PROJEKTU UN KVALITĀTES VADĪBA

OCCUPATIONAL LABOUR MOBILITY

RESEARCH

IEGULDĪJUMS TAVĀ NĀKOTNĒ

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The research group of "Projektu un kvalitātes vadība" Ltd conducting the research "OCUPATIONAL LABOUR MOBILITY " of the activity "Researches of Labour market" within project No.1DP/1.3.1.7.0/10/IPIA/NVA/001 "Development of medium-term and long-term forecasting system for demand of labour market" of the European Social Fund programme "Human resources and employment" addition 1.3.1.7. activity "Development of short-term and long-term forecasting and monitoring system for demand of labour market":

Head of the group of researchers – professor Edgars Kasalis of the University of Latvia (LU). He has a doctoral degree in economic science and has more than 20 years of academic and research work experience at the LU and experience in different international and local scientific projects.

The following responsible researchers participated in development of the research and the following main blocks of activities have been distinguished:

Associate professor of the LU Edgars Brēķis

Planning of detecting and collection of the required data, approbation of data analysis methods, forecasting, and data analysis;

Associate professor of the LU Sandra Jēkabsone

Research of theoretical developments of occupational mobility, qualitative analysis of occupational mobility, summarising research conclusions and development of proposals regarding improvement of labour market policy;

Lecturer of the LU Kārlis Purmalis

Research of theoretical developments of occupational mobility of labour, qualitative analysis of occupational mobility, summarising research conclusions and development of proposals for improvement of labour market policy.

The following researchers also were involved in preparatory stage of the research: Māris Brants and Guna Eglīte.

The information necessary for the research purposes from sector representatives – executives, industry association representatives and industry experts and Latvian and foreign economy experts was acquired from the surveys conducted by SIA "Dorus" within the activity "Surveys in the labour market sector" of the ESF project of the Ministry of Economics of the Republic of Latvia No.1 DP/1.3.1.7.0/10/IPIA/NVA/001"Development of long-term and medium-term forecasting system for demand of labour market".

This document expresses the opinion of the group of researchers that in no way can be considered to be reflecting the opinion of the European Community or the state of Latvia.

Researchers: "Projektu un kvalitātes vadība", Ltd

TABLE OF CONTENTS

SUMMARY 3

TABLE INDEX 5

FIGURE INDEX 7

LIST OF ABBREVIATIONS 8

TERM DEFINITIONS 9

INTRODUCTION 14

RESEARCH METHODOLOGY AND APPLIED SOURCES OF INFORMATION 17

1. THEORETICAL ASPECTS OF LABOUR FORCE MOBILITY 22

2. OCCUPATIONAL MOBILITY OF THE LABOUR FORCE IN LATVIA AND FACTORS AFFECTING IT 31

2.1. TENDENCIES OF OCCUPATIONAL MOBILITY IN LATVIA FROM 2000 TO 2010 31

2.1.1. INTENSITY OF OCCUPATIONAL MOBILITY WITHIN THE SCOPE OF SEPARATE OCCUPATIONAL GROUPS. 39

2.1.2. ANALYSIS OF OCCUPATIONAL MOBILITY BETWEEN VARIOUS OCCUPATIONAL GROUPS .. 52

2.1.3. ASSESSMENT OF SPECIFICS OF OCCUPATIONAL MOBILITY AMONG DIFFERENT OCCUPATIONAL GROUPS 62

2.2. CHARACTERISTIC FEATURES OF OCCUPATIONAL GROUPS AND MOST SIGNIFICANT FACTORS AFFECTING OCCUPATIONAL MOBILITY IN LATVIA 68

3. REGULARITIES AND SIGNIFICANCE OF OCCUPATIONAL MOBILITY IN DEVELOPMENT OF LABOUR MARKET 80

3.1. ANALYSIS OF MUTUAL SIMILARITIES OF OCCUPATIONAL GROUPS AND ASSESSMENT OF THE RELATION DEGREE 80

3.2. TIME AND COST OF OCCUPATIONAL MOBILITY AMONG VARIOUS OCCUPATIONAL GROUPS... 83

3.3. TENDENCIES OF OCCUPATIONAL MOBILITY IN INDUSTRIES OF NATIONAL ECONOMY OF LATVIA 88

3.3.1. TENDENCIES OF LABOUR MOBILITY IN LATVIAN INDUSTRIES FOR THE PREVIOUS TEN YEARS 89

3.3.2 PRESENT TENDENCIES OF LABOUR MOBILITY IN LATVIAN INDUSTRIES 113

3.3.3. TENDENCY FORECASTS OF LABOUR MOBILITY IN LATVIAN INDUSTRIES 126

3.4. OPTIONS TO FACILITATE OCCUPATIONAL MOBILITY ACROSS VARIOUS POPULATION AND OCCUPATIONAL GROUPS 145

CONCLUSIONS 148

SUGGESTIONS ..... **Error! Bookmark not defined.**

REFERENCES 151

APPENDICES 153

SUMMARY

During the research „OCCUPATIONAL MOBILITY OF LABOUR", theoretical concepts with regard to labour mobility, factors that affect them and identification approaches were analysed. Tendencies of occupational mobility of labour in Latvia from 2000 to 2010 and its intensity within separate occupational groups were determined, and occupational mobility among various occupational groups was analysed. As a result of in-depth research of the issue, the factors affecting the occupational mobility (demographic situation and tendencies, education level, labour compensation) were analysed in various occupational groups and from the territorial perspective.

Special attention was paid to assessment of mutual similarities and degree of relation between occupational groups and their effect on occupational mobility in relation to development tendencies of labour market. Effect of occupational mobility on development of labour market was assessed as time and frequency of occupational mobility, its costs among various occupational groups. Usefulness and options of facilitating occupational mobility and options in Latvia were assessed among various population and occupational groups.

The following novelties of the research can be mentioned:

- Features of occupational mobility have been detected in various occupational groups with different qualification degree, identifying high and low incoming and outgoing mobility (mobile and non-mobile occupational groups);
- Upon assessing methodology of occupational mobility in Latvia and foreign countries, mutual similarities of occupational groups were analysed, and the degree of relationship has been detected, as reflected in occupation "Similarity matrix";
- In light of the features of the Latvian labour market and education system, options have been assessed to calculate the time and costs of occupational mobility of labour among various occupational groups;
- It is planned to use results of the research in forecasting labour market tendencies, determining the potential labour mobility among various occupational groups, as well as additional information to determine adequate labour market demand and supply.

The main conclusions and findings of the research are as follows:

1. The occupational mobility in Latvia is affected by and in future will be affected by migration tendencies together with economic development tendencies;

2. According to experts' assessment, a driving force of occupational mobility and a significant factor of influence in all industries in Latvia is the level of remuneration. A significant factor affecting mobility is social security and work environment;
3. As of 2002 to 2010, three most mobile occupations in Latvia were shop assistants and product demonstrators, builders, finance and sales specialists. Representatives of three least mobile occupations were senior officials of municipalities, political and public organisations, various cultural workers, fashion demonstrators and other professions of a narrow specialisation;
4. According to calculations by the research authors, 5.8% of employed persons (or 59 577 people) were annually subjected to mobility from Q1 2002 to Q4 2010.

Key words: occupational mobility, occupational groups, costs, motivation.

TABLE INDEX

Table 1.1. Profession classes according to different skill levels 25
Table 2.1. Distribution of the occupied and the vacant positions in Latvia by occupational groups in 2005 and 2012 34
Table 2.2. Proportion of vacancies in all groups of professions in Latvia and other EU member states , in 2011 35
Table 2.3. Gross salary in Latvia, on average per month by professions and education levels in 2010 (LVL) 36
Table 2.4. Summary of incoming occupational mobility in major group of profession 1 "Managers" ... 39
Table 2.5. Division of the highest incoming profession mobility according to sub-major groups of major group 1 "Managers" 40
Table 2.6. Summary of incoming occupational mobility in major group of profession 2 "Senior specialists" 41
Table 2.7. Division of the highest incoming profession mobility according to sub-major groups of major group 2 "Senior specialists" 42
Table 2.8. Summary of incoming occupational mobility in major group of profession 3 "Specialists" 43
Table 2.9. Division of the highest incoming profession mobility according to sub-major groups of major group 3 "Specialists" 44
Table 2.10. Summary of incoming occupational mobility in major group of profession 4 "Servants" .. 45
Table 2.11. Division of the highest incoming profession mobility according to sub-major groups of major group 4 "Servants" 46
Table 2.12. Summary of incoming occupational mobility in major group of profession 5 "Service and sales employees" 47
Table 2.13. Summary of incoming occupational mobility in major group of profession 6 "Qualified agriculture and fishery employees" 48
Table 2.14. Summary of incoming occupational mobility in major group of profession 7 "Qualified workers and craftsmen" 49
Table 2.15. Summary of incoming occupational mobility in major group of profession 8 "Operators of equipment and machinery" 51
Table 2.16. Summary of incoming occupational mobility in major group of profession 9 "Simple professions" 52
Table 2.17. Division of the highest incoming external profession mobility according to major groups in major occupational group 1 "Managers" 53

Table 2.18. Division of the highest incoming external occupational mobility according to major groups in major occupational group 2 “Senior specialists” 54
Table 2.19. Division of the highest incoming external occupational mobility according to major groups in major occupational group 3 “Specialists” 55
Table 2.20. Division of the highest incoming external occupational mobility according to major groups in major occupational group 4 “Servants” 56
Table 2.21. Summary of incoming occupational mobility in major group 5 of professions “Service and sales employees” from other major groups 56
Table 2.22. Summary of incoming occupational mobility in major group 6 of professions “Qualified agriculture and fishery employees” from other major groups 57
Table 2.23. Summary of incoming occupational mobility in major group 7 of professions “Qualified workers and craftsmen” from other major groups 59
Table 2.24. Summary of incoming occupational mobility in major group 8 of professions “Operators of equipment and machinery” from other major groups 60
Table 2.25. Summary of incoming occupational mobility in major group 9 of professions “Simple professions” from other major groups 61
Table 2.26. Specifics and particular tendencies of occupational mobility in Latvia from 2002 to 2010 63
Table 3.1. Indirect costs of occupational mobility 86

FIGURE INDEX

Figure 2.1. Division of the employed by professions in Latvia and EU-27 countries, in 2012 32

Figure 2.2. Structure of the unemployed by professions in EU-27 countries and Latvia, in 2012 33

Figure 2.3. Structure of the unemployed by professionw in the EU member states, in 2012 34

Figure 3.1. Occupational group dendogram 82

LIST OF ABBREVIATIONS

CSB	Central Statistical Bureau
EC	European Commission
EEA	European Economic Area
ESF	European Social Fund
EU	European Union
GDP	gross domestic product
ILO	International Labour Organization
MoE	Ministry of Economics of the Republic of Latvia
NACE	Statistical classification of economic activities
OECD	Organisation for Economic Cooperation and Development

TERM DEFINITIONS

Position Form of employment at an organisation as defined by features of the respective occupation and qualification[1].

Employer Person who works at own enterprise, professional practice or farm (fishery) with the aim to generate income or benefit and employs one or several persons for a remuneration[2].

Employee (worker) Person who performs some work (including also at a family's farm or also at a family's enterprise/private practice), wherefrom the person or his/her family obtains income, profit (payment in cash, remuneration in goods or services)[3].

Economically active population (labour) Persons of both genders who, in the reporting period, supply their labour for manufacturing material goods or providing services. Economically active population consists of the employed and job seekers (both the ones registered with the State Employment Agency as well as the unregistered ones), who are actively looking for work[4].

Economic activity rate Proportion of the economically active population in the total population of the corresponding age group, in per cent[5].

Incoming occupational mobility Occupation to which an individual transfers in case of change of occupation[6].

Outgoing occupational mobility Occupation that an individual leaves in case of change of occupation[7].

Qualification

1) Official result of assessment and recognition obtained when a competent structure establishes that an individual has reached research results in compliance with particular standards[8].

2) Level of a person's professional knowledge and skills[9].

[1] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.
[2] CSB database, available at: http://www.csb.gov.lv/statistikas-temas/termini/darba-devejs-ipasnieks-35279.html.
[3] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.
[4] CSB database, available at: http://data.csb.gov.lv/DATABASE/Iedzsoc/Ikgad%E7jie%20statistikas%20dati/Nodarbin%E2t%EEba/NB01.htm.
[5] Ibid.
[6] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.
[7] Ibid.
[8] Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (Text with EEA relevance) (2008/C 111/01), Official Journal of the European Union 6.5.2008.
[9] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.

Mobility Transportability, movement[10].

Skills Special competences acquired in training or practice and useful for work[11]. They include ability to acquire, restore and extend theoretical knowledge and skills, use them creatively in practice to perform work tasks[12].

Skill level The required level of education, specialisation and experience of practical work that ensures successful performance of work tasks[13].

Occupation Qualified occupation/type of occupation (position, trade, speciality), where the employee needs a certain education, knowledge, experience, skills and expertise[14].

Classification of occupations Systematised list of occupations where occupations have been systematised in groups according to internationally recognised codes[15].

Major occupational groups Occupational groups grouped according to the codes of the International Labour Organization in an ascending by the degree of their similarity (from 0 to 9)[16].

Occupational standard Theoretical and practical preparedness that allows performing the work that corresponds to a certain level of complexity and responsibility[17].

Occupational qualification The documentary assessment of education and professional mastery corresponding to certain occupation[18].

Occupational mobility Employee's readiness and ability to change occupation and/or place of employment[19]. It can be expressed both as movement within the scope of the present place of employment by taking a different position (internal mobility), and as change of the place of employment or occupation (profession) (external occupational mobility).

Occupational qualification levels A different division of occupational classification according to educational level or programme type (in the Latvian education system, there are five levels of occupational qualification: 1 (lowest) to 5 (highest))[20].

Speciality Division within occupation characterised by specific knowledge, skills and special proficiency.

[10] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.
[11] Cambridge Business English Dictionary /skill – a particular ability that you develop through training and experience and that is useful in a job/.
[12] Profession Classification ("LV", 299/304 (1360/1365), 21.10.1998.).
[13] Ibid.
[14] Ministry of Welfare of the Republic of Latvia, available at: http://www.lm.gov.lv/text/80.
[15] Labour force occupational mobility, EU Structural Funds National programme "Labour market studies" project "Studies of the Ministry of Welfare", LU, Riga, 2007.
[16] Ministry of Welfare of the Republic of Latvia, available at: http://www.lm.gov.lv/text/80.
[17] Ibid.
[18] National database of education options, available at: http://www.niid.lv/node/372.
[19] Authors' definition.
[20] Ministry of Welfare of the Republic of Latvia, available at: http://www.lm.gov.lv/text/80.

Major occupational groups (ISCO 88 ed.)

CODE	MAJOR GROUPS
OC1	Managers
OC2	Professionals
OC3	Technicians and associate professionals
OC4	Clerical support workers
OC5	Service and sales workers
OC6	Skilled agricultural, forestry and fishery workers
OC7	Craft and related trades workers
OC8	Plant and machine operators, and assemblers
OC9	Elementary occupations
OC0	Armed forces occupations

Hierarchy and amount of occupational classification groups[21]

MAJOR GROUPS	SUB-MAJOR GROUPS	MINOR GROUPS	SEPARATE GROUPS
1. Managers	4	11	30
2. Professionals	6	27	90
3. Technicians and associate professionals	5	20	81
4. Clerical support workers	4	8	29
5. Service and sales workers	4	13	38
6. Skilled agricultural, forestry and fishery workers	3	6	15
7. Craft and related trades workers	5	14	66
8. Plant and machine operators, and assemblers	3	14	40
9. Elementary occupations	6	11	33
0. Armed forces occupations	3	3	3

[21] Ministry of Welfare of the Republic of Latvia, available at: http://www.lm.gov.lv/text/80.

Statistical classification of economic activities by NACE Rev. 2

CODE	FIELD
A	Agriculture, forestry and fishing
B	Mining and quarrying
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply; sewerage, waste management and remediation activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transportation and storage
I	Accommodation and food service activities
J	Information and communication
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support service activities
O	Public administration and defence; compulsory social security
P	Education
Q	Human health and social work activities
R	Arts, entertainment and recreation
S	Other service activities
T	Activities of households as employers; undifferentiated goods- and services producing activities of households for own use
U	Activities of extraterritorial organisations and bodies

Education levels (according to ISCED97 classification)[22]

LEVEL	NAME
Level 0	Pre-primary education
Level 1	Primary education or first stage of basic education
Level 2	Lower secondary education or second stage of basic education
Level 3	(Upper) secondary education
Level 4	Post-secondary non-tertiary education
Level 5	First stage of tertiary education
Level 6	Second stage of tertiary education

[22] Eurostat database, available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:International_standard_classification_of_education_(ISCED)

INTRODUCTION

Topicality of the research "OCCUPATIONAL MOBILITY OF LABOUR" is determined by the necessity to provide substantiated, clear and sufficiently detailed information to developers of structural economic policy regarding consistency of occupational mobility of population and the factors affecting it.

Subject of the research "OCCUPATIONAL MOBILITY OF LABOUR" is occupational mobility of labour, its intensity and main factors affecting it in Latvia from 2000 to 2010. The research analyses occupational mobility of economically active population at the age group of 15 to 74. Occupational mobility is employees' readiness and ability to change occupation and/or place of employment, and it is significant for ensuring efficient operation of labour market. It can be expressed both as movement within the scope of the present place of employment by taking a different position (internal mobility), and as a change of the place of employment and/or occupation (external occupational mobility). From 1999 to 2005, approximately 6.3% of the economically active population in Latvia were occupationally mobile, which is less than average in the EU[23]. Similarly during the previous years, the level of labour mobility has not increased significantly as it was limited due to economic recession (from 2008 to 2010) resulting in increase in unemployment and decrease of options to find or change job. Insufficient mobility can hinder development of new, knowledge-intensive sectors in the country, and limit economic growth in general.

The goal of the research is to assess the intensity of the occupational mobility of labour within various occupational groups and among them, taking into account the specifics of the Latvian education system and structural changes in the labour market.

Main **tasks** of the research:

- To determine the intensity of occupational mobility in each occupational group during the last 10 years;
- To study the best way of quantifying intensity of occupational mobility in occupational groups and what determines it. To identify what are the specific skills for the studied occupational groups;
- To study what methodology would be applicable to calculate mutual similarities of occupational groups. Applying adequate methodology, to calculate level of relationship between occupational groups;

[23] OCCUPATIONAL MOBILITY OF THE LABOUR FORCE, EU Structural Funds National programme "Labour market researches" project "Researches of the Ministry of Welfare", LU, Riga, 2007.

- To calculate occupational mobility of labour among certain occupational groups during the last 10 years. To identify what main factors have determined it;
- To study and calculate what is the time and costs of occupational mobility of labour among various occupational groups taking into account the specific features of the Latvian labour market and education system;
- To describe research results and provide main conclusions resulting from the research that would be used after the research for development of medium and long-term forecasts of the labour market.

The research reviews the intensity and tendencies of occupational mobility of labour in Latvia from 2000 to 2010 both in separate occupational groups and among various occupational groups distinguishing specific skills of the studied occupational groups. Likewise factors affecting the occupational mobility are analysed with a focus on the following groups of factors:

- economic factors (salary, career and development opportunities, working conditions etc.);
- demographic factors (population age, gender);
- education level (according to the 3 educational levels in compliance with the education classification[24] structure in Latvia);
- occupation type (high qualification, medium qualification and low qualification occupations);
- regional factors.

Special attention is drawn to features of occupational mobility in various occupational groups with various qualification degrees, identifying occupational groups of high and low incoming and outgoing mobility (mobile and non-mobile occupational groups). Assessing methodology of occupational mobility in Latvia and foreign countries, mutual similarities of occupational groups are analysed, and the degree of relationship is detected, as reflected in occupation "Similarity matrix". In light of the features of Latvian labour market and education system, options have been assessed to calculate the time and costs of occupational mobility of labour among various occupational groups.

It is planned to use results of the research in forecasting labour market, by determining the potential mobility of labour among various occupational groups, and as additional information to determine adequate labour market demand and supply.

Research limitations. The main limitation is related to lack of information required by the researchers. Data from surveys of Latvian labour market in the present scope is insufficient to draw adequately

[24] Regulation of education classification of Latvia – http://www.likumi.lv/doc.php?id=184810&version_date=09.10.2010.

objective and fundamental conclusions regarding intensity of the occupational mobility and factors affecting it. To obtain the required information, it would be necessary to perform a detailed (selective) labour survey, and polling of employers. Occupation classification uses names and codes from the international classification ISCO-88 that was also used in all Labour Force Surveys from Q1 2002 to Q4 2010. It is impossible to transfer to occupation classification in compliance with the standard requirements of ISCO-08 (using the table developed by the Ministry of Welfare for comparison of occupation codes) as transfer to a new code requires knowledge of the occupation codes at the 6-digit level but the Labour Force Survey summarises those only at the 4-digit level.

RESEARCH METHODOLOGY AND SOURCES OF INFORMATION

To reach the goal of the research "OCCUPATIONAL MOBILITY OF LABOUR", qualitative and quantitative methods of analysis were used:

- monographic;
- graphical image;
- table;
- preparation of charts and layouts;
- calculation of average and relative values;
- drafting time sequence;
- correlation calculation;
- grouping of data and information;
- cluster analysis;
- factor analysis;
- analysis of expert surveys.

During the research, authors mainly used the available information from official statistical data. Publicly available data in Eurostat and CSB databases characterising national accounts and labour market, as well as CSB information of labour survey for detailed analysis of demand and supply.

Seeking answers to questions posed in the research, along with the available statistical data, methods of survey were used in the.

Analysis of statistical data used various classifications:

- Major occupational groups according ISCO 1997 edition;
- Statistical classification of economic activities by NACE Rev. 2;
- Levels of education according to ISCED97 classification;
- Occupational Classification of the Republic of Latvia.

The general description of labour mobility was based on publicly available sources of information – CSB and Eurostat databases.

To assess the flow of occupational mobility and calculate intensity of the occupational mobility, for the purposes of analysis the authors of the research used quarter results of CSB Labour Force Surveys for the period from Q1 2002 to Q4 2010. Occupational Classification applies names and codes from the

international classification ISCO-88 that was also used in all Labour Force Surveys from Q1 2002 to Q4 2010.

To analyse the specific features of occupational groups, Occupational Classification[25] of the Republic of Latvia and description of skills at the major and sub-major occupational groups provided in the Occupational Classification was used.

Occupation similarity was assessed on the basis of information regarding compliance of education (ISCED97 classification) with occupations (according to ISCO 08 classification) prepared by the Ministry of Economics of the Republic of Latvia and provided to the authors.

To assess the processes in the field of occupational mobility in the Latvian economic sectors, information from business representatives and expert surveys was analysed.

Data collection methods used in the research

To obtain information regarding long-term development specifics of certain economic sectors, and general economy development tendencies within the scope of activity "Labour market researches in Latvia" within project No 1DP/1.3.1.7.0/10/IPIA/NVA/001 "Development of medium-term and long-term forecasting system for demand of labour market" of the ESF project of the Ministry of Economics, "Dorus" Ltd conducted in-depth interviews with:

- industry representatives – top managers from companies with above-the-average indicators of the number of employees and turnover;
- representatives from industry associations and industry experts (industry specialists recommended by representatives of the industry associations);
- experts of the Latvian economics and foreign economy experts.

Organisation of interviews. Interviews were carried out from 22 February to 10 May 2013, carrying out, in total, 265 valid interviews. Duration of interviews varied from 40 minutes to 2 hours.

For the purpose of interviews, 893 potential informants were addressed and in 609 cases refusals were received. In total, 284 interviews were carried out, 19 of which were found to be invalid (for instance, the informant was unable to reply to several important questions about the industry etc.) thus these interviews were not included in the research.

A report was prepared for each valid interview, and a summary about each industry, a summary of Latvian expert interviews and a summary of foreign expert interviews.

[25] Profession Classification of the Republic of Latvia in compliance with Regulations of Cabinet of ministers No 461 of 18 May 2010.

During the interviews, questions were asked in relation to three parallel problems:

- Research on the strategically most demanded skills in future in Latvia;
- Research of influence of ageing of population on future skills supply in Latvia;
- Research on occupational mobility of labour.

Economic industries. Before the research, a list of industries to be included in the interviews was developed and approved by the client. In total, on the basis of the industry size and significance in the long-term perspective of the Latvian economy, 45 most significant industries to be included in the research were identified.

Interviews with industry representatives. 135 valid interviews were made with top managers of companies. Three companies among the 10 largest companies of the industry depending on the number of employees in 2011 (on the basis of CSB information) were selected from each economic industry. In each company, one top manager was interviewed.

In case of two industries ("Real estate activities" and "Pre-primary and primary education"), 10 companies with the largest number of employees had one type of activities, while the industry itself was not so homogeneous. Therefore, in these industries companies were chosen for interviews by the turnover instead of the number of employees, that is, the choice was made among the 10 companies with the largest turnover.

In total, 551 top managers were addressed for interviews and 403 refusals were received. Out of 148 interviews, 13 were considered to be invalid.

Interviews with industry representatives and industry experts. 45 valid interviews were carried out with representatives of industry associations and 45 valid interviews were performed with industry experts. One association was chosen from each industry, which was among the 3 largest associations representing the industry according to the number of participants. One representative was interviewed from each industry.

Each of the interviewed representatives of the industry association further recommended an expert of the respective industry who knows the industry in general. Thereafter an interview was performed with the respective industry expert.

Five industries ("Electric power generation, transmission and distribution", "Railway transport", "Air transport and activities auxiliary to air transport", "Postal and courier activities", "Higher education") do not have industry association, therefore in these industries interviews with representatives from

industry associations and industry professionals were replaced by interviews with representatives and professionals of the largest companies, trade unions and societies.

In total, 102 representatives of industry associations and 66 industry experts were addressed for the interviews. Refusals were received from 57 representatives of associations and 19 experts. All interviews with representatives of the industry associations and 45 out of 47 expert interviews were valid.

Interviews with experts of the Latvian economy and foreign experts. 20 valid interviews were carried out with experts of the Latvian economy and 20 valid interviews were performed with foreign economy experts. Interviews with representatives from Latvia were performed in person, and the interviews with the foreign experts were carried out on the phone.

For interviews, experts specialising in macroeconomics and/or labour market issues were chosen, and among foreign experts – the ones have also global or European view of the situation. The list of interviewed experts was approved by the client.

In total, 87 experts of the Latvian economy were addressed for the interviews and 87 foreign experts of economy were addressed. Refusals were received from 66 experts of the Latvian economy and 64 foreign experts. 20 out of 21 Latvian and 20 out of 23 foreign expert interviews were valid.

Main sources of information

Sources of statistics data:

- database of the Central Statistical Bureau (available at the Internet: http://www.csb.gov.lv);
- data of CSB labour survey;
- quantitative statistical data of Eurostat labour statistics (available at the Internet: http://epp.eurostat.ec.europa.eu);
- Occupational projections and training data by the United States Bureau of Labour Statistics. 1996.

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2. Latvia 2030. Latvian sustainable development strategy until 2030. – Riga, 2010.

Publications and assessments of international organisations

1. Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (Text with EEA relevance) (2008/C 111/01), Official Journal of the European Union 6.5.2008.
2. Informative report „On Latvian position regarding European Union minister in employment and social matters for issues to be reviewed at informal meeting of 22-24 January 2009", Ministry of Welfare of the Republic of Latvia, 2009.

1. THEORETICAL ASPECTS OF LABOUR MOBILITY

Concept of mobility

During the last 20 years, market globalisation and scientifically technological progress have caused rapid and radical changes in the global economy structure. The growing use of information technologies, increase in the proportion of services in the structure of the gross domestic product, development of knowledge-intense economy sectors imposes new requirements also on labour: new specializations are demanded, some of the existing ones become unnecessary, and in many occupations technological innovations materially affect the skills necessary for the workers. Knowledge is supplemented and qualification is raised globally, and this is determined by the technological progress, increasing productivity.

Therefore, employees all over the world have to adapt more and more to changes in the labour market, acquiring various new skills, changing the type of occupation (profession) and/or the place.

Labour mobility or movement is understood as movement of labour. This can be international or regional inland (geographical mobility), and change of occupation and/or place of work (occupational mobility). It should be noted that these two types of mobility do not exclude each other, for example, along with moving to a different country (region), also the occupation (profession) is changed.

Generally EU member states are characterised by a comparatively low labour mobility, almost 25% of all labour in the EU have not changed their employer their entire life[26]. Labour mobility is an especially significant factor for the EU population to be able to find more suitable work in the united labour market, in turn, the employers would be able to find suitable employees. In the reports, the European Commission indicates that it is exactly the geographical mobility that serves as a tool to increase the EU competitiveness in the global economic competition and stresses that labour movement among the EU member states has left a positive impact on the economic situation of all member states[27]. According to the EC, mobility helps the EU citizens to reach their career and personal goals being the base of each individual's successful and fulfilled life. It increases employment and decreases labour costs, social exclusion and poverty, and gives the option to find a better job and therefore contributes to improvement of life standard and life quality of the whole EU population.

[26] Informative report "On Latvian position regarding European Union minister in employment and social matters for issues to be reviewed at informal meeting of 22-24 January 2009", Ministry of Welfare of the Republic of Latvia, 2009.
[27] Ibid.

Geographical mobility of labour has been studied also in Latvia, the period after the EU enlargement in 2004 should be specially noted when migration flows among various EU member states grew significantly.

Having assessed the range of available studies, it should be concluded that in Latvia both individual researchers (M. Hazans, I. Indāns) and groups of researchers and research institutes, state institutions (the Bank of Latvia, the Ministry of Economics, and the Ministry of Welfare) have drawn attention to studying issues of labour migration, assessing both the scope of migration and the factors that determine it, as well as consequences caused by migration.

Until now in Latvia, there has been only one research focusing on occupational mobility of labour, carried out in 2006-2007 (for period 1999 to 2005) within the scope of the National programme "Labour Market Studies" of the EU Structural Funds. In the research, in order to assess the occupational mobility of labour, labour was surveyed, experts were interviewed, as well as employers and employees completed questionnaires. Proposals were developed for the state institutions in charge for ensuring constant monitoring of occupational mobility in Latvia.

Nevertheless, Latvia still has not collected and provided the necessary information to follow directions, scope, tendencies of occupational mobility, therefore limiting performance of further studies in this field. A similar tendency exists in other countries - separate studies of occupational mobility of labour have been performed, for example, in Russia, Estonia, the Czech Republic, however, those cover only certain segments and aspects of occupational mobility that are topical in the particular countries. Furthermore, these studies apply different research methods that complicate the comparative analysis. A summarising research on occupational mobility in the EU member states ordered by the European Commission performed by the Danish Technology Institute should be noted separately. It describes the main tendencies of job mobility in Europe, as well as the most significant differences among the EU member states.

Thus, having analysed job mobility, researchers of the Danish Technology Institute distinguish 3 types of mobility[28]:

1. movement among employers from one job to another (*job-to-job mobility*), without changing the type of occupation;
2. movement among different occupations (professions) and along the career ladder (*occupational mobility*);

[28] Job Mobility in the European Union: Optimising its Social and Economic Benefits, Final report, Danish Technological Institute, Policy and Business Analysis, April 2008.

3. movement among different types of employment agreements, as well as from and to the labour market (*employment mobility*).

The research stresses the difference between occupational mobility and geographical mobility. The job mobility includes a change of place of work, position or employment status, geographical mobility, however, includes a change in location that may be related or unrelated to job mobility.

Other researches distinguish movement from one job to another within one place of work (including the career ladder) or the internal mobility and movement among occupations and various employers (or from a job to a job by changing the employer) or the external mobility.

Familiarizing with the various studies and types of mobility, the authors conclude that labour mobility or movement in the labour market includes, on the one hand, change in geographical location of the place of work (geographical mobility) or change of the employer (movement between employers), in the other hand, change of occupation (work skills) that may happen within the framework of the present place of work, as well as by changing the employer and the geographical location. Likewise the employment status may change – movement from employment to unemployment or from unemployment to employment.

Occupational mobility refers to change of an individual's job status, for example, change of position or work contents. Within the scope of occupational mobility, horizontal and vertical mobility is distinguished. The horizontal mobility is a change of profession (moving to a different job), remaining in the same professional level, and the vertical mobility is a change of occupation (moving to a different job) at a different professional level[29]. Vertical mobility can lead upward (*upward mobility*) and lead downward (*downward mobility*)[30]. In case of upward mobility, the professional level (class) changes from lower to higher, in case of downward mobility it changes vice versa (from higher to lower).

Depending on the required knowledge and skills, 7 various occupational classes can be distinguished:[31]

1. highly-paid specialists (senior managers);
2. less-paid specialists (professionals);
3. performers of routine non-physical work (clerks);
4. service and sales specialists;
5. self-employed;

[29] Mobility of Labour http://www.tutorsonnet.com/homework_help/micro_economics/production_theory/mobility_of_labour_and_its_types_assignment_help_online_tutoring.htm.

[30] Job Mobility in the European Union: Optimising its Social and Economic Benefits, Final report, Danish Technological Institute, Policy and Business Analysis, April 2008.

[31] Bukodi, E. and P. Róbert, Occupational Mobility in Europe, European Foundation for the Improvement of Living and Working Conditions, Dublin, 2007.

