

Structure of Unemployment and Structural Unemployment in Georgia





GEORGIAN FOUNDATION FOR
STRATEGIC AND INTERNATIONAL STUDIES



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1. Introduction

1.1 Unemployment statistics in Georgia

In Georgia, the National Statistics Office of Georgia (Geostat) is responsible for production of labor statistics. The main source of information comes from the Integrated Household Survey (IHS) of Georgia.

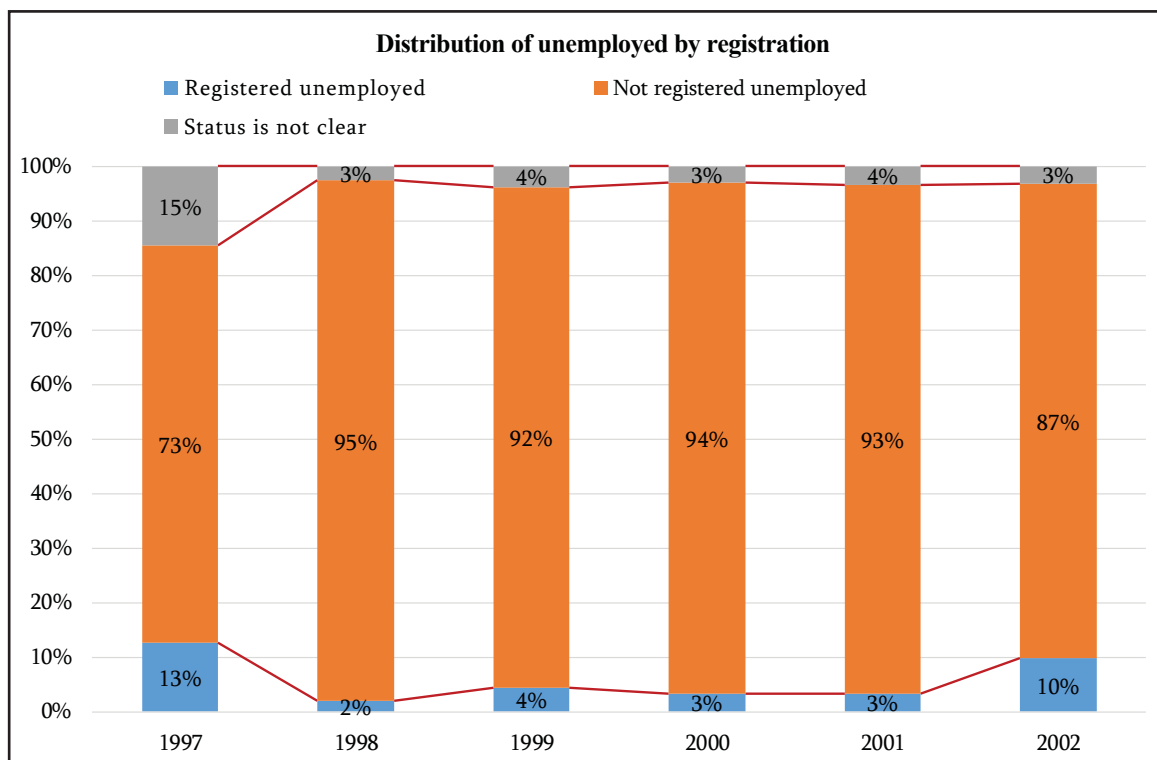
In 1996-2001 the economic status of the population was assessed by just a small questionnaire which never allowed for deep analyses of the issue. In 2000-2001 the Integrated Household Survey was qualitatively improved; following which, within the frame of the survey, a detailed study of employment and unemployment was introduced. For this purpose, an integrated research tool – “Shinda 05_1”¹ is used; with the help of which each member of 15 years and older of the sampled household are interviewed.

The unemployment rate has been the subject of high interest and regular discussion in Georgian society throughout the last 20 years. Concerns are often voiced that the indicator is reduced artificially. However, going deeper into this issue, one can realise that even a reduced unemployment rate determined in accordance with ILO criteria, is not low at all, as is revealed below.

