

REGIONAL DIFFERENCES BETWEEN JOB SEEKERS: CASE OF LATVIA

Kate Lase, University of Latvia

Biruta Sloka, University of Latvia

Abstract. Differences in labour market have always been on great importance in Latvia, however special concern is about regions of Latvia where finding a new job sometimes could be very challenging process, because these regions are developing unevenly, job vacancies are limited, wages are lower and there is a lack of high qualified specialists in labour market. Purpose of the study is to analyse regional differences between job seekers in regions in Latvia.

The tasks of the study:

- 1) To analyse theoretical background of regional differences of job seekers and employment in context of urban and rural areas;
- 2) To analyse main challenges and problems of regional differences between job seekers in regions in Latvia.

Research methods used in preparation of the paper were the analysis of scientific publications and previous conducted research results, the analysis of Labour Force Survey results and the analysis of data of Central Statistical Bureau of Latvia. The Survey results are analysed using indicators of descriptive statistics (indicators of central tendency or location - arithmetic mean, mode, median), indicators of variability (indicators of dispersion - range, standard deviation and standard error of mean), cross-tabulation for regions of Latvia, for territories: urban-rural living and analysis of variance - ANOVA are used.

The results of analysis have indicated several differences between regions of Latvia, but there are no differences between job seekers in urban and rural areas of Latvia.

Keywords: *employment, job search, regional differences.*

JEL code: J31; J21; E24

Introduction

According to the Eurostat expected duration of working life in the EU lengthen with every year and now it is 36.4 years (Eurostat). However, there are very important aspects on working life which are important for each country and each individual to have best possible results in working life including education and training, retraining, skills update and many other aspects which are researched also by academic researchers with analysis of different aspects of best possible solutions including aspects of predicting the effect of work values on workplace communication environment and job quality of tertiary students (Chan, Ben Yedder, Vipulakom, 2020).

The economics of countries change during each individual's working life and each country's economic development where there are noticed differences in labour demand and labour supply by different regions in the countries and also by administrative territories.

Taking into account all mentioned before, the purpose of the study is to analyse regional differences between job seekers in regions in Latvia. In order to achieve the purpose, the tasks are formulated as follows:

- to review theoretical background of regional differences of job seekers and employment in context of urban and rural areas;
- to analyse main challenges and problems of regional differences between job seekers in regions in Latvia.

Research methods used: scientific publications and previous conducted research results analysis, analysis of "The Labour Force Survey" results (in 2014-2019) and European Central Bank conducted survey on Household income and expenses survey results (HFCS), results are compared with the results of other Eurozone countries. For statistical data analysis there are used main indicators of descriptive statistics (arithmetic means, standard deviations and standard error of means), t - test for testing differences of means by two independent characteristics - territories (cities and rural areas) and for testing differences of arithmetic means by six independent characteristics - regions of Latvia was used one of the most often used multivariate analysis method: analysis of variance – ANOVA.

Literature Review

Researchers world-wide have analysed different aspects influencing labour market including several aspects of job seekers; regional differences, unemployment rate, education level, quality of education, gender, family status (married or not married, with children or without children).

Extensive studies of different labour market aspects are done by Mihails Hazans, professor of University of Latvia and also researcher of IZA-Institute of Labor Economics, Germany. Research results of professor Mihails Hazans are inspiring many researchers and his findings are often used as valuable examples for other researchers related to different employment aspects: like, looking for the workforce: how the elderly, discouraged workers, minorities, and students are involved in the Baltic labour markets (Hazans, M., 2007). Professor Hazans has performed many analysis and his research results are used world-wide.

Differences in regional unemployment have been on research agenda for last decades as more and more countries seek to develop regions and apply appropriate policies. Geographic labour mobility is important factor for an efficient labour market and has consequently been extensively studied (Boman, 2012).

Importance of the effect of early career social capital on long-term income development in Finland (Oinas, Ruuskanen, Hakala, Anttila, 2020) where the results of the mentioned researchers give strong and reasonable support to the idea that social capital can be transformed into economic capital.

Quality of educational programs and correspondence of those programs to labour market needs are requirements by employers, by policy makers and students – this aspect is on extremely big importance as it is recognised also by academic researchers with entrepreneurial intention model focusing on different aspects of higher education (Tomy, Pardede, 2020).

Role of personality has shown significant influence on occupational sorting and routine work (Viinikainen, et al, 2020). Alternative models of activation policies are studied in research done by researcher G. Scarano (Scarano 2020) where there in the respective research where are analysed administrative data and the experience of public oriented services.