6. skilled workers;
7. non-skilled workers (see Table 1.1.).

In light of occupational similarities, and the required education and skills, occupations are classified in groups also in the occupation classification.

Table 1.1. Occupation groups by different skill levels[32]

LEVEL	OCCUPATION GROUPS
1	High-paid specialists
2	Less-paid specialists
3	Performers of routine non-physical work
4	Service and sales specialists
5	Self-employed
6	Skilled workers
7	Non-skilled workers

A change of occupation may take place in one occupational group (for example, Technicians and associate professionals (OC3) group has 5 sub-groups, change of occupation can occur between those) and between various occupational groups (for example, from the occupational group of Professionals (OC2) to the occupational group of Managers (OC1)).

Analysis of occupational mobility flows distinguishes incoming and outgoing mobility. The incoming occupational mobility is the occupation to which an individual transfers in case of change in occupation; the outgoing occupational mobility is the occupation left by an individual in case of change of occupation[33]. It should be noted that there are occupations with a limited incoming mobility (i.e., regulated occupation) regulated by laws (for example, specific requirements of education etc.). These occupations include doctors, pharmacists, advocates, judges, architects, construction engineers and other occupations operations of whom are strictly regulated by law[34], although many other occupations (teachers, accountants and the like) also have various limitations in terms of the incoming occupational mobility. The least limitations are in simple occupations where no specific skills and abilities are needed or where those can be mastered in a comparatively short time without great financial investments. However, for instance, the research of the Ministry of Welfare on the occupational mobility of labour detected that the scope of occupational mobility in Latvia is actually smaller among the "simplest" occupations, which could be explained by the low appeal of these occupations from the

[32] Bukodi, E. and P. Róbert, Occupational Mobility in Europe, European Foundation for the Improvement of Living and Working Conditions, Dublin, 2007.
[33] Occupational mobility of the Labour force, ESF National programme "Labour market researches" project "Researches of the Ministry of Welfare", LU, Riga, 2007.
[34] Law "On the Regulated Professions and the Recognition of Professional Qualifications" of the Republic of Latvia, available: http://www.likumi.lv/doc.php?id=26021.

point of view of incoming mobility (low remuneration, unattractive and hard working conditions), in turn, the outgoing mobility in these occupations is hindered by the low level of education and qualification of the employed in these professions (including insufficient language skills).

Occupational mobility as employees' readiness and ability to change occupation is one of the material conditions for efficient functioning of a flexible labour market. Employee occupational mobility has the potential to increase work productivity, if, for instance, an employee can use his/her skills and abilities in a different position or at a different employer thus creating a larger added value. It facilitates economic and social growth, high employment level, as well as a balanced and stable economy development. Occupational mobility allows both the employers and the labour to adapt easier and more efficiently to the ever changing market circumstances and to compete more successfully both in the internal and the external market. Occupational mobility is a precondition to successfully overcome the challenges brought by globalisation and the increasing competition in international markets. At present, the global economy is changing dynamically; and how successfully and fast the population can adapt to it also by increasing their skills and abilities, will determine scenarios of further economy development.

At the same time, mobility can increase disproportion in labour market – labour movement to industries with higher remuneration or emigration can cause labour deficit and affect competitiveness among industries.

Occupational mobility is higher (it is confirmed also by the results of the expert surveys made during the research) while the economy is flourishing, and it is lower during recession when the level of unemployment increases, the labour has less options to choose and change the place of work.

Factors affecting labour mobility

Free movement of people within a country and abroad as geographical mobility is one of the basic principles of the EU. In theory, free movement of people facilitates economic and social progress, high employment and sustainable development. Another, possibly determinant factor facilitating development of occupational mobility is movement towards a society based on knowledge ensuring competitiveness and growth during globalisation of the economy. In a more narrow sense, factors affecting occupational mobility are found in interaction and balance between structural policy of national economy and demand and supply of labour market, as well as in correlation of the development level and degree of the respective national economy with other countries.

For occupational mobility and mobility among places of work, it is important that the population wants and is able to acquire new skills and improve the existing ones.

From the point of view of the individuals, there is a range of factors that facilitate and hinder occupational mobility (age, family status, attitude towards professional career, education level and skills (also language and communication skills), salary and level of welfare, mentality features), which should be viewed in the context of the particular national economy and society. Thus the factors affecting occupational mobility can be divided into two groups: **external** and **individual**.

External factors affecting occupational mobility are the economic and labour market situation, salary, social benefits (retirement age, benefits and others), and options to choose the working time. Individual factors are an individual's wish of development and self-realization, skills, education, age, family status, nationality and the like.

In foreign studies on occupational mobility of labour, the following factors affecting the mobility are distinguished[35]:

1. education and training – labour mobility is based on knowledge and skills; the broader the knowledge, the larger mobility options;
2. perspectives and wishes – employee's opinions and wishes in relation to career growth determine his/her mobility. The optimists change place of work and occupation more frequently despite language, religion and other barriers;
3. social status – split society and various castes hinder mobility;
4. means of transport – developed transport and communication system facilitates mobility;
5. peace and security.

The following factors characterising **work attractiveness** should be mentioned:

- salary – it is mentioned as the most significant factor both in foreign and in Latvian studies as salary has a positive correlation with the general satisfaction with job; and differences in salaries is the strongest factor facilitating geographical and occupational mobility;
- working hours – at present, this is a very significant aspect, especially in the context of the high level of unemployment in the EU, viewing which the proportion and significance of part-time work should also be analysed;
- future prospects – confidence about durability of the job (security aspect);
- degree of work complexity;
- work contents: being interesting, prestige and independent;

[35] See, for example, Lubos Vagac. Internal Labour Mobility in Slovakia. – European Employment Observatory, Centre for Economic Development, Slovakia. June 2013; Fasang A. e.a., The relationship between geographic and labour market mobility within the European Union. // Over.werk, #3/2006 Steunpunt WSE; Coppin L. en Vandenbrande T. Job mobility in the career of European workers // Over.Werk, #3/2006, Steunpunt WSE; Viktoria Hnatkovska, Amartya Lahiri, and Sourabh B. Paul. Castes and Labour Mobility– Department of Economics, University of British Columbia, August 2011 – http://faculty.arts.ubc.ca/alahiri/castes-aej_FINAL.pdf.

- informal relations at the work.

In light of the above, it can be concluded that occupational mobility of labour is affected by a range of subjective and objective factors that can be divided in several groups. The first group – demographic factors (age, gender, family status, nationality and the like). The next – education and skills (including language skills). Third group – economic factors: overall development level of the country (region), availability of transport infrastructure, salary, growth opportunities and future perspectives, work stability, security and the like. The fourth group – occupational group and its skills (different occupational groups have different intensity of occupational mobility, mainly dependent on the specific knowledge and skills required to work in certain field or also the existing limitations).

Methods applied to analyse occupational mobility

Analysing occupational mobility, different researches apply different approaches. Among them, both the complicated structural models and results of labour market surveys should be noted, as well as data of various institutions about employees' movement within the labour market during their active life. In practice, most cases combine data of labour surveys with analysis of various polls.[36]

Goals of occupational mobility researches usually refer to both to labour market monitoring, long-term policy planning and to general scientific research subject. As a sample, studies of vertical mobility can be mentioned discussing tendencies of labour movement along career ladder upwards or downwards.[37] One of methods to analyse vertical mobility according to occupations is comparison of remuneration (for example, per hour), arranging occupations respectively. Moreover, in analysis of vertical mobility, using labour surveys, the quantitative labour inflow or outflow from a particular occupation, at the same time taking into account also the movement between full-time and part-time employment and changes in the number of unemployed persons according to occupations.

Mobility assessment can be obtained also opposing workers' movement from one occupation to another. Nevertheless, this method has a drawback – the size of the average remuneration is disputable depending on additional payments affecting the average remuneration (risk degree and the like), as well as indicators of education.

Tendencies of labour movement are also analysed in light of the time (from full-time to part-time, from a higher risk to a lower risk work, thus the average remuneration is changed).

[36] Occupational projections and training data By United States. Bureau of Labour Statistics. 1996.

[37] See, for example, Shirley Dex, Joanne Lindley, Kelly Ward. Vertical occupational mobility and its measurement. Sheffield Economic Research Paper Series, SERP Number: 2007006. – 2007.

Analysing vertical mobility of labour, indicators of education obtained by the labour are widely used[38].

Mobility indices are also calculated using three categories of indicators: obtained education, work experience (before integrating in a new occupation), scope of training required for a full-fledged work.

In general, authors of researches sometimes focus on a certain problem forming a respective set of selection: for example, men of a specific age group, women depending on age, and their indicators in relation to integration in labour market[39].

Researchers *Sicherman* and *Galor* (1988) note that intensity of occupational mobility within a company (internal mobility) mainly depends on the employer, but the external mobility *(inter-firm)* is mainly explained by an individual's decision and tendency to increase income in the long run.[40]

Among studies of labour market occupational mobility, a significant role is played by analysis of migrant labour. Spain can be mentioned as an example, where the occupational mobility was analysed on the basis of summarised data of the National Statistics Institute regarding:[41]

- social-economic indicators (age, gender, nationality, education, language knowledge in the year of arrival);
- work experience (occupation before leaving the country of residence, the first place of work after immigration and in the year when the labour was surveyed).

The occupational mobility is studied also on the basis of data obtained from large surveys. Studies of labour market in the USA can be mentioned as an example. Having used them in analysis, researchers *Markey J.P.* and *Parks W.*[42] (1989) found that:

- age is one of factors affecting the level of occupational mobility (the research notes high level of occupational mobility among the youth and low mobility among the elderly employees);
- higher level of education is closely related to voluntary mobility, at the same time it is hindered by necessity of specific skills and experience of separate professions;
- compulsory mobility is accompanied by a decrease of income (the research concludes that as a result of forced movement of employees labour flows away from production and service industries);

[38] Shirley Dex, Joanne Lindley, Kelly Ward. Vertical occupational mobility and its measurement. Sheffield Economic Research Paper Series, SERP Number: 2007006. - 2007.
[39] Shirley Dex, Joanne Lindley, Kelly Ward. Vertical occupational mobility and its measurement. Sheffield Economic Research Paper Series, SERP Number: 2007006. - 2007, Table 1, p. 14.
[40] Sicherman N., Galor O. A theory of career mobility. Centre for the Research of the Economy and the State. WP No 51, 1988.
[41] Hipólito Simón, Raúl Ramos, Esteban Sanromá. Occupational Mobility of Immigrants in a Low Skilled Economy: The Spanish Case. IZA DP No. 5581, 2011.
[42] Markey J.P., Parks W. *Occupational change*: pursuing a different kind of work. In Monthly Labour Review, September 1989.

- significant changes, when an employee changes both the employer and the occupation, have not been observed often.

The regular labour studies performed by the Hong Kong Statistics Board should be marked especially; they include also an analysis of occupational mobility.[43] The object of the research is persons who have reached the age of 15 and changed place of work due to various reasons:[44]

- employment status changed (for example, from a self-employed to a full time (or part time) employee in the same profession);
- person who changed the employer, but not the position;
- person who changed occupation or place of work (industry);
- person whose employment status at the present employer has changed – occupying the position also after reaching the retirement age.

Thus the obtained information allows concluding on quantitative mobility of the employed in general and detailed rate. Statistical data allow to annually identifying the frequency of changed jobs, as well as the most significant reasons for the change of job. Some reasons of voluntary change of job are as follows[45]:

- insufficient remuneration and additional benefits;
- not satisfied with the job, management or colleagues;
- not satisfied with long, inconvenient and inflexible working hours;
- not satisfied with physical working conditions;
- not satisfied with the little growth prospects and the like.

Having summarised the above information, it can be concluded: high degree of detalisation in statistical data is a determining factor allowing to objectively assessing labour mobility.

Various methods are used globally to assess labour mobility, but the most popular methods are the use of data from labour force survey statistics and analysis of polling data.

[43] Hong Kong Statistics. Job-changing of employed persons, http://www.censtatd.gov.hk/hkstat/sub/sp200.jsp?productCode=C0000033.
[44] Hong Kong Statistics. Job-changing of employed persons. Report No 61. Census and Statistics Department, December 2012, http://www.statistics.gov.hk/pub/B11301612012XXXXB0100.pdf.
[45] Ibid, Table 1. Job changers. Page 23.

2. OCCUPATIONAL MOBILITY OF LABOUR IN LATVIA AND FACTORS AFFECTING IT

This Chapter analyses the general indicators affecting labour mobility in Latvia in comparison to the European Union member states, as well as indicators of occupational mobility in Latvia in the period of 2000 to 2010. Using information from expert surveys, the previous development of indicators featuring industry occupational mobility and affecting factors, the present situation and future vision have been summarised.

2.1. TENDENCIES OF OCCUPATIONAL MOBILITY IN LATVIA FROM 2000 TO 2010

Analysis of indicators affecting labour mobility in Latvia

Indicators affecting labour mobility are analysed in this chapter in accordance with the following division, following the available range of statistical data:

- General indicators characterising the employment – salary, job seeker's last occupation, age, education level;
- Working conditions – reasons, why the employees leave work, working time.

In Latvia, the largest part of the employees works in the second OC-2 occupational group (Professionals). In this occupational group, the range of skills is rather wide and representatives of this group are highly qualified- scientists, education and art specialists, engineers and economists, and similar specialists. The second largest group of the employed in concentrated in OC-5 group or the service and sales workers. A similar division of the employed is observed also on the average in the EU-27 countries (see Figure 2.1.). On average, the EU-27 countries had 216 million employees in 2012.

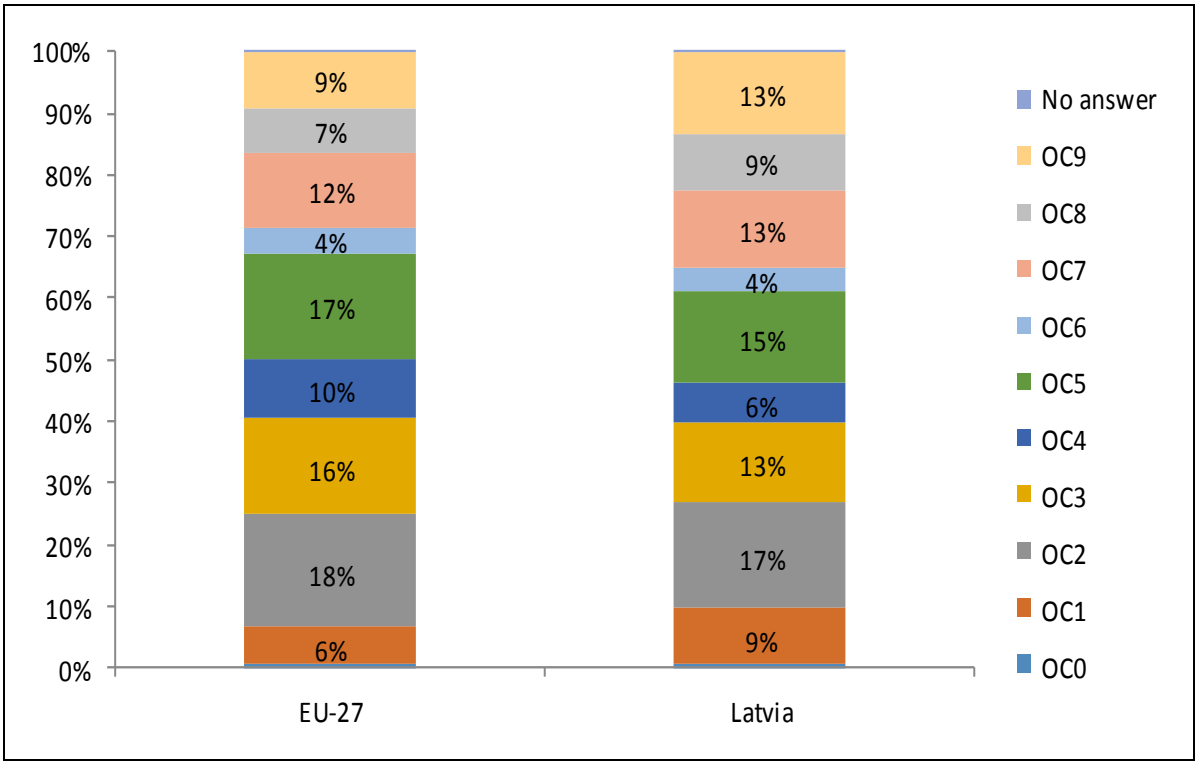

Figure 2.1. Division of the employed by occupations in Latvia and EU-27 countries, in 2012 (%)[46]

One of the ways to satisfy labour demand is involvement of the unemployed in the labour market, as well as natural movement of the labour (mobility within the occupation and industry).

In the EU-27 countries, the number of unemployed in 2012 amounted to 25 million people or approximately 11%. In Latvia, the number of the unemployed in 2012 amounted to 155 thousand or 13% of the economically active population.

Analysing the qualification structure of the unemployed in Latvia and comparing it with the average level in the EU-27 countries, it should be concluded that the statistical data contain a high per cent of unanswered questions. Therefore, for a more comprehensive view, one chart reflects the total division of the unemployed qualification less the unanswered data. In the EU member states, half of the unemployed cannot be identified according to the occupation, in Latvia the proportion is 24%.

Having deducted the unanswered questions, it is possible to compare the occupational structure of the unemployed (see Figure 2.2.). In 2012, the largest proportion among the unemployed refers to three occupational groups in Latvia and in the EU-27 countries: Service and sales workers (OC-5), representatives of Elementary occupations (OC-9) and Craft and related trades workers (OC-7).

[46] Eurostat.

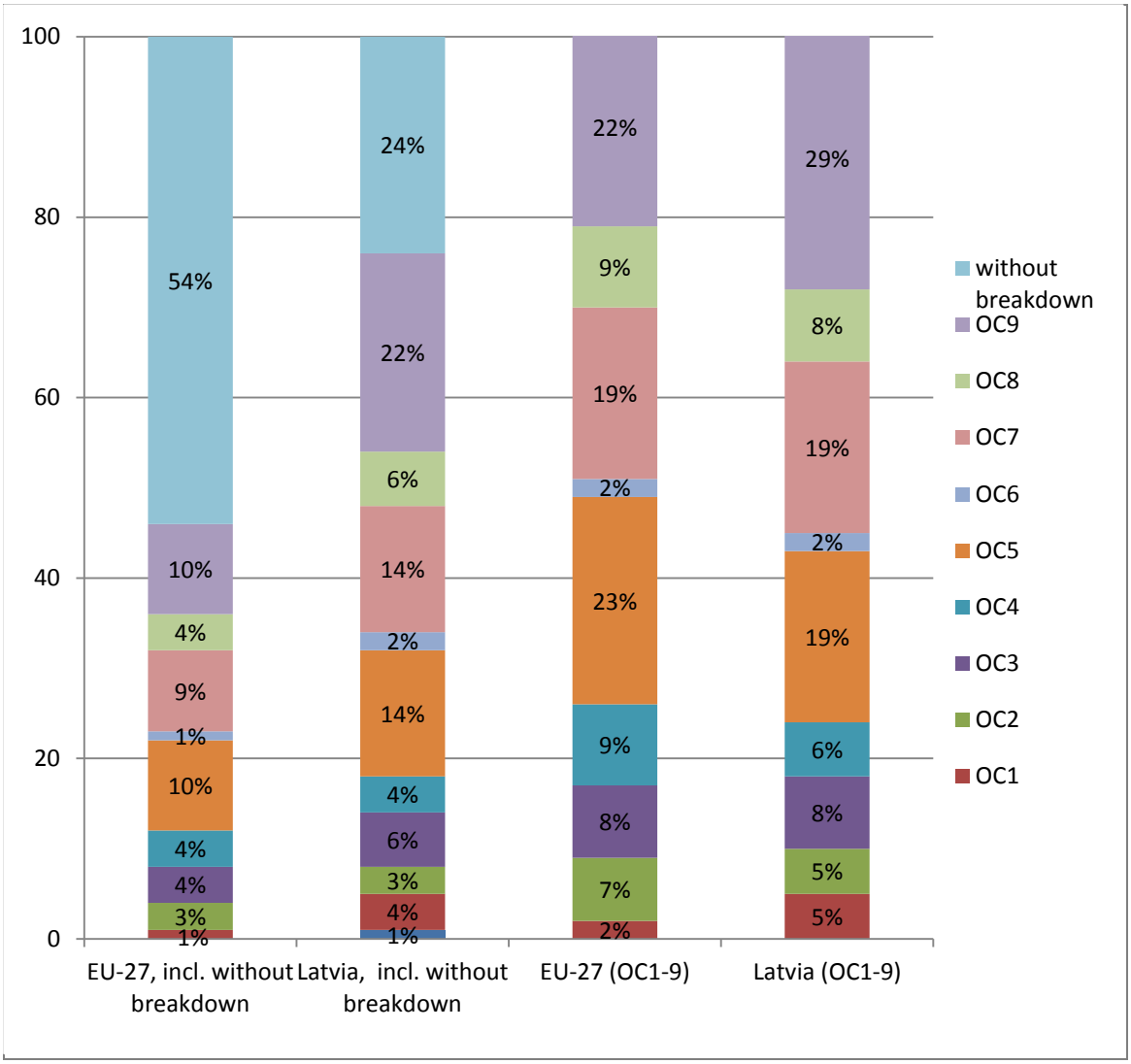

Figure 2.2. Structure of the unemployed by occupations in the EU-27 countries and Latvia, in 2012[47]

In other EU member states, the division of the unemployed according to occupation (less the unanswered questions) varies, to a certain extent it is affected by data quality (see Figure 2.3). In most of the EU member states, the largest amount of the unemployed refers to Clerical support workers and Service and sales workers (OC4–5), as well as to groups of skilled workers in different countries (OC6–8).

According to the data of CSB, the following were the reasons to lose job in Latvia in 2012:

- of all the unemployed, 49% were released from the job or they lost the job due to mass redundancy (in 2005, they constituted 23%);
- 22% left the job due to illness or other personal reasons (in 2005, they constituted 18%);
- 18% of the employed in the previous place of work were hired for a determined term (in 2005, they constituted 13%).

[47] Eurostat.

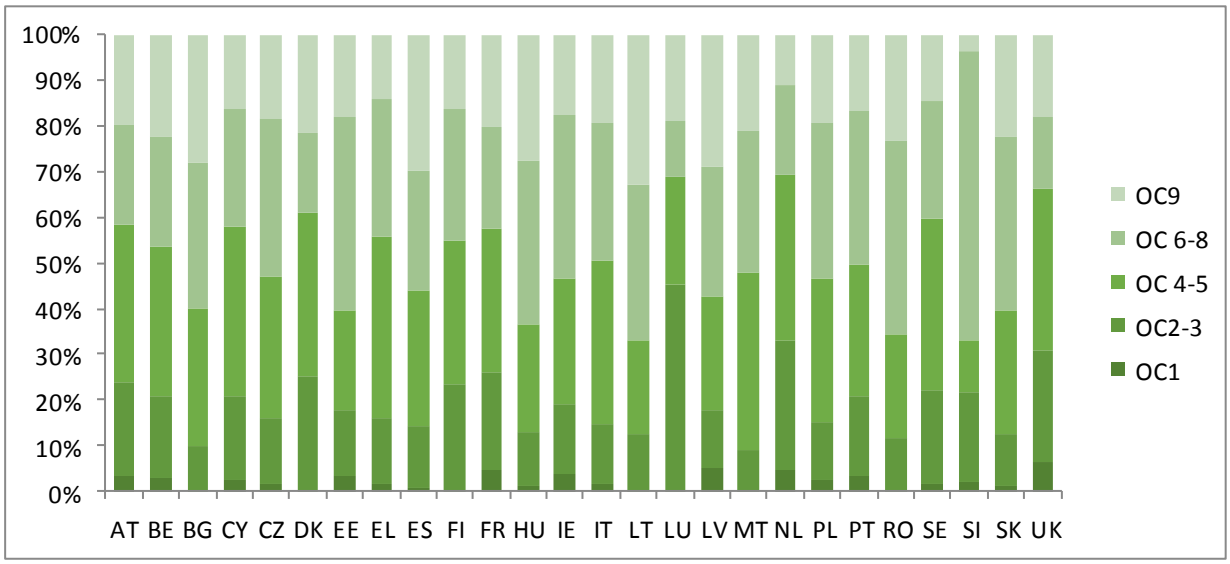

Figure 2.3. Structure of the unemployed by occupation in the EU member states, in 2012 (%) (without regard to the unanswered questions)[48]

Upon comparing statistics of vacancies and the occupied positions in Latvia after joining the EU (in 2005) and in 2012, decrease of the occupied positions and a significant drop in vacant places of work has been observed in the national economy (see Table 2.1.).

Table 2.1. Distribution of the occupied and the vacant positions in Latvia by occupational groups in 2005 and 2012[49]

STATUS OF PLACES OF WORK	2005		2012		2005	2012
	Occupied	Vacant	Occupied	Vacant	Occupied	Vacant
All professions	919469	12260	839097	3351	75	250
1. Managers	100337	632	79785	242	159	330
2. Professionals	149253	2781	129581	819	54	158
3. Technicians and associate professionals	129462	1742	163906	829	74	198
4. Clerical support workers	69039	831	42028	190	83	221
5. Service and sales workers	140058	1873	130913	607	75	216
6. Skilled agricultural, forestry and fishery workers	6081	60	6808	6	101	1135
7. Craft and related trades workers	126513	1717	103517	247	74	419
8. Plant and machine operators, and assemblers	88866	1301	69145	166	68	417
9. Elementary occupations	104618	1030	108763	244	102	446

[48] Eurostat.

[49] CSB data, authors' calculations.

According to the above, the proportion between the occupied and the vacant positions in all occupations in 2012 has increased three times. A significant decrease of the vacant positions in 2012 should be marked among agricultural, forestry and fishery occupations.

In calculating the proportion of vacant positions in the total number of positions (the number of vacant positions is divided by the sum of the occupied and vacant positions, and expressed in per cent), in Latvia in 2012 the average index was 0.4%. Among occupations, the variation of 0.09 to 0.63% has been observed. In comparison to 2005, the average proportion of vacancies in Latvia was 1.3% (variation of 0.63 to 1.83% among occupations).

Comparing with other European countries, the total indicator of vacancies in Latvia is lower than in the Baltics and other countries under review (see Table 2.2.).

Table 2.2. Proportion of vacancies in all occupational groups in Latvia and other EU member states, in 2011 (%)[50]

NACE	Czech Republic	GERMANY	ESTONIA	GREECE	LATVIA	LITHUANIA	POLAND	SLOVENIA	FINLAND	SWEDEN
A–S	0.9	2.7	1.3	NA	0.4	0.9	0.6	0.8	2.1	1.5
A	1.0	3.5	0.4	NA	0.3	0.3	0.3	0.9	2.3	1.1
B	0.3	0.6	0.5	0.1	0.0	0.0	0.1	0.3	NA	2.3
C	0.8	1.4	1.1	0.2	0.2	1.1	0.6	0.7	1.4	1.4
D	0.1	1.3	1.5	0.0	0.2	0.5	0.2	0.4	2.0	1.4
E	0.4	1.6	0.7	0.5	0.2	0.9	0.4	0.3	2.3	1.1
F	1.3	3.0	0.9	0.0	0.1	1.2	1.2	1.9	1.9	1.3
G	1.1	2.3	1.1	2.3	0.4	0.7	0.5	0.7	2.3	1.3
H	0.7	2.1	1.3	1.4	0.2	1.5	0.6	0.9	2.0	1.0
I	1.3	4.9	1.8	0.0	0.2	0.9	0.9	1.3	3.9	2.4
J	0.9	2.9	2.3	1.2	0.1	1.3	1.3	0.5	2.8	2.9
K	1.3	1.2	1.3	0.2	0.6	1.5	0.4	0.6	1.8	1.4
L	5.1	1.9	1.2	NA	0.1	0.3	0.4	0.9	2.4	1.4
M	1.9	3.2	1.4	0.1	0.1	0.7	0.7	1.2	2.1	2.8
N	3.1	11.0	1.6	0.4	0.4	0.9	0.5	2.5	3.1	3.0
O	0.3	0.6	2.6	0.0	2.1	1.2	0.7	0.2	1.5	1.6
P	0.3	1.2	1.0	0.0	0.1	0.2	0.1	0.6	1.4	1.3
Q	0.5	1.7	1.0	0.0	0.3	0.6	0.3	0.5	2.2	0.9
R	0.3	3.0	1.8	19.6	0.1	0.7	0.4	0.4	2.6	1.8
S	1.9	2.3	1.6	0.0	0.1	0.7	1.1	1.0	2.7	1.8

Factor affecting occupational mobility is the amount of remuneration in various industries. The statistics of Latvia show that the highest level of remuneration within the 3-digit code system of occupations is obtained by representatives of the first three occupations – managers, professionals and highly qualified labour. In turn, the labour earning less in 2010 was employed in the fields of the ninth

[50] Eurostat.

occupational group (street vendors) and the third occupational group – traditional and complementary medicine associate professionals (see Table 2.3).

Table 2.3. Gross salary in Latvia, on average per month by occupations and education levels in 2010 (LVL) (5 occupations with the highest and 5 occupations with the lowest remuneration)[51]

OCCUPATION	GROSS SALARY, TOTAL	SCIENTIFIC DEGREE	ACADEM. EDUCATION	1ST LEVEL PROF. HIGHER EDUCATION	VOCATIONAL SECONDARY EDUCATION	GENERAL SECONDARY EDUCATION	ELEMENTARY SCHOOL EDUCATION	PRIMARY SCHOOL EDUCATION
Ship and aircraft controllers and technicians (315)	1177		1561	1661	751	758		
Managing directors and chief executives (112)	998	2020	1236	649	531	482	434	
Software and applications developers and analysts (251)	908	610	998	598	607	697		
Mathematicians, actuaries and statisticians (212)	904		1022		374			
Legislators and senior officials (111)	863	1168	974	555	524	488	287	
Hairdressers, beauticians and related workers (514)	229		270	221	218	278	253	
Street and market salespersons (521)	224		261	280	232	211	223	195
Mixed crop and animal producers (613)	216							
Traditional and complementary medicine associate professionals (323)	211		202	222	213			
Street vendors (excluding food) (952)	179						186	

Differences in gross remuneration among various occupations are quite significant depending on the level of education – it is related to labour skills and qualification. For example, among workers with primary school education, the highest gross salary was in occupational group 722 "Blacksmiths, toolmakers and related trades workers" (gross LVL 572), occupational group 821 "Assemblers" (LVL 546) and occupational group 933 "Transport and storage labourers" (LVL 536).

Among workers with university degree (scientific degree), the lowest gross remuneration in Latvia in 2010 was in the occupational group 321 "Medical and pharmaceutical technicians" (LVL 265), occupational group 262 "Librarians, archivists and curators" (LVL 348) and occupational group 334 "Administrative and specialized secretaries" (LVL 363).

[51] CSB data.

The above information allows concluding that in general the proportions of economically active population by occupations in Latvia are similar as on average those in the EU-27 countries. The occupational division of the unemployed is similar on average, if the unanswered questions are not counted.

Proportion of vacancies in the total amount of places of work in Latvia in 2011 has been lower than in the neighbouring countries and other larger EU member states.

Tendencies of occupational mobility in Latvia

Analysing tendencies of occupational mobility in Latvia from 2000 to 2010, several factors can be distinguished facilitating occupational mobility of labour and several factors limiting it. Among the factors facilitating mobility, the rapid economic growth should be mentioned (from 2000 to 2007) and Latvia joining the EU that determined structural changes in the national economy and facilitated labour mobility from one occupational group to others. They are mainly determined by unstable development dynamics of national economy industries.

From 2004 to 2007, 3/4 of all increase in the GDP consisted of growth in construction, sales and commercial services industries, but contribution of the processing manufacturing in the total growth amounted only to 5%. The excessively fast increase in crediting and the exaggerated optimism of future income caused a rise in demand, mainly private consumption, facilitating expansion of various services, and the construction industry. As a result, their proportion in the total added value increased (proportion of service industries in the GDP increased from 71.8% in 2000 to 74.5% in 2007, and of the construction – from 6.1% to 8.9%). Furthermore, in the service sector in Latvia three industries dominated: trade, financial services and real estate activities amounting to almost 50% of the GDP. In turn, the proportion of processing manufacturing and other production industries in the GDP was decreasing at this time, thus causing outflow of labour.

At the same time, outward migration from Latvia increased resulting in lack of labour in certain industries and occupations. This is a negative factor that caused establishment of disproportion in the labour market, including rise in salaries not complying with productivity.

One of factors limiting mobility is also the economy recession (from 2008 to 2010) that resulted in significant increase in unemployment and decrease of options to find or change job.

To assess occupational mobility flow and calculate intensity of the occupational mobility, the authors of the research used quarter results of the Central Statistical Bureau Labour Force Surveys for the time period Q1 2002 to Q4 2010. Occupation classification applies names and codes from the international

classification ISCO-88 that was also applied in all Labour Force Surveys for period Q1 2002 to Q4 2010. Initially the analysis was made at the level of sub-major groups of occupation classification (at the 2-digit level), but it was detected that occupational mobility flows have excessive degree of aggregation that could encumber further analysis of these flows according to skills. Therefore it was decided to analyse the mobility flows at the level of small groups (3-digit non-major groups).

