

The Impact of Unemployment on Older Population in the North-East Region

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Abstract

This paper aims to highlight the impact of labor supply for the population aged 55-64 years looking for a job in the North East. It uses multifactor regression model, with the exogenous variables, the rate of job vacancies fielobds. The analysis shows that although the Romanian population is aging and this trend continues, the elderly are not in the demand for skills and abilities to employers. They accept jobs that do not require a specific qualification, seasonal jobs, poorly paid. Continuous vocational training policies to meet the needs of those who do not have the skills required in the current economic situation.

Key words: *unemployment, regression, labor market, job vacancies*

Introduction

We assist in reducing the share of young population, aged 0-14 years, from 23.7% (in 1990) to 15.0% (in 2012) and the growth of the elderly, 65 years and older, from 10.3 % (in 1990) to 15.0% (in 2012). Adults, 15-64 years increased steadily from 66% (in 1990) to 70% (in 2012). For the first time in four decades, from 1 January 2012 the population share of young population is equal to the share of elderly population (15.0%), as shown in a study by the National Bank of Romania.

The specialists considers that the process of demographic aging of the population, which was quite brisk in recent decades, will make 2030, each 5th inhabitant of Romania will enter the category "elderly".

Change over time in the number and structure of the population, leading to changes in the labor market. In Romania, due to structural changes, new professions appeared and disappeared traditional professions. In Romania, due to structural changes, new professions appeared and disappeared traditie. În profession with many companies, due to

restructuring, there was a reduction in the number of jobs available, but new ones have appeared under new economic conditions. The problem of population decline - quantitative difficulty - is accompanied by a qualitative difficulty, according to the study Talent Shortage in 2011, conducted by ManpowerGroup, which reveals that one in three employers worldwide have difficulty filling vacancies, the lack of personnel who possess the appropriate skills (up three percentage points from 2010). The recession has led to specific behaviors that deeply affect both employers' intentions and those of people who aspire to a job. The elderly are most affected by changes in the labor market, considering the skills, their skills, and availability of, respectively, the power to cope with change and adapt to new requirements. Labor market imbalances are produced, with an aging population and labor migration. Young people with greater ability to adapt to change, migrate to areas where jobs are better paid.

This paper aims to highlight issues of unemployment and vacancies for economic activity in the North East, knowing that it is one of the poorest regions of Romania, but with a large number of immigrants.

The region comprises 6 counties: Bacau, Botosani, Iasi, Neamt, Suceava and Vaslui, the largest of the eight development regions of Romania. The region with the largest population of eight, representing 17.2% of the total country population. Because of the geographical and historical Northeast region experienced a serious lagging behind in socio-economic terms. The region has a degree of rurality higher than the national average. The region has a mainly agrarian economy and standard of living of the population, very low. In the communist period, we performed a forced industrialization in the region, which led to the creation of an industrial culture, workforce qualification and training of a large number of specialists. Large understood, changes in the economy has affected precisely this category, a 90s were specialists in various fields, mainly industrial. From the economic point of view, unemployment can be regarded as an unused labor capacity. International Labour Office defines unemployed population, as: persons aged 15-74 who were without work during the reference week but are currently available for work and actively seeking work past four weeks or had already found a job and start working Pota the next three months. The measure the supply of labor, can be considered vacant job. According to NIS methodology, job vacancies are considered paid posts, newly created, unoccupied, or will become vacant if: concrete action employer to find a suitable candidate for the position in question

(examples of concrete actions undertaken by the employer: announcing the vacancy through employment services for labor, newspaper advertising, media, internet, direct contact of possible candidates etc.); immediate occupation or employer wants a specific time period established by the employer.

2. Econometric Modeling

2.1. Data used

We use multifactor regression model. Dependent variable: the unemployment rate for the age group 55 -64 years (RS_55-64) independent variables vacancy rate for six fields in the Romanian economy: industry, agriculture, commerce, tourism, construction, health, education and public administration (SIAP), and financial and real estate transactions.

The data used are quarterly data for the period 2005-2013 and come from research, the statistical "Force Survey household labor" (LFS) respectively Survey vacancies. Source National Institute of Statistics.

