportunity costs)

Religious Human Capital (Iannaccone 1990)

- To produce religious commodities you need certain religious knowledge (concerning doctrines and rituals)

Some implications of economic theory:

- Income should affect church attendance negatively because of opportunity costs

- Retirement should affect church attendance positively because of missing opportunity costs

- Age should affect church attendance positively because of increasing religious human capital

Implications are mostly confirmed in the USA.

- About 2,000 religious denominations

- No church-tax

➔ Market structure, religious groups can be treated as suppliers for religious services

What about Germany?

Data

Socio-oeconomic Panel (GSOEP)

Cross-section: Wave 2007

Sample

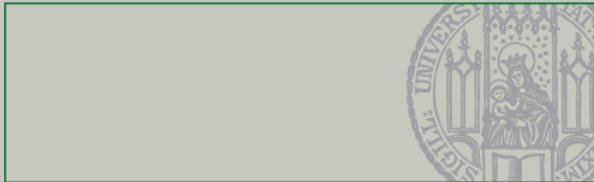People with Protestant or Catholic denomination

Variables

Dependent:	church attendance (ordered: never, less than once a month, less than once a week, more than once a week)
Independent:	urban area (dummy, 1 > 50,000 inhabitants)
	age, age²
	education (in years)
	East Germany (dummy)
	log Income (log net income)
	retirement (dummy)

Estimation

Ordered Probit Regression

Ordered Probit

| Rel. Activity	Model 1	Model 2
Male	-0.095***	-0.151***
Age	0.032***	0.025***
Age_sq	0.000***	0.000***
Education (Years)	0.035***	0.037***
East Germany	0.184***	-0.020*
Income	-0.006	
Retirement		0.033
cut1	0.979***	0.861***
cut1	2.141***	1.927***
cut3	2.657***	2.432***
N	7337	12900
Chisq	266	482
Nagelkerke	0.039	0.040

Men attend less often than women

Older people attend more often than younger people

Income and retirement have no effect on church attendance

*p>0.05, **p>0.01, ***p>0.001

Church Attendance urban vs. rural areas
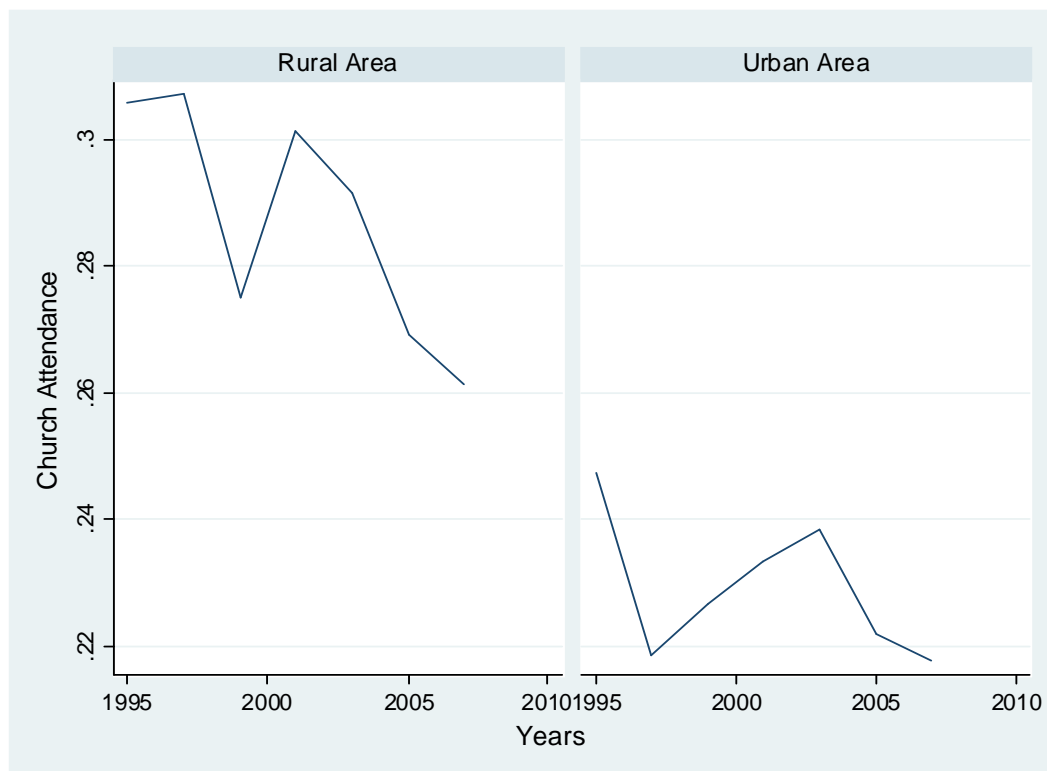
Church Attendance:

Chance of attending religious services at least once a month

Why should people living in rural areas attend church more regularly than people living in urban areas?

Maybe people differ in church attendance-affective variables
age, sex, education, income/retirement suggested by economic theory

Than urban-rural disparities would not be significant.