The goal of analysis – to determine the intensity of incoming occupational mobility on the level of the sub-major occupational groups, separating mobility within individual major groups (occupational groups 1 to 9) and mobility of other occupational groups, and to determine the proportion of mobility in the major occupational groups and the sub-major groups in comparison to the total occupational mobility.

To reach the above goal, those persons within a household were chosen whose occupation change could be detected by consecutive surveys. Process of selection was as follows:

1) all quarter data files for labour survey were merged in one file;
2) of all survey entries, only those entries were filtered where a person had indicated the status of economic activity: "Employed";
3) following an algorithm developed by the researchers, cases were searched where the same person in a consecutive survey indicated a different profession from the profession indicated in the previous survey;
4) by scales of labour survey for quarterly surveys of occupations to which the transfer has occurred, flows between occupations were calculated for period Q1 2002 to Q4 2010 (results were expressed in percentage of the total number of persons transferring to the occupation after the previous occupation).

After the first two steps, a selection of 53 333 persons surveyed within the household limits with repetitions was obtained from the initial mass data of 241 175 entries. Having filtered cases when a person in a consecutive survey indicates a different occupation from that indicated in the previous survey (step 3), it was detected that the total amount of such cases is 6 498. In step 4, upon calculating occupational mobility flows, it was concluded that 59 577 persons (who changed occupation, but not obligatory the employer) were professionally mobile on average once a year from 2002 to 2010.

Taking into account that the number of employees on average was 1.033 million at the same time, it was determined that in period 2002 to 2010, on average 5.8% of the employed were subject to occupational mobility annually. After a further analysis within the scope of individual occupational groups, as well as between various occupational groups individual survey results were assessed carefully as their number values could be insufficiently objective to make generalisations.

2.1.1. Intensity of occupational mobility within the scope of individual occupational groups

Intensity of occupational mobility within major occupational group 1 (Managers)

A summary of incoming occupational mobility for major occupational group "Managers" according to sub-major group codes is provided in Table 2.4.

As the table data show, sub-major group mobility within the major group varies at a large range: from 4.6% in a sub-major group 111 "Legislators" to 81.8% in sub-major group 115 "Senior officials of municipalities". It should be noted that the proportion of the whole major group in the total mobility amounts to 10.5% that, taking into account the relative small number of the employed in the occupations of major group 1, should be assessed as high, especially in sub-major groups 122 "Sales, marketing and development managers" and 131 "Production managers in agriculture, forestry and fisheries", whose proportion in the total mobility amounts to 2.8%. To a large extent this would be explained by professional growth and career development.

Table 2.4. Summary of incoming occupational mobility in major occupational group 1 "Managers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
111	**4.6**	0.1
112	33.9	1.7
113	61.7	0.2
114	80.7	0.0
115	**81.8**	0.0
121	45.1	1.8
122	36.2	**2.8**
123	28.1	1.1
131	40.8	**2.8**
Total for major group 1:		**10.5**

Furthermore, analysing what sub-major groups of major group 1 have the highest mobility in each of the sub-major groups, the relative proportions were ranged according to the absolute value, distinguishing three highest indicators for each sub-major group and determining the proportion of the other sub-major groups (see Table 2.5.).

Table 2.5. Division of the highest incoming occupational mobility according to sub-major groups of major group 1 "Managers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	1st RANK SUB-MAJOR GROUP, ITS PROPORTION	2nd RANK SUB-MAJOR GROUP, ITS PROPORTION	3rd RANK SUB-MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER SUB-MAJOR GROUPS
111	131\4.6	-	-	0.0
112	122\16.2	123\10.3	121\6.1	1.3
113	122\19.1	131\14.0	112\12.0	16.6
114	122\80.7	-	-	0.0
115	111\59.9	113\21.9	-	0.0
121	131\30.8	122\7.5	112\3.5	3.3
122	112\13.2	131\8.9	123\7.0	7.1
123	122\9.1	131\8.8	121\5.4	4.8
131	121\17.6	122\13.3	112\7.7	2.2

Internal mobility in sub-major groups 114 "Senior government" and 115 "Senior officials of municipalities" occurs on a narrow base of the previous occupations. Internal mobility of sub-major group 114 occurs on sub-major group 122 "Sales, marketing and development managers", ensuring 80.7% of the total mobility or 100% of the internal mobility. In sub-major group 115 "Senior officials of municipalities" it is similar, where the internal mobility is ensured by employees of sub-major group 111 "Legislators" - 59.9% of the total mobility and sub-major group 113 "Traditional chiefs and heads of villages" with 21.9%. Generally, reverse mobility is observed where the elected persons' term of authority possibly expires. Also sub-major group 113 "Managers of local municipalities" should be noted, the internal mobility of which consists of a broad range of profession representatives, on the other hand, mobility data for sub-major group 111 "Legislators" are non-convincing and contradict the logics.

Intensity of occupational mobility within major occupational group 2 (Professionals)

A summary of incoming occupational mobility for major occupational group "Professionals" according to sub-major group codes is provided in Table 2.6.

Table 2.6. Summary of incoming occupational mobility in major occupational group 2 "Professionals" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
211	39.4	0.3
212	13.9	0.1
213	27.7	0.5
214	9.6	1.4
215	38.3	0.1
221	17.0	0.2
222	**7.6**	0.5
231	**55.8**	0.3
232	54.5	0.9
233	41.0	1.1
234	52.2	0.2
235	47.7	0.4
241	23.6	**2.2**
242	35.6	0.4
243	11.8	0.3
244	17.6	0.8
245	43.5	0.2
246	37.9	0.1
247	29.3	**1.8**
248	18.5	**1.7**
Total for major group 2:		**13.9**

As provided by the data of Table 2.6., within the scope of major group 2 the incoming mobility among sub-major groups varies less than in major group 1: from 7.6% in sub-major group 222 "Nursing and midwifery professionals" to 55.8% sub-major group 231 "University and higher education teachers". It should be noted that the proportion of the whole major group in the total mobility amounts to 13.9% that in light of the relatively small number of the employed in the occupations of major group 2 should be assessed as high, especially in sub-major groups 241 "Finance professionals" (2.2%), 247 "Science workers" (1.8%), and 248 "Officials and specialists of state institutions", (1.7%). To a large extent this can be explained by professional growth and career development, as well as remuneration issues. The assessment does not cover data about sub-major group 223 "Traditional and complementary medicine professionals" as the available data provide information only about the external mobility.

Furthermore, analysing sub-major groups of major group 2 having the highest mobility in each of the sub-major groups, the relative proportions were ranged according to the absolute value, distinguishing three highest indicators for each sub-major group and determining the proportion of the other sub-major groups (see Table 2.7.).

Table 2.7. Division of the highest incoming occupational mobility according to sub-major groups of major group 2 "Professionals" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	1st RANK SUB-MAJOR GROUP, ITS PROPORTION	2nd RANK SUB-MAJOR GROUP, ITS PROPORTION	3rd RANK SUB-MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER SUB-MAJOR GROUPS
211	214\18.3	241\17.1	222\4.0	0.0
212	232\13.9	-	-	0.0
213	214\10.3	241\7.2	215\4.1	6.1
214	211\3.1	241\2.9	248\2.6	1.0
215	248\38.3	-	-	0.0
221	248\13.0	214\4.0	-	0.0
222	241\4.0	221\3.6	-	0.0
231	232\25.9	248\7.9	211\7.8	14.2
232	233\24.4	231\7.1	234\6.6	16.4
233	232\17.5	235\10.2	234\7.4	5.9
234	232\31.4	235\14.8	233\6.0	0.0
235	232\18.9	214\6.4	233\6.0	16.4
241	248\10.9	242\3.1	214\2.0	7.6
242	248\21.4	241\7.9	231\6.3	0.0
243	232\11.8	-	-	0.0
244	247\4.0	211\3.3	231\2.3	8.0
245	248\16.5	244\8.7	242\6.7	11.6
246	242\37.9	-	-	0.0
247	248\23.7	241\5.6	-	0.0
248	242\4.0	214\3.8	241\3.6	7.1

Considering results of Table 2.7., it shows that internal mobility in sub-major groups 215 "Electrotechnology engineers", 221 "Medical doctors", 222 "Nursing and midwifery professionals", 243 "Archivists, librarians and related information professionals ", 246 "Religious professionals" and 247 "Science workers" occurs on a narrow base of previous professions. Namely, internal mobility of sub-major group 215 occurs on sub-major group 248 "Officials and specialists of state authorities", ensuring 38% of the total mobility or 100% of the internal mobility. Similarly as in sub-major group 243 "Archivists, librarians and related information professionals" where the internal mobility is ensured by sub-major groups 232 "Vocational education teachers" in the amount of 11.8% of the total mobility and sub-major group "Religious professionals" internal mobility of which is ensured by 242 in the amount of 37.9%. Sub-major groups 232 "Vocational education teachers", 235 "Other teaching professionals" and 231 "University and higher education teachers" should also be noted the internal mobility that contains broad range of occupation representatives, but mobility data for sub-major group 223

"Traditional and complementary medicine professionals" are unconvincing and the analysis does not allow to make unambiguous conclusions.

Intensity of occupational mobility within major occupational group 3 (technicians and associate professionals)

A summary of incoming occupational mobility for major occupational group "Technicians and associate professionals" according to sub-major group codes is provided in Table 2.8.

Table 2.8. Summary of incoming occupational mobility in major occupational group 3 "Technicians and associate professionals" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
311	17.3	1.7
312	25.2	0.7
313	52.8	0.1
314	**56.6**	0.1
315	20.9	0.3
321	31.4	0.3
322	17.3	0.5
323	16.0	0.7
324	0.0	0.0
331	**11.3**	0.5
332	30.0	0.2
333	0.0	0.0
334	0.0	0.4
341	20.4	**3.7**
342	30.0	1.3
343	16.9	**3.6**
344	43.3	0.3
345	15.8	0.9
346	11.7	0.3
347	21.9	0.8
348	0.0	0.0
Total for major group 3:		**16.5**

Data in Table 2.8. show that within the major group, the incoming mobility in sub-major groups of occupations fluctuates broadly: from 11.3% in sub-major group 331 "Primary education teaching associate professionals" to 56.6% in sub-major group 314 "Ship and aircraft controllers and technicians". The proportion of the entire major group in the total mobility amounts to 16.5% that should be evaluated as medium high taking into account the amount of the employed in occupations of major group 3 (105.7 thousand or 12.3%). Especially high mobility is observed in sub-major groups

343 “Administrative associate professionals” and 341 “Finance and sales associate professionals” whose proportion in total mobility amounts to 3.6% and 3.7%. To a large extent, this would be explained by the level of remuneration and number of the specialists prepared in the respective occupational groups.

Analysing which sub-major groups of the major group have the highest mobility in each of the sub-major groups, the relative proportions were ranged according to the absolute value, distinguishing three highest indicators for each sub-major group and determining the proportion of the other sub-major groups (see Table 2.9.).

Table 2.9. Division of the highest incoming occupational mobility according to sub-major groups of major group 3 “Technicians and associate professionals” (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	1st RANK SUB-MAJOR GROUP, ITS PROPORTION	2nd RANK SUB-MAJOR GROUP, ITS PROPORTION	3rd RANK SUB-MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER SUB-MAJOR GROUPS
311	312\3.7	341\3.1	344\2.5	8.0
312	341\5.8	343\5.0	323\4.5	9.9
313	342\16.7	323\15.1	311\13.8	7.1
314	345**35.9**	311\20.7	-	0.0
315	345\15.1	311\3.3	344\2.5	0.0
321	341\15.6	343\10.5	342\3.0	2.3
322	323\16.1	321\1.1	-	0.0
323	322\11.1	343\2.7	347\2.2	0.0
331	334\11.3	-	-	0.0
332	347\10.2	322\7.5	312\4.5	7.8
341	342\10.6	343\8.2	311\1.0	0.5
342	341\14.7	311\5.5	343\5.5	4.2
343	341\7.5	342\3.5	344\1.7	4.2
344	345\21.1	343\8.0	315\6.8	7.4
345	343\4.7	341\3.4	344\2.7	5.0
346	323\11.7	-	-	0.0
347	342\8.9	331\4.4	341\3.2	5.4

Higher internal mobility is observed in sub-major group 314 “Ship and aircraft controllers and technicians” implemented at the account of sub-major group 345 “Police inspectors and detectives”. This internal mobility has no explanation as the required skills for the corresponding occupational groups are different. In sub-major group 331 “Primary education teaching associate professionals” the internal mobility takes place at the account of sub-major group 334 “Other teaching associate professionals”, and in sub-major group 346 “Social work associate professionals” at the account of sub-major group 323 “Nursing and midwifery associate professionals”. The skills needed for professions of these sub-major groups are similar.

Intensity of occupational mobility within major occupational group 4 (clerical support workers)

A summary of incoming occupational mobility for major occupational group "Clerical support workers" according to sub-major group codes is provided in Table 2.10. Table data show that within the major group, the incoming mobility in sub-major groups fluctuates broadly: from 4.6% in sub-major group 413 "Material-recording and transport clerks" to 38.4% in sub-major group 419 "Other office clerks". The proportion of the entire major group in the total mobility amounts to 5.5% that should be assessed as medium low taking into account the small amount of the employed in occupations of major group 4 (48.0 thousand or 5.6%).

The highest level of mobility is observed in sub-major groups 411 "General office clerks", 412 "Secretaries (general)" and 413 "Keyboard operators" the proportion of which in the total mobility amounts to 1.2% and 1.1%. To a large extent, this can be explained by the level of remuneration in the respective occupational groups.

Table 2.10. Summary of incoming occupational mobility in major occupational group 4 "Clerical support workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
411	16.2	**1.2**
412	33.6	1.1
413	4.6	1.1
414	18.0	0.6
419	**38.4**	0.1
421	34.7	0.9
422	10.2	0.5
Total for major group 4:		**5.5**

Analysing which sub-major groups of the major group have the highest mobility in each of the sub-major groups, the relative proportions were ranged according to the absolute value, distinguishing three highest indicators for each sub-major group and determining the proportion of the other sub-major groups (see Table 2.11.).

Table 2.11. Division of the highest incoming occupational mobility according to sub-major groups of major group 4 "Clerical support workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	1st RANK SUB-MAJOR GROUP, ITS PROPORTION	2nd RANK SUB-MAJOR GROUP, ITS PROPORTION	3rd RANK SUB-MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER SUB-MAJOR GROUPS
411	414\7.3	412\4.9	422\2.6	1.4
412	421\16.3	411\7.5	414\6.5	3.2
413	412\3.1	421\1.1	411\0.4	0.0
414	421\12.5	411\5.6	-	0.0
419	411**31.5**	413\6.9	-	0.0
421	412\16.6	422\13.0	411\4.3	0.9
422	421\8.9	414\1.3	-	0.0

A higher internal mobility is observed in sub-major group 419 "Other office clerks that is implemented at the account of sub-major group 411 "Secretaries and keyboard-operating clerks". This internal mobility could be explained by horizontal mobility when employees are transferred to a similar position due to remuneration or work conditions. Sub-major groups 421 "Cashiers, tellers and related clerks" have a larger internal mobility to sub-major groups 412 "Secretaries (general)", 414 "Library, mail and related clerks" and 422 "Client information clerks". A reason for this internal mobility could be a higher remuneration in the respective occupational groups.

Intensity of occupational mobility within major occupational group 5 (Service and sales workers)

Comparatively, most employees within major occupational group 5 were obtained by travel and transport service sub-major group (511), where, of all those who came to this occupation, 43% were transferred during the period under review (see Table 2.12.). Furthermore, 16.4% of those have been employees of public catering or household managers (sub-major group 512).

Table 2.12. Summary of incoming occupational mobility in major occupational group 5 "Service and sales workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
511	**43.0**	0.2
512	23.8	**2.6**
513	19.5	1.1
514	30.4	0.6
516	11.4	1.6
522	12.8	**4.0**
523	**39.1**	0.6
Total for major group 5:		**10.7**

The second most popular sub-major group where the employed had the previous profession from the same major group, is 523 "Cashiers and ticket clerks" – almost 40% of all who changed occupation to the above. Furthermore, 35% of those who became sellers at kiosks and market had the previous occupation of shop salesperson (522 sub-major group) that discloses the high similarity of these two occupations. It should be noted that the highest outgoing mobility within the scope of major occupational group 5 was in sub-major groups 512 and 522. Of all those who changed their occupation, shop salespersons (522 sub-major group) amount to 4%, and representatives of 512 sub-major group – 2.6%, which is one of the largest proportions among all occupations, but not within the scope only of the major group. Also the employed in occupation of sub-major group 511 had the previous occupation within the major group 5; nevertheless the employed in this occupation comparatively seldom move to other occupations, only 0.2% of all who changed the occupation.

Intensity of occupational mobility within major occupational group 6 (skilled agriculture, forestry and fishery workers)

In occupational group 6, most employees (51.3%) moved to sub-major group of agricultural, forestry and fishery products for individual consumption (621), furthermore 34% of them had been mixed crop and animal producers (see Table 2.13.).

Table 2.13. Summary of incoming occupational mobility in major occupational group 6 "Skilled agriculture, forestry and fishery workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
611	22.5	1.6
612	42.9	1.1
613	**50.3**	1.5
614	22.0	0.7
621	**51.3**	1.4
Total for major group 6:		**6.6**

In turn, 50.3% of all who changed occupation transferred to sub-major group (613) of mixed crop and animal producers from the same major group during the period under review. Moreover, 33.5% of them were previously employed in sub-major group 621 confirming similarities of these two sub-major occupational groups. The third sub-major occupational group that attracted employees from other occupations of major group 6 was animal producers (612), where more than 40% were transferred, including that almost 20% of them previously were employees working on agricultural, forestry and fishery products for individual consumption (sub-major group 621). In total, 1.4% of the employees in sub-major group of agricultural, forestry and fishery products for individual consumption have changed their occupation that is a comparatively high proportion both within the major group and among other occupations. Comparatively seldom the occupation is changed by fishery employees and hunters (only 0.3%) that can be explained by specific skills needed by representatives of the given occupational group and that cannot be used in other occupations.

Intensity of occupational mobility within major occupational group 7 (craft and related trades workers)

In the occupational group of craft and related trades workers, the highest occupational mobility was observed in sub-major group of builders (712). 4.2% of all the employed who changed profession during the period under review were builders (see Table 2.14). In turn, movement to the sub-major group of builders (712) from the same occupational group has not been so intensive (only 17% of all the employed of major group 7 have moved to sub-major group of builders). In major group 7, sub-major group 713 "Building finishers and related trades workers ", as well as the occupation of painters, building structure cleaners and related trades workers (sub-major group 714) are similar to builders. This is proven by the fact that almost 20% of those who became workers of finish works and 30% of those who have become painters were builders previously.

Table 2.14. Summary of incoming occupational mobility in major occupational group 7 "Craft and related trades workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
711	36.6	
712	17.5	**4.2**
713	34.6	1.0
714	46.1	0.6
721	41.4	0.7
722	55.0	1.2
723	27.4	**2.1**
724	28.7	1.7
731	28.6	0.1
732	28.2	0.1
733	22.6	0.2
734	11.9	0.2
741	12.3	0.6
742	45.5	1.1
743	19.1	0.6
744	**80.8**	0.0
745	**63.0**	0.1
Total for major group 7:		**12.8**

Most employees attracted from other occupations of major group 7 were pelt, leather and shoemaking trades workers (sub-major group 744). Furthermore, 50% of all those who moved to this sub-major group were painters, building structure cleaners and related trades workers (sub-major group 714) that is different due to required skills and is not similar to occupations of sub-major group 744. This could be explained by the fact that during the years of rapid growth there was a high demand in painters and other construction workers attracting workers without a special knowledge and skills in these occupations, who consequently returned to their principal occupation along with the economic recession beginning.

Another sub-major occupational group attracting the employed from the same major group were controllers of operations of technology processes, laboratory assistants and workers of the related professions (sub-major group 745). Thereof, 25.5% had the previous occupation of textile, garment and related trades workers (sub-major group 743) and 15% were food processing and related trades workers (sub-major group 741). A comparatively popular occupation in major group 7 was wood treaters, cabinet-makers and related trades workers (742). 45.5% of those who became workers of wood-processing or furniture producers had the previous occupation in the same major group, furthermore, almost half of them were from the sub-major group of builders (712). Most employees

moved to the sub-major group of blacksmiths, toolmakers and related trades workers (722) from the sub-major group of machinery mechanics and repairers (723), as well as the sub-major group of sheet and structural metal workers, moulders and welders, and related workers (721) both of which are similar to the occupation of smiths and toolmakers according to the skills. The sub-major group of building frame and related trades workers (711) attracted employees from two other occupations of its major group – sheet and structural metal workers, moulders and welders, and related workers (sub-major group 721) and handicraft workers in wood, textile, leather and related material (sub-major group 733). 20% of those who became workers of mining industry had the previous occupation as the workers of metal processing; this indicates the comparatively large similarity between these occupations.

Intensity of occupational mobility within major occupational group 8 (plant and machine operators, and assemblers)

In the occupational group of plant and machine operators, and assemblers, the incoming occupational mobility among sub-major groups is fluctuating at a broad range: from 8% in sub-major group 827 "Food and related products machine operators" to 100% in sub-major group 817 "Automated-assembly-line and industrial-robot operators" that is clearly indicated in Table 2.15. Furthermore, it should be noted that all who came to sub-major group 817 were employed in sub-major group 828 (assemblers).

76.5% employees have come to sub-major group 813 from other occupations of major group 8, furthermore, their largest part previously worked in sub-major group of power-production and related plant operators (816), but 20% were Mining and mineral-processing-plant operators (811). A high internal mobility is observed also in sub-major group 824 of occupations (73% of all those who came to sub-major group of wood-products machine operators were previously employed in major group 8). In turn, mobility between occupations in sub-major group 824 is low and is implemented at the account of one sub-major group (122) (17% of those who came to this occupation previously worked in state administration as senior officials).

A high indicator of internal mobility refers to sub-major group 811 of occupations (mining and mineral-processing-plant operators) and 825 (printing-, binding-and paper-products machine operators). 57.8% of workers in occupation 811 and 55% of representatives of occupation 825 previously worked in occupational group 8.

Table 2.15. Summary of incoming occupational mobility in major occupational group 8 "Plant and machine operators, and assemblers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
811	57.8	0.2
812	18.6	0.1
813	**76.5**	0.1
814	14.4	1.2
815	10.1	0.2
816	26.2	1.0
817	**100.0**	…
821	33.0	0.2
822	22.5	0.1
823	21.5	0.1
824	73.0	0.1
825	55.1	0.1
826	53.0	0.3
827	**8.0**	0.7
828	22.6	0.8
829	27.9	0.2
831	31.7	0.2
832	13.2	2.3
833	23.4	1.0
834	11.1	0.1
Total for major group 8:		**8.7**

Low internal mobility in the group refers to occupations 834 (ships' deck crews and related workers), 815 (chemical-processing-plant operators) and 827 (food and related products machine operators) where only 8% of newcomers worked in some of sub-major group 8; but inflow of workers from various occupational groups, including the group of legislators (111) to this occupation has been observed.

Intensity of occupational mobility within major occupational group 9 (elementary professions)

In occupational group 9, the highest internal mobility refers to occupation 914 (building caretakers, window and related cleaners). 60% of representatives of this occupation previously worked in some sub-group of the elementary occupations; in addition, more than a half previously worked as messengers, porters, doorkeepers and related workers (915). In other occupations, more expressed inter-occupational mobility flows were observed (see Table 2.16.).

Table 2.16. Summary of incoming occupational mobility in major occupational group of profession 9 "Elementary professions" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY WITHIN THE MAJOR GROUP	PROPORTION IN THE TOTAL OCCUPATIONAL MOBILITY
911	24.6	0.5
913	27.0	1.3
914	**59.6**	0.7
915	36.4	1.0
916	28.7	1.1
921	19.3	3.1
931	19.7	1.7
932	27.9	3.1
933	36.9	1.1
Total for major group 9:		**13.6**

A high indicator of internal mobility refers also to sub-major group of transport and storage labourers (933), 37% of the employed who have come to this occupational group previously worked at elementary occupations, similarly a larger number of newcomers previously worked in industry (932).

Generally the total movement among the elementary occupations is less heterogeneous than in other occupational groups. Smaller internal mobility refers to agricultural, forestry and fishery labourers (921), mining and construction labourers (931).

2.1.2. Analysis of occupational mobility between various occupational groups

Assessment of occupational mobility of major occupational group 1 (managers)

Data on the incoming occupational mobility in major occupational group 1 from other major groups and their ranging has been provided in Table 2.17. separating three highest indicators for each sub-major group.

Assessing the internal mobility from other sub-major groups according to data summarised in the table, quite high mobility dispersion among separate sub-major groups should be observed: from 18.2% in sub-major group 115 "Senior officials of municipality" to 95.4% in sub-major group 111 "Legislators", which could be explained by the fact that legislators often are elected persons with various previous occupations. It should be noted that the proportion of these two sub-major groups in the total mobility is comparatively low (see Table 2.17.).

Table 2.17. Division of the highest incoming external occupational mobility according to major groups in major occupational group 1 "Managers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS	1st RANK MAJOR GROUP, ITS PROPORTION	2nd RANK MAJOR GROUP, ITS PROPORTION	3rd RANK MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER MAJOR GROUPS
111	**95.4**	2\52.2	8\43.2	-	0.0
112	66.1	2\16.4	3\15.6	4\9.2	24.9
113	38.3	2\17.6	3\15.0	5\5.7	0.0
114	19.3	2\19.3	-	-	0.0
115	**18.2**	5\18.2	-	-	0.0
121	54.9	2\14.7	3\11.7	5\10.0	18.5
122	63.8	2\16.0	3\12.1	5\10.2	25.5
123	71.9	2\24.9	3\15.3	5\9.7	22.0
131	59.2	2\14.3	3\13.6	5\11.8	19.5

Analysis of data in Table 2.17 raises caution in relation to assessment of external mobility, showing that incoming mobility of legislators is mainly based on sub-major group 248 "Officials and specialists of state institutions" of major group 2 "Professionals" (52.2%) and sub-major group 826 (21.8%) and 827 (21.4%) of major group 8 "Plant and machine operators, and assemblers". In sub-major groups 114 and 115 with quite limited range of external mobility occupations (from major group 2 and 5 respectively) it is similarly. In turn, the broadest range of external mobility occupations is in sub-major groups 122, 112, and 123.

Assessment of occupational mobility of major occupational group 2 (professionals)

Viewing incoming occupational mobility flow in major group 2 from other major groups, the quite large dispersion between separate sub-major groups can be noted: from 44.2% in sub-major group 231 "University and higher education teachers" to 92.4% in sub-major group 222 "Health professionals (except nursing)" (see Table 2.18.). However, proportion of these two sub-major groups in the total occupational mobility is 0.5 % only.

Analysis of data in Table 2.18 shows that incoming mobility in sub-major group 246 "Religious professionals" is mainly formed by sub-major group 121 "Business services and administration managers" of major group 1 "Managers" (62.1%). In sub-major groups 215 and 223 having a quite limited range of external mobility occupations (major groups 3, 7, and 8 respectively), the situation is similar, this causes certain considerations regarding data accuracy or else, possibly, this is related to studies for professional career purposes. In turn, the broadest range of external mobility occupations is in sub-major groups 221 "Medical doctors", 222 "Health professionals (except nursing)" and 214 " Architects, engineers and related professionals".

Table 2.18. Division of the highest incoming external occupational mobility according to major groups in major occupational group 2 "Professionals" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS	1st RANK MAJOR GROUP, ITS PROPORTION	2nd RANK MAJOR GROUP, ITS PROPORTION	3rd RANK MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER MAJOR GROUPS
211	60.6	3\40.9	1\11.5	7\8.2	0.0
212	86.1	3\26.4	4\24.3	7\18.0	17.4
213	72.3	3\54.3	1\13.2	5\5.2	0.4
214	90.4	3\29.1	1\24.1	7\12.3	24.9
215	61.7	7\34.3	3\27.4	-	0.0
221	83.0	1\22.2	5\14.8	7\14.2	31.8
222	**92.4**	3\35.2	5\12.9	1\12.0	32.3
223	100.0	3\66.7	8\33.3	-	0.0
231	**44.2**	3\32.6	1\6.1	8\4.0	1.5
232	45.5	3\20.8	1\7.6	5\6.0	11.1
233	59.0	3\31.4	5\14.5	7\5.5	7.6
234	47.8	3\33.6	8\6.0	1\4.6	3.6
235	52.3	4\26.8	9\10.5	3\7.8	7.2
241	76.4	3\30.5	1\17.4	4\9.5	19.0
242	64.4	3\25.3	1\19.8	5\10.7	8.6
243	88.2	3\41.9	1\29.2	9\11.9	5.2
244	82.4	3\45.3	4\10.1	1\9.9	17.1
245	56.5	3\18.9	5\11.0	1\8.6	18.0
246	62.1	1\62.1	-	-	0.0
247	70.7	3\29.3	4\22.9	1\18.5	0.0
248	81.5	3\42.7	1\11.3	5\8.0	19.5

Assessment of occupational mobility of major occupational group 3 (technicians and associate professionals)

Data on the incoming occupational mobility in major occupational group 3 from other major groups and their ranging has been given in Table 2.19. separating three highest indicators for each sub-major group.

Assessing the incoming mobility from other major groups according to the data summarised in the table, it should be concluded that mobility dispersion among different sub-major groups ranges from 43.4% in sub-major group 314 "Ship and aircraft controllers and technicians" to 100% in sub-major group 334 "Other teaching associate professionals".

Table 2.19. Division of the highest incoming external occupational mobility according to major groups in major occupational group 3 "Technicians and associate professionals" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS	1st RANK MAJOR GROUP, ITS PROPORTION	2nd RANK MAJOR GROUP, ITS PROPORTION	3rd RANK MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER MAJOR GROUPS
311	82.7	7\39.8	2\19.9	8\8.4	10.3
312	74.8	1\20.8	2\16.7	4\11.7	25.7
313	47.2	9\20.8	4\13.7	2\6.7	6.1
314	**43.4**	1\18.7	7\15.3	2\9.4	0.0
315	79.1	2\42.6	8\30.1	1\6.4	0.0
321	68.6	1\30.3	2\14.9	3\12.5	10.8
322	82.7	2\51.0	5\9.3	7\9.2	13.2
323	84.0	2\32.1	7\14.1	5\13.7	24.1
331	88.7	2\63.0	1\8.1	6\7.6	10.0
332	70.0	2\43.3	7\9.7	4\5.6	11.2
334	**100.0**	2\43.6	9\24.3	5\14.2	17.9
341	79.6	5\27.7	2\19.6	1\9.0	23.2
342	70.0	2\20.7	1\13.8	5\9.7	25.9
343	83.1	2\25.1	1\20.8	4\20.2	16.6
344	56.7	2\25.1	1\9.7	5\9.4	12.5
345	84.2	2\36.3	5\18.0	7\7.5	18.0
346	88.3	5\55.0	9\15.2	2\13.0	5.1
347	78.1	2\29.4	7\19.4	1\14.6	14.7

Data in Table 2.19. show that incoming mobility of specialists is based on employees of major group 2 "Professionals" (52.2%). Major group 5 "Service and sales workers" and major group 1 "Managers" should be mentioned as the next dominant major groups for incoming mobility.

Assessment of occupational mobility of major occupational group 4 (clerical support workers)

Viewing the incoming occupational mobility flow of major group 4 from other major groups, mobility dispersion among separate sub-major groups should be noted: from 61.6% in sub-major group 419 "Other office clerks" to 95.4% in sub-major group 413 "Material-recording and transport clerks" (see Table 2.20). However, proportion of these two sub-major groups in the total occupational mobility is 1.2% only.

Table 2.20. Division of the highest incoming external occupational mobility according to major groups in major occupational group 4 "Clerical support workers" (%)

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS	1st RANK MAJOR GROUP, ITS PROPORTION	2nd RANK MAJOR GROUP, ITS PROPORTION	3rd RANK MAJOR GROUP, ITS PROPORTION	PROPORTION OF OTHER MAJOR GROUPS
411	83.8	3\30.6	2\24.8	5\19.6	8.8
412	66.4	3\28.0	2\9.9	7\8.9	19.6
413	**95.4**	3\25.8	8\16.1	9\14.1	39.4
414	82.0	9\13.3	5\12.6	8\12.4	43.7
419	**61.6**	3\17.4	8\17.4	2\11.0	15.8
421	65.3	5\20.6	3\15.5	9\9.4	19.8
422	89.8	3\39.4	7\17.3	9\12.6	20.5

Data in Table 2.20. show that incoming mobility is mainly formed by major group 3 "Technicians and associate professionals". This might indicate at regressive vertical mobility. The highest mobility of all major groups is in sub-major group 413 "Material-recording and transport clerks" (95.4%), and the lowest mobility is in sub-major group 419 "Other office clerks".

Assessment of occupational mobility in major occupational group 5 (service and sales workers)

A summary of incoming occupational mobility for major occupational group 5 from other occupational groups is provided in Table 2.21. Most employees from other major groups have moved to the sub-major group of protective services workers (516), moreover the sub-major group of security staff has obtained representatives from all major groups, including the senior government officials (112), clerks of state institutions (248) and other occupational groups of high qualification. This could be explained by comparatively high demand of security staff, and the option to combine the occupation of security staff with other occupation and/or search for job.

