

Determinants of unemployment of rural population in Poland

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IAMO Forum 2016
Rural Labor in Transition: Structural Change, Migration and Governance
22 - 24 June 2016 Halle, Germany



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Motivation



In Poland, there are many social and economic problems in rural areas. The most important are:

(1) low income and poverty;

(2) Unemployment and hidden unemployment

Hidden unemployment concerns mostly private farms and members of farmers families.

From 0.5 to 1.4 milion farmers are “hidden unemployed” and 70% of people are only part-time employed (underemployment) (NSP 2006, p. 23)

(3) lower level of education of rural population and educational barriers;

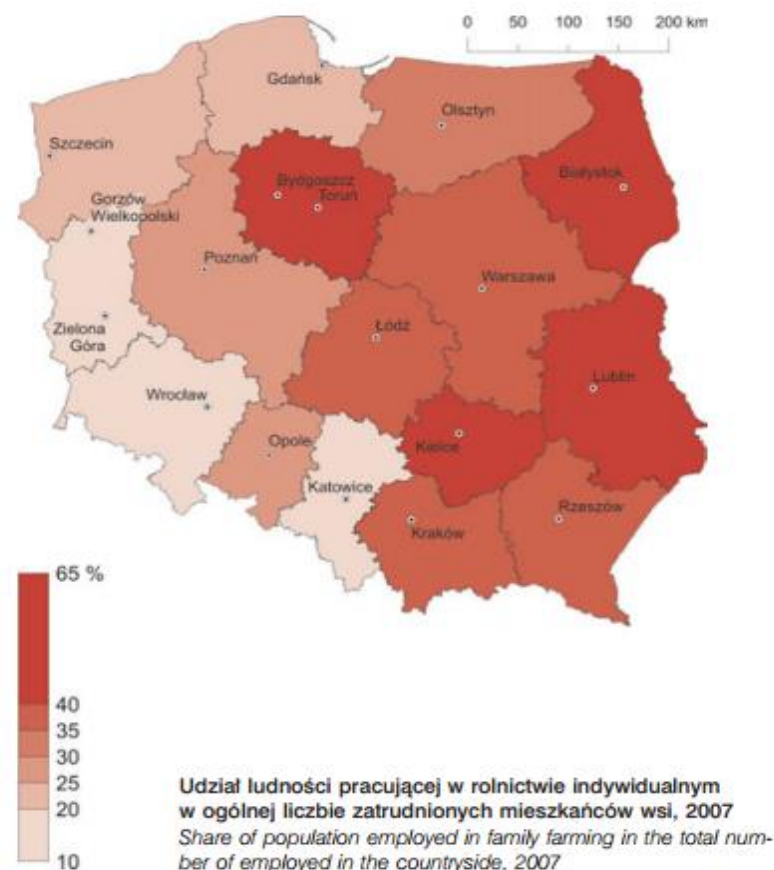
(4) lack perspective for the young people in local communities.

The aim of the study was to investigate determinants of unemployment of rural population in working age (18-65)

Motivation

Tab. 1. Economic activity of the population aged 15 and more by level of education, (2014)

	Unemployment rate (%)	
	Rural area	Urban Area
Total	9,3	8,2
Tertiary	5,8	4,1
Post-secondary	10,5	7,6
Vocational secondary	8,3	7,5
General secondary	13,1	10,9
Basic vocational	9,0	12,9
Lower secondary, primary and incomplete primary	15,4	24,3



Date and methodology



- The conclusions are based on the results of surveys conducted among 2057 rural inhabitants.
- Data for the analysis comes from the Human Capital in Poland (BKL) for 2013.
- **The binary logistic regression model has been used to determine the prediction of unemployment.**

Answers are coded as follows:

- 1- if someone has been unemployed (by Eurostat definitions)
- 0- if someone worked

Results

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Sex	-0.286	0.143	4.015	1	0.045	0.751	0.568	0.994
Age	0.081	0.011	56.148	1	0.000	1.085	1.062	1.108
Work experience	-0.161	0.013	160.701	1	0.000	0.851	0.830	0.873
Income	-0.001	0.000	49.857	1	0.000	0.999	0.999	0.999
Higher educations			14.445	3	0.002			
Primary (1)	1.067	0.297	12.881	1	0.000	2.907	1.623	5.207
Vocational (2)	0.923	0.269	11.745	1	0.001	2.517	1.485	4.269
Secondary (3)	0.693	0.263	6.921	1	0.009	2.000	1.193	3.352
Farms	-1.312	0.309	18.044	1	0.000	0.269	0.147	0.493
Skills	-0.339	0.151	5.056	1	0.025	0.713	0.531	0.957
Training	-0.801	0.206	15.072	1	0.000	0.449	0.300	0.673
Macro-region: Malopolska			7.572	7	0.372			
Central Region (1)	-0.290	0.247	1.388	1	0.239	0.748	0.461	1.213
Wielkopolski Region (2)	-0.427	0.242	3.103	1	0.078	0.653	0.406	1.049
Silesian Region (3)	-0.600	0.263	5.208	1	0.022	0.549	0.328	0.919
Western Region(4)	-0.300	0.221	1.836	1	0.175	0.741	0.480	1.143
Pomeranian (5)	-0.304	0.224	1.840	1	0.175	0.738	0.476	1.145
The North-estern(6)	-0.121	0.237	0.263	1	0.608	0.886	0.557	1.409
Estern Region (7)	-0.256	0.290	0.777	1	0.378	0.774	0.438	1.367
Constans	-1.438	0.449	10.240	1	0.001	0.238		

Results (1)

Variables that increase the risk of unemployment

1. Age - if someone is older it the risk of being unemployed is bigger

- On the basis of the received level of the odds ratio $\exp \beta = 1.085$, we conclude that the increase in age by one year causes an increase chance of being unemployed on average by 8.5%
- It estimated that the increase in age of rural inhabitants of 10 years causes an increase risk of unemployment by almost 125% ($e^{10\beta} = 2,242$).

2. The level of education lower than the higher increases the chance of being unemployed.

- People with primary education are three times more chance to be unemployed than people with higher education.
- Secondary education - 2 times greater chance of being unemployed.
- Vocational education - 2.5 times greater chance.

Result (2)

Variables that reduce the risk of finding themselves in the group of unemployed people

1. **Sex (woman)** - being a woman reduces the chance of being unemployed by 25%

2. Work experience

Each additional year of work experience reduces the risk of unemployment by 15%

The increase in work experience of five years caused a decrease chances of unemployment by 56% ($e^{5\beta} = 0.44$), a rise of 15 years reduced the risk by 91% ($e^{15\beta} = 0.089$).

3. Income

The growth of income per person will decrease the chances of being unemployed

The increase in income per person by 1 zł decreased the chances of unemployment by 1%

or increase income by 100 zł for 1 member of the household reduced the chance of being unemployed by 10% ($e^{100\beta} = 0.905$).

4. Farms

People who have farms have less chance to be unemployed by 75% than those who do not have a farm.

5. Skills

People who have the skills important for employers they have less chance of being unemployed about by 30%.

6. Training

People who take part in training, they have about 55% less chance to be unemployed than those who do not to training.

7. **Living in Silesian Region**- the chance of being unemployed is 45% lower than in the Malopolski Region.

- As a result of structural changes and transformations, rural areas in Poland have been affected by the problem of unemployment.
- Important determinants of unemployment of rural population are: the level of education, their skills, participation in training.
- In Poland the farm owners and farm holders with over 2 equivalent ha of land cannot be registered as unemployed. They can not participate in training to upgrade their skills, which are addressed to the unemployed.

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Thank you.

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