2.2. Descriptive statistics

Looking at Table 1, the information rate of job vacancies in the North East classified by broad areas of activity of the Romanian economy, we find that the highest rate of vacancies is to be found in areas of the budget, 13, 32%, the lower in the tourism trade. One explanation could be the fact that in the last field, practice more, moonlighting, employers not reporting job vacancies, however, in contrast, due to the legislation, all vacancies are announced. During the analyzed period (36 quarters), RLV industry was below 3.32%, and construction was 1.17%. The lowest average vacancies can be found throughout the tourism trade.

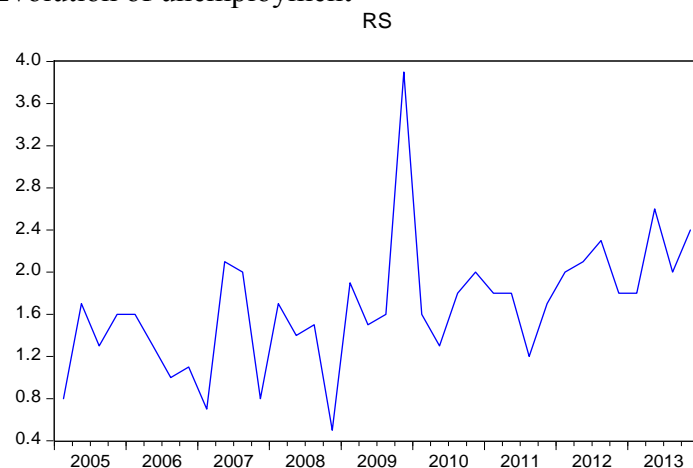
Table 1. Descriptive Statistics employment rate in the North East.

	RLV_IND	RLV_AGR	RLV_CON	RLV_COMT	RLV_TRANZ	RLV_SIAP
			S	UR	IF	A
Mean	3.705000	1.401111	1.308889	0.797222	2.495000	6.961667
Median	3.320000	1.325000	1.170000	0.690000	1.240000	5.800000
Maximum	6.130000	2.920000	3.300000	2.190000	5.450000	13.32000
Minimum	1.820000	0.340000	0.170000	0.150000	0.800000	2.580000
Std. Dev.	1.429075	0.676528	0.947875	0.584522	1.711582	3.554808

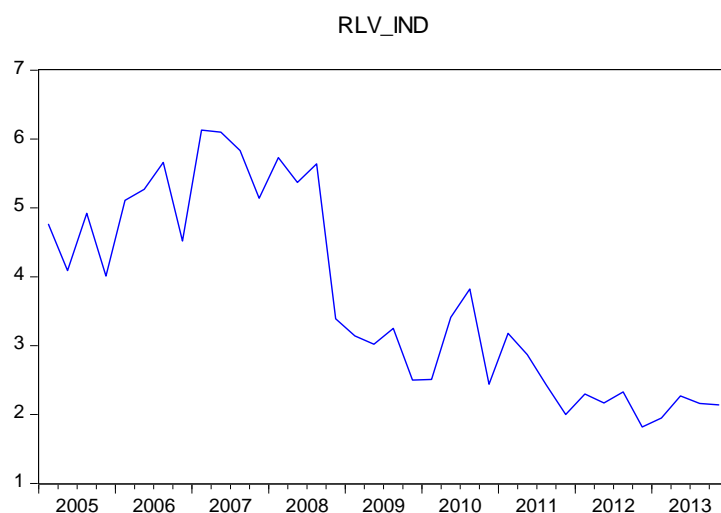
A look at the unemployment rate for people aged over 55 years, shows that these are at a fairly low level. Maxima 3.9% is reached in Q4