Table 2.21. Summary of incoming occupational mobility in major occupational group 5 "Service and sales workers" from other major groups

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS (%)
511	57.0
512	76.2
513	80.5
514	69.6
516	**88.6**
522	87.2
523	60.9

Another occupational group that attracted most of the employed from other occupational groups was shop salespersons (522). This sub-major group attracted representatives from all major groups (including both the high and low qualification occupations), mostly from sub-major group 341 (24.5%) the previous occupation of whom was finance and sales associate professionals that is closely related to the work of a shop salesperson. Likewise the sub-major group of personal care and related workers (513) has attracted a broad range of specialists from other occupational groups, mostly form the sub-major group of primary and pre-primary education teaching professionals (233) that could be explained by the comparatively low remuneration and the long working hours of the employed in this group. Employees from other occupational groups were least attracted by the sub-major group of travel attendants, conductors and guides (511), furthermore the largest part of them has come from the sub-major group of finance professionals (241). In this sub-major group, inflow of employees from low qualification occupations has not been observed; this could be explained by the fact that transport service employees need specific knowledge and skills (language skills, good communication and computer literacy).

Assessment of occupational mobility in major occupational group 6 (skilled agricultural, forestry and fishery workers)

The occupational group of qualified agriculture, forestry and fishery employees has attracted comparatively many employed from other major occupational groups, especially sub-major groups of fishery workers, hunters and trappers (615), forestry and related workers (614) and market gardeners and crop growers (611) that is shown in Table 2.22.

Table 2.22. Summary of incoming occupational mobility in major occupational group 6 "Skilled agriculture, forestry and fishery workers" from other major groups

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS (%)
611	**77.5**
612	57.1
613	49.3
614	**78.0**
615	**100.0**
621	48.7

Incoming mobility in sub-major group of fishery workers, hunters and trappers (615) is mainly formed by sub-major groups of food processing and related trades workers (741) and food and related products machine operators (827). Likewise sub-major group 615 has attracted comparatively many employees from major group 5. The sub-major group of forestry and related workers (614) has mainly attracted the employed from various low qualification occupational groups, and most of sub-major group 921 (Agricultural, forestry and fishery labourers) that can be explained by the similarities of both occupations, and by structural changes in the industry that resulted in the need of workers of agriculture and fishery to change occupation (3.1% of all who changed occupation during the period under review were workers of agriculture and fishery). In turn, the employed both from high and low-qualified occupations have moved to the occupation of market gardeners and crop growers (611). 30.6% of them had their previous profession from major group 9, and more than 10% – from major group 1 (managers). Sub-major group 612 (animal producers) mainly attracted the employed from the similar sub-major group 921 Agricultural, forestry and fishery labourers). Likewise sub-major occupations groups 613 and 621 mainly attracted workers from major group 9.

Assessment of occupational mobility in major occupational group 7 (craft and related trades workers)

Viewing the incoming flows of occupational mobility in major occupational group 7 from other major groups, it can be observed that there is quite large mobility dispersion among separate sub-major groups: from 19.2% in sub-major group of pelt, leather and shoemaking trades workers (744) to 88.1% in sub-major group of printing and related trades workers (734) (see Table 2.23.).

The incoming mobility in sub-major group of printing and related trades workers (734) is mainly formed by sub-major groups of computer associate professionals (312) and manufacturing labourers (932). Slightly more than 10% of those who became printing workers were also from major group 1 "Managers". Another sub-major group of major occupational group 7 that attracted most of the employed from other major groups is food processing and related trades workers (741), where the incoming mobility is formed by the employed of various major groups, and mostly from major group 5 who previously were service and sales workers. Similarly the employed from major group 6 and 9, especially sub-major group of manufacturing labourers (932), moved to this sub-major group. Employees from the elementary occupations were attracted also by the sub-major group of builders (712). More than 30% of those who have become builders previously were occupied in one of major group 9 (the largest part were from sub-major group 931 related to the builders). Builders have attracted employees also from occupations with higher qualification. Almost 12% of all who have become builders came from the two first (managers and professionals) major occupational groups.

Table 2.23. Summary of incoming occupational mobility in major occupational group 7 "Craft and related trades workers" from other major groups

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS (%)
711	63.4
712	82.5
713	65.4
714	53.9
721	58.6
722	45.0
723	72.6
724	71.3
731	71.4
732	71.8
733	77.4
734	**88.1**
741	87.7
742	54.5
743	80.9
744	19.2
745	37.0

More than 1/4 of the employees transferring to sub-major group of textile, garment and related trades workers (743) were previously employed in occupations of major group 8, and more than 1/5 - in occupations of major group 5. Sub-major group 744 of pelt, leather and shoemaking trades workers attracted least employees from the other occupational groups, employees only from sub-major groups 612 and 121 were transferred to it. This can be explained by specific skills required for employees of sub-major group 744 that could be similar to skills of the employed in sub-major group 612.

Assessment of occupational mobility in major occupational group 8 (plant and machine operators, and assemblers)

A summary of incoming occupational mobility for major occupational group 8 from other occupational groups is provided in Table 2.24. As provided in the given table, there is quite large mobility dispersion between separate sub-major groups: from 23.5% in the sub-major group of Glass, ceramics and related plant-operators (813) to 92% sub-major group of food and related products machine operators (827). High inter-person mobility is observed in sub-major groups 834, 832, and 814. The largest part of those who moved to sub-major group 834 (ships' deck crews and related workers) previously were employed in occupations of major group 7, and the ones who moved to sub-major group 814 (wood-processing-and papermaking-plant operators) previously were mainly employed in occupations of

major group 9. In turn, sub-major group 832 (motor vehicle drivers) has attracted employees from all occupational groups, including high qualification occupations.

Table 2.24. Summary of incoming occupational mobility in major occupational group 8 "Plant and machine operators, and assemblers" from other major groups

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS (%)
811	42.2
812	81.4
813	23.5
814	85.6
815	89.9
816	73.8
821	67.0
822	77.5
823	78.5
824	27.0
825	44.9
826	47.0
827	**92.0**
828	77.4
829	72.1
831	68.3
832	86.8
833	76.6
834	88.9

Quite high inter-occupational mobility refers to sub-major groups 812, 822, and 828. 43% of the employees who moved to occupation 812 (metal-processing-plant operators) previously worked in major occupational group 3 and were finance and sales associate professionals (341), and almost 78% of those who moved to sub-major group 822 (chemical-products machine operators) previously were employed in major group 7 – blacksmiths, tool-makers and related trades workers (722) and electrical and electronic equipment mechanics and fitters (724). The largest number (47%) of those who moved to sub-major group 828 (assemblers) previously worked in various sub-major groups of major group 7 (most in group 723, machinery mechanics and fitters). A similar situation is observed in occupation of sub-major group 823 (rubber- and plastic-products machine operators). 32% of representatives of this occupation previously worked in sub-major group 615 (fishery workers, hunters and trappers), and more than 46% – in sub-major group 721 (sheet and structural metal workers, moulders and welders, and related workers) and 723 (machinery mechanics and repairers).

A quite high indicator of external mobility refers to sub-major occupational group 825 (printing-, binding-and paper-products machine operators). 30% of the workers of these occupations previously worked in occupation 734 (printing and related trades workers). Sub-major group 813 is characterised by a lower level of inter-occupational mobility in major group 8; in addition all those who moved to this sub-major group previously were employed in occupations of major group 7.

Assessment of occupational mobility of major occupational group 9 (elementary occupations)

In the group of elementary occupations, quite high incoming mobility from other major groups is observed, as provided in Table 2.25.

Table 2.25. Summary of incoming occupational mobility in major occupational group 9 "Elementary occupations" from other major groups

CODE OF SUB-MAJOR OCCUPATIONAL GROUP	MOBILITY FROM OTHER MAJOR GROUPS (%)
911	75.4
913	73.0
914	40.4
915	63.6
916	71.3
921	80.7
931	80.3
932	72.1
933	63.1

A flow of the employed to the elementary occupations from all occupational groups was observed. More expressed tendencies refer to sub-major occupational group 931 (mining and construction labourers), whereof 36% of employees previously worked in a related occupation 712 (builders). In turn, more than 20% of those who moved to sub-major group 932 (manufacturing labourers) previously worked in occupations of major group 8. It should be noted that representatives of the elementary occupations comparatively often change occupation, especially workers in agricultural, forestry and fishery labourers (sub-major group 921) and manufacturing labourers (sub-major group 932). Employees of this sub-major group amount to 6.2% of all those who changed their occupation.

2.1.3. Assessment of specifics of occupational mobility among different occupational groups

In many cases, specifics of occupational mobility by occupational groups are related to established and in many cases reasonable entry barriers that are mainly expressed as specific requirements of education, skills and work life that can often be met by a very limited range of interested parties (for example, advocates, judges, doctors, auditors). This generally refers to well-paid positions with high level of responsibility requiring not only a high level of general and specific knowledge, set work experience and reputation in the chosen or the related occupations.

Another specific entry barrier is the limited number of employees in certain occupations protected by various regulations and rules, thus limiting the potential competition, even announcing certain competitions for the vacancies. As it is known, a solution to this problem could be extended use of recruitment companies for various levels of personnel. Occupations related to art and sports have certain specifics in the field of occupational mobility. In order to operate successfully in any occupation of these groups, a long professional experience is necessary, until the appropriate professional level is been reached and entry barriers have been passed. Furthermore, the relatively short professional career of representatives of these occupations should also be noted, in time it causes necessity to change occupation to a different one, however, the individual's specific training may cause certain limitations in further employment, which could be named as exit barriers.

Speaking of occupational mobility, it should be noted that it is more frequent and successful among related or connected occupations, when employee's prior education and level of training in form of various skills largely fits the requirements and specifics of the new occupation.

In less-qualified occupations, there are no entry barriers, thus there are no significant obstacles caused to occupational mobility even in cases when the applicant's sills do not suit the employer's specific requirements. Nevertheless these occupations are less attractive from the point of view of incoming mobility (low remuneration, non-attractive work conditions, and no growth and development opportunities).

Having used labour force survey data from CSB, the authors assessed specifics of occupational mobility in Latvia both in the general and within separate occupational groups. As a result, the occupations attracting most employees compared to other occupations from 2002 to 2010 and occupations with the largest employee outflow were determined. Immobile occupations with the lowest incoming and outgoing mobility were determined (see Table 2.26.).

Table 2.26. Specifics and particular tendencies of occupational mobility in Latvia from 2002 to 2010

No	OCCUPATIONS WITH THE HIGHEST INCOMING MOBILITY	OCCUPATIONS WITH THE HIGHEST OUTGOING MOBILITY	OCCUPATIONS WITH THE LOWEST INCOMING MOBILITY	OCCUPATIONS WITH THE LOWEST OUTGOING MOBILITY
1.	**522** (shop salespersons)	**712** (builders)	813 (glass, ceramics and related plant-operators)	212 (mathematicians, actuaries and statisticians)
2.	**341** (finance and sales associate professionals)	**522** (shop salespersons)	824 (wood-products machine operators)	825 (printing-, binding-and paper-products machine operators)
3.	**712** (builders)	**341** (finance and sales associate professionals)	822 (chemical-products machine operators)	834 (ships' deck crews and related workers)
4.	241(finance professionals)	343(administrative associate professionals)	711 (miners, shot firers, stone cutters and carvers)	333 (special education teaching associate professionals)
5.	122 (sales, marketing and development managers)	932 (manufacturing labourers)	215 (electro technology engineers)	521 (fashion and other models)
6.	121 (business services and administration managers)	921 (agricultural, forestry and fishery labourers)	223 (traditional and complementary medicine professionals)	744 (pelt, leather and shoemaking trades workers)
7.	921 (agricultural, forestry and fishery labourers)	122 (sales, marketing and development managers)	114 (senior officials of special-interest organisations)	114 (senior officials of special-interest organisations)
8.	932 (Manufacturing labourers)	131 (production managers in agriculture, forestry and fisheries)	246 (religious professionals)	
9.	931 (mining and construction labourers)	512 (cooks)	115 (senior officials of municipalities)	348 (religious associate professionals)
10.	343 (administrative associate professionals)	832 (car, van and motorcycle drivers)	817 (automated-assembly-line and industrial-robot operators)	115 (senior officials of municipalities)

As demonstrated by the data summarised in this table for the period 2002 to 2010, three most mobile occupations in Latvia were:

1. shop salespersons (522);
2. builders (712);
3. finance and sales associate professionals (341).

The immobile professions are the following:

1. senior officials of special-interest organisations, and political and public organisations (sub-major groups 115 and 114);
2. various religious professionals (sub-major group 246 and 348);
3. fashion and other models (521) and other occupations of narrow specialisation.

A detailed division of incoming and outgoing mobility is provided in Appendices 1 and 2.

Mobility specifics in major groups 1 and 2 are basically determined by requirements of the higher education and skills. The incoming mobility mainly relates to professional career growth, the outgoing mobility, however, is often going downwards, especially in the sub-major group of elected positions in major group 1 that is mainly related to expiry of the powers and a specific rotation among state highest officials and chief specialists often affected by various activities and mutual agreements of political parties behind the scenes.

Specifics of mobility within sub-major occupational group 3 are related to dominant incoming mobility from the second major occupational group. The largest part of the incoming employees in sub-major occupational group "Professionals" come from major group "Senior professionals" that, viewed in general, can be related to regressive (downward) occupational mobility (when a significant part of the employed move to lower level occupations). Likewise major group 4 is characterised by higher incoming mobility from the third major occupational group. The largest part of the incoming employees in major group "Clerical support workers" comes from major group "Professionals" that also indicates a regressive occupational mobility.

Employees with experience in all occupational groups, except certain occupations, transfer to the fifth major occupational group. For example, none of the newcomers to the fifth major occupational group has previously worked in sub-major groups 113-115 of the first major occupational group (state and municipality managers and officials, senior officials of organisations). At the same time, none of the employees in sub-major group 511 (travel attendants and related workers) has previously worked in a leading position (major group 1). Specialists with a prior experience in occupations of 211-212, 231, 234, 243 and 247 do not transfer to the fifth major occupational group. These occupations are related

to high level of skills in physical sciences (knowledge in the field of maths, chemistry, and physics), provision of educational services, scientific research. Among the representatives of the fifth major occupational group there are no newcomers from occupations of 324 and 333 (traditional medicine practitioners and faith healers and special education teaching associate professionals).

Mobility to the fifth major occupational group has not occurred from occupation 419 (other office clerks). An internal mobility feature can be referred to occupation 521 (fashion and other models), none of newcomers in major group 5 has previously worked in this occupation.

Mobility to the fifth occupational group has not occurred from some occupations in major group 7: 731, 732 and 744. Representatives of this occupation are characterised by skills of work with various precision equipment, tools, production of pottery objects and footwear and leather products. Mobility to the fifth major occupational group has not occurred from occupations of 812-813, 822, 824, -825 and 828. Representatives of this occupation are characterised by skills of operators of various industrial equipment. None of the employees in major group 5 has previously worked in occupation of 912 (vehicle, window, laundry and other hand cleaning workers) of major group 9 during the period under review.

Mobility of the sixth major group is low within the high qualification segment (in comparison with, for example, the fifth major group, representatives of the sixth major group of occupations have rarely performed work of managers and high qualification specialists and specialists). Occupation 615 (fishery workers, hunters and trappers) where 7% previously worked in 214 (architects, engineers and related professionals) should be marked. Workers with previous experience related to occupations of major groups 1-4 have not transferred to occupation 615, except the particular case above. Inter-group mobility among the newcomers of the seventh major group during the research reveal flow of skills both from higher and lower qualification occupations. Newcomers of the seventh occupational group do not include labour with previous experience in occupations of high level of knowledge (212 - mathematicians, actuaries and statisticians). Similarly newcomers of the seventh major occupational group do not have representatives of occupations 111, 113-115 with management and legislation skills. Within the group, none of the representatives of the seventh major group had previous working experience in occupations of 732 (potters, glass-makers and related trades workers) and 745 (controllers of operations of technology processes, laboratory assistants and workers of their related professions).

The eighth major group had 100% mobility in occupation 817 (automated-assembly-line and industrial-robot operators). Everyone who transferred to this occupation was previously employed as

assemblers (828). Limited internal mobility within the group can be referred to occupations 822 (chemical-products machine operators) and 823 (rubber- and plastic-products machine operators). This is expressed as follows: in the first reviewed occupation representatives of only one occupation of the eighth major group - sub-major group 832 (car, van and motorcycle drivers) have transferred; thus among newcomers of occupation 822, 23% previously worked as vehicle drivers, but among newcomers of occupation 832 - 22% previously represented group 833 (Heavy truck and bus drivers). In general, the largest number of newcomers in occupation 822 previously worked in major group 7, occupations 722 (blacksmiths, toolmakers and related trades workers) and 724 (electrical and electronic equipment mechanics and fitters). In per cent - 37% and 40%, respectively, of the number of newcomers in occupation 822. Generally the number of newcomers in occupation 823 has previously worked in the sixth and seventh major occupational groups: 32% previously were fishery workers, hunters and trappers (615), 24% - machinery mechanics and repairers (723) and 22% - sheet and structural metal workers, moulders and welders, and related workers (721). Thus, the dynamics of newcomers in separate occupations (817, 822 and 823) in major group 8 shows a quite limited internal and inter-group mobility.

Specifics of the ninth major group are high internal and inter-group mobility. The internal mobility of the group in certain occupations shows that the required simple and physical work skills allow changing occupation freely within the group. Moreover, representatives of all occupational groups have transferred to the work of elementary occupations. Generally, 1-4% of representatives of the ninth major group have previously occupied leading occupations in the first major occupational group. Representatives of occupational groups 114 and 115 - senior officials of political and public organisations, municipalities - have not transferred to elementary occupations. Representatives of the second major group, unlike the managers, have not changed work to occupation 911 (street vendors and related workers). In comparison - 4% of representatives of 911 previously have been Sales, marketing and development managers (122). Representatives of the second major group have not moved to occupation 914 (building caretakers, window and related cleaners); in comparison - 3% of newcomers in occupation 914 previously were senior government officials and traditional chiefs and heads of villages (112 and 113). Among the occupations of the second major group, representatives of occupations 223 and 231, 234-235, 242-244, 247 have not moved to the ninth major group. Thus, none of the performers of elementary occupations has worked as health-care assistant, occupied position of teaching staff and academic position, occupied lawyer's position and the like. Specialists who previously worked in the third major group - both specialists of physical sciences (311, 314, 315), vessel and air vessel drivers and technical specialists (321), medicine specialists (322, 323), have moved to the ninth major group. Specialists of legal, social, art science (341, 342, and 343) can be

found among workers of simple occupations. Specialists of occupations 312–313, 324, 331–333, 344–345 and 348 have not moved to elementary occupations: among representatives of elementary occupations specialists who have previously worked at the respective jobs requiring knowledge of the industrial and technological processes, skills in veterinary, finances and maths, as well as skills of services, education services and the like have not transferred. Specialists of occupational group 419 – other office clerks – have not moved to elementary occupations. Representatives of occupations 521 – fashion and other models – of the fifth major group have not moved to performance of elementary occupations. Performers of elementary occupations have not occupied occupations 744 (pelt, leather and shoemaking trades workers) and 745 (controllers of operations of technological processes, laboratory assistants and workers of the related professions).

Workers with experience in occupations 825 (printing–, binding–and paper–products machine operators) and 834 (ships' deck crews and related workers) have not moved to elementary occupations.

So, it can be concluded that in elementary occupations both the internal and the inter–group mobility have been even. During the period under review, representatives of elementary occupations had not previously occupied positions requiring high level of specialisation (for example, skills of physical sciences) and skills that are obviously sufficiently demanded in the labour market (performers of technological processes, production processes and the like).

2.2. CHARACTERISTIC FEATURES OF OCCUPATIONAL GROUPS AND MOST SIGNIFICANT FACTORS AFFECTING OCCUPATIONAL MOBILITY IN LATVIA

To analyse the specific features of occupational groups, Occupation Classification[52] of the Republic of Latvia and therein provided description of skills of the major groups and sub-major groups was used. Assessing work tasks given in the classification, both the most significant common skills required by all employees of some sub-major group and the specific skills that differ depending on the field of action were identified.

First major group "Managers"

This major group includes occupations the principal tasks of which are related to determination and formulation of state policy, development of laws and regulations, organising government policy and its implementation in institutions, organisations and enterprises. Legislators, state officials and managers determine, formulate policy of the state and government, state-wide organisations, develop laws, public regulations and instructions, represent the state and act on its behalf, supervise compliance with the state policy and laws, plan, manage and coordinate operational activities and events of enterprises, organisations or their structural units. The basic tasks of their professional activities are the following:

- to determine, formulate policy of the state, its regions and local municipalities, and to issue directives;
- to draft laws, public regulations and instructions;
- to represent the state, region and to act on its behalf, to supervise compliance with the state policy and laws, process of their explanation;
- to perform tasks that are common for political parties, trade unions and other state-wide organisations;
- to plan, manage and coordinate operations and events of enterprises, institutions, organisations or their structural units; to manage other employees.

According to the occupation classification, occupations of major group 1 are classified into four sub-major groups:

- 11 Chief executives, senior officials and legislators
- 12 Administrative and commercial managers
- 13 Production and specialized services managers
- 14 Hospitality, retail and other services managers

[52] Profession Classification of the Republic of Latvia in compliance with Regulations of the Cabinet of ministers No 461 of 18 May 2010.

Skills required by all sub-major groups of major group 1:

- high communication skills;
- ability to take the leadership and persuade others;
- ability to work in circumstances of uncertainty and analyse various economic, political and social situations;
- ability to listen to others and take independent decisions;
- skills to develop as a personality and specialist.

Specific skills that depend on the particular field of operation:

- to plan, manage operation strategy and coordinate operations of a structural unit for the principal operational activities of an enterprise, institution in production of goods and provision of services;
- to develop and manage work and management procedures;
- to plan and manage daily transactions and operative work processes;
- to choose and train employees, control performance of their obligations;
- to maintain contacts with managers of other structural units;
- to represent the structural unit at other structural units or enterprises, institutions, organisations;
- to perform similar tasks; manage other employees.

Education: higher academic education, scientific degree in certain cases.

Second major group "Professionals"

The second major group includes occupation s whose work requires high level of theoretical and professional knowledge in nature, social sciences and humanities. The main task is a broad use of the existing knowledge, their improvement and skills to solve theoretical problems, acquisition of systematic experience. Senior specialists perform scientific researches, educate the population, performs the practical work to create material and intellectual values in all enterprises, institutions, organisations of national economy, as well as independently. Majority of occupation s in this major group require at least the fourth level of skills (according to EQF[53]). Main tasks of the professional activities are related to development of scientific works, theories, concepts, research methods, provision of consultations, work at all levels of public education institutions teaching, educating the population of all generations. In addition, the senior specialists perform practical work in creation,

[53] Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (Text with EEA relevance) (2008/C 111/01), Official Journal of the European Union 6.5.2008.

production and sale of material values, provide legal, religious, medical and social care services, and manage other employees.

According to the occupation classification, occupations of major group 2 are classified into six sub-major groups:

- 21 Science and engineering professionals
- 22 Health professionals
- 23 Teaching professionals
- 24 Business and administration professionals
- 25 Information and communications technology professionals
- 26 Legal, social and cultural professionals

Skills required by all sub-major groups of major group 2:

- high communication skills;
- ability to take the leadership and persuade others;
- ability to work in circumstances of uncertainty and analyse various economic, political and social situations;
- ability to listen to others and to take independent decisions; skills to develop as a personality and specialist.

Specific skills that depend on the particular field of operation:

- must manage methods and techniques of analysis and synthesis of the problem to be studied;
- practical skills of using technical means to be used at work, regulations of use;
- technology and organisation of the work to be performed, regulatory enactments related to those;
- must be able to use theory in practice and to improve it constantly.

Education: higher academic education, scientific degree in certain cases.

Third major group "Technicians and associate professionals"

According to the occupation classification, occupations of major group 3 are classified into five sub-major groups:

- 31 Science and engineering associate professionals
- 32 Health associate professionals
- 33 Business and administration associate professionals

- 34 Legal, social, cultural and related associate professionals
- 35 Information and communications technician

Skills required by all sub-major groups of major group 3:

- Analytical skills (ability to perform technical operations related to preparation and use of concepts and research methods in the fields of nature, medicine, agriculture and public sciences, and engineering sciences and humanities);
- Cooperation skills (ability to work together with others, work in a team);
- Language skills (ability to communicate in the state language and in at least one foreign language);
- Ability to use theory in practice and to improve it constantly;
- Computer expertise.

Specific practical skills that depend on the specific field of operation:

- Ability to use modern scientific methods;
- Ability to know legislation and regulatory enactments;
- Skills to use the most modern achievements of IT;
- Management skills (ability to manage a team, project).

Fourth major group "Clerical support workers"

According to the profession classification, occupations of major group 4 are classified into four sub-major groups:

- 41 General and keyboard clerks
- 42 Customer services clerks
- 43 Numerical and material recording clerks
- 44 Other clerical support workers

Skills required by all sub-major groups of major group 4:

- Computer skills (skills to write on the computer; enter and extract data in the computer);
- Skills of bookkeeping and accounting (skills to manage bookkeeping and record warehouse production, production reserves, register transport movement);
- Managerial skills;
- Cooperation skills (ability to work together with others, work in a team);
- Language skills (ability to communicate in the state language and in at least one foreign language);
- Ability to use theory in practice and to improve it constantly.

Specific practical skills that depend on the specific field of operation:

- Shorthand;
- Communication skills (ability to communicate with clients);
- To be competent in regulatory enactments;
- Skills of coordination.

Fifth major group "Service and sales workers"

According to the occupation classification, occupations of major group 5 are classified into four sub-major groups:

- 51 Personal service workers
- 52 Sales workers
- 53 Personal care workers
- 54 Protective services worker

Skills required by all sub-major groups of major group 5:

- Good social and communication skills (ability to communicate with clients, to listen to their wishes and problems, to offer alternative solutions in various non-standard situations);
- Language skills (ability to communicate in the native language and in at least one foreign language);
- Cooperation skills (ability to work together with others, work in a team);
- Ability to use theory in practice and to improve it constantly.

Specific practical skills that depend on the specific field of operation:

- Ability to plan and constantly organise the work, use various methods and technologies (including information and communication technologies);
- Ability to find, assess and creatively use information (travel companions, guides);
- To purchase products and other materials, to control their use and storage (cooks, building managers);
- Ability to perform various physical tasks (load and unload goods provided for trade, assist persons who are unable to take care of themselves, to save people, animals, property and other material values during fire and other accidents);

Education: General secondary or vocational education.

Sixth major group "Skilled agricultural, forestry and fishery workers"

Workers of this major group perform works of agriculture and cattle breeding, forestry, hunting and fishery works.

According to the occupation classification, occupation s of major group 6 are classified into three sub-major groups:

- 61 Market-oriented skilled agricultural workers
- 62 Market-oriented skilled forestry, fishery and hunting workers
- 63 Subsistence farmers, fishers, hunters and gatherers

Required skills that depend on the particular field of operation:

- to prepare, fertilize soil for sowing, planting;
- to sow, plant, harvest;
- to breed fruit trees, berry bush, root-crops, to harvest;
- to breed, supervise and use forest;
- to monitor forest animals and organise their hunting;
- to breed fish and fish them;
- to process, store, use products of cattle-breeding, agriculture, fishery;
- skills to manage other employees.

All specialists of the sixth major group must know construction of the technical equipment used in work, operation principles, sequence of work processes, and their rational organisation. Specialists must know the norms of product pricing, marketing, labour and environment protection, as well as labour legal relations. They must be able to use knowledge of theory and skills in practice and improve them constantly.

Education: elementary or secondary vocational education.

Seventh major group "Craft and related trades workers"

Workers of this major group work manually or with mechanical equipment – produces goods, processes goods, preparing printed products and the like.

According to the occupation classification, occupations of major group 7 are classified into five sub-major groups:

- 71 Building and related trades workers, excluding electricians
- 72 Metal, machinery and related trades workers
- 73 Handicraft and printing workers
- 74 Electrical and electronic trades workers

- 75 Food processing, wood working, garment and other craft and related trades worker

All employees of the seventh major group are required skills related to performance of practical work of various complexities (including physical work):

- Skills to perform works related to construction: construction of buildings and other structure, perform various construction works, bricklaying works, glazing of windows and the like;
- Skills to perform works of machine engineering and metal processing: to perform technical servicing and repair, produce metal structures, equipment and devices, cover, polish metal surfaces, install and manage workbenches, service and repair vehicles, engines, production equipment;
- Skills to perform work with electrical and electronic equipment: mount, regulate and repair electromechanical and electrical engineering machines and tools;
- Skills to perform works of craftsmen and in the field of printing works: to prepare precision tools, articles of precious metal, glass, pottery, wooden, floral, leather, textile or other material, objects of art, perform printing works;
- Skills to process foods: handle and process meat, fish, grain cultures, fruit and vegetables;
- Skills to make and repair furniture and wooden goods, as well as to make and repair textile objects, footwear.

Workers of this occupational group should know how to organise production process, materials to be used, and availability of end-products. They should know the sequence of mutually related work processes, their rational organisation, working regimes; regulations of work safety and environment protection, employment legal relations. They must be able to use knowledge of theory and skills in practice and improve them constantly.

Education: elementary or secondary vocational education, trade education.

Eighth major group" Plant and machine operators and assemblers

Workers of this major group manage and supervise equipment, mechanisms by remote controls or without them, to assemble products from sets of parts in compliance with instructions.

According to the occupation classification, occupations of major group 8 are classified into three sub-major groups:

- 81 Stationary plant and machine operators
- 82 Assemblers
- 83 Drivers and mobile plant operators

Required skills to perform works of operators of industrial equipment:

- manage and supervise mining;
- manage and supervise automatic and semi-automatic mounting lines, industrial robots;
- skills to process metal and other raw material (glass, pottery, wood, paper, chemical substances);
- skills to manage water recycling equipment, equipment and mechanisms, to drive vehicles, agriculture, forestry, road construction and similar mechanisms, loading equipment;
- skills to perform works on ships and other floating means.

All specialists of this major group must know operational principles of equipment and mechanisms to be serviced, operation, control and servicing regulations, sequence of work processes, organisation. They must know regulations of work safety and environment protection. They must be able to use knowledge of theory in practice, if needed, to improve it.

Education: elementary or secondary vocational education.

Ninth major group "Elementary occupations"

The employed perform simple and monotonous work or mechanical work operations using manual tools and physical strength.

According to the occupation classification, occupations of major group 9 are classified into six sub-major groups:

- 91 Cleaners and helpers
- 92 Agricultural, forestry and fishery labourers
- 93 Labourers in mining, construction, manufacturing and transport
- 94 Food preparation assistants
- 95 Street and related sales and service workers
- 96 Refuse workers and other elementary workers

The following skills are required for the work:

- Sell goods or supply goods to the client;
- Provide various services on the street;
- Clean, wash, iron laundry and clothes, perform cleaning work;
- Supply urgent messages and goods, move baggage, perform doorkeeper's obligations, guard items and property;
- Collect waste and clean streets or other public places;
- To perform auxiliary works of agriculture, forestry, fishery and hunting;

- To clean water reservoirs, dig ditches, obtain mineral deposits, auxiliary works of construction and industry – sort products, collect sets of details and pack them, unload and load cargo to be transported;
- Transport passengers, goods and materials by vehicles to be operated with pedals or by the force of traction.

They must know the rational means of work performance, norms of work safety and environment protection, as well as labour legal relations. They must be able to do the following: use simple tools, professional cleaning tools and means of cleaning.

Education: elementary education and principal skills or elementary vocational education.

Most significant factors affecting mobility in Latvia

Demographic. In light of tendencies of ageing of population in Latvia, specific situation is observed in development of occupational mobility. According to the previous studies and labour studies, a higher level of occupational mobility is traditionally observed in age group of 18 to 24, when young people often with insufficient level of skills search their place in the labour market after having obtained education. At this age, employees often have to work low-qualified works with low remuneration causing frequent changes in place of work and occupation.

The high occupational mobility at the age of 25 to 45 should be assessed differently, as it is generally related to successful career or else to making radical decisions in relation to complications in private life or re-assessment of values of life.

Quite different occupational mobility occurs at the age group of 55 and onward – in the so-called group of "silver" labour. This is the age of pre-retirement or retirement, when most of the workers despite the knowledge and vast working experience have reduced physical and mental working skills and certain non-compliance occurs between the employer's wishes and the actual employee's abilities. A situation occurs where employee's knowledge and skills have become out-dated and do not correspond with the requirements of modern labour market. In these circumstances, many workers are forced to change occupation and professions to continue their working life in compliance with the actual possibilities, that is, by performing less responsible works that suit the physical abilities.

Taking into account the rapid ageing of population, the proportion of this age will significantly increase in the nearest years. The system of labour market and life-long education will face this problem in the nearest future that will require not only provision of specific training but also certain solutions to psychological problems.

Education. Studies and statistical data indicate certain regularities formed between the employees' level of education and occupational mobility – the higher is an employee's level of education and skills the higher is his/her occupational mobility. This, firstly, refers to occupational mobility in relation to career growth. Decisions by persons with higher and sufficiently universal education regarding the possible occupational mobility are often more substantiated and feasible as employers are interested in acquiring well-educated, efficient and motivated employees. It should be noted that the employee's level of education should be assessed not only by the level of the acquired formal education but also by the activities in the field of life-long learning. Not only the fundamental knowledge of various fields should be assessed, but also language skills, ability to communicate, flexibility and tolerance, and a range of various abilities required by the 21st century.