Despite this, the unemployment rate indicator defined by ILO criteria does not allow for complex assessment of this acute social and economic problem: it does not cover under-employment and hidden unemployment – vents widely distributed in the countries with transitional economies such as Georgia. The database of the IHS does offer the possibility for analyses of under-employment and hidden unemployment.

The database of integrated household survey also contains information regarding structure by qualification of unemployment, its differentiation by duration, sources for job creation and structural unemployment (Skills Gap), the regular processing of which is not normally carried out. Analyses of the data of different structural aspects of unemployment and structural unemployment provide the opportunity for significant conclusions to be made in order to improve the effectiveness of the employment policy and economic policy in general.

Chart N1



Source: Geostat. Statistical Yearbook, 2004.

¹ http://www.geostat.ge/cms/site_images/_files/georgian/kitxvarebi/shinda/Shinda05-1_2015_Geo.pdf

Detection of the tendencies of the unemployment structure and structural unemployment much depends on the correct operation of the system for current registration of unemployed persons. Although a service for registration of unemployment existed in Georgia until 2004, it never operated properly- citizens could register there as unemployed but the number of job seekers covered by the system was insufficient (see Chart N1).

The inefficiency of the system for current registration of unemployed persons was logical, since in fact registration as unemployed did not contain any prospective for employment, and unemployment benefits were too low. This clearly reflected a complex and unfortunate situation existing in the economy of Georgia at the turn of the century. No system for registration of vacancies was available, which made registration of unemployment irrational. Vacancies are still not registered and it is still impossible to obtain such information.

Deep analysis of the structure of unemployment is possible only in conditions of proper functioning of the system for current registration of unemployed people. Since such a system is unavailable in Georgia, we are limited with the assessments of sampling surveys, and must still depend on the databases of the Integrated Household Survey. Although, these are data of another registry and cannot function as the current registration system, on their basis are created particular time series of homogenous information, providing the opportunity for research of developed tendencies.

1.2 Goal and objectives of the study

The main goal of the present study is the research of structural aspects of unemployment and structural unemployment in Georgia, which goes beyond the framework for assessment of the unemployment rate by ILO criteria and aims at the following:

1. Assessment of aggregated unemployment level and its structure.
2. Analyses of the structure of unemployment, including:
 - By qualification,
 - By duration,
 - By achieved level of education.
3. Identification of the structure of the sources for job generation.
4. Analyses of structural unemployment (Skills Gap), including:
 - Study of long-term unemployment and de-qualification;
 - Study of “unsatisfied” employees and hidden structural unemployment;
 - Study of structural consistence of the demand and supply of the labor market;
 - Analyses of the effectiveness of the education system, in the aspect of structural unemployment.
5. Identification of institutional weaknesses of the labor market.
6. Scenarios for development of the labor market.

1.3 Sources of information

In order to achieve the above-stated objectives, several sources were used in the study, of which the most important is the Integrated Household Survey.

IHS has been carried out continuously since 1996. Consequently, a pretty long-term time series was developed, providing broad opportunities for in-depth analyses of unemployment and employment. Primary databases of the survey are accessible on the website of Geostat.² The questions of the survey are also presented.³ Although the database provides a lot of information regarding the structural and systemic peculiarities of unemployment, this is still insufficient. Consequently, additional information is required in order to develop a full scale picture of the demand - supply of the labor market.

The report of the research of employers' attitudes towards vocational education, ordered by the Ministry of Education and Science of Georgia⁴ and carried out by the company ACT in 2015, was used for

² http://www.geostat.ge/?action=meurneoba_archive&lang=geo

³ http://www.geostat.ge/?action=page&p_id=697&lang=geo

⁴ <http://www.mes.gov.ge/content.php?id=5962&lang=geo>

analyses of the labor market. The Survey Report of Labour Market Demand Component conducted by the company BCG in 2015 under the order of the Ministry of Labor, Health and Social Affairs of Georgia was used as well.⁵

For the purpose of a more complete assessment of the current demand – supply condition on the labor market, systematization of the offers, provided in more or less institutionalized information sources of employment, and formation and analyses of the database were planned within the frame of the project.