Researchers are analysing also different fields and specialities, for example, network analysis in accounting research with deep analysis on institutional and geographical perspective (Uyar, Kılıç, Koʻ eoğlu, 2020), gender importance as well as gender and network effects on occupation (Fung, 2020), on hiring discrimination against transgender job applicants – considerations when designing a study (McFadden, 2020), on life outside the garment factories: the lived experiences of factory workers (McKay, McKenzie, 2020). The mentioned factors are considered as important aspects influencing job seekers.

There is done extensive analysis on socio-economic determinants of public expenditure by assessing the influence of population age structure (Azolibe, Nwadibe, Okeke, 2020), importance of social capital, labour market status and wages (Caparrós Ruiz, 2020) and having influence also on growth factors of the industry development aspects (Mayerhoffer, 2020). Age structure is mentioned as one of the most important aspects in job seeking process.

Study in Germany revealed that regional unemployment is very pronounced in Germany and there are significant differences between the eastern and the western regions (Granato, et al, 2015). Another study in Germany was investigating how potential duration of unemployment benefits affects early job search behaviour and re-employment outcomes and revealed that the extension of benefits increases the average nonemployment duration of individuals (Lichter, Schiprowski, 2021). Regional differences for job seekers are confirmed also by other researchers.

Different situation is in Croatia where the main problems of the Croatian regional labour markets are low flexibility of the labour market and inexistence of adjustment mechanisms such as wage adjustment. Results of this study also indicate that Croatia is highly centralised and other counties than Zagreb have low fiscal capacity (Jakšic, 2017). Low flexibility of the labour marked could be considered as important and influencing factor for job seekers.

Regional unemployment in context of youth unemployment have been studied in Slovakia. The study revealed that in districts with low unemployment rate the job offer exceeds demand, but in the region with the highest rates there is graduate overqualification and the job offer is very limited. The research indicated that youth unemployment rate is related to the graduate's education and is achieving different values in the respect to the region (Strakova, 2018). Youth unemployment differs by country but it is an important factor influencing job seekers also by regions.

Researchers (Audretsch et. al., 2015; Bergantino and Madio, 2019; Huertas, et al, 2019) were researching the link between regional unemployment and entrepreneurship and revealed that regional influence is important factor.

Study in Netherlands was researching how the location of job influence job search and revealed that jobseekers tend to take jobs in regions close to their old working region (Morkute, 2017). Study in San Francisco was researching relationship between job seeker's search effort and the duration of the search and indicated that long-duration job seekers send more applications each period what is contrary with standard search theory that higher search effort should lead to a higher job-finding rate and shorter search durations (Faberman, Kudlyak, 2016) and could be considered as important aspect influencing job seeking.

Boman (2012) reveals that in Sweden education, being a male, married increases the probability of employment, while having children or being older than 45 decrease probability of employment after being unemployed.



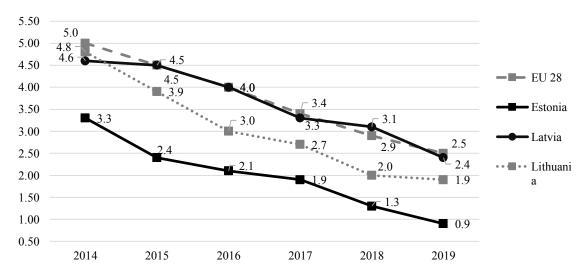
Study in Romania was researching rural unemployment spells and exit destinations and revealed that more attention from policy makers is necessary. To reduce unemployment duration and to improve employment Romanian policies needs to be targeted towards unemployed women over 45. Thus, another implication is to increase level of education of those living in rural areas, especially developing practical skills (Danacica, Cirnu, 2014). Such aspects are stressed also in other scientific publications by other authors and conclusions are alike in many countries and continents.

Methodology

In order to get a broader view of job search duration in regions and territories of Latvia, different data sourced were used in this research – anonymized data sets of Labour Source Survey 2019 in Latvia (to make own calculations and analysis of representative survey data) and data of Eurostat and Central Statistical Bureau of Latvia.

