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# Job Change in Latvia: The Role of Labor Market Conditions and Employees' Socio-Demographic Characteristics

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### Abstract

The study examined the relationship between job change, employee's socio-demographic characteristics and labor market conditions in Latvia. Drawing on a nationally representative sample of employees, retrieved from EU-SILC database, inferential and correlational analysis showed that employee job change has relatively closer relationship with the employee age, than with the unemployment rate, number of occupied posts or vacancies in the region, where the employee lives. However, the observed correlations generally can be assessed as weak.

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# 1. Introduction

Workforce movement from one employer to another creates dynamic labor market, which in turn contributes to building an efficient employment. On the other hand, excessive workforce mobility may lead to negative consequences due to the loss of human capital<sup>1</sup>. According to the results of *Eurofound* study, in the pre-crisis period (2002-2007) Latvia had the lowest average continuous length of service or continuous employment with the same employer among the European Union member states - 7 years and 4 months<sup>2</sup>. However, in the crisis period (2008-2012) the average length of continuous employment in Latvia has increased significantly. In 2014 employees with a

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continuous length of service with the same employer for 10 years or more accounted for 30% of the total number of workers<sup>3</sup>. This is slightly lower than the total level in the member states of the OECD (32%), but lags far behind the respective levels in the Continental Europe. For example, number of long-term employees in Italy was 50%, in France - 46%, in Belgium - 43%, in Germany - 42%, in Spain and in the Czech Republic - 41%.

The development of long-term employment in Latvia creates favorable conditions for the companies regarding maximization in the return on investment in human capital as well as provides new challenges for maintaining high motivation in the existing workforce as well as attracting new workforce. According to the research results of experts from the Latvian banking sector on the changes in the Latvian labor market in 2008-2013, since 2010 it has been more difficult for the local employers to adjust the salaries of the existing workforce than it has been during the years of crisis<sup>4</sup>. At the same time many companies experience lack of skilled workers, which, according to the medium- and long-term demographic forecasts, is growing<sup>5</sup>, and it will be more difficult to find suitable workers. Even with the improvement of financial situation of the companies and therefore more ambitious investments in human capital, the negative demographic trends, in particular decrease of the number of the working age population, will lead to higher competition among companies in attracting and retaining the workforce. In the theoretical models of employee turnover the labor market situation<sup>6,7,8</sup> and socio-demographic characteristics of employees<sup>6,9,10</sup> are viewed as a separate set of factors. The objective conditions, such as the job growth rate and unemployment rate in the domestic and professional labor market<sup>11</sup>, number of visible companies<sup>12</sup> and specific job offers<sup>13</sup> may influence the employee's views on how easy it is to change job and to encourage him/her to stay in the current workplace or leave it. In turn, the employee's socio-demographic characteristics, such as age<sup>14</sup>, gender, marital status<sup>15</sup>, the number of children<sup>16</sup>, education<sup>17</sup>, economic status<sup>18</sup> etc. can also influence the motivation to stay in the existing workplace or not. However, not always the importance of labor market<sup>19, 20, 21</sup> and socio-demographic<sup>16,22,23</sup> factors is confirmed with regard to the employee turnover.

# 2. Methodology

In order to find out the reasons for a job change and how they correlate with the socio-demographic characteristics of the respective group of individuals as well as labor market indicators, the Central Statistical Bureau of Latvia (CSB) provided anonymized individual data as well as databases. The anonymized individual data is obtained from the "Income and Living Conditions Survey" (hereinafter - the EU-SILC) from the reports of ten years (2005-2014). EU-SILC database allows to find out the reasons for the voluntary and involuntary termination of employment relationship in more detail. The anonymized individual EU-SILC data provided by the CSB about the respondents aged 16-74 years and living in private households in Latvia were processed and analyzed. The sample established from the EU-SILC data does not include persons living in collective households (homes for the elderly, disabled children, student dormitories, hotels, barracks, hospitals, sanatoriums, prisons, etc.). IBM© SPSS© Statistics Version 23 software was used for the data processing. Statistical tests were used for the data quantitative analysis in order to identify significant differences and correlation among the selected variables in the database.