The following were considered as such information sources:

- a. Newspaper “Sitkva da Saqme”, a weekly newspaper with the highest print run in Georgia. It is the only source in print media in which job advertisements are published. Similar information is published in other newspapers, but their print run and coverage are limited, and the number of advertisements low;
- b. Web-resource - jobs.ge, a key electronic information source of employment. Web resource HR.ge, providing information on vacancies in public sector, can be considered as an information source of similar co-measurable scale; but due to the specific character of the study, the main focus was on the data of the relatively universal source - jobs.ge.

Within the frame of the project, 10 in depth interviews were carried out with large employers in different sectors, based on the objectives of the study.

1.4 Research methodology

The level of institutionalization of the labor market is very low in Georgia. According to the latest data of Geostat, the share of hired employment in the economically active population stands at just 37.3 percent, almost half of which are employed in the public sector. As mentioned above, the quality of the current statistical recording of unemployment is also very low. The only information array complying with international standards is the database of the Integrated Household Survey. For the purposes of the present survey, additional processing of the mentioned database became essential, based on which versatile analyses of time series of 2009 – 2015 was carried out.

Analyses were conducted for the quantitative assessment of social layers such as under-employment and hidden employment which made the possible calculation of aggregated indicator of unemployment and identification of its dynamics and structure.

Based on additional analyses of the IHS database, the question: what could unemployed people offer potential employers? - was answered. With this, the professional and qualification structure of unemployed people, identified by ILO criteria, was studied. The survey questionnaire envisages indication of the basic profession of the respondent according to diplomas or other certificates. Consequently, the assumption was made that unemployed people seek jobs in accordance with their profession.

The Integrated Household Survey questionnaire allows the analysis of job seeking in different forms. Thus, the question regarding how an unemployed individual looks for work was answered. Whether job-seekers prefer hired employment or self-employment could also be determined with the help of the questionnaire.

The extent to which the job seeking process is within an institutional framework, or distribution of institutional resources and social capital (relatives, friends) in this process, or the duration of job seeking and so on, could also be assessed based on the same source.

In the process of implementation of the given research project, the biggest challenge was quantitative assessment of the inconsistency of the demand for a labor force and structure by qualification of supply (Skills Gap), standard methodology for which is unavailable. According to information obtained on the ILO website, the concept of structural unemployment is limited by a detailed explanation of unemployment of this type.⁶ Study of the examples of calculation of structural unemployment demonstrated that quantitative assessment of this event means a high level of institutionalization of the labor market when detailed information regarding appointment and dismissal of employees from companies is accumulated in one agency.

⁵ <http://moh.gov.ge/files/2015/Failebi/29.12.15.pdf>

⁶ http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_166604.pdf

Quantitative assessment of single aspects of structural unemployment is possible according to the IHS data, which of course does not show the full picture. For example: the analyses of duration of unemployment give an impression about the extent of structural employment. In this regard, comparative analyses of actual professions and those by diploma are interesting, based on which the employment rate indicator according to qualification can be calculated, which, in context, is close to the structural unemployment indicator. Despite this, the indicators obtained as a result of additional analyses of the Integrated Household Survey cannot substitute the importance of the level of institutionalization of the labor market in the comprehensive assessment of structural unemployment.

The job seeking process is just partially institutionalized in Georgia, providing minimal opportunities for qualitative and quantitative analyses. In particular, vacancies offered are not classified. Thus, at the first stage, the systematization of information given in the advertisements published in “Sitkva da Saqme” and jobs.ge became essential. The question was answered based on the information provided in each advertisement. Completed questionnaires were entered into the database with the help of which it is possible to determine the structure of the vacancies available on the labor market.

At the beginning, the intention was to generate a time series from both sources of information to cover the period 2009-2015. In the case of newspaper “Sitkva da Saqme”, this was possible: figures from 2009 to 2015 were collected, from which numbers published in May and late December of each year were selected. The database was formed based on these data and the above mentioned questionnaire. Regrettably, the administration of internet resource Jobs.ge was not similarly ready for cooperation, and did not give the researchers access to the archive of the site. Consequently, the analyses of the structure of vacancies were possible only for late May, 2016. Due to this, making quantitative assessments based on historical data was not possible.