The nature of the Labour Force Survey 2019 – to survey households selected according to a definite system on a weekly basis throughout the whole year. Information about labour status of the population of Latvia and situation in the labour market covers population aged 15–74 (in several tables population aged 18–24, 30–34, 15–64, 20–64 or 25–64). The annual data of the survey are calculated as arithmetic mean of the quarterly indicators. Extrapolation of the annual survey results is made based on the average quarterly statistics on usually resident population living in private. Labour Force Survey methodology has been developed based on the methodology worked out by the International Labour Organization (ILO). The same methodology is also used by the Eurostat and the Organization for Economic Cooperation and Development (OECD) therefore, all data are internationally comparable (The Labour Force Survey, 2019) and is good that it is possible to use anonymized survey data for deeper analysis.

Research results and discussion

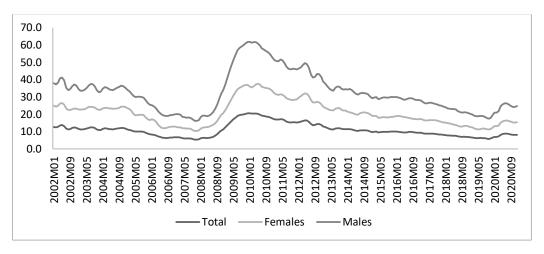


Source: author's construction based on data of Eurostat

Fig. 1. Long-term unemployment rate in Baltic states and EU average from 2014 to 2019, %

Long-term unemployment is indicator that measures the share of the economically active population aged 15 to 74 who are out of work and have been actively seeking employment for at least a year. According to Figure 1 the lowest long-term unemployment from Baltic countries is in Estonia, followed by Lithuania, while the highest long-term unemployment is in Latvia and it is below EU average.

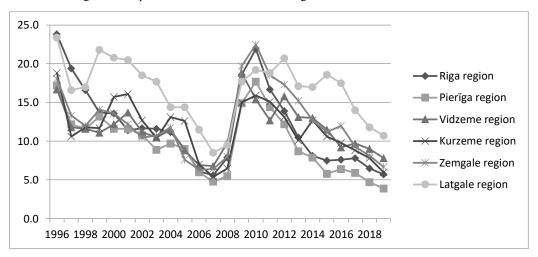
Data of unemployment rate in Latvia buy gender is reflected in figure 2.



Source: author's construction based on data of Central Statistical Bureau of Republic of Latvia

Fig. 2. Unemployment rate in Latvia by gender from 2002 January to 2020 December, %

Unemployment data indicate that female unemployment rate in Latvia is lower during all analysed period. Time series of unemployment rate in statistical regions of Republic of Latvia are reflected in figure 3.



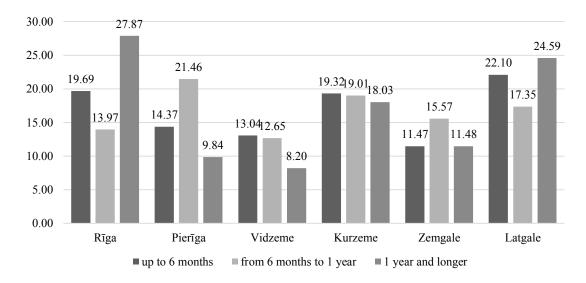
Source: author's construction based on data of Central Statistical Bureau of Republic of Latvia

Fig. 3. Unemployment rate in Latvia by gender from 1996 to 2019, %

Unemployment data indicate that in Latgale region unemployment rate in Latvia is higher since 2012.

According to the administrative breakdown, there are 6 regions in Latvia: Rīga, Pierīga, Vidzeme, Kurzeme, Zemgale and Latgale. In Figure 4 is revealed individual's job search duration in regions of Latvia





Source: author's construction based on data of Labour Force Survey

Within Groups

Total

Fig. 4. Individual's job search duration in regions of Latvia in 2019, %

The statistics shows that the longest job search duration - one year and longer - is for inhabitants from Riga region, followed by Latgale region, while more that 20% of inhabitants of Latgale region spend the shortest time - up to 6 months - seeking for a job. Inhabitants of Zemgale region have the most difficulties in finding a job within six months, but majority of inhabitants of Pierīga region find a job from 6 months to one year long period of time. To evaluate - are there any significant differences between job search duration and regions of Latvia - analysis of variance was used (see table 1).