In order to choose appropriate statistical tests, the empirical distribution of quantitative variables were tested with regard to normal distribution using the Kolmogorov-Smirnov test, which is valid for large samples (sample size researched in all reporting years is variable and above 350 respondents - respondents who changed jobs in the last 12 months from the time of the survey interview). According to the results of this test, the empirical distribution of quantitative variables – socio-demographic characteristics of employees, such as the number of persons in the household, number of children younger than 18 years and age of the respondent - do not correspond to normal distribution (p < 0.05). The inverse transformation of these variable data does not make the empirical distribution more approximate to the normal distribution (p < 0.05). As one part of the studied variables are qualitative variables and another part - quantitative variables with the empirical distribution that does not correspond to the normal distribution, non-parametric methods were used to identify significant differences and data correlation. Statistically significant correlations were checked using Spearman rank correlation coefficient ( $r_s$ ). The Asymptotic method were applied for the conclusions on significance of criteria were evaluated with the Fisher's Exact Test<sup>24</sup>.

#### 3. Job change and employee's socio-demographic characteristics

During the reporting period, the biggest number of employees who has changed the job in the past 12 months from the time of the survey interview changed, it was the highest in 2006 (10.48% of the total workforce or 104 801 people), while the lowest - in 2009 and 2013 (6.48% and 6.51% respectively ) (see Fig. 1). The obtained rates are close to the natural rate of unemployment in the Latvian labour market, which ranged from 8 to 13% from 2006 to  $2014^{25}$ .



Fig. 1. The number of employees who have or have not changed the job in the last year (2005-2014).

Changes in the total number of employees and in the number of employees who changed jobs are almost identical, except for the period of economic recession in 2009 and 2010 (see Fig. 2). During these years faster changes in the number of employees who changed jobs can be observed: in comparison with the total number of employees, number of employees in this group decreased more than 1.6 times in 2009 and increased more than 1.4 times in 2010. During the period of economic recession the number of filled posts and vacancies decreased substantially<sup>26</sup>. Consequently the working population had fewer options for changing jobs to a better position and for the non-employed workforce it has become more difficult to restore their employee status<sup>27</sup>. In 2010, with an increase of the non-employed workforce, job change most often is associated with involuntary reasons - loss of previous jobs because of redundancy, contract expiry, etc.



Fig. 2. The employees who have changed the job in the last year (2005-2014).

Similar tendencies in the job change as in 2009 and 2010 can be observed in 2013 and 2014 but they are relatively moderate. During this period number of jobs increased; however, this increase is small<sup>26</sup>. In 2013 these

restrictive factors were still important for changing job to better position. In addition, the individuals who were unemployed previously, could be uninterested in such a job change. But in 2014 the change of job was strongly determined by accepting a better job offer or search for a better job.

Almost in the whole reporting period, men changed their jobs more often than women but in the last reporting years (2013-2014) the percentage of those who do change their job and those wo do not change was similar in both gender groups (6-8% and 92-94% respectively). The results of Chi-square test confirms the above mentioned trends: statistically significant differences in job change between gender groups have been identified in 2005-2012 (2005-2008, 2010-2012 p < 0.01; 2009 p < 0.05). The employees who had never been married change the job more frequently (8.10 to 15.63% of all employees having this family status). The least inclined to change jobs are widows and widowers (4.45 to 9.22%). The results of Chi-square test confirm that statistically significant differences are observed in the groups of employees with different family status in the entire reporting period (2005-2012, 2014 p < 0.01; 2013 p < 0.05).