The existing practice shows that persons with low level of education have limited opportunities of occupational mobility as they often lack the necessary knowledge and skills to pass the entry barriers to work in a different occupation related to higher salary and better working conditions. Nevertheless, the practice shows high occupational mobility also in low-qualification occupations occupied by young workers with insufficient level knowledge and professional skills that in most cases is related to low salary and not-so-attractive working conditions. This means that the general level of education should be increased, the system of life-long learning should be improved and its availability should be increased. As noted in the sustainable development strategy of Latvia until 2030, the situation is ripe to change the paradigm in education system.

Salary. One of the main initiators of occupational mobility is individual's satisfaction or dissatisfaction with the existing salary and possibilities to change it making a certain available occupation change that could ensure also a higher salary. The factor of salary, as well as employment availability is the main cause of geographical mobility (inland and cross-border). Also in most cases the professional career is related to a possibly higher salary and establishment of a certain life standard.

No doubt, occupational mobility is related to the territorial development level of a country and its specifics. If the development of separate regions significantly varies, along with the geographical mobility also an increased occupational mobility will be observed.

Free movement of labour and significantly different level of salary among countries being also the main cause of geographical mobility and causing population emigration from less developed countries causes also a peculiar occupational mobility of the departing persons, when the qualified specialists are forced to perform less-qualified work thus contributing to the-so-called regressive occupational mobility.

The occupational mobility is affected by changes in industry structure of natural economy, increase in the technological level of business and introduction of new economy elements in the labour market.

Location. Territorially, occupational mobility is affected by several factors that are mainly related to economic development level of the respective territory, demographic structure of the residing population and educational level. Economic activity rate in a territory is largely determined by the number of existing places of work and distribution according to occupations, their possible dynamics and largely also by the level of salary. Following this criteria, the internal occupational mobility in territories with low economic activity is quite limited. Employees have little career opportunities in their companies, the number of vacancies in the territory is limited. The historical situation proves also an insufficient level of education of population in these territories, as well as increased ageing of population due to regular geographical mobility of young educated people to economically more developed state regions (mainly to large cities, especially Riga and suburbs of Riga) and foreign countries having larger options to find suitable work and higher salary.

Assessing the situation in many regions of Latvia that are further away from the larger towns and that have a very limited economic and social development options, an expressed outgoing occupational mobility in practically all occupational groups should be mentioned, thus leaving the remaining labour insufficient for labour market demands (mainly in education level and age structure) and causing even more imbalance in the territorial development of the state. Together with labour problems, a significant role in this non-attractive situation is played also by underdeveloped infrastructure of public transport and society, limited availability of various services (kindergartens, schools, health protection institutions and other services) that make these regions non-attractive also to new investments.

In the context of ensuring labour resources and employment, an important role is played also by the internal geographical mobility within the country in a way that the labour is able to operatively react to changes in a certain region and work at a place with available jobs. Internal migration of population is a significant type of labour mobility in Latvia. The most popular type is push-pull migration of labour. Traditionally it is understood as daily commuting to work, but in all Latvia also long-term internal migration is active, especially in the direction from rural areas and smaller towns to the capital and other larger towns.

Assessing economic regions with average and above-the-average development level, the more developed labour market both in supply and demand should be noted. In these circumstances, the outgoing geographical and occupational mobility is decreased, and the incoming geographical and occupational mobility is increased, as there is a better social infrastructure, more available and qualitative social services and more developed life environment, as well as opportunities of higher

salary offer. In these circumstances, occupational mobility is more expressed in relation to career growth, more active involvement in public and political life. Occupational mobility from and to certain occupations, to a large extent, depends on the main business specialisation and development prospects of the region, as well as the existing institutions financed by state and municipalities providing services thus attracting significant number of employees from various occupations.

3. REGULARITIES AND SIGNIFICANCE OF OCCUPATIONAL MOBILITY IN DEVELOPMENT OF LABOUR MARKET

This Chapter will analyse mutual similarities of occupational groups, occupational mobility tendencies in various industries of the Latvian national economy and mark options to facilitate mobility.

3.1. ANALYSIS OF MUTUAL SIMILARITIES OF OCCUPATIONAL GROUPS AND ASSESSMENT OF THE RELATION DEGREE

To determine mutual similarity of occupational groups, it is necessary to study what methods would be suitable for detecting mutual similarity or degree of relation of occupational groups, to be used as basis for calculation of the degree of relation of occupational groups.

The assessment of occupation similarities is based on the skill component. Assessing relation between skill and occupation[54], authors of the research came to a conclusion that information prepared by the MoE regarding conformity of education with occupations is appropriate to reach the goal. Thus, occupation similarity was assessed on the basis of the file regarding compliance of education (ISCED97 classification) with occupation (according to ISCO 08 classification) prepared by the MoE and given to the authors.

The file regarding compliance of education with occupations prepared by the MoE contains only binary variables: 1 – if the education corresponds to requirements of the occupation, 0 – if the education does not correspond to profession requirements. It does not view partial compliance. The data contain 125 lines – occupation classification at the small group level, and 345 columns – education group according to the level and field of education. The binary data mass limits choice of methods. To determine natural occupational groups, factor analysis or cluster analysis could be used. This shall be done by tools inbuilt in SPSS data analysis program.

Experts do not recommend factor analysis for binary data, as it is known that the link between selected elements is weak, therefore the researchers chose the other identification method for natural groups – cluster analysis. The cluster analysis was used by researchers in "Study on skills with the largest strategic demand in future in Latvia" to determine a group of benchmark countries corresponding to alternative scenarios for national economy development. The cluster analysis allows disclosing data structure better as it includes a combination of various algorithms and methods grouping similar

[54] International Standard Classification of Occupations (ISCO-08) – Conceptual Framework. www.ilo.org. See also Elias, P. (1997), "Occupational Classification (ISCO-88): Concepts, Methods, Reliability, Validity and Cross-National Comparability", *OECD Labour Market and Social Policy Occasional Papers*, No. 20, OECD Publishing. http://dx.doi.org/10.1787/304441717388 .

objects in certain categories. Hierarchical cluster analysis initially puts the most similar objects in groups; then decreases the parameter threshold by a certain step, thereafter determining whether the objects belong to one group and obtaining object groups that are less homogeneous internally. In this manner, a diagram of object grouping structure – dendogram – is obtained as a result.

The algorithm to form groups uses similarities or differences described by a distance measurement between objects.

Taking into account that in education related to occupations is more characterised by clusters rather than a chain, the distance between objects is searched by the method of Complete Linkage (Farthest Neighbour). This method determines distance between clusters by the largest distance between any two objects in various groups. *Dice* index is chosen as distance measurement taking into account that the data are binary variables. This index does not take into account those elements that are not observed in the objects simultaneously; however, the simultaneously observed elements have a double weight – thus they obtain a larger significance in [education] compliance. The index is also called as *Czekanowski* or *Sorensen* distance measurement.

As a result of cluster analysis, authors of the research obtained a dendogram (see Figure 3.1.), allowing to conclude that 125 could be grouped in 41 broader groups; and having analysed the group objects in detail it was detected that occupations can be classified by education (as formal skill indicator) in **40 broader groups** (for "Printing and related trades workers" the education does not significantly differ from "Craftsmen" or "Rubber- and plastic-products machine operators").

Upon an in-depth analysis of the object groups, the skills determining group structure was selected. Levels and fields of formal education are assumed as skill indicators. Analysis results for 40 occupational groups are summarised in Appendix 3.

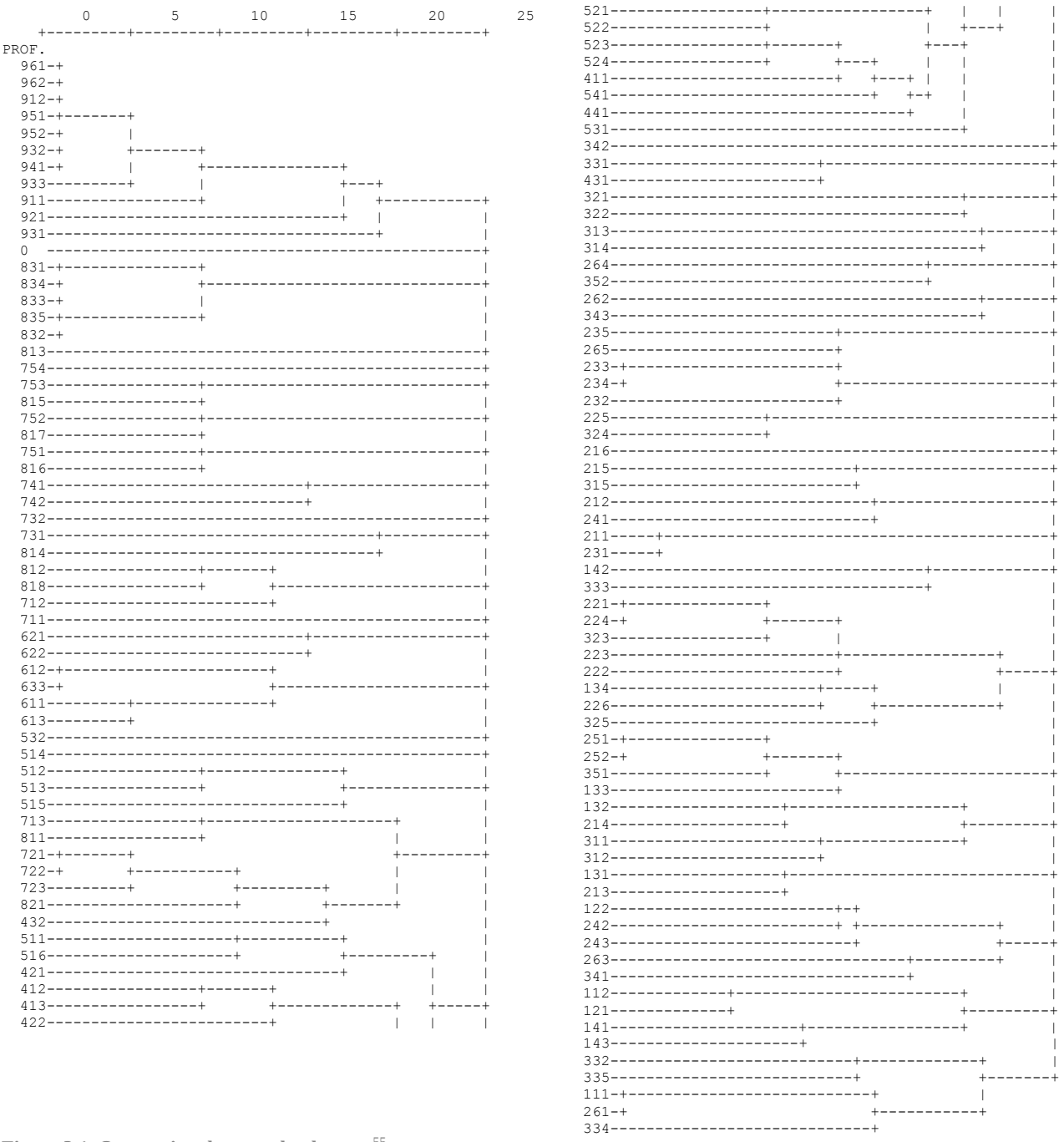

Figure 3.1. Occupational group dendogram[55]

The authors determined that correlation between fields of education corresponding to occupations could be used as a measurement of similarities between occupations. To verify usefulness of this approach, correlations between binary variables were calculated by the method ***Dice***, analogue to the used cluster analysis. Upon comparison of correlation rates summarised in the "similarity matrix" with the groups acquired in cluster analysis, it should be concluded that there is an unequivocal correspondence between a higher correlation rate and belonging to one group. This is explained by the fact that only the corresponding cases are weighed. For example, the correlation rate between

[55] Prepared by the authors of the research on the basis of the ME information regarding compliance of education (ISCED97 classification) with professions (according to ISCO 08 classification).

occupations “legislators and senior officials” and “legal professionals” is 1 as both levels and fields of education indicated as corresponding to the mentioned occupations coincide. If in some couples of occupations an occupation has five fields of education indicated but only one coincides, the correlation rate will be 0.200. If each group has two, but only one coincides, it is 0.500. Thus it is clear that these correlation rates show only the relative correspondence of fields of education with regard to all fields of education of the couple. This means that in case any occupation has a long list of fields of education, when it is compared to a shorter list of another occupation, it is known at the very beginning that the correlation rate would be small. The problem would not be eliminated also by the option to range the fields of education for occupations according to their significance and to compare only the most significant ones (the first **n** – the most important fields of education cannot be compared because there are occupations where only one field of education coincides) – correlation rates will assume values 1 or 0.

Authors' suggestion for an in-depth analysis is to use cluster analysis in future to determine groups that are joined according to common fields of education and to perform qualitative analysis of skills as due to the difference in fields of education corresponding to the occupations interpretations of the quantity indicators (correlation rates) among various couples cannot be compared.

3.2. TIME AND COST OF OCCUPATIONAL MOBILITY AMONG VARIOUS OCCUPATIONAL GROUPS

The economic essence of costs is a consequence of choice. In circumstances of limited resources, all the planned projects cannot be implemented: upon deciding on implementation of one programme, the used resources are not available for different purposes.

For example, upon deciding to study at a programme of 2nd level vocational education, the costs comprise not only the study fees but also the potential benefits that could be obtained if these resources were used differently – to ”buy free time” to be used for ”shopping” (analogous to principal assumptions of models for money and time MIU (*Money in Utility*))[56]. In economy theory these costs are defined as alternative costs of resources. Assessment of alternative costs is a complicated issue. The best alternative use of the resources has to be identified and the benefit it could provide. In circumstances of a perfect market, market prices reflect also the alternative costs as only the resource prices need to be collected. Within the research, this would mean that it is sufficient to summarise only

[56] Walsh, Carl E. (2003). Monetary Theory and Policy, MIT Press, pages 43-59.

the program costs for one pupil/trainee/student and to detect whether additional skills are needed or not to transfer to another occupation and what the related costs are.

Conditions of a perfect market exist if:

- a large number of buyers and sellers can enter and leave the market without additional costs;
- all buyers are identical;
- all buyers have access to full information;
- the goods and services to be sold are identical.

In reality, one or several of these conditions are not met. In case of the labour market, as it was already mentioned in the first research, there is information asymmetry between employers and employees – the employers wish to hire an employee with a set amount of skills, but the best applicant is chosen by the formal education indicated by the employers. Therefore, in searching employees, the employers follow not only the obtained level of education but also the previous experience.

If we assume that the product to be sold is the skills (or their set), then the assumption about their authenticity should be rejected – education programmes that provide these skills have various contents and bear various costs that are different not only among the fields of education but also among the implementers of education programmes in the same field. Thus neither programme content, nor costs are homogeneous. Moreover, an additional difference between prices and economic costs is caused by whether the education is financed by own funds, loan or scholarship.

To assess the true economic costs of educational services, the relation between costs and prices (*cost-to-charge*) could be used. This approach is broadly used in assessing costs of medical services. The index is prepared by expert groups who convert prices for medical services in actual economic costs having studied invoices for medical treatment.

An alternative method would be analysis of micro-costs (*micro-costing*). The method of micro-costing identifies and sets a value for each resource used to create a product or service (teachers' hourly rate, term of use of premises, use of teaching materials and the like).

Likewise surveys can be used to determine individuals' readiness to pay a certain amount for education in case they change profession.

Of these three methods, following the project limitations, the micro-costing analysis could be used; however, in the field of education, not all stages of "production of the end-product" are identified as goods or services to be sold. Many activities that comprise an education programme depend on

resources outside the market, for example, independent student work, student research work. Assessment of the value of the resources outside the market is called shadow price.

As the resources outside the market are not purchased, their value is replaced by prices of other similar resources. Nevertheless, certain educational activities cannot be replaced by similar, for example, attending lectures most certainly cannot be aligned to a paid job similar in functions and the salary rate of which could be used as assessment of a lecture hour. A contrary approach could be used, and the problem could be viewed from the point of view of a teacher, but, as the number of students in groups varies, also the "productivity" is different within one field.

Non-material values are difficult to assess as there are no comparative values, but in the process of learning and studies their proportion is significant. Therefore, in order to bypass the problem of missing data, they are usually assessed qualitatively that is not revealed in this research according to the research tasks.

Another approach to assessment of costs of occupational mobility could be assessment of indirect costs. Indirect costs or losses of productivity are income of labour that is not earned as additional skills have to be acquired for a transfer from an occupation to occupation. A drop in productivity could be caused by the time spent for studies, instead of creating goods or services. This results from the assumption that education is investment in human capital (assumed analogue to the manner how the human capital, more precisely – acquisition of skills, is included in the model of economic growth of Uzawa-Lucas [57]). The human capital method could help assessing the lost time that had to be used for acquisition of additional skills in order to transfer to another occupation or what is the amount of lost time used to acquire the skills that are not needed by the new profession.

If it is assumed that the set of skills needed for an occupation is characterised by two indicators – level of formal education and the field, then the costs for a transfer from an occupation to an occupation can be incurred in the following cases summarised in Table 3.1.

[57] Barro, R.J. and Sala-i-Martin, X. (2004) Economic Growth. 2nd edition. The MIT Press, pp. 239-279.

Table 3.1. Indirect costs of occupational mobility

NO	OCCUPATION TO WHICH INDIVIDUAL IS TRANSFERRED	COSTS OF OCCUPATIONAL MOBILITY
1	the level and field of education coincide	none
2	a higher level of education is required, the field coincides	time to be used to obtain the required level of education
3	the level of education could have been lower, but the field coincides	time to be saved by remaining in the previous level of education
4	the level of education could have been lower and in a different field	time that could have been saved staying in the previous level and field of education coinciding with the new profession + the time to be spent to obtain the required education
5	the level of education coincides but it is needed in a different field	
6	a higher level of education is needed and in a different field	

Calculation of time and costs is divided in five steps:

(1) Setting up an occupational similarity matrix according to the field and degree of education. On the basis of the file regarding compliance of education (ISCED97 classification) with occupations (according to ISCO 08 classification) prepared by the MoE and provided to the authors, similarities (distances) between occupations are calculated depending on type and field of education corresponding to the occupation. The obtained distances vary from 0 to 1, where 0 indicates complete similarity and 1 means that there are no similarities at all.

As the education indicators are binary – if the education complies with the occupation, the value is 1, otherwise the value is 0, the *Dice* index is chosen as the distance measurement by analogy with the case of cluster analysis where the elements that are not observed in the objects simultaneously are not taken into account upon calculation of the variable relation, at the same time double weight is applied to the observed elements – thus a larger significance is granted to [education] conformity. The calculations use tools of statistics programme package SPSS. Results are reflected in Appendix 3.

(2) Setting up an occupational difference matrix according to the field and degree of education. Assuming that close occupations have a set of overlapping skills (as the education), if a transfer to a different occupation occurs where the set of existing skills is only partly required, the unused skills could be referred to costs related to labour mobility.

To calculate what part could be referred to costs by using the matrix obtained in step (1), differences among occupations according to the education have been calculated. This is done by dedicating similarity measures from 1 and obtaining a table of the same dimensions (matrix) where difference measures are summarised instead of similarity measures.

(3) Link between occupations and the time spent at the previous level of education.

To assess, what is the time loss upon transferring from one occupation to another, each of the occupations acquires time required under the educational system of Latvia to successfully acquire the particular level of education[58].

As the general elementary education is mandatory for everyone, this level of education is not viewed in further calculations. The time of the secondary education can be from 3 to 5 years depending on the type – general, professional, vocational training. It is assumed that 3 years are spent at this stage to finish it successfully. The first stage of the higher education can take 3 or 4 years, but the second stage (master degree) takes 1 or 2 years. Therefore it is assumed that the average term to complete this stage of education is 4 years. Length of full-time doctoral studies is 3 years that are then assumed as the time required completing the stage.

Each of the occupations according to the file regarding compliance of education (ISCED97 classification) with occupations (according to ISCO 08 classification) is granted the time necessary to obtain the level of education typical for the occupation.

(4) Calculation of the expected lost time in changing occupations.

To assess what part of time has not been used expediently, if only a part of the existing skills is required upon transferring to the new occupation, each line in the occupation difference table obtained in step (2) is multiplied (that is, analysed according to the exiting occupation) by the time required to obtain the typical level of education corresponding to each occupation in step (3). As a result, the occupation difference matrix obtained in step (2) is transformed into units of time – years lost in case of transfer from one occupation to another.

(5) Calculation of time and costs of occupational mobility.

To calculate time and costs of occupational mobility, mobility flows between occupations (absolute values or number of cases) assessed in step (2) are used, which are then multiplied by assumptions made in step (4) for the time (year) loss in case of transfer from one occupation to another. Summing up the number of lost years that correspond to all cases, assessment of the total time and costs of occupational mobility is obtained.

[58] Ministry of Education and Science, Educational system. Internet resource http://izm.izm.gov.lv/nozares-politika/izglitiba/7265.html.

The calculations are encumbered by noncompliance of occupational standards that, as mentioned previously, cannot be eliminated if data of labour force surveys are used for former period of time – it is impossible to perform decoding as there is no unequivocal compliance at the 4-digit level, as well as occupation names have changed in time. Moreover, it is not correct to refer to the present occupation division to perform interpolation in the previous periods of time, especially within the scope of this research that would mean reliance on an assumption about non-changeability of occupations in time. Unfortunately, there are no alternative sources of data to assess occupational mobility flow. Likewise further analysis uses only those occupations whose compliance does not cause doubt; as a result, it should be understood that the obtained assessment is lower than it could have been if the earliest data of labour force survey would be available, supplemented by the new occupation codes.

As a result of the calculations, it was concluded that during 9 years (2002-2010) 1 002 201 human years have been lost as a result of occupational mobility or on the average more than 110 thousand human years have been lost each year. Taking into account that during the period under review the number of employed persons in Latvia varies from 920 thousand to 1 095 thousand, the obtained result implies[59] that a human year has been lost as a result of 1 occupational mobility for each 9 employed at least.

3.3. TENDENCIES OF OCCUPATIONAL MOBILITY IN INDUSTRIES OF THE LATVIAN NATIONAL ECONOMY

In order to assess the processes in the occupational mobility in industries of the Latvian national economy, information was used from surveys of company representatives and experts carried out by SIA "Dorus" within the scope of activity "Labour market researches" of ESF project No 1DP/1.3.1.7.0/10/IPIA/NVA/001 "Development of medium-term and long-term forecasting system for demand of labour market" of the Ministry of Economics.

In this sub-chapter, to characterise tendencies of occupational mobility the following expert opinions, answers to questions will be used:

- What is the employee turnover in the industry or an enterprise during the previous 10 years, what are the factors affecting it;
- How expressed was the labour movement in this time between occupations of one level, between industries and what factors affected it;

[59] The number of employed is divided by the lost human years in thousand, or 920/110=8.36 and 1095/110=9.95

- What is the employee turnover in the industry or an enterprise at present, what are the factors affecting it;
- How expressed is the labour movement between occupations of one level, between industries and what factors affect it;
- What factors could affect employee turnover in future;
- How expressed will be the labour movement between occupations of one level, between industries and what factors will affect it.

The sub-chapter is structured on the basis of analysis of expert opinions in each industry in each aspect of occupational mobility changes: past tendencies, present situation, and future forecasts.

3.3.1. Tendencies of labour mobility in Latvian industries for the previous ten years

What is the employee turnover in the industry or an enterprise during the previous 10 years, what are the factors that affect it?

Crop and animal production (NACE A01).

Specialist turnover was affected by technological progress (labour demand decreased), level of remuneration, migration. It has also been noted that labour turnover was affected by working conditions, retirement age and workers' health condition.

Experts consider that rotation of qualified employees in the industry is low, but it is higher in occupations where specific skills are not required. It has been noted that larger labour rotation occurred from 2005 to 2009.

Forestry and logging (NACE A02).

Company representatives note that both in the company and in the industry labour turnover is low: employees stay in the occupation for a longer time. It is emphasized that labour turnover has a negative effect on companies' operational activities, it is determined by the technological level and skills to operate it in the industry – equipment is expensive and not everyone can be trusted with it.

The company representatives also indicate that the largest part of employees have been working for a long time (10-20 years and more), moreover the companies select the persons with the best skills.

Moreover, experts of industry associations indicate that labour turnover is large, further it is large in the long term. This is determined by seasonality of forestry, weather conditions when the employed do not have remuneration and they are forced to look for alternative work. Thus, in the experts' opinion, the labour alternately works in forestry, construction, and this affects also the skills of the particular occupation (they deteriorate). An example is given from experience of a company where the flow of

employees was huge in 2012 – eighty-seven employees were hired and eighty-five employees were released.

Fishing and aquaculture (NACE A03).

Company representatives note that in the industry in general the turnover is low because the companies have arranged salary payment process and the situation have become stable all in all. It is noted that larger turnover of labour could occur in companies and spheres with larger proportion of performers of low-qualified work.

Low turnover of labour is noted in the segment of administrative personnel, but in fish processing the employee turnover is significant.

Likewise contradictory tendencies are indicated in mobility of sailors. Among respondents, the opinions differ, indicating both that turnover of sailors on ships has decreased lately and that it is still high (crews change by up to 50-60% people in each new voyage), simultaneously indicating that sailors are changed but the leading specialists do not change their places of work intensively.

Mining and quarrying (NACE B).

Respondents note that the labour core or the labour of the most important occupations (excavator operators, bulldozer operators, vehicle drivers, electrical fitters, and welders) did not change in practice.

However, this industry also shows tendencies of labour import, less expressed in qualified personnel, but more expressed among less-qualified specialists, where continuous physical work and endurance is required. Likewise turnover in seasonal workers is noted in mining industry, but the reasons of leaving are not mentioned.

Manufacture of food products and beverages (NACE C10-12).

According to experts, employee turnover in the industry ranged from 10% to 38% within 10 years. The turnover was more pronounced during the rapid growth of economy: in case of labour deficit and low labour conditions, the turnover increased as people changed work to earn larger remuneration. At present, specialist turnover ranges 10-12% of the average; according to the experts, it does not hinder the daily work in general.

It is noted that in case manual work prevails in a company the turnover reaches 30%, and it has been the same historically. Experts note that the proportion in general does not change with regard to the number of employees. On the contrary, in a company that partially introduced new technologies in

2012 the personnel turnover was 0.9% or approximately 20 people each month. In a company that introduced new technologies and the salary level is higher, the employee turnover does not occur.

Light industry (NACE C13-15).

During the previous ten years, according to expert calculations, the number of employees in the industry has been decreasing in general; at the same time the employee turnover is small - those who leave do not come back.

Manufacture of wood and of products of wood (NACE C16).

The experts indicate that there is a tendency in the industry to build long-term relations with all partners, including employees. Thus the cooperation is long-term, even exceeding 10 years. Likewise it is noted that there is labour turnover, though it is minimum; in certain companies it amounts to 10%, but the industry in total faces a larger turnover.

It is also noted that the crisis and the situation thereafter brought its changes: during the crisis the employees kept their places of work, but lately higher turnover has been observed.

According to experts, the previous 10 years during the "economic bubble", employee turnover was large, but at the moment when employees understood that the place of work is a value the labour turnover initiated by employees was decreasing and the turnover initiated by employers was increasing (options to choose better employees).

It is noted that the situation became normal and turnover among qualified employees is small, but the turnover among less qualified labour is very large.

Manufacture of paper and printing (NACE C17-18).

Most respondents indicate that during the last 10 years employee turnover in their companies has been low, and the present employees do not change their places of work.

Among separate companies, the employee turnover is significant reaching even 20%, this is explained by the location (rural area).

The experts indicate that the low turnover can be explained by the amount of required skills. In general, specialists working with equipment are long-term employees working for 10-20 years. The small turnover is determined by specific knowledge for work with printing equipment.

A larger turnover, according to expert estimates, occurred during the economic growth, in industry administration. A part of the employees moved to the field of services.

It is noted that a larger turnover is observed in occupations of auxiliary workers or among unskilled workers. At the same time the experts consider that this turnover is not immense.

Manufacture of chemicals (NACE C19-20; C22).

According to expert estimates, employee turnover in the industry was not remarkable, the economy crisis caused its slight increase.

Turnover in various age groups is noted - turnover among young people is larger in contrast to elderly employees who work for a longer term. It is considered that the turnover is influenced by the economic cycle and stability - if it was high then the turnover was minimal, and vice versa.

Pharmacy (NACE C21).

The opinion of the industry experts reveal small labour turnover in pharmacy. This is explained by the fact that employees work in the industry for a long time.

In general, it has been estimated that employee turnover in companies of the industry has been approximately 4% and turnover, if it was larger than 6%, is an indicator that company representatives must take active measures.

It has been noted that in the industry the chemists have not changed because they are demanded and work long-term. Larger turnover has been observed in positions that are not directly related to the specifics of the industry - for example, market analysts, personnel specialists.

Trade (NACE G).

In the industry, employee turnover is seasonal - in the beginning of the summer the turnover increases, especially among men. The industry as such is characterised by high employee turnover, the experts relate it both to factors of remuneration, seasonality, unemployment, emigration and others.

In general, high level of labour turnover in the industry has been estimated: approximately 70-80%. Turnover among the youth is larger. During economic prosperity, before the crisis, the turnover in the industry was very large, for example, daily personnel turnover in the large shops. During the economic crisis, the turnover was small for 2-3 years.

Rail transport (NACE H49.1-49.2).

In the industry, during the previous ten years employee turnover has been very low or almost non-existent. But the experts consider that competition is maintained in the labour market, it is affected by the free labour market of the EU.

Before the economic crisis, the employee turnover was determined by the industry of construction, and the salary level in it caused drain of labour from the railway transport industry.

Land transport (NACE H49.3-49.4, H52.21.).

The experts have different opinions: some consider that the employee turnover is small (10-20%), the others consider that it is remarkable. The large turnover is explained by the fact that the occupation of a driver, taxi driver, and carrier is not prestige, as well as the level of remuneration and similar factors.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

According to expert estimates, in general employee turnover in the industry has not changed or has changed minimally. This is explained by the factors of remuneration and industry stability.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

The historical employee turnover is characterised differently: there are companies where the turnover has increased due to restructuring and decrease of costs of function; however, there are companies where the staff is characterised as stable and the turnover is small.

In traditional regulated fields, for example, traffic controllers, pilots, technicians, employee turnover is small in the experts' opinion. Labour turnover is larger among flight attendants and more intensive among ground handling.

The experts note that personnel turnover depends on company growth. The larger is the growth, the smaller is the turnover among personnel.

Work specifics (night, evening work, and work on weekends) are among the most significant factors affecting rotation of key employees. Sometimes students work as flight attendants in the aviation industry and leave the job upon acquiring the basic profession at an institution of higher education.

In general, turnover in the industry depends on profession: in professions requiring lengthy training to acquire the qualification, the employee rotation is smaller. In turn, the employee turnover is larger if the skills are acquired in shorter time.

The experts note also the low salary and work in shifts in ground handling.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

In general, employee turnover in the industry has been minimal during the past ten years. Separate experts indicate that until economic crisis in 2008 they felt quite large employee turnover.

Significant labour turnover was among employees whose work at the companies was not the principal job. Reasons for the turnover – seasonality, emigration, ageing and similar factors.

Postal and courier activities (NACE H53).

In general, respondents indicate large historical labour turnover. This is mainly determined by the large number of low-qualified labour with low level of remuneration.

Turnover in rural regions could have been higher, but it is delayed by the older postal carriers; turnover among younger employees occurs due to the low remuneration. Turnover was lower during recession and higher during economic growth.

The experts note that the remuneration is a significant factor for the high employee turnover.

Accommodation and catering services (NACE I55-56).

In general employee turnover is very high according to the experts, in some companies the employee turnover amounts to 30-50%.

Publishing activities (NACE J58).

The experts note that historically employment turnover has been small, more dependent on the required skills in the profession. Thus, changes in skills affect labour turnover.

It is noted that publishing houses require both specific knowledge and pleasure in working.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Employee turnover has been historically topical, the experts note that in certain periods the turnover has been very high. In general, it has been noted that journalism is one of the typical global industries characterised by comparative young people turnover, respectively, journalism is one of steps towards the industry of public relations, advertising.

Telecommunications (NACE J61).

The experts have different opinions: some consider that the employee turnover is small during the recent years, the others consider that it is larger.

The turnover is larger in call centres and client service centres dealing with equipment sale.

Employee turnover is affected by international companies that entice employees.

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

Some company representatives note that during rise of company activities the employee turnover was insignificant.

The turnover was affected by the crisis - separate companies lost 40-50% of employees. At present it has been noted that in the sector of the highest level IT dealing with programming, the employee turnover exists, it has been assessed in the amount of 10% due to buyout of employees.

Separate experts note that in IT companies who take care of their employees in terms of remuneration and working conditions, it has been observed that in programme development employee turnover is approximately 5%.

In turn, in IT support consultations, programme consulting sector where accountants work in addition to IT specialists, the employee turnover is larger than 5%.

In IT companies employing mostly computer operators without a special education and the work is conveyor-type based on sleight of hand, the employee turnover has been determined at the level of 40% during the last five years.