Ordered Probit

Rel. Activity	Model 3	Model 4
Urban Area	-0.224***	-0.234***
Male	-0.100***	-0.158***
Age	0.031***	0.023***
Age_sq	0.000***	0.000***
Education (Years)	0.043***	0.044***
East Germany	0.146***	-0.063*
Income	-0.008	
Retirement		0.044
cut1	0.938***	0.821***
cut1	2.106***	1.894***
cut3	2.623***	2.392***
N	7334	12894
Chisq	330	611
Nagelkerke	0.048	0.050

*p>0.05, **p>0.01, ***p>0.001

People in urban areas attend church more often than people in rural areas

➔ Results suggest that people in urban areas attend church less often than people in rural areas even if we control for economic assumptions

How can these differences be explained?

1. Religious human capital (Iannaccone 1990)

   - In rural areas people get socialized by religious institutions (lack of secular institutions for spending the free time), which leads to higher religious human capital.

2. Social integration/control (Ellison/Sherkat 1995, Lee/Bartkowski 2004)

   - In rural areas, norms for church-attending are stronger.

   - People don't have many social alternatives, so the influence of control mechanisms are stronger.

   - Church's integrational function of the is better with absent alternatives.

To test these hypotheses we have a look on mobility

(rural ⟷ urban):

Thesis 1 (Human Capital):

  If people move from urban to rural areas there will be no change in church attendance (and vice versa).

Thesis 2 (Integration and Social Control):

  If people move from urban to rural areas, church attendance will increase because of more social control.

  If people move from rural to urban areas church attendance will decrease because of less social control.

Data

Socio-oeconomic Panel (GSOEP)

Longitudinal: Waves 1995, 1997, 1999, 2001, 2003, 2005, 2007

Sample

People with Protestant or Catholic denomination

Variables

Dependent:	church attendance (ordered: never, less than once a month, less than once a week, more than once a week)
Independent:	urban area (dummy, 1: > 50,000 inhabitants)
	rural area (dummy, 1: <= 50,000 inhabitants)
	age, age²
	education (in years)
	East Germany (dummy)
	log Income

Estimation

Random Effects Ordered Probit Regression
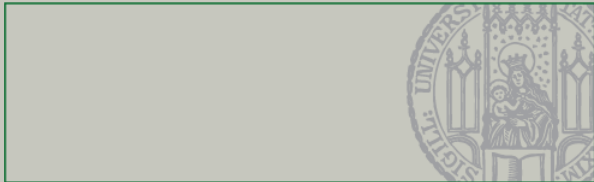
Random Effects Ordered Probit

Rel. Activity	rural → urban
Urban Area	-0.437***
Rural Area	
Male	-0.353***
Age	0.015
Age_sq	0.000
Education (Years)	0.156***
East Germany	0.206
Income	-0.011
cut1	1.519***
cut1	4.002***
cut3	5.438***
rho	0.765
N	2772
Chisq	43***

+p>0.1, *p>0.05, **p>0.01, ***p>0.001

In urban areas people attend church less regularly than in rural areas.

Mobility leads to changes in individual church attendance:

- Moving from urban to rural areas increases church attendance
- Moving from rural to urban areas decreases church attendance

These results suggest that

➔ people adapt church attending from their social context

➔ social control works better in smaller groups (i.e. rural areas)

Next Steps:

- Social control is more effective in a religious environment – regional differences should be analyzed

  ➔ more regional information is needed

- What is the role of household structure (children, skip generation families) for church attendance?

Thank you for your attention!

- Azzi C./ R. Ehrenberg (1975): Household Allocation of Time and Church Attendance. Journal of Political Economy 83: 27-56.

- Durkin J./A. Greeley (1991): A Model of Religious Choice under Uncertainty. Rationality and Society 3: 178-196.

- Ellison C./ D. Sherkat (1995): The "Semi-involuntary Institution" Revisited: Regional Variations in Church Participation among Black Americans. Social Forces 73: 1415-1437.

- Heineck, G. (2001): The determinants of church attendance and religious human capital in Germany: Evidence from panel data. DIW Discussion Paper No. 263.

- Iannaccone, L. (1990): Religious Practice: A Human Capital Approach. Journal for the Scientific Study of Religion 29: 297-314.

- Iannaccone, L. (1995): Household production, human capital, and the economics of religion. In: Tommasi, M./K. Ierulli (Eds.): The new economics of human behavior. Cambridge: University Press: 172-187.

- Iannaccone, L. (1998): Introduction to the Economics of Religion. Journal of Economic Literature 36: 1465-1495.

- Lee, M./J. Bartkowski (2004): Love Thy Neighbor? Moral Communities, Civic Engagement, and Juvenile Homicide in Rural Areas. Social Forces 83: 1001-1035.

- Schmidtchen, D./A. Mayer (1993): Ökonomische Analyse der Religion. In: Ramb, Bernd-Thomas , und Karl-Heinz Hartwig (Eds.): Ökonomische Verhaltenstheorie. München: Vahlen.

- Schmidtchen, D. (2000): Ökonomik der Religion. Universität Leipzig: Economic Series 003.