Analyzing the relationship between educational level and job change, the group of employees with pre-primary education has been removed from the sample set, because it is very small (EU-SILC provides data about this group that differs from zero only in 2005, 2008 and 2010) and its inclusion in the comparison of employee groups may distort the results of analysis. The results of Chi-square test show statistically significant differences on the other levels of education during the entire reporting period (2005-2012, 2014 p < 0.01; 2013 p < 0.05). Employees, who have primary education or first grade general education change jobs more frequently. Proportion of the secondary, post-secondary non-tertiary or higher education employees who have changed jobs is unstable in the respective groups. Comparing the average indicators, employees with higher education change jobs less often (an average of 6.77% in the reporting period, employees with secondary education - 9.03%; employees with post-secondary non-tertiary education - 7.81%).

From 2005 to 2007, and in 2014 statistically significant differences of job change are observed according to the region employees are living (2005-2007., 2014 p < 0.01; 2012 p = 0.05); no statistically significant differences are identified in 2008-2011 and in 2013. Almost in all reporting years employees living in Latgale have changed jobs less frequently (from 4.44 to 8.52%). In other regions the proportion of employees who changed jobs is unstable with regard to the total number of employees in the region. With regard to this proportion, Riga was first among the regions in 2008 (12.09%) and 2014 (11.51%). It should be noted that with regard to the economic status of employees, in 2009 the CSB introduced a new methodology for grouping data on the economic status of the frequency of job change does not differ significantly in the employee groups with different economic status, with the exception in 2009 and 2010 (p < 0.01). In 2009, full-time employees changed their jobs significantly less frequently than part-time employees - the difference is 1.86 times. In 2010, part-time employees changed their jobs more frequently - the difference is 1.61 times.

The results of Mann-Whitney test show that in the entire reporting period the age group of employees who changed their job differs from the age group of employees who did not change their job (p < 0.01): younger employees change their jobs more frequently. Both groups of employees that have been studied also differ in the entire reporting period by the number of children aged 18 years or younger in the household (2005, 2008, 2014, p < 0.05; 2007, 2009-2011, 2013 p < 0.01), with the exception of 2006 and 2012: in general employees with more children change their jobs more frequently. By contrast, the number of persons in the household is of less importance: statistically significant difference in the both groups that have been studied can be observed only in 2005 (p < 0.05; 2011 p = 0.05).

Although a statistically significant difference in results of the study confirm that employees, who have changed their jobs, differ by numerous socio-demographic characteristics, further correlation analysis reveals that there is a weak relationship or statistically insignificant relationship between job change and these characteristics. The age of employees has the highest correlation coefficient with the job change in all reporting years ( $r_s = -0.092 - (-0.148)$ ; p < 0.001). The second most important parameter, according to the correlation coefficient value, is the educational level (2006-2011  $r_s = -0.054 - (-0.094)$ ; p < 0.001). In general, the values and statistical significance of socio-demographic characteristics correlation coefficients are unstable, which can be explained by potential impact of other factors.

Analyzing the reasons of job change, it can be concluded that in all reporting years the main reason is acceptance of a better job or search for a better job (see Fig. 3). In 2006-2008 and in 2014 70-76% of employees changed jobs for this reason. In 2009 increased the proportion of employees who changed their jobs for involuntary reasons (due to the close of business, redundancy, early retirement, dismissal, etc.) - 36.64%, which is the highest in the entire reporting period. Since 2011, the number of employees who changed their jobs for involuntary reasons tends to decrease. Relatively few employees have changed jobs as a result of family situation (child care and care for other dependents; they have to change location due to the job of their partner / marriage) or due to selling or closing their own / family business, in general their proportion varies from 0.00% to 2.26%.



Fig. 3. Reasons for job change (2005-2014).

According to the results of Kruskal-Wallis and Jonckheere-Terpstra tests, statistically significant differences in the employee socio-demographic characteristics by the reasons of job change in the entire reporting period can be observed in employee groups with various economic status (p < 0.01-0.05). Full-time employees change jobs due to acceptance of better job offer more frequently than part-time employees. By contrast, part-time employees change jobs due to the expiry of the contract or due to involuntary reasons relate to the activities of employer more frequently. An exception is years 2009 and 2010, when both full and part-time employees have changed their jobs for involuntary reasons in similar proportions (in 2009 - 22-24%, in 2010 - 36-37%). Different picture can be seen in the data from 2014, where the proportion of part-time employees who have changed their jobs for involuntary reasons decreased significantly and it was more frequent among the full-time employees.