Within the frame of the project, in depth interviews were also conducted with 10 large employers of different sectors. For this purpose, a special questionnaire was created. The scope of the institutional problem for finding potential employees and their professional consistence was assessed based on content analyses of said interviews.

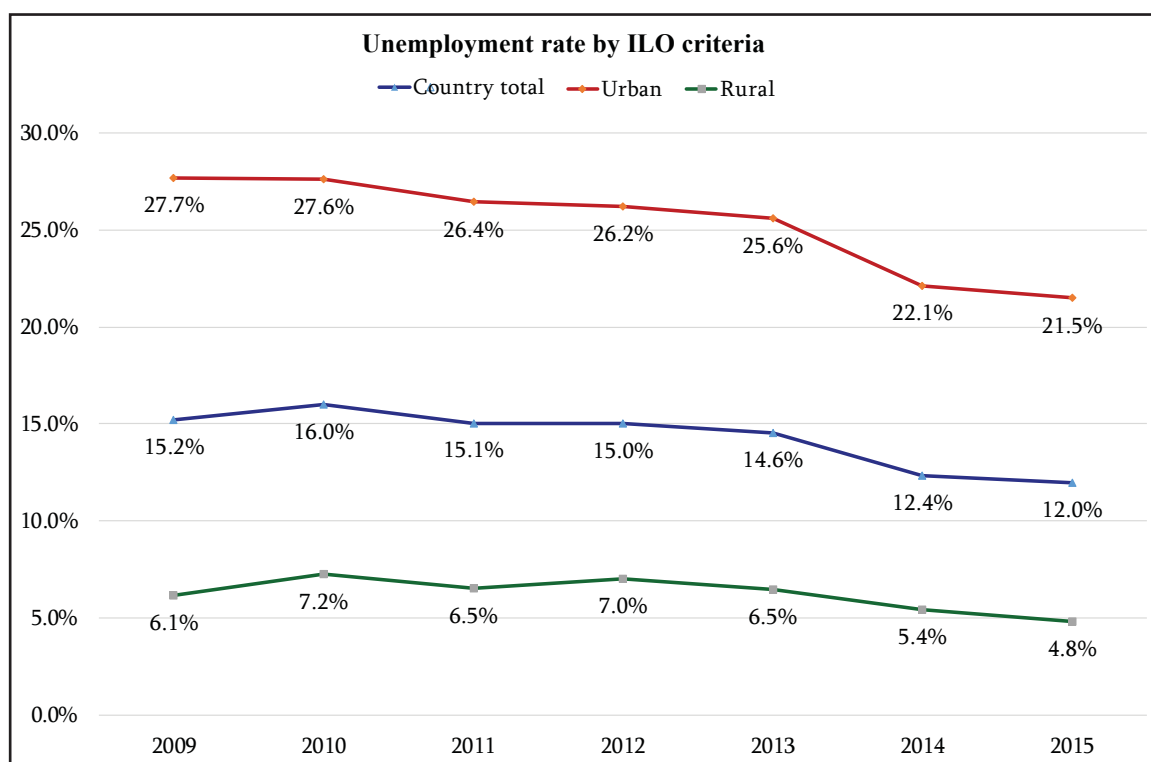
2. Structure of Unemployment

2.1 Assessment of aggregated level of unemployment

As mentioned above, the official unemployment rate indicator is based on ILO criteria according to which the unemployment rate in Georgia was decreasing in 2009 – 2015, particularly in 2014 – 2015.

A 12 percent unemployment rate means that 12 percent of the economically active population did not work for cash or in-kind income for even one hour during the seven days prior to the interview. It must be taken into consideration that the economically active population does not include those individuals who do not work (students, housewives and so on) or are not actively seeking work. The economic activeness indicator was 68 percent in 2015, i.e. 32 percent of the population was not economically active for various reasons.