Other experts note that the time period of the previous ten years cannot be described equally, 2002-2007, 2008-2009, and the period after 2010 should be distinguished:

The turnover was normal until 2006, inclusive, an employee worked for five years approximately and used growth opportunities as the number of companies grew. But the turnover was normal - in the industry, targeted buyout of specialists was not regular, at least not among average specialists.

Situation in 2008 -2009 was different: companies decreased the number of labour as orders from the private sector and the state decreased, resulting in termination of projects. In the sector, loads were decreased, and it resulted also in unemployment among IT specialists. During this time, there was practically no turnover. People moved from less successful companies to more successful that, in turn, had the option to get better specialists on comparatively good terms.

As of 2010, tendencies indicate that demand for various specialists - both the programmers and the analysts - are significantly larger than the supply. This has been affected also by the employers' positions: employees' demands are increasing thus leading to larger labour turnover.

Financial and insurance activities (NACE K).

There are opinions that during economic growth the turnover was high, and companies bought employees, and during recession the turnover is lower. According to the experts, there is a large difference between Riga and regions – employers in Riga must try to be more attractive.

It has been noted that previously the turnover was lower, but it has grown at present. The historical turnover is assessed at 5%; before the crisis it was possibly more expressed, but a large number of people have returned to the industry, according to experts' opinion.

A larger turnover before the crisis has been noted in the occupation of servicing specialists, however, during the crisis employees tried to keep their places of work.

There is an opinion that the turnover depends both on supplies in the total labour market where these people can rotate and on internal organisation culture and organisation conditions.

Real estate activities (NACE L).

The experts consider that historically employees moved from the industry to the financial sector. The employee turnover was affected also by company mergers, computer system implementation, work capacity increase and control.

It has been noted that the turnover is based also on work intensity, requirements, as well as employees' wish to find a better job and options to change the occupation.

Experts indicate that this industry provides experience and knowledge, but the employees move to work at other places in the future.

Legal and accounting activities (NACE M69-70).

Experts note that historically the employee's turnover has existed mainly due to new specialists. In private law offices, the turnover is low, but experts have no information about state enterprises.

It has been noted that the turnover may have a tendency to increase as the personnel has become impersonal and qualification is raised.

Reasons for the turnover in the industry are rotation among the young employees – understanding that the occupation is not suitable, work load, and emigration. Sometimes the young employees find this industry as a start for further career, the turnover is determined also by remuneration, company environment and stability.

Scientific research (NACE M72).

The experts have a common opinion that the turnover in the industry has been low. Some experts describe it even as too low.

In distribution among companies, the turnover in scientific institutes has not been large, in the private sector it has been larger historically.

It has been noted that the turnover has been larger among younger employees, but the turnover has been very low among elderly employees.

Factors affecting turnover are: low, insufficient remuneration, unstable funding, depend on projects of the European Union Structural Funds. Experts note that during the time when there are no projects a large part of the employed in the industry has no job. Thus the employees from the science industry financed by the state move to the private sector, other industries or else go to work in their industry abroad. In general the turnover depends on lack of stability, predictability.

Technical services, advertising (NACE M71, M73-74).

In the industry, people are assessed to be mobile, in general 5-10% move away from the industry.

Respondents cannot unequivocally describe the turnover because each year the situation has been different and reasons for the turnover have been various.

The factors affecting the turnover are basically the salary, internal emotional feeling in choosing a particular company, ageing, comfort and social environment. It has been noted that the state enterprises in the industry have difficulties to compete with the private sector due to remuneration.

Administrative and support service activities (NACE N).

It has been noted that turnover of administrative employees in servicing enterprises has been very low, but the turnover of the service employees has been high. The high turnover is explained by low remuneration. In occupations of more qualified work, the turnover is not so expressed.

Experts note that the turnover depends on the company and possibilities to combine with a different job. Tendencies of movement from the state sector to private sector have been noted.

Public administration and defence; compulsory social security (NACE O).

The experts note that in 2006/ 2007 the number of labour increased because the number of positions had increased. However, the number of labour decreased in 2008.

The high turnover is explained by competition between remuneration in the public and private sector.

At present personnel turnover has been assessed only at the level of ministries where it has been calculated that approximately 15% employees have left in 2012. From the occupational point of view, the labour that left included specialists of higher and medium level.

Preschool and primary school education (NACE P85).

According to the experts' opinion, the turnover in the industry has been topical, and the turnover has been very characteristic in Latvian kindergartens. In turn, in kindergartens of national minorities the employees do not change the place of work so often.

The turnover has been observed, also in relation to ageing, remuneration, and requalification. In general, the turnover is mobility ofenerally affected by low remuneration, and a part of employees leaves due to the high requirements.

It has also been noted that in case the personnel had a corresponding qualification, place and satisfactory collective, the turnover was lower.

The turnover has been characterised also by change in place of residence or a person's dissatisfaction, psychologically complicated working and emotional stress has been a reason for change of jobs.

Secondary education (NACE P85.3).

It has been noted that before the crisis the turnover was large: each year teachers changed in schools, likewise the mobility was affected by traineeship abroad, for example, teachers of foreign languages. After the crisis, the situation became stable, the turnover was comparatively low.

The labour turnover was affected also by generation change within the framework of tax laws (period when the retired were paid only a part of pension, if they occupied a salaried work).

The situation shows that those who left the industry have not returned.

The employee turnover is affected mainly by remuneration level, as well as requirements of professional qualification that must be constantly improved.

Higher education (NACE P85.4).

The employee turnover is assessed as solidly low, especially in relation to labour of the higher level. The turnover is determined by the specifics of the industry, for example, election of professors for 6 years period stabilises the situation, and there is no rapid labour turnover.

Within occupations, qualification turnover is described to be low because by working in this industry the personnel becomes patriots of their occupation and institution of higher education.

Remuneration is mentioned as the main reason for turnover, historically the turnover was larger at the time when salaries were decreased in the state sector and institutions of higher education. Specifics of the industry is mentioned as another reason for the turnover; according to the experts' estimate 10-15 years are needed to develop from a lecturer to the position of a professor.

It is noted that the turnover is larger in occupations that are not directly related to the principal operations - laboratory assistants, street sweepers, cloakroom attendants, janitors. The large turnover in these occupations has been historically high. It is affected mainly by the low remuneration.

A significant reason for labour turnover is generation change. However, it is noted that in technical sciences, especially in engineering science, the situation is contradictory. On the one hand, when research works are extended and the number of students has increased, the new teachers come in. On the other hand, in separate specific specialties that are not popular among young professionals the problem of generation change is topical (for example, engineering mechanics).

Health protection (Q 86).

The experts consider that turnover of doctors and nurses are low as representatives of this occupation tend to work at one place for a longer term. Turnover of representatives in these occupations is related to demographic drop: if the number of population decreases, the number of people employed in medicine also decreases.

Turnover in general is more characteristic for employees with lower remuneration - street sweepers, janitors, workers. Reason for this is the low remuneration.

It has been noted that working at several places of work is typical in this industry. The most significant reasons for the turnover mainly are the hardness of the profession, remuneration, syndrome of professional burn-out, as well as emigration.

Social care (NACE Q87-88).

The experts note that labour turnover is higher or lower depending on region, language skills, internal environment, remuneration level, work specifics and other factors.

It has been noted that in certain cases the turnover amounts even to 50%.

Arts, entertainment and recreation (NACE R).

The largest part of respondents state that the industry has not had high level of employee turnover.

In turn, among experts, it has been noted that during the last 10 years the turnover was approximately 10% per year. Moreover, there have been various stages of intensity of the turnover. The turnover was more expressed among technical employees and administrative employees; but the tendency is not so typical among artists.

The experts mention remuneration, being higher in the private sector, to be the main reason for employee turnover. Thus labour movement away from state enterprises to private enterprises is topical for the industry.

The reason of the low remuneration has caused a situation when many employees in the industry combine the work in arts with the principal job.

How pronounced was the labour movement in this time between occupations of one level, between industries and what factors affected it?

Agriculture and cattle breeding (NACE A01) according to the experts' assessment, the process during the last years has been uninterrupted. A more expressed movement of labour to companies in Riga and suburbs of Riga were observed – this was affected by the remuneration and infrastructure. Within one occupation, reasons of employee turnover – salary and work conditions. At the same time experts indicate that certain effect on employee turnover was caused by technical progress leading to necessity to learn and improve one's skills; moreover, during the previous ten years less-qualified labour moved away from the industry.

In the experts' opinion, during economic growth industry professionals who changed profile and worked in construction have returned to agriculture and crop production.

Forestry and logging (NACE A02).

A representative of a state budget institution admits that employees move to work at private companies of the industry due to the higher remuneration. In turn, representatives of private companies state that labour has moved abroad, likewise labour movement away from the industry and to it was determined by the construction boom and its end. It has been noted that an employer must take into account that in case the employees are not paid then the individual will try to improve his/her income combining jobs or even by fraudulent activities (theft).

In the opinion of company representatives, labour turnover is mainly determined by higher remuneration. Improving qualification and transfer of employees to a profession of a higher level has not been typical.

On the other hand, in the opinion of association and separate industry experts, horizontal movement within the industry has not been high. Vertical mobility occurs; if a person has potential and corresponding education, then the companies support the movement. Similarly movement to other industries occurs upon transfer to a job of higher level. It is mentioned that more pronounced labour mobility was among drivers who changed industries and moved to development of careers, road construction within their occupation. This is related to development of road construction industry and changes in its remuneration. It should be noted that drivers moved to international carriage and they can be kept in the forestry and logging by inland carriage and opportunity to be close to the family.

From other industries the movement to forestry and logging is rare; it is noted that forestry has limited mobility ("closed range"). Likewise the industry is characterised by traditions and dynasties where the young take over the operations of this industry from families.

The experts note that labour mobility is mainly affected by remuneration – employees move to the place of better remuneration. An opinion is expressed that in these cases the issue of professionalism rises because "*...goal of the industry is profession quality and it should be organised*".

Fishing and aquaculture (NACE A03).

In general, industry experts note that during the previous ten years fishing industry experienced loss of specialists. This was affected by construction flourish, the factor of qualification and skills did not play any role, but the remuneration significantly exceeded the industry level by 2-3 times, as the experts indicated. The experts note also that during the last two years it has been observed that labour is returning; but employers mainly hire qualified specialists.

In the opinion of some companies, there is no significant flow – profession representatives stay in the industry and the occupation, even if they change the employer. Thus, horizontal mobility is more often observed. Respondents mention also that the mobility occurring as a result of requalification – for example, mechanic assistants change qualification and work in the coastal area; but this is not a mass phenomenon in the industry as the requalification is complicated. The respondents indicate a small turnover of drivers in the industry, as well as the fact that the vertical mobility mainly depends on the workers' choice.

Mining and quarrying, NACE B.

Respondents note that the labour is changing, but changes are not expressly dynamic. This is affected by such factors as remuneration and weather conditions. Labour mobility is decreased by training that allows acquiring additional skills and abilities. This is undertaken also to ensure company's backup employees who can replace colleagues who are on vacation or ill.

Some experts indicate that labour mobility is minimal and only in the case when a person finds a better-paid job. It is noted that in general labour has been working at the occupation for a long time, as well as mobility occurs internally in the company. Experts indicate that an employee in the industry must be universal and must be able to use various equipment during different seasons. Thus the companies maintain a constant rotation and training.

Experts also note the vertical mobility within the company, for example, seasonal workers having passed training can become machine-operators and operators.

It is noted that the industry is heavily affected by other industries - construction and logging; at the same time it is indicated that good remuneration and social guarantees compensate the competition with other industries.

Manufacture of food products and beverages (NACE C10-12).

Experts indicate that most of the labour changes due to emigration. Furthermore, employees leave a food production company for logistics companies; in comparison, during the economic crisis they moved to construction.

It is noted that vertical occupational mobility is possible within the company. Regionally, mobility is noted to be low as employees have limited choice of places of work. Mobility is possible also at the level of different industries, for example, for laboratory assistants.

In general, the food industry competes for the labour not only with the companies of its own industry but on the whole market. Production operators can be mentioned as an example; they can work at other places instead of the food industry alone.

According to the expert estimates, there is no significant mobility among production companies because the level of remuneration is similar, thus employees have no motivation to move. Moreover, employees released due to redundancy can find an equal place of work at a similar company.

Light industry (NACE C13-15).

Experts note that careers are usually developed within one company. In the industry, labour mobility is small, although there is the option to re-qualify. Employees use it, additional training is provided, but within the scope of their own occupation. It is noted that an industry specialist must be a universal worker with various skills. There are not many newcomers in the light industry from other industries; this is determined by the factor of difficult work.

Manufacture of wood and of products of wood (NACE C16).

In general, during the last 10 years, the most expressed movement of labour away from the industry occurred in 2006 and 2007, when employees moved to construction. It is also mentioned that employees move to furniture production and away from it, depending on the time when the scope of work and labour demand changes, in the related industries.

The experts have different opinions on the issues and tendencies of labour requalification: some consider that it is not pronounced as each occupation has specific trends and each person has his/her zone of comfort. Others think that requalification is facilitated by companies, and it occurs both from the theoretical and practical aspect. It is mentioned that as a result of requalification employees gain a broader vision, and the range of skills and competencies is extended – replacement is possible both at the level of management and workers.

With regard to labour movement between industries, it is noted that during the construction boom the labour that left has now returned, and at present it is the personnel of simple qualification.

Manufacture of paper and printing (NACE C17-18).

According to the experts' estimates, employee mobility between occupations within one level exists, but it is not very profound. Likewise employee rotation between companies is not large in general. Specialists move between various companies, but the movement is slight in general. It is noted that people from construction and forestry work in the industry. In the industry, the professionals usually work for long years that are also the factor explaining the low mobility.

Similarly experts concluded that there are works of specific levels where a particular level of skills is sufficient; for example, packing is a monotonous work that does not require highly qualified workers.

Technological progress, however, facilitates that workers master several devices, and as a result one worker can perform several operations. Thus there is no need of additional labour. It is noted that there is the chance to develop and build career if a person shows himself/herself well and is motivated to work.

Experts also note that during the last ten years, serious labour movement has occurred between companies, and this tendency was more profound in Riga, less profound in regions. This is explained by the level of remuneration: in Riga, it is easier for employees to transfer to a different company, but moving from regions to the capital causes additional costs that are not economically beneficial for employees. Period of 2006 to 2007 has been marked as a complicated time for the industry when higher salaries were paid in construction. Experts indicate that salaries had to be increased by 40-60%

to keep the labour during the time when the production increased by 20% in the industry. During the economic crisis, salary level decreased and according to the experts the situation is becoming more stable at present.

Manufacture of chemicals (NACE C19-20; C22).

Experts note that the general tendency has not been profound, but it has varied among representatives of different occupations. Thus, for example, workers change along with work regularity (orders are not regular). In turn, specialists and representatives of specific occupations change seldom as determined by the level of required knowledge. Chemists can change occupation and work at pharmacy or re-qualify at any production industry (they know physics, chemistry, maths, material sciences).

It is noted that workers have moved to competing companies in Latvia or to leading companies globally. Those companies that ensured corresponding conditions could delay movement of these employees.

Pharmacy (NACE C21).

In general, this industry has only vertical movement within a company - if a higher position becomes vacant, a priority is given to the company's own employee. Employee turnover between companies is seldom because they attract students instead of enticing by higher salary.

Specialists of natural sciences and engineering sciences form other industries are demanded in pharmacy because representatives of these professions can additionally acquire the required knowledge.

Labour from the pharmacy industry does not move much to other industries. Sometimes the turnover does not occur, for example, often pharmacists themselves are the managers of a pharmacy, and therefore no turnover occurs in relation to maintenance of business.

In large companies of the industry, employees move from various pharmacies or offices, and occupy the positions of regional managers or obtain similar promotions.

Experts note that horizontal mobility is not as simple as all the occupations have strict standards. In general, the labour does not move to other industries; it moves within the industry.

Trade (NACE G).

The vertical mobility has been marked as the dominant, for example, from a seller, confectioner and similar positions employees move to a higher position, become department managers. Other transfer within the industry is minimal according to the experts.

There is a high inter-industry mobility - employees arrive from other industries and transfer to them. For example, during the economic crisis labour inflow to the trade industry from the construction was observed.

Experts mention procurement specialists and marketing specialists moving horizontally among the most mobile occupations. Sellers and operators move to work in other industries.

In general, labour rotates among various companies within the industry, to it and away from it.

Rail transport (NACE H49.1-49.2).

Respondents' replies vary: some note mobility in occupations of train engine operators and machine operators. Others consider that the movement is not profound, but there are career opportunities within a company and qualification can be raised. It is noted that practically no employees come from other industries, but only IT specialists have moved from the railway transport to work in other industries.

Land transport (NACE H49.3-49.4, H52.21.).

Within the industry, during the last ten years the labour has moved slightly as governed by the industry specifics. Generally there has been mobility between bus drivers and truck drivers. During the crisis, amount of cargo transportation decreased; therefore vehicle drivers went to work as bus drivers and returned after the crisis.

Transport drivers have the option to change drivers' categories; therefore drivers' vertical growth is minimal. Likewise movement to other industries has been found minimal, except for the period of construction boom.

Experts note that there are employees in the industry moving to other industries retaining their occupation (transport drivers) but this movement is not profound.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

In general, movement among industry companies is slight, likewise the movement among the industries is small. Experts note that labour in companies has vertical mobility - option to build career.

Significant factors affecting mobility are both remuneration and social guarantees, and professional level. Mobility is limited by re-qualification options, for example, shipbuilding. Experts stress that hull construction and ship repairmen require professional training from the basics, and fast entry of labour from other industries is limited. Furthermore, those who came to work and re-qualified remained for a

long term. Painters are mentioned as the most mobile and flexible occupation where the professional knowledge is not significant, the practical skills are decisive.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

There is a profound movement of employees in the industry between companies as aviation skills are mobile and applicable in other countries as in Latvia. Likewise labour comes to Latvia from abroad.

The industry is characterised by occupation change, for example, due to ageing, pilots move to administrative positions.

Outgoing mobility to other industries is not large, the employed in the industry work there for the whole life, as well as the incoming mobility is limited because the aviation requires specific skills. Usually, engineers and technicians move from other industries of aviation, but ground handling occupations are not profoundly specific, thus labour mobility is more profound between the industries.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

There has been little movement, mostly among companies in one city. Vertical mobility is noted – career growth during the last 10 years.

The experts note combining work at the principal job and other companies; however, instead of technical occupations, representatives of universal occupations arrive from other industries.

It is noted that labour movement is highly dependent on the company: there are companies with minimal labour mobility and there are companies with high labour mobility among various companies.

Inter-occupational mobility depends on the particular occupation in the industry: transporter, forwarder, ship agent is the occupations without highly specific requirements; therefore they are mobile.

Postal and courier activities (NACE H53).

The industry experts note that companies view mobility from the point of view of employee development – build long-term career. Thus occupational mobility ten years ago was assessed in the amount of 10-30%, it was determined by level of remuneration and work specifics (managers of higher level basically come from the existing company as the work specifics do not allow to easily find a full-fledged professionals from outside).

Movement from postal and courier operations to other industries has not been profound. Generally, the employees who left moved to financial industry.

Active outgoing movement of labour was marked in 2005-2006 when remuneration was rapidly increasing in various institutions of the public sector.

Accommodation and catering services (NACE I55-56).

Experts note that labour moves both in the industry and to other industries.

Moreover, historically the labour movement was affected by remuneration.

Publishing activities (NACE J58).

It is noted that the industry is characterised by qualification improvement and transfer to other industries depends on the company. Generally, employees of the industry have reoriented to industries represented by public relations, TV media and press secretaries. A reason for this movement – remuneration and work requirements in publishing.

In general, change of the industry among employees is not profound due to work specifics and skills. Moreover, freelance employees work at book publishing, their principal job is in other industries.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Experts note that historically the labour moves horizontally within the industry, movement mostly occurs to commercial media. A part of labour has moved to public relations, politics.

Telecommunications (NACE J61).

In general, during the recent years labour movement between occupations of one level is not large. Experts note that before the crisis it was more active.

Experts particularly indicate that vertical and incoming (from another industry) mobility is more typical. It is noted that lager interest is observed in the labour market to come to the telecommunication industry rather than leave it because the telecommunication industry has prospects and it is prestigious.

Among the experts, mobility estimates have been noted: in 2013, the internal rotation of personnel has been assessed by 30% – both the horizontal and vertical.

The inter-industry labour mobility has been assessed as generally contradictory – there are experts who think that employee rotation to and from telecommunication industry is rare. Other experts note that there is movement both to other industries and from other industries to the telecommunication sector.

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

In the industry, as experts have indicated, labour movement occurs at the account of enticement. This is the reason for constant rise in remuneration, moreover enticement of programmers is a topical issue. It has been noted that at IT companies where the product is a created and developed programme, their programmers are protected as, first, they work with the product and the product skills are very valuable. If a person has worked at a product for 5 years and changes the employer, training a new person is comparatively more expensive.

Internal movement of employees has been noted in the industry – from occupation of a tester to a programmer, system analyst. It is noted that IT has many positions and occupations where the most suitable position can be found for an employee in a larger company. Although there are no statistical data, how many programmers have re-qualified to other positions or how many testers have become analysts, there is a constant turnover and development in the industry. Similarly IT professionals can move within the industry along with the occupational groups from a programmer to project manager. It is noted that more consultants are offered on the market, movement between companies is smaller.

At IT companies where computer operators without special education are working and do work of conveyor type, movement within one-level occupations does not exist.

Between the industries, experts note little movement intensity. In general, few employees leave IT segment. Consultants leave the IT the industry more than programmers. For example, a consultant moves to work as a chief accountant.

Likewise, the incoming mobility exists in the industry; before the crisis it was more profound, but it is still present. People with a calling to IT sphere, but those who have not studied it, for example, doctors and radio engineers re-qualify as programmers or system analysts.

Financial and insurance activities (NACE K).

It is noted that a financial institution always looks for a person internally, but the growth opportunity is very limited. Requalification to another level occurs very rarely. In total, employee movement in Riga is more profound, and less profound in regions as employees do not wish to change the town.

It is noted that during the last 10 years, there was a significant inflow of employees from other industries, as influenced by the level of remuneration.

Labour rotation occurs usually within the industry, between occupations. Employees move from servicing Latvian clients to business of non-residents. Thus, the labour changes directions, but the occupation level remains the same.

It is noted that employees do not tend to move to other industries or they move to their own business, to other companies.

In division of occupational groups, mobility is sufficiently high among accountants, IT specialists, lawyers, analysts. The analysts are noted as universal professionals who can move to auditor companies.

Factors that affect mobility - remuneration, work environment, working conditions, organisation of the internal environment, organisation of regulatory enactments, procedure of adopting authorisations, decisions, mutual relations, microclimate, relations between the manager and the employee.

Experts also note that the industry is open for occupations without the basic financial skills as the companies are ready to invest in training. It is estimated that in future specialists of higher qualification are needed because the simple operations will be performed electronically, account settlement operators will disappear. They will be replaced by consultants with a larger, more profound understanding about the financial industry as such.

Real estate activities (NACE L).

It is noted that there are companies where requalification and movement is not profound because the skills are too specific, therefore the personnel is stable.

In general, in the field of real estate qualification must be raised, the youth must especially obtain experience, and they have larger tendency to change work and qualification.

There is inter-industry incoming mobility - employees from construction transform to property managers. Flows between various companies within the industry have been very high during the crisis, in general it depends on the company.

Flows between occupations are not profound as they are different.

Legal and accounting activities (NACE M69-70).

It is noted that none of these industries has an expressed mobility between occupations of the industry level because each work is specific and requires special training that can be easier studied at an institution of higher education instead of requalification.

During the crisis, movement to other industries was smaller because stability and keeping to one work was important.

Also the movement to the industry is not profound because specific skills are needed. Experts note that turnover mainly occurs within the same occupation, as well as some change the occupation or start business.

Scientific research (NACE M72).

In the experts' opinion, there is movement within the industry, and very rarely labour has moved among industries. At the same time, potential of labour mobility is high, although the surveyed persons could not measure it in per cent or in number.

According to the experts' opinion, the tendencies in science indicate movement within an occupation, cooperation with other occupations in projects, movement between occupations, however, is rare.

Technical services, advertising (NACE M71, M73-74).

As various companies are represented at the industry, opinions vary. It is noted that employees are looking for new challenges, therefore both the horizontal and the vertical movement exists.

In some companies movement has not been especially profound on the horizontal level, it is noted that employees from companies of the public sector have moved to the private sector.

Acquisition of new skills in the industry is topical.

Administrative and support service activities (NACE N).

Experts note that industry occupations are short-term: occupations are often changed by moving to another industry.

Turnover is affected by remuneration level, also attitude towards employees and work conditions.

It is noted that before the crisis, movement of labour to construction, emigration and movement to a different industry was more profound. Moreover, at present the labour is returning to the industry.

It is noted that inter-occupational and inter-industry mobility is seasonal, for example, in summer employees from the security move to construction. But this is not a tendency of the industry.

The most significant factor that affects labour flow is the economic factor and salaries.

Public administration and defence; compulsory social security (NACE O).

The experts note that in 2006 and 2007 the competition among institutions was large and mobility was large depending on where the salary was higher. However, at the beginning of the crisis the employees kept their positions. At present, a tendency has been observed that competition between institutions is increasing and employee mobility also increases.

Preschool and primary school education (NACE P85).

Movement between industries has not been large, but there has always been requalification in the industry, for example, teacher assistants are directed to study to become a teacher.

Experts note that in this industry education is a limitation that hinders labour income from other industries. Flows of incoming occupations from other industries have been noted, art teachers and teachers of English, linguists, food technologists and biologists, but these occupations need to obtain the corresponding qualification for work at pre-school.

Within the industry, there has been the option to raise qualification, a tendency of requalification from baby-sitters to teachers has been noted.

Furthermore, labour moves from the public to private sector where the remuneration is higher. Movement to other industries has been noted, but according to experts' estimates it is not profound.

Secondary education (NACE P85.3).

Experts note that movement to the industry rather than outgoing mobility has been observed. In cities movement is more profound, the affecting factors are salaries, work load, qualification.

It is noted also that those teachers who left the work in 2008 were later ready to return to the employer. The process was limited by the occupied jobs.

Higher education (NACE P85.4).

It is noted that labour movement is minimal - in the academic environment there is no profound movement among institutions of higher education, also the outgoing mobility to other industries is low. Those who have started to work in the academic environment usually work there for a long term and often for the whole life.

At the same time, labour flow to the private sector is mentioned as a problem, it is noted that instead of qualification, the ability to keep the young qualified specialists has become a problem in the industry.

It is noted that employees move along the vertical line specific to the industry.

Health protection (Q 86).

It is noted that it is possible to move from the health care industry to other industries, but there is no option to come from some other industry to the health protection industry. Historically the flow from the industry to business structures, pharmacy, cosmetics.

In general, movement in the industry and labour flow to foreign countries takes place. In occupations of nurses, there is the option to improve qualification and to study to become doctor's assistant, doctor, however, this tendency is not massive in the industry.

The main factor affecting the turnover is the remuneration; moreover, in the private sector it is sometimes higher.

Social care (NACE Q87-88).

Opinions on labour movement among occupations of one level of the same industry differ. Some consider that labour movement between occupations of one level does not exist.

Others note that requalification takes place, for example, from the carer occupation to nurses, from the carer to social carer.

Certain mobility existed among various sectors - some of employees move to the private sector to become a private carer. Also the outgoing mobility from the social care to other industries, pedagogy, medicine, trade, has been observed.

Mobility is affected by various factors. Experts note that employees of the social field have a universal occupation that has no problems to switch or re-qualify. It is considered that requalification is a way how to ensure availability of employees of a certain occupation - employees are intentionally directed to obtain new skills, thus preparing specialists of higher quality.

In the industry, requirements are changed, and the industry itself becomes more flexible with as regards labour entering from other industries: if previously the higher education was mandatory in social work then the present tendency shows readiness to accept teachers, doctors in the occupation.

Profound differences in geographical location are noted - mobility in the regions is lower.

Arts, entertainment and recreation (NACE R).

As the respondents represent different fields of the industry, their responses varied. Not all the companies note the opportunity of career growth and it is determined by the specifics of the

profession. In occupations, where possible, career development is supported by the company because an employee must change and develop, thus internal vertical rotation of labour occurs.

Respondents find that the labour flows to the private sector or outside the industry. This is related to the level of remuneration. It is indicated that persons, who have left, now work in other industries as directors, voice recorders and in similar occupations.

3.3.2 Present tendencies of labour mobility in Latvian industries

What is the present employee turnover in the industry or a company, what are the factors affecting it?

Experts indicate that in the crop and cattle breeding (NACE A01) group labour rotation has decreased at present, and workers do not often change the employer. It should be noted that at the same time labour movement in the industry is maintained among labour with the lowest qualification (for example, auxiliary workers) but specialists of higher qualification do not change so profoundly. The most significant factors that affect labour rotation in the industry are the remuneration, work conditions and age (age of retirement).

Forestry and logging (NACE A02).

Respondents state that the turnover is minimal at present. The workers who leave the job retire or move to a better-paid job.

Fishing and aquaculture (NACE A03).

Experts indicate that the present employee turnover is topical in fish processing due to remuneration and work environment, as well as drivers' turnover and young specialists' difficulties to enter the industry have been noted. In general, experts consider that the industry is not characterised by high employee turnover.

Mining and quarrying (NACE B).

It is indicated that turnover in the industry is minimal, especially among the principal employees. An employee may leave the place of work due to the difficult conditions after having worked as a newcomer for a half a year, according to experts. This and remuneration corresponding with social guarantees are considered to be a certain dividing line indicating employee's motivation to stay in the industry for a longer time.

Higher turnover refers to auxiliary workers and younger people. It is noted that having obtained additional qualification the young people usually build the career upwards. In the industry, a large turnover of seasonal workers is noted and it varies each year.

Manufacture of food products and beverages (NACE C10-12).

Experts consider that the turnover has been sufficiently high, and it has not decreased in comparison with the previous years. It is estimated that the turnover is measured at 30%, at the same time experts indicate that situation in manufacturing is satisfactory.

Light industry (NACE C13-15).

Experts note that in general employee turnover in the industry is very low. There is turnover among those employees-newcomers who have worked for a short term (a half a year or year) instead of those who worked for a longer time. Generally, the turnover was affected by emigration and remuneration.

Manufacture of wood and of products of wood (NACE C16).

Experts note that there is turnover, but more profound personnel turnover is referred to management composition. It is also noted that the turnover should be measured individually in each company, and to a large extent the turnover depends on the employer's attitude towards employees.

Manufacture of paper and printing (NACE C17-18).

Experts consider that the present employee turnover in the industry is very low; furthermore many professionals work at companies for long years, and the turnover does not affect the production process.

Separate companies lack labour, and the proportion of turnover amounts to 50% annually. Moreover, those, who have worked for a long time (approximately 10 years), move less: 5-7% annually.

Manufacture of chemicals (NACE C19-20; C22).

Experts note that the turnover is stable, it is very small, or does not exist at all.

Pharmacy (NACE C21).

At present employee turnover in the industry of pharmacy is still low, and the experts estimate that the critical threshold of 6% has not been reached.

It is noted that pharmacists' turnover is larger as there is always a demand of them. Representatives of this occupation work both during their retirement and they are bought by other companies, as well as their residence costs are paid so that the employees stay in the region.

Trade (NACE G).

Experts note that employee turnover in the industry is invariably high, approximately 70%, many employees leave the job due to remuneration, load, emigration.

During summer, labour turnover increases.

Rail transport (NACE H49.1-49.2).

Experts consider that employee turnover in the industry is not high at present.

Land transport (NACE H49.3-49.4, H52.21.).

At present employee turnover is not profound as companies try to provide appropriate working conditions that would help to ensure that stable employees remain in the companies. Furthermore, it is noted that in case a company tries to ensure stable remuneration employee turnover does not occur.

Higher labour turnover refers to representatives of the simple occupations or employees who do not wish to work for the respective remuneration.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

Experts consider that employee turnover in the industry is not high.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

Turnover in this industry is not high at present, according to the experts' estimates, the mobility meets the limits and is approximately 10%.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

Experts consider that the labour mobility is assessed at present depending on the company. There are companies where the turnover is close to zero, moreover other companies are fighting now for labour turnover.

Postal and courier activities (NACE H53).

At present, experts consider that employee turnover in the postal industry is high, but it is considered to be a common situation. In turn, employee turnover in sub-industries of courier services and logistics is assessed at the rate of 15% in 2012. In turn, Q1 2013, only 2% of employees changed. Historically, according to the experts' assessment, labour turnover did not exceed 20%.

Accommodation and catering services (NACE I55-56).

According to the experts' assessment, turnover has been high regionally. In Riga, employee turnover is higher, it is lower in regions.

Publishing activities (NACE J58).

At present, according to the experts' assessment, employee turnover is low.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Experts note the history of the last two years in the industry, when decrease in places of work resulted in significant labour movement to other industries and companies. A profound horizontal turnover is noted.

Higher labour turnover is noted in public media, and lower in news agencies.

Telecommunications (NACE J61).

At present, the employee turnover calculations vary by different experts. Some note that the turnover is not profound, others detect a turnover of 15-20% annually. However, the turnover varies in different companies and occupations.