The employee age is rather important with regard to the reasons of job change: among ten reporting years only in 2006, 2009 and 2013 there was no statistically significant difference in the age of employee by the reasons of job change (p > 0.05). Similar results are for the number of children aged 18 years or younger in the household. This indicator does not have statistical significance in 2010, 2011 and 2013 (p > 0.05). Gender, marital status and region, where the employee lives do not have stable impact on the reasons of job change. In 40% -50% of the reporting years these characteristics have statistical significance but the number of years, when these factors do not have statistical significance, is similar (p > 0.05). In turn, separate impact of the employee level of education and the number of persons in the household is rare: for example, employee education levels have statistical significance only in 2008 and 2009 (p < 0.05).

Similarly, as it has been identified previously with regard to the employee socio-demographic characteristics and job change, the correlation between the socio-demographic characteristics and reasons for the job change is weak or statistically insignificant, as well as correlation coefficient values and their statistical significance change from year to year. During the reporting period the economic status of employee had the highest correlation coefficient with the job change reasons ( $r_s = 0.116$  to 0.238; p < 0.05). Gender of employee, region, where employee lives and the level of education had significant correlation with the reason for job change less frequently.

#### 4. Job change and labor market conditions

To assess the impact of the labor market conditions on job change and its reasons, significance of such indicators as the number of occupied posts (total in the country, in the public and private sectors), for the main job with time tracking), the number of vacancies (total in the country, in the public and private sectors), the number of unemployed and the unemployment rate was analyzed. The results of the analysis indicate that all investigated indicators of labor market condition have at least a medium correlation with the number of employees, who changed the job during the last year: the higher the number of vacancies, the more employees tend to change their job ( $r_s = 0.552$  to 0.709; p < 0.05); the same, but in the opposite direction, refers to the number of unemployed and the unemployment rate ( $r_s = -0.600 - (-0.648)$ ; p < 0.05).

Importance of the studied labor market indicators is exposed more accurately in their relationship to the job change reasons. All of the labor market indicators have a high correlation with the number of employees who changed jobs due to an acceptance of better job offer or search for a better job ( $r_s = |0.721$  to 0.952 |; p < 0.01), who changed their jobs for involuntary reasons ( $r_s = |0.697 - 0.830|$ ; p < 0.05, an exception is number of occupied posts in the public sector, which showed no significant correlation with these reasons of job change) or due to child care and care for other dependents ( $r_s = |0.564$  to 0.794 |; p < 0.05). By contrast, such reasons causing job change as the employment contract expiration, change of location due to the job of their partner / marriage, selling or closing a business do not have statistically significant correlations (the exception is the number of occupied posts in the public sector, which have moderate correlation with the job change due to selling or closing a business ( $r_s = -0.588 - (-0.636)$ ; p < 0.05). By studying the correlations between employee job change and labor market indicators at the regional level, it was found that in all regions of Latvia the number of employees, who changed jobs, is related to the indicators of unemployment, occupied or vacant posts. Only in the Pieriga region this correlation has not been observed (p > 0.05). This can be probably explained by the proximity of the national business center - Riga - which is relatively available labor market for workable population.

Although the results of the study confirms that the macro trends of job change are related to the regional labor market dynamics (except Pieriga region), the regional labor market situation has a marginal role in the individual level. Statistically significant relationship between employee job change and the unemployment rate, number of the occupied posts or vacancies in the region, where the employee lives has been observed in 2005, 2006, 2011-2014 but it does not exceed the value |0.085| ( $r_s$ ).