Chart N2



Source: IHS database processed by the group of authors

As demonstrated by the above chart the difference between the unemployment rates in urban and rural areas is great: in 2015, the unemployment rate in urban areas was almost 5 times more than that in rural areas. The low unemployment rate in rural areas is obviously a result of self-employment, which brings the rural unemployment rate to minimal values. In 2009 – 2015, unemployment decreased in both urban and rural areas; however, the tendency was relatively high in urban areas, especially in 2014 – 2015.

Although the unemployment rate calculated by ILO criteria is pretty informative, the picture of unemployment would never be complete without taking into consideration under-employment and hidden employment. IHS allows for analyses of both.

To assess under-employment and hidden employment in the present study, we decided to use the following criteria, which are actively used in similar international studies:⁷

1. The worker shall be considered as under-employed if:

- They performed more than one job during the seven days prior to the interview. This is mainly due to the fact that the income from one job is not enough and one is forced to take multiple jobs;
- They were forced to work part time during the seven days prior to the interview and were willing to work full time, being ready to start immediately if there was an opportunity.

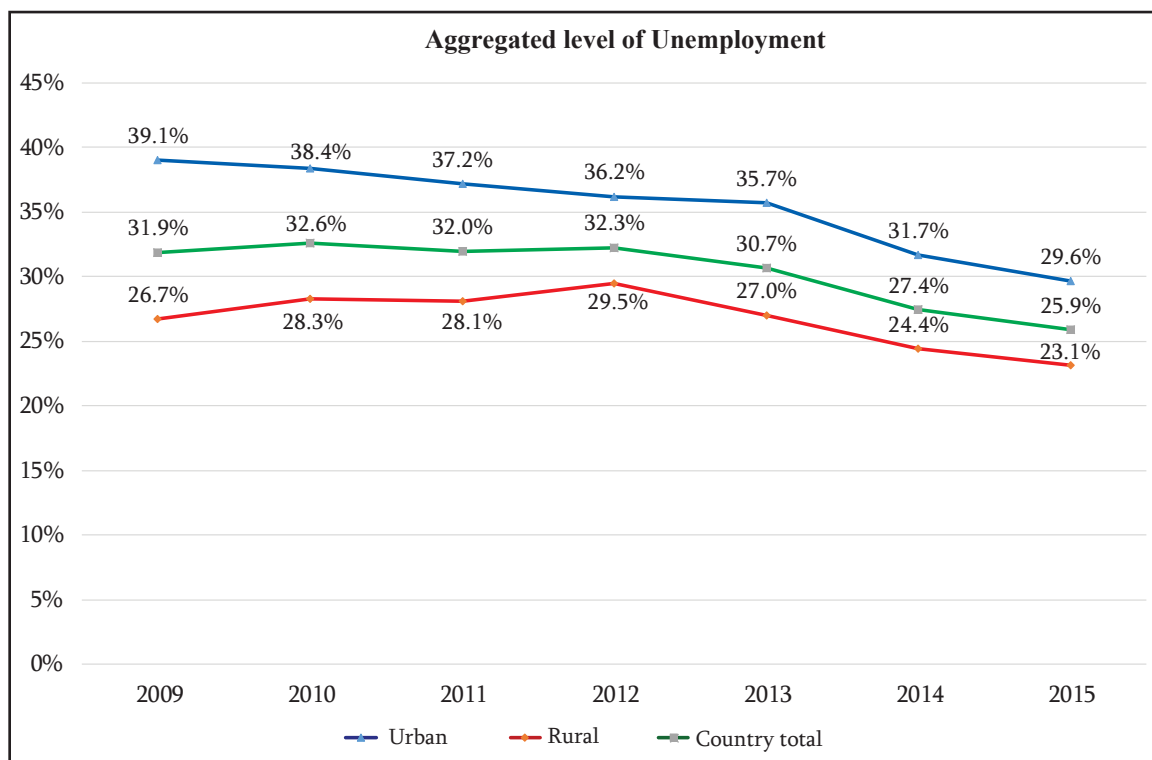
⁷ Presented criteria envisage the methodology recommended by ILO

2. The worker shall be considered as hidden unemployed, if:

- They worked full time during the seven days prior to the interview, but were not satisfied with the job;
- They were seeking other job;
- In the event of finding a job, they were ready to change the job immediately.