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

Some experts note that employee turnover is sufficiently high, and one should seek to keep the labour, saying that salary is not the sole motivator to keep the employees for a longer term.

Remuneration is a significant factor, nevertheless it is also important how interesting the work is, what are the possibilities of routine. In the industry, a topical tendency could be that turnover among some specialists occurs due to work contents rather than remuneration.

Other experts consider that the turnover exists, however, it is not profound. At present the economic situation in the country, in their opinion, does not allow companies to buy-out employees. Historically employee buying was more profound, at present the turnover exists, however, it is not so profound.

An example of inter-industry mobility is that data entry operators who have come to the IT industry from the financial industry due to crisis return back.

Financial and insurance activities (NACE K).

Experts note that the present turnover is affected by the employer himself. It is assessed that the present turnover is average, within limits.

It is noted that turnover is lower in well-paid positions, for example, client service industry where specific in-depth knowledge is not required. Remuneration plays a large role at this level.

Real estate activities (NACE L).

Turnover occurs among the young and less-qualified employees, the turnover in other occupations is not profound.

Experts consider that the turnover depends also on the company; it could be even at the rate of 50% and also minimal due to investments in employee training.

Legal and accounting activities (NACE M69-70).

In the experts' opinion, all fields have normal turnover, significant turnover is not detected.

Scientific research (NACE M72).

Experts have different opinions, some consider that turnover is profound, others consider the turnover to be low. Reasons for the turnover - insufficient financing. Other factors affecting turnover is ageing, labour emigration abroad and flow to manufacturing in certain cases.

Technical services, advertising (NACE M71, M73-74).

In comparison with the turnover since 2008, the turnover is described as below 5% and it is satisfactory. Thus, historically the employee turnover has decreased.

Administrative and support service activities (NACE N).

The experts note that employee turnover depends on the company: there are companies with stable level of turnover, and there are companies where the turnover is significant - approximately 25-30 employees per month in a large company.

Public administration and defence; compulsory social security (NACE O).

At present, as the experts have estimated, the labour turnover occurs, and approximately 15% of specialists leave the state administration.

However, turnover among low-qualification specialists is assessed to be too fast. Reason - minimal salaries paid for the first qualifications are low.

Preschool and primary school education (NACE P85).

Experts note that the turnover depends on the institution and intensity of attracting new employees (graduates often refuse from further work in the industry and move to other places).

Secondary education (NACE P85.3).

Employee turnover in general is low according to the experts' estimates. It is noted that there is no turnover among the richer and poorer schools as the personnel in richer schools does not change.

Higher education (NACE P85.4).

Experts consider that the turnover in the industry is not high, at present there are stable places of work in the industry with stable salary level and development opportunities.

Health protection (Q 86).

At present the turnover has remained the same as before mainly due to financial reasons, insufficient motivation, illness or family conditions, emigration.

Larger turnover occurs among low-qualification occupations, for example, street janitors. Higher employee turnover occurs at the age of retirement.

Social care (NACE Q87-88).

The turnover varies in different institutions; in some institutions the turnover is not profound at present, and there are institutions where the number of employees changes constantly, up to 50%.

It is noted that employees leave the industry due to various reasons, but the ones who stay work for a long term.

In cities (Riga), employee turnover is higher than in the regions.

Arts, entertainment and recreation (NACE R).

At present, experts consider that employee turnover is low, mainly within the norm.

How pronounced is the labour movement between occupations of one level, between industries and what factors affect it?

In crop and cattle breeding (NACE A01), it is not profound, in the experts' opinion

Forestry and logging (NACE A02).

Some experts consider that in comparison to the situation 5 years ago no significant changes have occurred, and the horizontal movement is less expressed, compared to the vertical movement.

It is noted also that within the scope of mobility, labour returns to the previous places of work because the employee did not manage to earn more at the new place, or else returned from abroad.

Experts note that labour moves to other industries: representatives of a universal profession can work in several industries, for example, tractor drivers can move to road construction, drivers can move to international carriage. This is related both to the seasonality (typical both to road construction and forestry) and to lack of labour in all industries. It is also noted that development of forestry is strong and it is not easy to compete with it in terms of labour issues.

Fishing and aquaculture (NACE A03).

It is noted that requalification from other industries is possible, for example to re-qualify as a sailor. This occupation lacks workers, but experts note that in comparison with the other countries Latvia needs qualification confirmation (documents).

It is mentioned that no significant movement has been observed at present, it is noted that it is possible to re-qualify, for example, from fish receipt for storage to fish sorting.

Mining and quarrying (NACE B).

Experts consider that labour movement is not high in the industry, and the requalification level is determined by the manufacturing need of each company.

Also the mobility in a company between occupations is noted - from a locksmith to a tractor driver and later to the chief engineer.

Manufacture of food products and beverages (NACE C10-12).

The industry experts' opinions vary, the tendencies, however, show that mobility in the regions is limited (there are no alternatives). The mobility is affected by seasonality - employees move to other industries, for example, in spring the labour moves to construction, road construction, logistics, and in autumn it returns to food production. Another sample - employees of the lower level can move from meat processing to fish processing, and thereafter to vegetable canning (work at a conveyor). Thus, turnover mainly refers to less qualified labour, turnover among higher qualified employees is smaller.

Light industry (NACE C13-15).

The experts note that labour movement within the industry is not profound, movement to other industries is more profound. Specifically, newcomers from other industries are not a usual phenomenon. It is noted that the existing labour is re-qualified along with introducing new equipment; it is noted that employees must be universal with various skills within one company.

Flows among various companies within one industry are not profound.

Manufacture of wood and of products of wood (NACE C16).

It is mentioned that movement in the industry occurs seldom, mainly due to personal reasons to change work conditions for less hard ones. In general, experts do not have information to which industries the labour moves when it moves.

Also a tendency is mentioned that movement of less qualified labour is more profound, and it is not known in which direction it occurs.

Experts also have mentioned differences in the private and public sector, saying that in case a person wishes a more dynamic work he/she moves to the private sector.

Manufacture of paper and printing (NACE C17-18).

At present the labour turnover is not profound in the industry, it occurs in small amounts, in certain cases it is close to zero. Zero mobility is explained by active monitoring of salaries and their maintenance above the average.

Inter-occupational mobility also exists - printer's work in shifts can be mentioned as a sample; thus after some time due to physical exhaustion employees move, for example, to post-processing. Thus employee rotation occurs within a company or because some employees choose to change the employer. Experts note that in the industry, an employee can grow from an auxiliary worker to a master.

Experts also note that a large role in employee qualification and movement among occupations is played by personal initiative.

In general experts indicate that mobility among industries is less profound and it is not profound within the printing industry. This is because competitive remuneration is ensured and employees are used to work with particular equipment and in the specific company. The experts say that in light of these factors, flows from a company to another are not simple as companies work using their own technologies. This, in turn, means a necessity of requalification.

Manufacture of chemicals (NACE C19-20; C22).

In the experts' opinion, occupation movement at various levels depends on company specifics. There are companies where occupations can be changed within the specialty; but there are occupations where requalification is impossible as field of activity and specifics are too different.

It is noted that the tendency to move to other companies or other industries is not profound, there are some cases when competitors entice trained employees.

Pharmacy (NACE C21).

Within the industry, labour moves among companies. But the occupation specifics do not allow moving rapidly to other industries. In addition, employee requalification is not cardinal, nevertheless employees improve their knowledge - it is an integral part of the work.

Trade (NACE G).

Labour rotation in the industry occurs both in horizontal and vertical direction. Movement occurs among various shops, rotation between various companies, between various industries. Likewise the labour develops career, it is determined by the desire to grow, to obtain a better-paid job.

Rail transport (NACE H49.1-49.2).

In general, labour movement between occupations of one level is minimal or does not occur at all. Movement occurs within the industry, but the outgoing and incoming industry mobility is not profound. The most significant movement factor is remuneration.

Land transport (NACE H49.3-49.4, H52.21.).

Among the occupations in the industry, movement is not significant, for example, managers have the only option to change the category. Labour does not move to other industries to a large extent, and also no labour comes from other industries. This is explained by the level of remuneration.

In the industry, the turnover is not profound as the industry specifics do not allow moving to a different occupation in the absence of the required knowledge.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

Experts consider that labour movement in the industry is not generally observed.

In port operations in private sector, in experts' opinion, labour movement occurs upon establishment of new companies, construction of new objects, and entry of new service providers. Cases are observed when managers rotate (including buy-out) from one company to another.

In the industry in general, the internal rotation occurs, but the outgoing movement is not profound. It is noted that labour from other industries enters the industry, for example, financial economy, construction.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

Movement occurs within the industry among employees of various countries and within various airlines.

The aviation industry is quite closed for other industries, as well as the employees of this industry are reluctant to move to other industries. A slightly higher mobility among employees occurs in the field of ground handling.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

Experts note that within the scope of one occupation, the most mobile professions at present are IT specialists and electricians; companies are ready to attract representatives of these occupations by a better remuneration.

Movement between industries is more profound at present, moreover, experts consider that sometimes labour turnover is even preferable.

Postal and courier activities (NACE H53).

Some experts note the internal movement of labour in companies, for example, upon closing a department, an alternative place of work is offered elsewhere. Labour turnover between various structures is assessed to be at the rate of 10%. It is noted that labour moves more to the industry of logistics, transport.

Accommodation and catering services (NACE I55-56).

Experts indicate that labour movement at present is not profound, although it occurs between industries and within the industry.

Publishing activities (NACE J58).

The process of raising qualification in the industry is mentioned as a factor that facilitates vertical mobility. It is noted that in mass media publishing employee migration between industries is basically typical of the creative occupations. Transfer to a different industry is typical of computer designers and specialists working as freelancers, free from any connection to one industry.

Experts note that if the economic situation allows increasing the number of printed material, also the number of employees increases.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Higher labour turnover is noted in public media, and lower in news agencies.

Telecommunications (NACE J61).

In general, labour movement between occupations of one level is low or does not occur at all. Labour moves from other industries to the telecommunications. It is affected by remuneration, social guarantees, as well as industry prospects and prestige.

It is noted that in the IT field a low labour movement between occupations of one level occurs, it is determined by specialisation.

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

Programmers' mobility between industries is not profound, it is determined by work and skill specifics. It is noted that consultants, accountants are the professions with more active turnover.

Labour movement in the IT industry occurs due to buy-outs, according to some experts. In general the migration from the IT field to other industries is low, the same refers also to the incoming migration.

Financial and insurance activities (NACE K).

At present, according to the experts, movement within an occupation and between occupations is not typical.

It is noted that separate legal services and accountancy services can be performed by representatives of other industries.

Real estate activities (NACE L).

Within the industry, rotation occurs, employees change occupations within the real estate sector and in management, likewise careers are built. Also, movement to other companies occurs due to salary.

People from other industries who have not had relation to the field come to the industry of real estate.

Legal and accounting activities (NACE M69-70).

In the sector of legal services, movement within the industry occurs upon starting career, and employees leave the industry after a longer period of operation.

In accounting sphere, it is possible to develop career, as well as to move to other companies. It is noted that it is complicated to move to a different industry and come to the industry.

It is noted that many specialists of the industry become insolvency administrators, as it is a demanded field.

Scientific research (NACE M72).

In science, movement between occupations of one level is little and occurs in rare occasions.

However, experts indicate that requalification or qualification improvement takes place – these indicators reach even 50%. It is considered that requalification is higher than in the country on the average, at the same time it is described as a short-term mobility, when a person moves for a certain period of time to work at a project and return to the field.

It is considered that labour movement between countries is more topical – moreover, the flow does not occur from one industry to another, among occupations of one level in the industry, but rather in one and the same industry between countries.

Technical services, advertising (NACE M71, M73-74).

It is noted that there are attempts to develop horizontal movement so that employees are able to replace each other, as well as qualification increase and trainings take place.

Movement of labour to other industries is not expressed, however, it depends on the particular company. It is noted that movement occurs among companies, but this is not massive. Employees enter the industry also from other industries, especially from the state sector, for example, marketing specialists.

Administrative and support service activities (NACE N).

It is noted that an employee who works in the service sector often does not develop a career and there is no need in requalification.

At present, seasonal mobility between industries is more topical, for example, employee moves from the industry to construction. At the same time, internal movement does not occur as each occupation is specific, and it is also dependent on the company.

Public administration and defence; compulsory social security (NACE O).

Experts have different opinions, they consider that the industry does not have a profound labour movement and it moves away from the state administration. Also competition increase is noted between state administration institutions.

Preschool and primary school education (NACE P85).

Movement between professions of one level occurs in this industry, as well as qualification improvement and increase is a mandatory requirement in the industry.

Movement to other industries also occurs as teachers are looking for the options to receive higher remuneration for the work, but the tendency is not profound, according to the experts. Likewise labour moves to different related industry, for example, kindergarten baby-sitters acquire the teacher's occupation.

Secondary education (NACE P85.3).

There are institutions of education with low labour movement, and there are also such institutions where movement of teachers is higher.

In total, the experts' opinions vary. It is noted that there is low movement among professionals in subjects of general education, but the movement in specialised subjects has increased in comparison to the situation five years ago.

Among industries, the movement does not take place or is minimal; those who leave the industry were dissatisfied with working intensity and remuneration level.

The industry is characterised by developing qualification, attending courses, but in general moving away from the industry is not profound.

Higher education (NACE P85.4).

It is noted that less professionals are leaving for the private sector; the issue how to attract new employees is topical.

The new and existing teachers who have reached a quite high degree of expertise move to manufacturing, the turnover among institutions of higher education, however, is low.

Health protection (Q 86).

Movement in the occupation is insignificant; moreover, this is not a problem faced in health care. Experts have noted that the present economic conditions hinder mobility. In general, developing qualification is typical of the entire industry, and labour often works at several institutions.

Experts have mentioned transfer of nurses to the industry of cosmetics as a typical example of labour mobility.

The incoming mobility is strictly limited; entry from other industries to the health care is even impossible due to the specific skills.

Social care (NACE Q87-88).

Tendencies of labour movement among occupations of the same level have varied, from minimal to intensive.

This is affected by remuneration, required transportation costs to get to work. A tendency shows also effect of emigration on employee turnover.

Outgoing mobility of the industry to other industries is possible, it is determined by the specifics of skills – representatives of the occupation need language skills, good social skills and the like, this, for example, allows moving to the tourism industry.

Incoming movement from education, security industries (teachers, psychologists, police officers) occurs. Experts noted that the turnover is affected by economic factors and the fact the representatives of these occupations intentionally choose the occupation.

Arts, entertainment and recreation (NACE R).

Experts have various opinions about the turnover among occupations and between industries. Some consider that the industry does not have a profound outgoing mobility to other industries, others state that labour mobility between industries has increased.

Also, in relation to further education and employees' career opportunities, various responses are given; this is related to specifics of operation of each company. It is noted that the industry has faced cases when labour has moved within a company both vertically and horizontally.

Experts note that among the technical personnel the turnover is more profound, and it is determined by the low remuneration.

3.3.3. Tendency forecasts of labour mobility in Latvian industries

What factors could affect employee turnover in future?

Crop and cattle breeding industry (NACE A01).

In the experts' opinion, the labour turnover in the medium term will be affected by remuneration, technological development and labour education. In the long term, remuneration, technological development and general standard of living. In the experts' opinion, employee turnover in the medium and long term will be determined by development of other industries.

Experts see increase in occupational mobility in the region in long-term - labour movement from rural areas to regions will occur. This could be affected by deterioration of infrastructure and also by deterioration of the standard of living - availability of kindergartens and institutions of education is an important factor that affects decisions taken by labour.

Forestry and logging (NACE A02).

In the medium term, it is predicted that the main factor affecting labour turnover will be remuneration and working conditions. An important factor is considered to be the demand in timber, competition by other industries in the labour market will also be of importance.

The turnover can be affected by higher requirements, those will be determined also by changes in employee generations. In this case, ageing could be the only reason for turnover of employees.

Experts consider that a healthy competition among the labour is necessary, and a company name and reputation will decrease employee turnover.

In the experts' opinion, a factor affecting mobility will be remuneration: if the remuneration grows in other industries, the labour may move elsewhere.

Fishing and aquaculture (NACE A03).

In the medium term, experts consider that turnover in fish processing will remain at the previous level – large turnover related to work conditions. Moreover, the turnover is affected also by the level of remuneration, and no significant changes are forecast.

In the long term, it is considered that labour turnover will be affected by rapid rural development and new places of work in other companies.

Mining and quarrying (NACE B).

In the medium term, according to the experts' assessment, the remuneration is a significant factor. On condition that the production is competitive and business is developing, it is possible to maintain the level of remuneration that would hinder employee turnover. Also the factor of emigration, demographic situation and ageing is indicated.

In the long term, employee turnover will be mainly determined by economic and demographic factors.

Manufacture of food products and beverages (NACE C10-12).

In the medium and long term, experts forecast growing employee turnover – it will be affected by geographical mobility and options to freely move between various countries. It is noted that people will have more access to education, therefore also to more work opportunities.

In the food industry, employee turnover will be affected by industry development – requirements of work performance and higher demands.

Experts find that if companies are not well-organised guaranteeing stability, the employee turnover will increase. The level of remuneration in other companies and abroad will affect labour flows.

The experts indicate that in separate occupations the turnover cannot be avoided, for example, among shop salespersons.

Light industry (NACE C13-15).

In the medium term, in the experts' opinion, employee turnover will be affected by retirement, level of remuneration and qualification necessity. It is noted that employees will move to places of work with higher remuneration.

In the long term, employee turnover will be affected by economic factors, also size of the market, in the experts' opinion, it will decrease.

Manufacture of wood and of products of wood (NACE C16).

In the medium term, in the experts' opinion, the prevailing factor affecting employee turnover will be remuneration, therefore companies will have to solve productivity issues (it must be increased). At the same time, increasing productivity will definitely cause replacement of labour by machines; experts forecast that if the tax burden still increases, employees will become more expensive than the machines. This will lead to the situation that instead of employee turnover, their replacement by machines will be topical.

It is stated that employee turnover will be affected by the open labour market of Europe, stating that if it is possible to earn more elsewhere people will not be ready to work "due to patriotism" for a long time. It has been forecast that remuneration may rapidly reach a level of equalization.

Working conditions are mentioned as an important factor: good working environment is a part of remuneration; also the company name is important and affects the turnover.

In the long term, experts have mentioned the effects of the set of all the mentioned factors as well as the economic situation.

Experts have expressed an opinion that in the long term those factors related to individuals' interest, motivation and preferences (what an employee likes and dislikes) will become important. Skills are mentioned as an important factor – a good employee can dictate his own terms to the employer. In the long term, experts also note the effect of migration on labour turnover.

Manufacture of paper and printing (NACE C17-18).

In the medium term, in the experts' opinion, a company's financial condition will be significant – its efficiency, profitability will determine employee turnover.

Another significant factor affecting employee turnover is development of other industries and level of remuneration. Experts have stated that the industry will be affected by life and working stereotypes – for example, jobs should be changed every 5-7 years or the idea that a person works in one industry for the whole life.

It is noted that labour can move to other industries in future that develop at a faster pace and offer higher remuneration. Furthermore, labour turnover will be determined by the retirement of the existing labour.

Manufacture of chemicals (NACE C19-20; C22).

In the medium term, in the experts' opinion, employee turnover could be affected by the level of remuneration, also replacement of employees at the pre-retirement and retirement age with younger employees. Furthermore, social guarantees, openness of the external market will affect. There is a risk that higher-rank specialists will look for job abroad.

In the experts' opinion, in the long term employee turnover will be affected by integration in the European market, as well as increasing the production efficiency. The latter will bring redundancy.

Pharmacy (NACE C21).

Experts consider that employee turnover will be affected by the economic conditions (infrastructure, standards of living), state policy and stability. A significant role in employee turnover is played by remuneration and social guarantees.

Trade (NACE G).

In future, employee turnover in the industry will be affected by the level of remuneration, experts note the necessity to raise the minimal salary. Among other factors, moving to larger cities, emigration, ageing, searching jobs closer to home, prestige of the occupation are mentioned.

Another important factor affecting employee turnover is work environment, for example, atmosphere set by the shop manager.

Rail transport (NACE H49.1-49.2).

Experts consider that in future employee turnover will be affected by a range of factors, among them: EU common labour market, remuneration, ageing, amount of services.

In the industry, no significant employee turnover is predicted, and it is substantiated by limitations to increase in the number of cargos - freight amount can increase only as much as the infrastructure allows.

Land transport (NACE H49.3-49.4, H52.21.).

In future, according to the experts' assessment, employee rotation may increase if the industry develops. The turnover will be affected also by salaries and work environment in companies.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

Experts consider that in future employee turnover will be affected by technology development, remuneration, geographical mobility. The ageing and state policy factors are mentioned.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

In the experts' opinion, in future employee turnover in the industry can be affected by entry of new airlines, and the competition to attract employees will increase.

Employee turnover could be affected by increase in freight forwarding thereby causing demand of employees.

A significant factor affecting the turnover is remuneration. Experts consider that the turnover will increase if remuneration remains the same in future.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

Experts consider that employee turnover in future will be affected by regional development, level of remuneration and work environment. Likewise the economic and political situation in the country and ageing has been mentioned.

Postal and courier activities (NACE H53).

The future employee turnover in the industry will be affected by emigration, size of salary. Furthermore, value of the service to be provided by the industry, new technologies and consumers' purchasing capacity are indicated as significant.

Accommodation and catering services (NACE I55-56).

The mobility in the industry is affected by the level of remuneration and by the free labour market in the EU and globally.

Experts also note the effect of the industry development and opening new companies on the mobility, as well as motivation systems in companies facilitating labour to remain and move internally.

Publishing activities (NACE J58).

Experts consider that turnover will be affected by the general development of the industry. Effect of the electronic environment is mentioned; as it will result in movement of the elderly people away from the industry.

Also the factors of tax burden are indicated – governmental decisions referring to taxes and company existence, financing to state media.

In future, labour emigration could affect the overall turnover in the industry, higher remuneration will be needed to keep them.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Experts consider that employee turnover will be mostly affected by general industry development, level of remuneration and financial motivation, training opportunities. It has also been noted that mobility will be facilitated by instability of media owners and Latvian public media.

Telecommunications (NACE J61).

Experts consider that employee turnover will be mostly affected by remuneration, skill demand in the labour market, and difficulties have been forecast to find good specialists. Competition will be caused by foreign companies and foreign labour markets. Work specifics and position requirements will change.

In the long term, employee turnover will be affected by emigration, in the experts' opinion, also by the place of residence and employee's values and priorities (balance between the private life and work).

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

It is considered that factors impacting employee turnover will be level of remuneration and strong buyers of employees.

As experts have concluded, programmers who are mainly working because of love for their occupation are also subjected to the factor of remuneration.

It is noted that job opportunities abroad and work from abroad will also be of importance. Turnover will be affected by insufficiency of employees in Latvia, Europe, globally. Usually, IT specialists know foreign languages, and they are not “tied” to a specific labour market.

The turnover can also be affected by the constant technological development, thus if employees cannot keep up with the developments, the employee turnover is unavoidable.

In the long term, the experts consider that employee turnover will be affected by globalisation, and options to work for the external market can cause even larger lack of labour in Latvia.

Financial and insurance activities (NACE K).

It is forecast that there will be a higher demand in specialists of IT technologies and they will have more opportunities to choose more pleasant work, work environment, and remuneration.

It is noted that the turnover will be affected by the level of remuneration, competition, emigration and technological progress.

Real estate activities (NACE L).

The turnover will be affected by the fact that people realise that the specific occupations are not suitable for them and they change the industry.

It is noted that the industry of real estate is an industry of young people, ageing would not be typical.

In the long term, it has been forecast that rotation will decrease as those, who want to work, will move to the industry.

Legal and accounting activities (NACE M69-70).

In the medium term, in the experts' opinion, the turnover will be affected by turnover in the new professionals, as well as by the fight of foreign competitors for employees.

In general, the remuneration will affect turnover in all fields.

Such factors affecting the turnover have been noted as law offices merging as offices as franchise is established or the horizontal mobility will increase within the industry.

Scientific research (NACE M72).

In the experts' opinion, the turnover will be affected by remuneration and availability of projects. Experts consider that until 2020 these factors will hardly change.

The turnover will be affected by higher integration globally, emigration, and ageing. This will be affected by establishment of new companies able to finance the science. Thus classically, financing comes to science from the production and it will affect labour turnover.

Technical services, advertising (NACE M71, M73-74).

It is forecast that rise in costs will affect the level of salaries and companies will have to think about keeping the labour in conditions of increasing costs.

Experts also note that the industry is uneven, therefore the turnover is difficult to describe and forecast.

Administrative and support service activities (NACE N).

Experts consider that in future labour turnover will be affected by size of the remuneration and competing companies.

A certain effect will be caused by infrastructure, location of the object and means of transport to reach it.

Also the effect of emigration and new requirements to employees has been noted.

Public administration and defence; compulsory social security (NACE O).

Experts consider that turnover will be affected by economic growth, level of remuneration and aspects of work quality.

Preschool and primary school education (NACE P85).

Experts indicate that in future the turnover will be affected by remuneration and social guarantees.

The occupations in this industry are characterised by "burn-out" in 5 years; therefore a term of 2-year restoration would be necessary, as it has been introduced in foreign countries.

The turnover will also be affected by emigration of young people, but it will not be a profound tendency.

In the long term, according to the experts' estimate, the tendency could change and employee turnover in the industry will take every 5 years.

Secondary education (NACE P85.3).

Experts forecast that employee turnover will be affected by the administrative burden, level of salary, as well as employees' options to master new technologies, ability to teach in a foreign language.

In the long term, turnover will be affected by economic conditions and bureaucratic requirements.

Higher education (NACE P85.4).

One of the reasons for turnover in future is the ability of the academic personnel to follow the technological development and globalisation, for example, reading lectures online and virtual communication with students.

It is noted that larger part of specialists will adapt, but some will move away from the industry. Generation change is mentioned as a reason for the turnover, predicted at a high level in the industry.

In the long term, it is considered that turnover will not be high and experts rely on stabilisation of the situation in future.

Health protection (Q 86).

Employee turnover will be affected by the economic situation and situation in the country, level of remuneration and social guarantees. Furthermore, the effect of emigration and lack of funding has been noted, as it could magnify this process.

Social care (NACE Q87-88).

In future employee turnover will be affected by dynamics of remuneration and general situation in the industry.

Experts note that in the long term, turnover will be affected by ageing and necessity to increase qualification.

Arts, entertainment and recreation (NACE R).

All respondents consider that remuneration is the most significant factor for labour turnover; this tendency will last in future.

Furthermore, it is predicted that technology development will decrease the demand for manual work, this could decrease demand for technical employees. Representatives of these occupations will be necessary, but in smaller numbers.

Also ageing is mentioned as a factor affecting the turnover.

In the field of theatre, it is forecast that the employee movement in the territory of Latvia will be more flexible because establishment of various forms of theatre is planned, different types of theatres are merged, thus the employees will become more mobile.

It is noted that employee turnover could be affected by the state and private funding. The turnover could be affected by disappearance of language barrier, at that moment existence of the Latvian theatre will be threatened, experts note that this can be observed in other fields.

How pronounced will be the labour movement between occupations of one level, between industries and what factors will affect it?

Experts forecast that in the industry of crop and cattle breeding (NACE A01) the most significant factor affecting labour mobility will be remuneration. However, there are various opinions regarding movement within one occupation – some consider that the mobility will occur within one occupation, others consider that it will decrease. It is noted that a certain effect on mobility will be caused by company cooperation in future. Experts also note that there is possible movement of the employed to

other industries, this will be affected by the level of remuneration or other conditions that will encourage people to leave the rural areas.

Forestry and logging (NACE A02).

It is noted that at present there is no expressed occupation hierarchy, as well as there is no vertical movement: for example, the youth are keen on changing the profession horizontally, experts predict that this situation will change in future.

Experts stress that another factor affecting workers' movement and mobility within the industry and other industries in future is the fact that companies will have to follow the present situation in other industries a higher remuneration will entice specialists to other work places.

Respondents mention a necessity not only to train specialists for the industry, but also to be able to keep the workers in the industry; companies need to follow costs and take care of the working environment so that the workers do not emigrate.

In the context of mobility, experts mention aspects of education and the necessary investments in equipment and tools, it has been indicated that teachers must be sufficiently qualified. It is also indicated that it is important that teachers would follow the overall development in training the new specialists. It is noted that the present tendencies of the merge (synergy) of forestry and agriculture would increase affecting the skills of labour.

Experts note that in future the situation where the employed obtain experience in the public sector after finishing the institution of higher education and move to a better-paid job in private structures after they have obtained knowledge will remain. Experts estimate that in the private sector the remuneration for the specialists of the industry will be higher than in the public sector in the long term.

Respondents conclude that the labour mobility in the industry will be affected by the economic factors, level of remuneration.

Fishing and aquaculture (NACE A03).

It is noted that in fish processing the labour movement was and will be topical, it is determined by the hard work.

Experts estimate that mobility in fishery will not be profound as the number of companies is decreasing, and they will motivate the labour to stay raising the remuneration. Others consider that requalification is not topical in the industry, and the labour is not moving away from the industry.

In general, the opinions about movement to and from other industries vary. It has also been mentioned that there are options to move from fish processing and ship repair to other industries. The same is possible in fish farming – the labour can come from other industries. The labour movement away from the industry companies could be affected by development in other industries.

Mining and quarrying (NACE B).

Experts have different opinions – some consider that ificant labour turnover will be insignificant; others, however, consider that there will be some mobility but it will not exceed the present one. The most significant affecting factors – salaries and employment seasonality forcing the employed to look for other sources of income.

Manufacture of food products and beverages (NACE C10-12).

Experts note that people and their skills will become more universal and the competition will be global. This will be increased by free movement of labour, options to acquire new skills in a different company.

Companies will continue offering training and requalification as this will be the option to acquire labour.

In general, there will labour rotation in the industry, less in Latvia, more in Europe.

In the experts' opinion, the size of remuneration in the food industry and other industries is the prevailing factor. A certain per cent of labour leaves job due to its specifics, but experts consider that it is not the prevailing factor.

It is noted that in regions employee turnover will be minimal because there are not many manufacturing companies and alternative places of work.

Light industry (NACE C13-15).

Experts consider that, as movement within one occupation is not topical, it is difficult to forecast it in future. It is predicted that movement to other industries and other countries can increase, – this will be determined by the level of remuneration.

Flows of labour coming from other industries are likewise difficult to predict because acquisition of skills needed by the representatives of other industries is complicated.

It is noted that in future labour requalification will take place at the companies' cost. Furthermore, an employee must be universal, with a larger baggage of knowledge and skills. Also, a more profound

employee turnover in the industry has been noted between companies among young people as young people like changes.

Manufacture of wood and of products of wood (NACE C16).

Experts consider that remuneration will be a significant factor affecting labour mobility in the next years.

Labour flow depends on development of each sub-industry because the labour moves to the place where the remuneration is higher and return, if the situation changes. The process is affected also by state subsidies to each industry, which is largely related to the economic situation in certain industries.

In the experts' opinion, at the time when industry employees are better paid, the following ancillary factors will become important – working conditions, work schedule, option not to work during holidays. Thus in future, it should be taken into account that by increase in remuneration in the industry these factors will be more important.

It is also stressed that long-term relations with employees are important, it is more important to keep the employee instead of attracting, therefore they should be taken care of, trained, certainty in work stability should be created.

Manufacture of paper and printing (NACE C17-18).

Some experts think that people become more mobile, and mobility will increase upon change of generations. Likewise a flow of labour, mostly less qualified workers, from third countries will also increase in cities of Latvia.

The experts note that labour mobility will increase among companies when the level of welfare grows. At present, people do not want to risk and move as there is a risk not to pass the probation period or other reasons; stability is very important. If people become more secured, savings will increase, the employees' feeling of safety will increase and the mobility will likewise increase.

Movement within companies will be similar as before – some specialists will move upward to the management level, some will change specialty horizontally; but there will not be a profound tendency. A necessity of specialisation will be imposed by the current situation facilitating employees to improve qualification. Experts consider that in total, the remuneration in the industry is competitive and the industry is well positioned. Moreover, demand in labour is not so large; therefore labour migration will not occur much.

Experts likewise note that employee turnover will occur at the will of the employers and the employees will be forced to re-qualify.

Manufacture of chemicals (NACE C19-20; C22).

The industry is not characterised by specific movement among occupations of one level because the specifics of each occupation are different. Experts note that employees can improve their qualification, if they are willing to learn.

Experts consider that the difference between remuneration in Latvia and Europe should be decreased (so that the difference would not exceed 20-25%) as industry specialists tend to go to work in other countries.

Labour movement to the chemistry industry from other industries is not simple because the chemistry industry requires specific knowledge.

Pharmacy (NACE C21).

Some consider that so far the strict standards in the pharmacy industry have limited labour mobility within the industry, it will not be the case in future. Likewise it is noted that in future employees' qualification will have to be increased.

Other experts consider that in future occupational mobility will be more profound, the labour will have to adapt to the new requirements of the occupation.

Trade (NACE G).

It is noted that in future the industry employees must be mobile, accept various challenges. Movement will depend on remuneration; the lesser differences in remuneration in the industry and other industries, the lesser will be the mobility. Upon a specific demand there is a risk that men will move to construction with larger remuneration.