# 5. What is more important for the job change?

To verify, if the job change is more related to employee's socio-demographic characteristics than to labor market indicators, the following formulas have been used (1) - (4):

$$z = (z_{jk} - z_{jh}) \times \sqrt{\frac{n-3}{2-2\times\bar{s}_{jk,jh}}}$$
(1)

$$z_r = 0.5 \times \ln\left(\frac{1+r}{1-r}\right) \tag{2}$$

$$\overline{s}_{jk,jh} = \frac{r_{kh} \times (1 - 2 \times \overline{r}^2) - 0.5 \times \overline{r}^2 \times (1 - 2 \times \overline{r}^2 - r_{kh}^2)}{(1 - \overline{r}^2)^2}$$
(3)

$$\bar{\mathbf{r}} = \frac{\mathbf{r}_{jk} + \mathbf{r}_{jh}}{2} \tag{4}$$

where z - obtained z-value,  $z_r$  - Fishers's Z transformation of correlation coefficient ( $z_{jk}$ ,  $z_{jh}$ ), r - correlation coefficient ( $r_{jk}$ ,  $r_{jh}$ ), n - sample size,  $\bar{s}_{jk,j}$  - covariance,  $r_k$  - correlation coefficient between analyzed correlation coefficients,  $\bar{r}$  – mean of analyzed correlation coefficients<sup>28</sup>.

Calculation results (see Table 1) show that in all years of the reporting period, when statistically significant relationship between the job change and selected labor market indicators has been observed, this relationship is significantly different from the relationship between the job change and the employee's socio-demographic characteristics ( $z > z_{critical}$ ; at  $z_{critical} = 2.575$  (p = 0.01)).

Employee job change has relatively closer relationship with his/her socio-demographic characteristics, namely age, than with the unemployment rate, number of occupied or free posts in the region, where the employee lives. However, the observed correlations generally can be assessed as weak.

Year	Sample size	Correlation between job change and			
		employee's socio-demographic parameter <sup>a</sup> $(r_{s(jk)})$	labor market indicators in the region, where the employee lives <sup>b</sup> ( $r_{s(jh)}$ )	$r_{s(kh)}$	Ζ
2005	3978	0135	A -0.033	0.007	-7.549
2006	4627	0.117	B% 0.029	0.004	4.26
2011	5784	0.148	A 0.023	-0.008	6.74
			Bv 0.025	-0.006	6.639
2012	5643	0.140	B% 0.037	0.030	5.591
2013	5587	0.092	Bv -0.024	-0.022	6.075
2014	5493	0.137	A -0.085	-0.030	11.514
			Bv -0.081	-0.024	11.339
			B% 0.052	0.016	4.523

Table 1. Differences in the employee's socio-demographic characteristics and the labor market indicators correlations with the job change.

<sup>a</sup>- the parameter, which has the highest correlation coefficient with the job change - employee age

<sup>b</sup> - the number of occupied posts (A), the number of vacancies (Bv) or the unemployment rate in the region, where employee live (B%)

Similar correlations have been identified with regard to such specific reasons for job change as acceptance of better job offer or search for a better job. With a 99% probability it can be argued that the job change due to the reasons mentioned above has closer correlation with the age of the employee than the unemployment rate, number of occupied or free posts in the region, where employee lives ( $z > z_{critical}$ ; at  $z_{critical} = 2.575$  (p = 0.01)).

# 6. Conclusion

The study revealed that employees, who have changed their jobs, differ by socio-demographic characteristics, but there is a weak or insignificant relationship between these characteristics and job change. The main reason of job change is acceptance of a better job or search for a better job. There is also a weak or insignificant relationship between employee's socio-demographic characteristics and reasons for the job change.

At the macro-level, labor market indicators have at least a medium correlation with the number of employees, who changed the job, and with the number of employees who changed jobs due to an acceptance of better job offer or search for a better job, or due to involuntary reasons, or due to child care and care for other dependents. However, at individual level, labor market situation has a marginal role.

Since the correlations of the job change and the reasons for job change with employee's socio-demographic characteristics and labor market conditions are weak, then it can be concluded that the job change is determined by other factors. Further studies should clarify the role of economic status, professional and psychological characteristics of employee in the job change. Regarding the labor market conditions, it could be argued that the job change will be likely more affected by the parameters characterizing the job quality than by the quantity of objectively available jobs.

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