Ana

Analysis of Variance (ANOVA) on Job Search Duration in 2019 by Regions in Latvia						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	5,502	5	1,100	4,283	0,001	

0,257

Table 1

Source: author's calculations and construction based on data of Labour Force Survey 2019

1369,953

1375,455

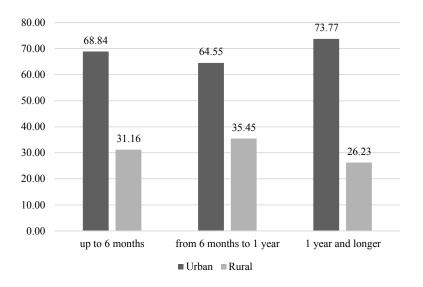
Data of table 1 (results of ANOVA) indicate that there are differences in job search duration in different regions in Latvia and they are statistically significant (sig. 0.001). Job search duration by territories of Latvia is included in Figure 5.

5332

5337

Table 2

Table 3



Source: author's construction based on data of Labour Force Survey 2019

Fig. 5. Individual's job search duration in urban and rural areas of Latvia in 2019, %

Figure 5 indicate that individuals from urban areas search for the job mostly one year and longer while, while individuals in rural areas do it from six months to one year.

Main Statistical Indicators of Job Search Duration in 2019 by Territories in Latvia

	Territory	N	Mean	Std. Deviation	Std. Error Mean
Job search	Urban	3490	1,89	0,542	0,009
duration	Rural	1848	1,89	0,435	0,010

Source: author's calculation and construction based on data of Labour Force Survey 2019

Data of table 2 indicate that there are no differences in job search duration by territories in Latvia. To evaluate –independent sample t-test was used (see table 3).

Analysis of Differences with t-tests on Job Search Duration in 2019 by Territories in Latvia

	Levene's Test for			t-test for Equality of Means						
		Equa	ılity of						95% C	onfidence
		Variances							Interv	al of the
										Difference
						Sig. (2-	Mean	Std. Error		
Analysed aspects		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
Job	Equal	10,703	0,001	-0,472	5336	0,637	-0,007	0,015	-0,036	0,022
search	variances									
duration	assumed									
	Equal			-0,505	4522,400	0,614	-0,007	0,014	-0,034	0,020
	variances									
	not									
	assumed									

Source: author's calculations and construction based on data of Labour Force Survey 2019

Data of table 3 (results of t-test) indicate that there are no differences in job search duration by territories (urban and rural areas) in Latvia and they are not statistically significant (sig. 0.637 and 0.614).

Conclusions, proposals, recommendations



- 1. The analysis of theoretical research revealed that regional differences are on great importance across European Union countries as well as in USA, however job search duration differ by countries and each country have its own challenges to overcome.
- 2. The lowest long-term unemployment from Baltic countries is in Estonia, followed by Lithuania, while the highest long-term unemployment is in Latvia and it is below EU average.
- 3. In case of regions of Latvia longest job search duration one year and longer is for inhabitants from Riga region, followed by Latgale region, while more that 20% of inhabitants of Latgale region spend the shortest time up to six months seeking for a job. Inhabitants of Zemgale region have the most difficulties in finding a job within six months, but majority of inhabitants of Pierīga region find a job from six months to one-year long period of time. Also, analysis of variance (ANOVA) indicates that there are differences in job search duration in different regions in Latvia and they are statistically significant
- 4. There are no differences in job search duration by territories (urban and rural areas) in Latvia and they are not statistically significant (sig. 0.000).

Bibliography

Azolibe, C.B., Nwadibe, C.E., Okeke, C.M.-G., 2020. Socio-Economic Determinants of Public Expenditure in Africa: Assessing the Influence of Population Age Structure. *International Journal of Social Economics*, 47(11), 1403-1418.

Audretsch, D. B., Duhse, D., Niebuhr, A., 2015. Regional Unemployment Structure and New Firm Formation. *Papers in Regional Science*, 94, 115-138.

Bergantino, A. S., Madio, L., 2019. Intra- and Inter-Regional Commuting: Assessing the Role of Wage Differentials. *Papers in Regional Science*, 98(2), 1085-1114.

Boman, A., 2012. Employment Effects of Extended Geographic Scope in Job Search. Labour Economics, 19, 643-652.

Caparrós Ruiz, A., 2020. Social Capital, Labour Market Status and Wages: Some Evidence from Spain. *International Journal of Social Economics*, 47(4), 539-560.

Chan, S.H.J., Ben Yedder, M., Vipulakom, K., 2020. Predicting the effect of work values on workplace communication environment and job quality of tertiary students. *Journal of International Education in Business*, 13(2), 239-261.