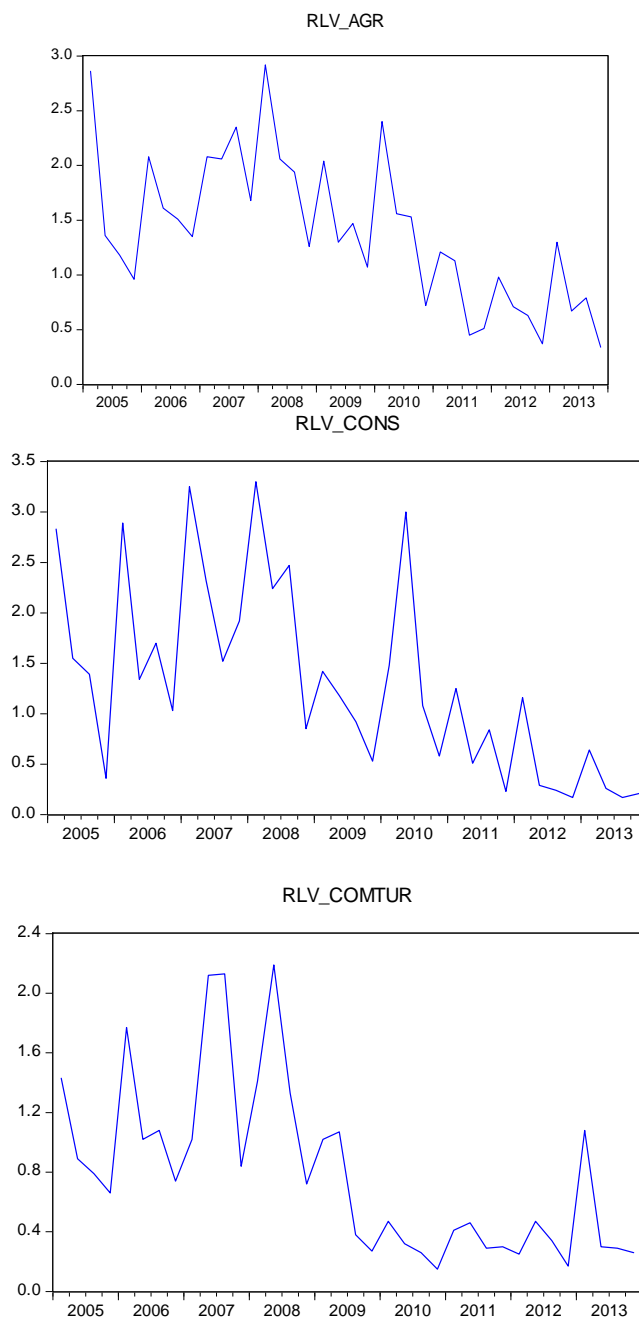
2009 after down, remaining at a level slightly higher compared to the start of the recession, to a maximum of 2.4%.

Figure 1. Evolution of unemployment



The analysis employment rate evolution in the main areas of activity, shows that after 2008, fell sharply vacancies in industry, trade tourism, areas of the budget, financial and real estate transactions, but also in agriculture and construction, which keeps downward trend. In industry, the slump began in quarter 4, 2008, travel trade, in Q3 2009, the situation has never recovered, as well as in construction, in H2 2010.





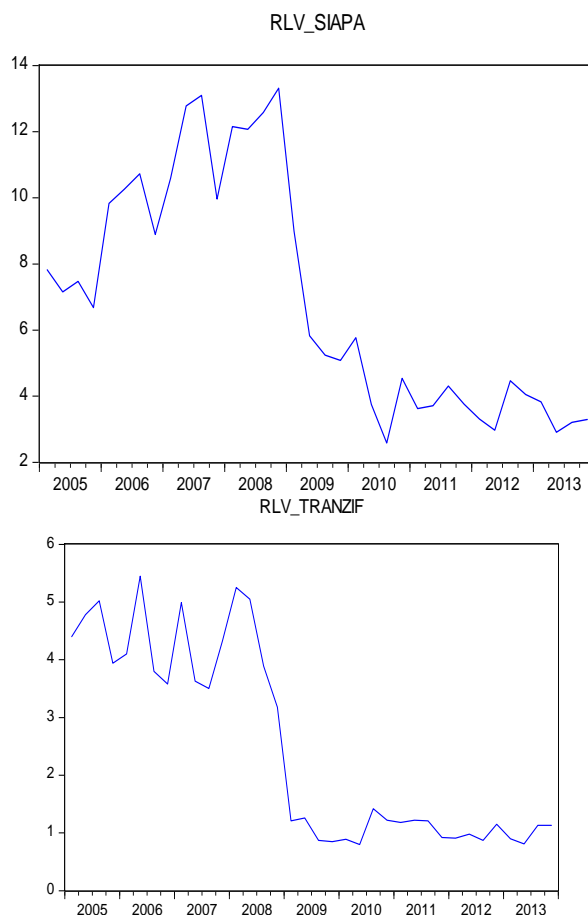


Figure 2. Evolution of the rate of vacancies

2.3. Econometric analysis

The econometric model used is of the form:

$$Y_t = b_o + b_1 X_{1t} + b_2 X_{2t} + \dots + b_k X_{kt} + \varepsilon_t$$

$t = 1, 2, \dots, T$

are observations in the sample;

Y_t –

observation of the dependent variable;

X_j –

independent variables,

X_{jt} –

observation of the independent variable;

b_o –

constant (constant term of the equat

b_1, \dots, b_k –

coefficients of independent variables;

ε_t – error term.