Experts find that in future people will have to become more mobile, change regions, cities, as well as employees will look for better places of work.

Rail transport (NACE H49.1-49.2).

In the industry, labour mobility between occupations of one level will not be large, although it will grow. At the same time, experts note that career opportunities will increase in companies and labour will move within the industry.

Land transport (NACE H49.3-49.4, H52.21.).

Within occupations, inter-industry mobility is assumed, for example, drivers could change industries but keep the same occupation. However, no significant mobility between industries is forecast. Mobility will be affected by the level of remuneration in other industries.

Within the industry, no large amounts of movement are foreseen, mainly as a result of qualification increase.

Water transport and service activities incidental to water transportation (NACE H50, H52.22).

In the experts' opinion, in general, labour mobility will take place, but it will not be profound. The labour will have the opportunity to build career vertically in the company. The mobility could be affected (facilitated) by entry of new companies.

Small inter-industry mobility (incoming and outgoing) is predicted, basically the horizontal mobility within the industry will be topical. Experts indicate that the industry has occupations where the qualification could be increased, and some where it is impossible.

Also the effect of short-term projects on labour mobility is noted. Construction of new terminals in the port territory and the respective employees hired for the project are mentioned as an example.

Air transport and service activities incidental to air transportation (NACE H51, H52.23).

Experts consider that within the occupation the turnover in the industry will be more profound, it will be affected by globalisation and openness of the world.

Inter-industry incoming and outgoing mobility will decrease even more as the occupation skills will require performance of technically complicated tasks.

Experts assume turnover among companies within the industry if the competition increases. It is noted that an employee will need to develop one's skills in future and become a universal worker.

Warehousing and storage; cargo handling (NACE H52.1, H52.24.).

In the experts' opinion, in future people will want and will be able to change places of work because the existing and other companies will develop. This movement is an option to create healthy competition and keep employees.

It is noted that mobility of technical specialists will be low because representatives of these occupations will still have requirements of specific skills.

In general, the intensity of labour turnover will be delayed by stable remuneration that corresponds to the skills.

Postal and courier activities (NACE H53).

Experts have different opinions, some consider that turnover will not be profound, others consider the opposite.

It is noted that labour movement from other industries – finances, insurance, and sales – will increase.

Inter-industry labour mobility will be determined by development of logistics, transport, postal industry, as well as the level of remuneration.

Accommodation and catering services (NACE I55-56).

Experts consider that working environment, remuneration, also development of industry companies are the significant factors that affect labour mobility.

It is noted that labour mobility will be topical both within the industry and between industries.

Publishing activities (NACE J58).

Experts note that increase in labour qualification and labour mobility within the industry will continue.

As regards movement of specialists to other industries, experts have different opinions or do not have an expressed opinion. In general, incoming flow of labour according to industries is limited due to the industry specifics.

Radio and television programme production and broadcasting; news agency activities (NACE J59-60, J63.9).

Experts consider that the labour mobility between occupations will be affected by the economic situation in the country, as well as the possible media concentration processes in Latvia.

Telecommunications (NACE J61).

There are different replies from respondents regarding movement between occupations of one level. It is noted that turnover will mainly affect client service sector, possible, the occupations of medium level managers (in the long term, they could start "walking" between companies).

Generally. The vertical movement is foreseen; and the horizontal – at the rate of 5% annually.

Movement between occupations of one level could increase because the level of education increases. It is also noted that labour mobility to the industry and from it will not be profound.

Computer programming, consultancy, data processing, web portals and other related activities (NACE J62, J63.1.).

Experts note that within the industry there will be competition with foreign companies. Employee movement away from the industry is not foreseen because the occupation of IT professionals is treated as a lifestyle, mode of thinking. The incomers remain in this industry, according to the experts.

Turnover will be affected by the level of remuneration, specialists' ambitions and ageing.

Financial and insurance activities (NACE K).

It is predicted that there will not be a large turnover among various similar occupations of one level. It is possible that IT specialists could move to their industry if it develops.

Experts note that personal traits will play a role in the mobility, for example, the younger generation is more loyal to occupation instead of the company. Thus if an employee can provide services in a different company, he/she will do that.

Real estate activities (NACE L).

Experts note that natural selection will occur in future, employees will focus on one industry, and therefore requalification will be lower.

However, there is influence by other industries; if the construction industry develops, it will entice part of employees.

In general, no large movement will occur, this will be determined by the work specifics and stability.

Legal and accounting activities (NACE M69-70).

In the legal field, experts forecast a movement away from the industry related to individual decisions (work suitability).

In accounting, employees will have to be able to change competencies within the industry.

Larger mobility is expected in non-regulated occupations - lawyers, consultants. In turn, the regulated occupations, for example, prosecutors, advocates, judges, do not have those flows.

Scientific research (NACE M72).

There will be more requalification and movement processes, inter-industry and inter-disciplinary researches will intensify. For example, biology and energetics, biology and physics will merge for projects.

Scientists will become more mobile; movement within the scope of one institute or industry will be small, but movement between industries, all over the industry, will increase.

Demand of specialists in all industries in general could increase. In future due to technology development there will be a higher demand of various specialists. For example, medicine, bio-technologies, computer sciences, manufacture.

The main requalification will be related directly to expansion of the qualification or its increase within the scope of one industry, less between industries. .

It is noted that in future, more scientists from other countries will move and it is hoped that the national economy will develop, Latvia will attract investments and funds also for science, causing demand in qualified and highly qualified labour in science.

Technical services, advertising (NACE M71, M73-74).

The turnover will depend on the company and its sphere because there are sectors where mobility is non-existent and in some sectors it is intensive.

Experts estimate that in advertising the labour will become younger - in future the average employee age will be below 35. Within the industry, the labour will not move massively.

Between industries, movement will occur, especially among programmers, researchers, and analysts.

Administrative and support service activities (NACE N).

Experts consider that the labour will not move to other industries at an optimum remuneration. It is estimated that vertical growth will develop to build careers in the respective occupations. Turnover between industries depends on occupational specifics, for example, security employees look for higher remuneration, so they change companies and the industry.

It is noted that in shipping the occupations have narrow specification, therefore movement to a different industry or position is not profound. Vertical turnover is more possible. Likewise it is complicated to move from another industry due to the international regulation.

Public administration and defence; compulsory social security (NACE O).

Labour mobility is predicted in various ways, for example, the State Revenue Service predicts a larger turnover in future than now. In the court system it will not be profound according to the experts' estimates.

In the police, the turnover is predicted only in the related industries – policy, prosecutor's office, and other institutions of investigation.

In general, labour mobility will be affected by the economic situation; moreover, in future every specialist will have to become versatile with a broad range of skills. Thus the tendency to increase qualification will be increased.

It is noted that mobility tendencies will depend on salary and operational efficiency.

Preschool and primary school education (NACE P85).

It is noted that qualification improvement will be important, for example, teacher assistants will become teachers, and pre-school teachers will become teachers.

Movement to other industries will be determined by remuneration, but the vertical mobility is limited due to work specifics. Mobility between industries could be topical from schools of general education to pre-school institutions.

In general labour mobility of the industry will be affected by laws, educational programmes, changes in institutions of higher education, but the industry itself cannot affect the changes, according to the experts.

Secondary education (NACE P85.3).

In general, experts of educational institutions forecast that in future there will not be a profound labour mobility between occupations of one level in the industry, but requalification and qualification improvement will be profound.

It is noted that in future more profound movement will be detected within the industry, especially in Riga.

Higher education (NACE P85.4).

It is noted that some teachers have so specific subjects that mobility within the occupation is limited. Movement between institutions of higher education is one of mobility types, but it should be interpreted taking into account aspects of guest lecturers or work combination.

It is noted that larger labour mobility could occur among the support personnel as their level of skills is not so specific. For example, the occupation of accountants is a more mobile occupation, able to move across industries.

It is also forecast that labour movement to manufacture will decrease, but the research link between manufacture and research will remain.

In general, experts assess the turnover from the view of financing and teacher load.

Health protection (Q 86).

Experts foresee that in future the labour will not come to the industry; the outgoing mobility will be more expressed (doctors and nurses have broad knowledge to go to a different industry). Still, a larger movement away from the industry is not foreseen, and the tendency will depend on remuneration in the industry.

Qualification improvement and labour mobility between various hospitals will be more topical due to larger remuneration.

Nevertheless, in general, movement away from the health care industry will not be as profound as acquisition of the occupation takes many years, remuneration abroad is assessed as a serious argument for labour emigration.

Social care (NACE Q87-88).

It is foreseen that movement across one-level occupations will be profound in the industry.

Thus it is planned that the number of people in institutions will have to be decreased, and it is possible by many new types of care services. If this is done, the labour will need to re-qualify.

Arts, entertainment and recreation (NACE R).

Most respondents foresee that the dynamics will be maintained and labour mobility will continue.

A flow of employees of international level has been mentioned, when local specialists would look for development opportunities abroad and foreign specialists will be attracted.

The outgoing mobility will not be profound, but generation change, qualification improvement and requalification within the company will be topical. These tendencies will be determined by various factors - both the location and its change, by profession specifics and economic factors.

It is estimated that art synthesis, merger will occur, it will be more profound, and thus labour movement will increase. The skill level will increase, they will overlap, and thus the labour will be more mobile within the industry.

The above summary of opinions by industry experts allows making several important conclusions:

1. The driving force of occupational mobility and a significant influencing factor in all industries in Latvia is the level of remuneration; social security and working environment, however, is less important. Quite often respondents indicated microclimate, company reputation as significant affecting factors.
2. During the previous 10 years, industries have faced outgoing flows of labour to construction during its flourishing time. During the economic crisis, the labour tended to return to the previous occupation.
3. Industry development and level of remuneration in future will affect the labour turnover – in industries growing faster and offering higher salary will have a higher supply of labour.
4. A significant factor for labour turnover is workers' emigration.
5. The national economy has several industries with limited incoming labour mobility: for example, acquisition of skills of highly qualified personnel in health care, scientific personnel, ship construction and specific occupations of client service is considered to be completely new for specialists of other industries. Thus these industries have a more profound vertical and horizontal internal mobility, the incoming mobility is limited.
6. In general, highly qualified personnel in the industries are not expressly mobile – the personnel work at the companies for a longer period of time, sometimes for the whole life. On the contrary, less qualified labour is mobile and it frequently changes in all industries of the national economy.

The expert surveys provided suggestions for the economic policy-makers at the national level: to facilitate increase in the minimum salary for the employed, to implement a well-argued tax policy that would suit the economic development (experts have mentioned salary tax burden as a significant limiting factor for increase in the average salary), to establish stable climate of economic development.

3.4. OPTIONS TO FACILITATE OCCUPATIONAL MOBILITY ACROSS VARIOUS POPULATION AND OCCUPATIONAL GROUPS

Occupational mobility is very significant for development of national economy and labour market. The more professional is the labour, the more efficient and productive it is; thus it is important to implement measures facilitating occupational mobility to increase occupational mobility both across separate population groups (paying special attention to population groups with low occupational mobility) and within occupations decreasing the existing limitations that hinder mobility of separate occupational groups.

As it was noted in the first Chapter, mobility is affected both by external and individual factors. Remuneration is significant external factor as it affects the mobility between various occupational groups and also decisions taken by separate individuals regarding change of occupation (profession). In turn, the education and qualification are important individual factors affecting occupational mobility of the population. Thus the occupational mobility of the population depends on the options to acquire additional education and qualification. These options are characterised by an individual's financial condition (whether the individual can afford additional education or training), geographical availability of education and training (whether the place of residence is close to institutions of the corresponding education) and the individual abilities (personality, previous education and experience). Information is an important factor for individual's professional growth. Information both in the context of available education and training, and skills required in future in the labour market.

To facilitate occupational mobility, life-long learning is significant. In the context of life-long learning, the public interest and motivation to independently develop, obtain new knowledge and skills should be facilitated, as well as options for this purpose should be established. Events of life-long learning must be implemented in relation to future development tendencies and forecasts of the labour market. Labour market forecasts are important both to plan measures to facilitate occupational mobility and to inform the society about tendencies of labour market development. When vertical and horizontal occupational mobility is compared, each of them has its advantages and drawbacks. The vertical mobility qualitatively improves the labour market, increases labour productivity, and it is important for innovation development, however, when the structure of national economy changes, when demand for certain occupations decreases, representatives of separate occupational groups could face difficulties to adapt to new conditions of the labour market and to work in a different occupation. In this situation, it would be possible to find less qualified work in a different occupational group, moving downwards, that affects negatively the individual's self-assessment resulting in decreased motivation and work return. Horizontal occupational mobility determines higher labour flexibility in circumstances of changing demand of labour, the specialisation level, however, is lower.

The occupational mobility of labour is facilitated by short-term migration. When population leaves to work abroad, it acquires new work and language skills, increasing their occupational mobility. If the acquired knowledge and experience is required in the labour market after returning to home country, then this is assessed as benefit of the migration.

To facilitate population mobility, the public opinion should be established regarding independent education and acquisition of skills, thus popularizing the concept of life-long learning. In the meanwhile, options should be created for population to undertake education and training measures,

which should be financially available. Knowledge of foreign languages is a significant factor in addition to knowledge acquisition, thus it is useful to facilitate learning foreign languages. Learning foreign languages by the younger population can be facilitated by involving them in exchange programmes. By increasing the education quality, the Latvian institutions of higher education could attract larger number of foreign students to motivate the local youth to study foreign languages. Occupational mobility among the elderly population can be increased facilitating establishment and development of various interest groups that would be a motivational alternative to spend time outside home thus acquiring new knowledge and skills.

There are various important measures facilitating employment (active labour market policies) that can be joined by the employed and the unemployed to acquire new knowledge and skills. In Latvia, the State Employment Agency implements measures to facilitate occupational mobility and to increase competitiveness, as well as it offers options to improve qualification and to re-qualify. Measures of qualification and requalification are implemented in cooperation with employers to ensure that the implemented programmes comply with requirements of the labour market. For this purpose, co-funding of the European Social Fund is used.

In future requalification programmes for the unemployed will be planned in line with the medium term forecasts of the labour market, as well as it should be observed that the training programmes would be sufficiently qualitative so that the unemployed in the labour market would obtain the most demanded skills.

CONCLUSIONS

1. The driving force of occupational mobility and a significant influencing factor in all industries in Latvia is the level of remuneration; the social security and work environment is not less important.
2. Occupational mobility in Latvia is affected by and in future will be affected by migration tendencies together with economic development tendencies.
3. During the last 10 years, national economy sectors have faced outgoing flows of labour to construction during its flourishing time. During the economic crisis, the labour tended to return to the previous occupation.
4. The national economy has specific industries with limited incoming labour mobility: for example, health care, science, printing and similar industries where the specific occupations require that skills are obtained completely anew by the specialists from other industries. Thus these industries have more profound internal mobility, but the incoming mobility is limited.
5. As the industry experts have estimated, at present the level of occupational mobility in Latvia is low, adding that lower turnover has been observed in occupational groups of higher qualification, and the turnover has been faster among less qualified occupations.
6. According to calculations by the research authors, 5.8% of employed persons (or 59 577 people) were annually subjected to mobility from Q1 2002 to Q4 2010.
7. From 2002 to 2010, three most mobile occupations in Latvia were shop assistants and product demonstrators (sub-major group 522), builders (sub-major group 712), finance and sales specialists (sub-major group 341).
8. From 2002 to 2010, three least mobile occupations were senior officials of municipalities, as well as political and public organisations (sub-major group 115 and 114), various religious professionals (sub-major group 246 and 348), fashion and other models (sub-major group 521) and other occupations of narrow specialisation.
9. From 2002 to 2010 the highest proportion of the total outgoing occupational mobility was observed in major group 3 “Technicians and associate professionals”, and the lowest – major group 4 “Clerical support workers”.
10. Specifics of the ninth major occupational group from 2002 to 2010 were high internal and inter-group mobility. Internal mobility in the group, according to certain occupations, shows that the required simple skills and physical work allows changing the occupation freely within the major group, moreover, representatives from all occupational groups have moved to the group of elementary occupations, including from occupations of high qualification.

11. Information from expert surveys allows to conclude that intensity of occupational mobility within certain occupational groups is very different and is of broad scale, sometimes reaching even 100%, indicating that the relevant sub-major group does not reveal incoming labour from other occupational groups, and it occurs on the basis of the internal occupations of the major group.
12. In the opinion of industry experts, highly qualified personnel in the industries are not expressly mobile – the personnel work at the companies for a longer period of time, sometimes for the whole life. On the contrary, less qualified labour is mobile and it frequently changes in all industries of the national economy.

RECOMMENDATIONS

1. The expert surveys provided suggestions for the economic policy-makers at the national level: to facilitate increase in the minimum salary for the employed, to assess tax policy (some experts have mentioned salary tax burden as a significant limiting factor for increase in the average salary), to establish stable environment for economic development.
2. The existing tendencies in the labour market show that labour turnover affects operations of all industries: in situations when the average level of remuneration increases in competing industries and requalification does not require significant time and resource investments, the industries that cannot compete with these industries by productivity lose qualified specialists. Economic policy-makers should assess the options to limit development of national economies that can significantly affect labour market changes.
3. Emigration of labour resources and experts' forecasts about its continuation in future, as well as decrease of inland labour resources should be taken into account during planning of economic policy.
4. During planning of the economic policy, investments and creation of new places of work should be supported in regions, especially less developed to decrease emigration flows of labour.

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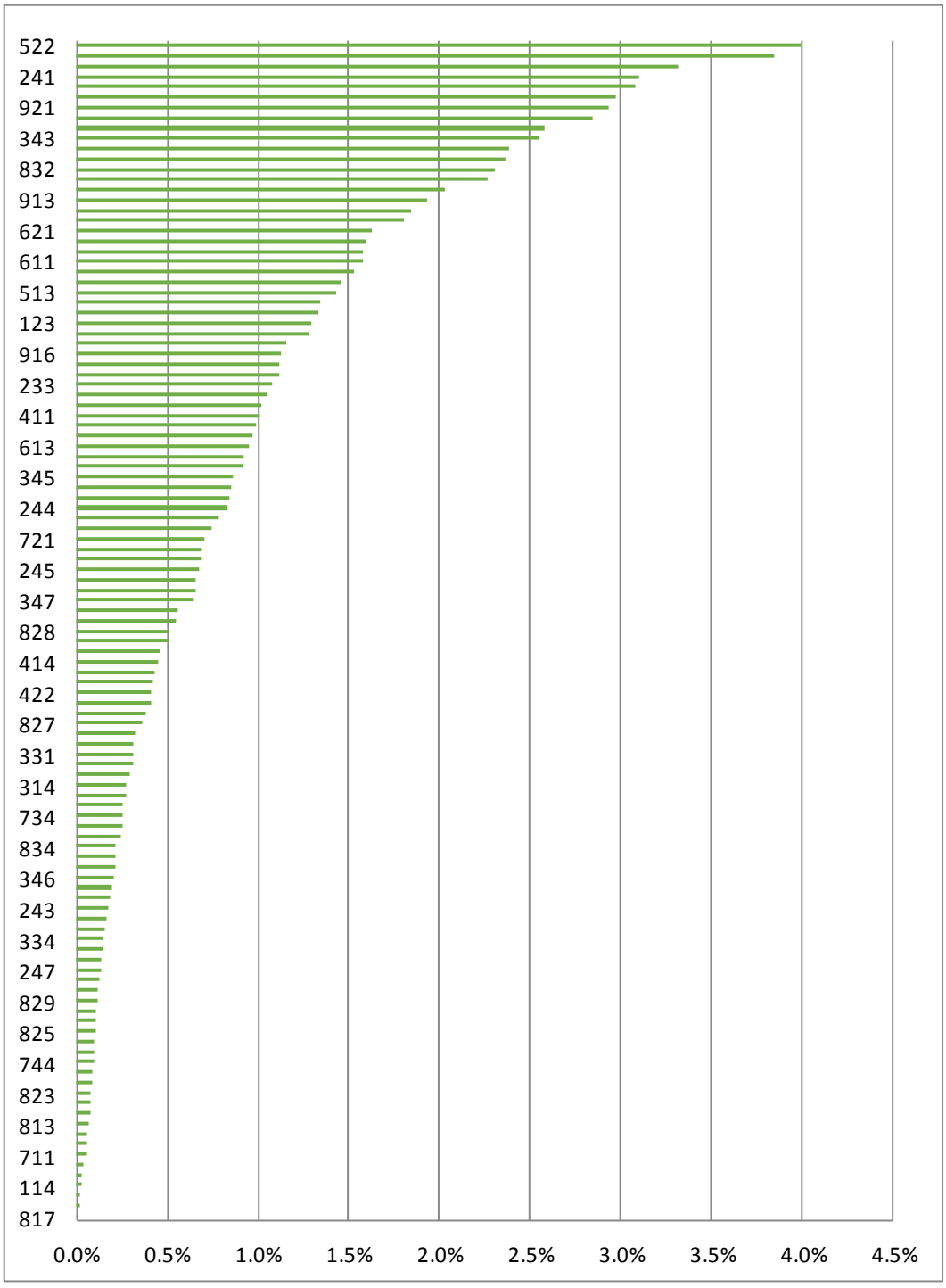
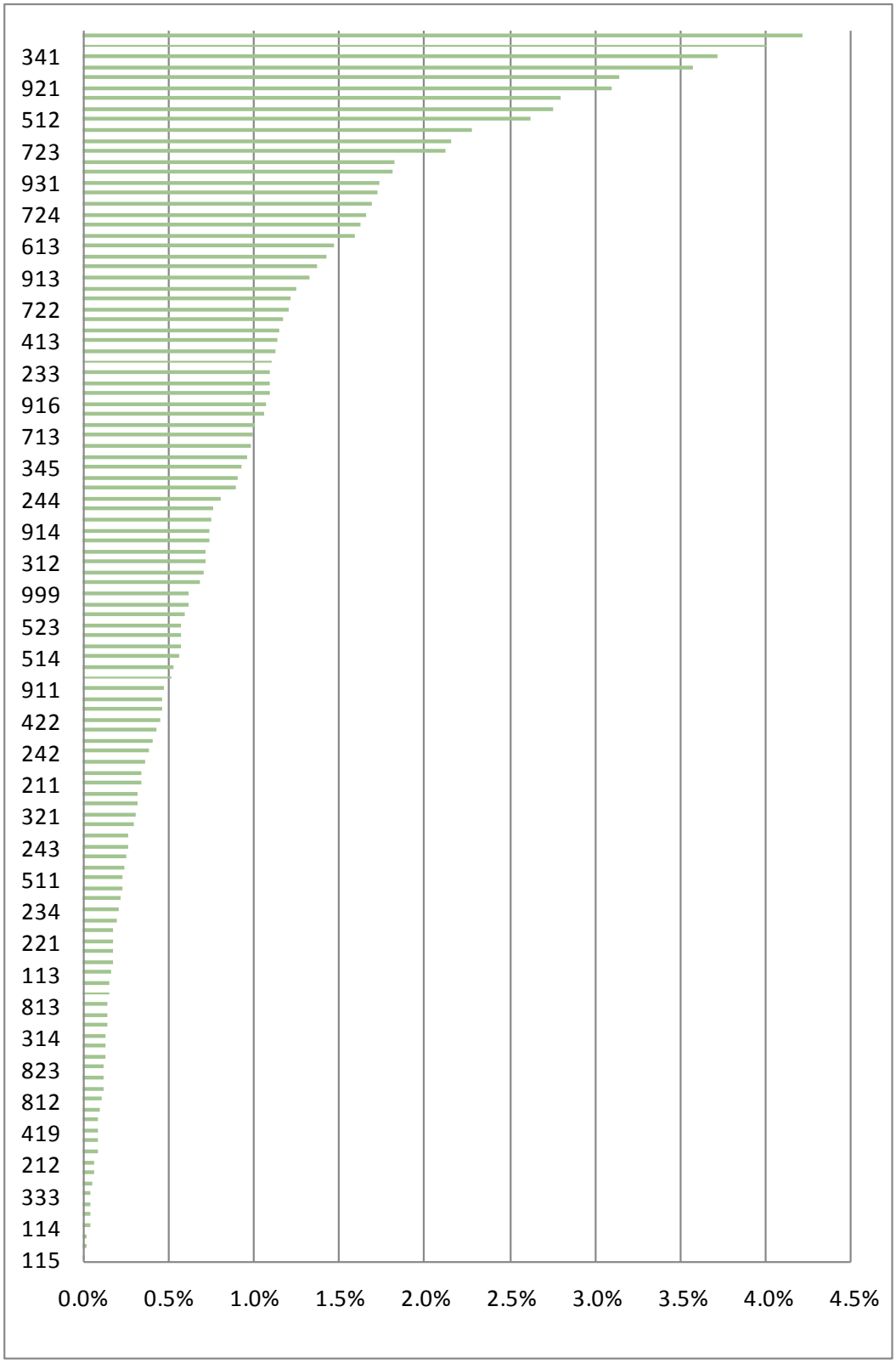
APPENDICES

Distribution of incoming occupational mobility in Latvia (in %) from 2002 to 2010[60]



[60] Authors' calculation according to the data of CSB labour force survey.

Distribution of outgoing occupational mobility in Latvia (in %) from 2002 to 2010[61]



[61] Authors' calculation according to the data of CSB labour force survey.

Common skills for occupational groups (level and field of education as the indicator)[62]

OCCUPATION	OCCUPATION CODE	GROUP	COMMON LEVEL AND FIELD OF EDUCATION FOR THE GROUP
Domestic, hotel and office cleaners and helpers	911	1	General elementary education, less than the elementary education and fields not classified elsewhere
Vehicle, window, laundry and other hand cleaning workers	912		
Agricultural, forestry and fishery labourers	921		
Mining and construction labourers	931		
Manufacturing labourers	932		
Transport and storage labourers	933		
Food preparation assistants	941		
Street and related service workers	951		
Street vendors (excluding food)	952		
Refuse workers	961		
Other elementary workers	962		
Armed forces occupations	0	2	Vocational and professional secondary education or first level professional higher education, or academic education and 2nd level professional education in the field Military Security
Locomotive engine drivers and related workers	831	3	Vocational and professional secondary education in the field Transport services
Car, van and motorcycle drivers	832		
Heavy truck and bus drivers	833		
Mobile plant operators	834		
Ships' deck crews and related workers	835		
Glass, ceramics and related plant-operators	813	4	Vocational and professional secondary education in the field Chemical technology and bio-technology
Other craft and related workers	754	5	Vocational and professional secondary education in the fields Other services or Work protection and safety
Garment and related trades workers	753	6	Vocational and professional secondary education in the field Technologies of textile production and manufacture of products
Chemical-processing-plant operators	815		
Wood treaters, cabinet-makers and related trades workers	752	7	Vocational and professional secondary education in the field Wood-processing technologies and manufacture of products
Automated-assembly-line and industrial-robot operators	817		
Food processing and related trades workers	751	8	Vocational and professional secondary education in the field Food production technologies and manufacture of
Power-production and related plant	816		

[62] Authors' calculation

OCCUPATION	OCCUPATION CODE	GROUP	COMMON LEVEL AND FIELD OF EDUCATION FOR THE GROUP
operators			products
Electrical equipment installers and repairers	741	9	Vocational and professional secondary education in the field Electronics and automatics
Electronics and telecommunications installers and repairers	742		
Printing trades workers	732	10	Vocational and professional secondary education in the field Material production technologies and manufacture of products
Handicraft workers	731		
Wood-processing-and papermaking-plant operators	814		
Building finishers and related trades workers	712	11	Vocational and professional secondary education in the field Mechanics and metal processing
Metal-processing-plant operators	812		
Operators of other production equipment and machinery	818		
Building frame and related trades workers	711	12	Vocational and professional secondary education in the field Physical sciences; Math and statistics; Mining of mineral deposits
Forestry and related workers	621	13	Vocational and professional secondary education in the field Sciences of life sciences
Fishery workers, hunters and trappers	622		
Market gardeners and crop growers	611	14	Vocational and professional secondary education in the field Agriculture
Animal producers	612		
Mixed crop and animal producers	613		
Subsistence mixed crop and livestock farmers	633		
Personal care workers in health services	532	15	Vocational and professional secondary education in the field Medical treatment; Health care services; Public health
Hairdressers, beauticians and related workers	514	16	Vocational and professional secondary education or first level professional higher education, or academic education and 2nd level professional education in the field Services of beauty care
Cooks	512	17	Vocational and professional secondary education in the field Hotel and restaurant services
Waiters and bartenders	513		
Building and housekeeping supervisors	515		
Material-recording and transport clerk	432	18	Vocational and professional secondary education in the field Machinery sciences
Painters, building structure cleaners and related trades workers	713		
Sheet and structural metal workers, moulders and welders, and related workers	721		
Blacksmiths, toolmakers and related trades workers	722		

OCCUPATION	OCCUPATION CODE	GROUP	COMMON LEVEL AND FIELD OF EDUCATION FOR THE GROUP
Machinery mechanics and repairers	723		
Mining and mineral-processing-plant operators	811		
Assemblers	821		
General office clerks	411	19	General secondary education and fields not classified elsewhere
Secretaries (general)	412		
Keyboard operators	413		
Tellers, money collectors and related clerks	421		
Client information workers	422		
Other clerical support workers	441		
Travel attendants, conductors and guides	511		
Other personal services workers	516		
Street and market salespersons	521		
Shop salespersons	522		
Cashiers and ticket clerks	523		
Other sales worker	524		
Child care workers and teachers' aides	531		
Protective services workers	541		
Sports and fitness workers	342	20	First level professional higher education in the field Sports
Financial and Mathematical associate professionals	331	21	First level professional higher education in the fields Finances, banking and insurance or Accountancy and taxes, or Maths and statistics
Numerical clerks	431		
Medical and pharmaceutical technicians	321	22	Academic education and 2nd level professional education in the field Health care services
Nursing and midwifery associate professionals	322		
Process Control Technicians	313	23	Academic education and 2nd level professional education in the field Chemistry technologies and bio-technology, or First level professional higher education in the field Life sciences
Life science technicians and related associate professionals	314		
Authors, journalists and linguists	264	24	Academic education and 2nd level professional education in the field Audio-visual arts and media arts
Telecommunications and broadcasting technicians	352		
Other teaching professionals	235	25	Academic education and 2nd level professional education in the field Visual plastic arts; Music and stage arts; Crafts; Applied arts
Creative and performing artists	265		
Vocational education teachers	232	26	Academic education and 2nd level professional education in the fields Pedagogical education or Education science
Secondary education teachers	233		
Primary school and early childhood teachers	234		
Veterinarians	225	27	Academic education and 2nd level professional education in the field
Veterinary technicians and assistants	324		

OCCUPATION	OCCUPATION CODE	GROUP	COMMON LEVEL AND FIELD OF EDUCATION FOR THE GROUP
			Veterinary science
Architects, planners, surveyors and designers	216	28	Academic education and 2nd level professional education in the fields Design or Architecture and city planning
Electro technology engineers	215	29	Academic education and 2nd level professional education in the fields Electronics and automatics or Machine science
Ship and aircraft controllers and technicians	315		
Mathematicians, actuaries and statisticians	212	30	Academic education and 2nd level professional education in the field Maths and statistics
Finance professionals	241		
Physical and earth science professionals	211	31	Doctoral degree
University and higher education teachers	231		
Retail and wholesale trade managers	142	32	Academic education and 2nd level professional education in the field Wholesale and retail
Business services agents	333		
Professional services managers	134	33	Academic education and 2nd level professional education in the field Medical treatment
Medical doctors	221		
Nursing and midwifery professionals	222		
Traditional and complementary medicine professionals	223		
Paramedical practitioners	224		
Other health professionals	226		
Traditional and complementary medicine associate professionals	323		
Other health associate professionals	325		
Information and communications technology service managers	133	34	Academic education and 2nd level professional education in the field Computer sciences
Software and applications developers and analysts	251		
Database and network professionals	252		
Information and communications technology operations and user support technicians	351		
Manufacturing, mining, construction, and distribution managers	132	35	Academic education and 2nd level professional education in the fields Mining of mineral deposits or Construction and civil engineering
Engineering professionals (excluding electro technology)	214		
Physical and engineering science technicians	311		
Mining, manufacturing and construction supervisors	312		
Production managers in agriculture, forestry and fisheries	131	36	Academic education and 2nd level professional education in the fields Agriculture; Forestry; Fishery
Life science professionals	213		
Sales, marketing and development	122	37	Academic education and 2nd level

OCCUPATION	OCCUPATION CODE	GROUP	COMMON LEVEL AND FIELD OF EDUCATION FOR THE GROUP
managers			professional education in the field Social and human behaviour sciences
Administration professionals	242		
Sales, marketing and public relations professionals	243		
Social and religious professionals	263		
Legal, social and religious associate professionals	341		
Managing directors and chief executives	112	38	Academic education and 2nd level professional education in the field Management and administration
Business services and administration managers	121		
Hotel and restaurant managers	141		
Other services managers	143		
Legislators and senior officials	111	39	Academic education and 2nd level professional education in the field Legal sciences
Legal professionals	261		
Sales and purchasing agents and brokers	332		
Administrative and specialized secretaries	334		
Regulatory government associate professionals	335		
Librarians, archivists and curators	262	40	Academic education and 2nd level professional education in the field Library, information and archive studies
Artistic, cultural and culinary associate professionals	343		