Danacica, D.E., Cirnu, D., 2014. Unemployment Duration in Rural Romania, Procedia Economics and Finance, 15, 1173-1184.

Eurostat. 2019. Duration of working life – annual data. Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-208320_QID_-625504A8_UID_-3F171EB0&layout=TIME,C,X,0;GEO,L,Y,0;SEX,L,Z,0;INDICATORS,C,Z,1;&zSelection=DS-208320SEX,T;DS-208320INDICATORS,OBS_FLAG;&rankName1=INDICATORS_1_2_-

1_2&rankName2=SEX_1_2_0_0&rankName3=TIME_1_0_0_0&rankName4=GEO_1_2_0_1&sortC=ASC -

Faberman, R.J., Kudlyak, M., 2016. The Intensity of Job Search and Search Duration, Federal Reserve Bank of San Francisco.

Fung, K.Y., 2020. Gender and Network Effects on Occupation: a Case study of China. *International Journal of Sociology and Social Policy*, 40(3/4), 267-281.

Granato, N., Haas, A., Hamann, S., Niebuhr, A., 2015. The Impact of Skill-Specific Migration of Regional Unemployment Disparities in Germany. *Journal of Regional Science*, 55(4), 513-539.

Hazans, M., 2007. Looking for the Workforce: The Elderly, Discouraged Workers, Minorities, and Students in the Baltic Labour Markets. *Empirica*, 34(4), 319–349.

Huertas, I. P., Ramos, R., Simon, H., 2019. Revisiting Interregional Wage Differentials: New Evidence from Spain with Matched Employer-Employee Data. *Journal of Regional Science*, 60(2), 296-347.

Jakšic, S., 2017. Explaining Regional Unemployment in Croatia: GVAR Approach. Revija za Socijainu Politiku, 24(2), 189-217.

Lichter, A., Schiprowski, A., 2021. Benefit Duration, Job Search Behaviour and Re-employment. Journal of Public Economics, 193, 104326.

Mayerhoffer, M., 2020. Growth Factors of the Coworking Industry: the Case of Prague. Journal of Property Investment & Finance, 38(3), 203-212.

McKay, F.H., McKenzie, H.J., 2020. Life Outside the Garment Factories: the Lived Experiences of Cambodian Women Garment Factory Workers. *International Journal of Migration, Health and Social Care*, 16(4), 415-427.

McFadden, C., 2020. Hiring Discrimination against Transgender Job Applicants – Considerations when Designing a Study. *International Journal of Manpower*, 41(6), 731-752.

Morkute, G., 2019. Location-Specific Knowledge in Spatial Job Search and its Outcomes: An Empirical Investigation. *Papers in Regional Science*, 98, 1373-1395.

Oinas, T., Ruuskanen, P., Hakala, M., Anttila, T., 2020. The Effect of Early Career Social Capital on Long-Term Income Development in Finland. *International Journal of Sociology and Social Policy*, 40(11/12), 1373-1390.

Strakova, R., 2018. Regional Disparities and Unemployment Rate: Role of Education in Regional Development. *Journal of Applied Economic Science*, 3(57), 663-672.

The Labour Force Survey 2019 [online]. [cit. 2020-10-20] Available at: https://admin.stat.gov.lv/system/files/publication/2020-06/Nr_15_Darbaspeka_apsekojuma_galvenie_raditaji_2019_gada_%2820_00%29_LV_EN.pdf

Scarano, G., 2020. Alternative models of activation policies: the experience of public oriented services. *International Journal of Sociology and Social Policy*, 40(3/4), 382-408.

Uyar, A., Kılıç, M., Ko eoğlu, M.A., 2020. Network analysis in accounting research: an institutional and geographical perspective. *Journal of Applied Accounting Research*, 21(3), 535-562.

Viinikainen, J., Böckerman, P., Elovainio, M., Hakulinen, C., Hintsanen, M., Kähönen, M., Pehkonen, J., Pulkki-Råback, L., Raitakari, O., Keltikangas-Järvinen, L., 2020. Personality, Occupational Sorting and Routine Work. *Employee Relations*, 42(6), 1423-1440.

The paper was supported by the NATIONAL RESEARCH PROGRAMME "LATVIAN HERITAGE AND FUTURE CHALLENGES FOR THE SUSTAINABILITY OF THE STATE" project "CHALLENGES FOR THE LATVIAN STATE AND SOCIETY AND THE SOLUTIONS IN INTERNATIONAL CONTEXT (INTERFRAME-LV)"