In our study, $T = 36$, corresponding to the years 2005 to 2013 quarters.

The independent variable coefficient how much the dependent variable changes when the independent variable X_{jt} , changes by one unit, while the other independent variables remain constant. The error term captures all the effects that occur randomly and were not taken into account in the model.

The regression equation is subject to assumptions in order to obtain efficient estimators, such as: $\text{cov}(x_i x_j) = 0$ for any $i \neq j$ (otherwise the phenomenon of multicollinearity); $\text{var}(\varepsilon_t) = \sigma_\varepsilon^2$ (homoskedastic hypothesis) $E(\varepsilon_t) = 0$, $\text{cov}(\varepsilon_i \varepsilon_j) \approx 0$ for any $i \neq j$.

Check validity of the model is performed using elements of mathematical statistics.

To test estimators using t-test (t-statistic). If the test is greater than the critical value (the value of the Student distribution table for the relevant degrees of freedom of thought and $T - k$) the null hypothesis is considered significant coefficient. The program used Eviews 8 tested by t test for each coefficient null hypothesis, namely that the coefficient is zero. Both values are reported t test (t-statistic) and associated probabilities (prob). If p is more than likely that is working, then the null hypothesis is accepted and considered coefficient is statistically zero (insignificant).

2.4. Results and interpretation

After checking the statistical hypotheses for the two models used, and their testing revealed the following model:

Dependent Variable: RS(-1)				
Method: Least Squares				
Date: 11/30/14 Time: 22:42				
Sample (adjusted): 2005Q3 2013Q4				
Included observations: 34 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.182532	0.198042	11.02057	0.0000
D(RLV_SIAPA(-1))	0.023896	0.070543	0.338742	0.7374

D(RLV_IND(-1))	0.195166	0.179088	1.089775	0.2854
RLV_CONS(-1)	-0.375628	0.127231	-2.952341	0.0065
D(RLV_COMTUR(-1))	0.276748	0.237171	1.166870	0.2535
D(RLV_AGR(-1))	-0.065868	0.191399	-0.344142	0.7334
D(RLV_TRANZIF(-1))	-0.045361	0.149271	-0.303887	0.7635
R-squared	0.270140	Mean dependent var		1.676471
Adjusted R-squared	0.107949	S.D. dependent var		0.598006
S.E. of regression	0.564807	Akaike info criterion		1.876577
Sum squared resid	8.613203	Schwarz criterion		2.190828
Log likelihood	-24.90182	Hannan-Quinn criter.		1.983746
F-statistic	1.665569	Durbin-Watson stat		2.114960
Prob(F-statistic)	0.167967			

The estimated model shows that the only area that offer jobs compatible with skills and expectations population segment is analyzed only the construction industry. Here then, in the North East region, those who looked for a job in the analyzed period were compatible with seasonal occupations (in constructiilor working on perioade generally determined), most often unqualified, or corresponding trades which, the old order had dedicated training in school education (construction, lathe, milling cutters, welders, etc.), trades now no longer found in the training programs of the new generation.

The Job vacancies in construction have influenced the statistically significant, inversely, the unemployment rate.

3. Conclusions

The North East Region, is one of the eight development regions of Romania, are experiencing problems that we find throughout Romania, and in Europe in general. Population aging, structural changes in the economy, technological progress, globalization, all these make the labor market to face great challenges. On the one hand, high unemployment among young people, the education system is rigid enough to economic changes, or offer graduates competent in accordance with the request of employers, and population aging, which is no longer found in the labor market. The three actors, policy makers, the employer but the employee must cooperate in issuing policies, their implementation and their investment for a good approximation to the labor market.

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