Using the mentioned criteria, it is possible to calculate the aggregated unemployment rate, which includes unemployed people identified by ILO criteria, under-employed and hidden unemployed workers. The dynamics of this indicator on a countrywide level and by urban rural areas are given below.

Chart N3

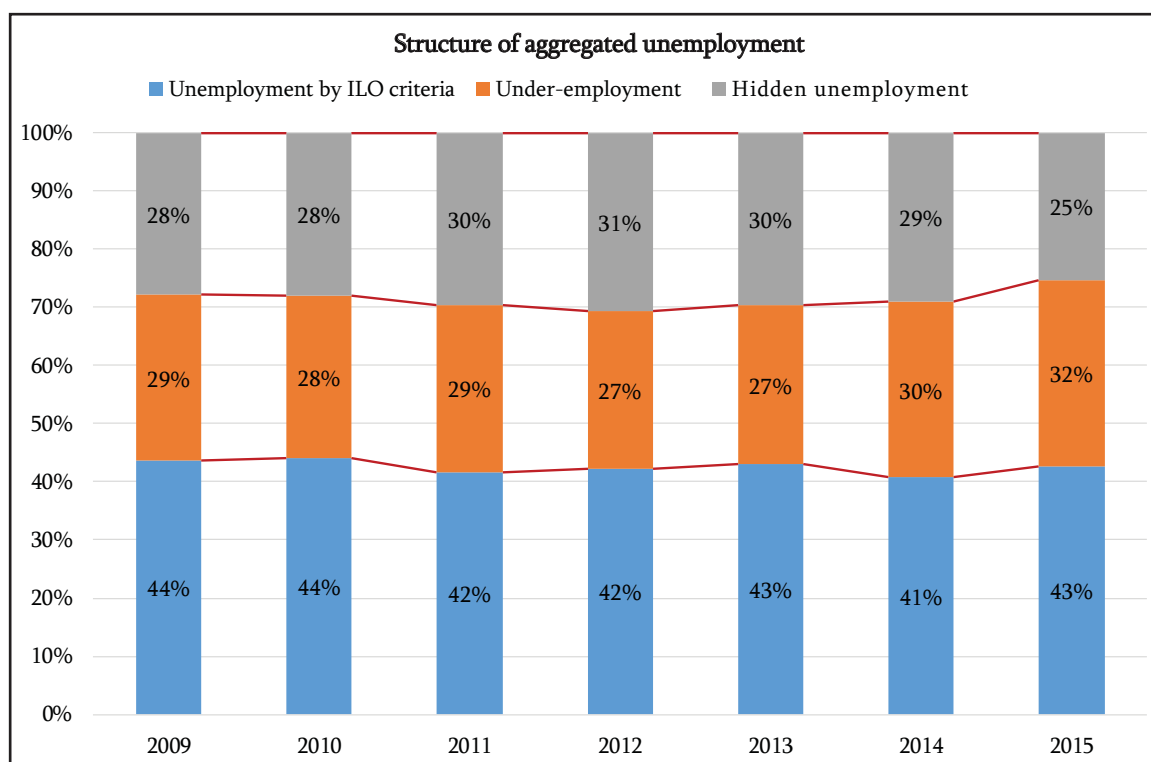


Source: IHS database processed by the group of authors

It is clear that the aggregated unemployment indicators calculated by urban rural area are not that significantly different from those of the indicators calculated by ILO criteria. The main reason for this is self-employment in agriculture: quite a significant part of self-employed people are under-employed or hidden unemployed.

Aggregated indicators of unemployment, as well as unemployment rate indicators according to ILO criteria, show a decreasing tendency, but the reduction trend in this case is relatively linear compared to the unemployment rate trend according to ILO criteria.

43 percent of the aggregated level of unemployment consists of unemployment by ILO criteria, almost one third – 32 percent under-employment, and 25 percent hidden unemployment. (See Chart N4)



Source: IHS database processed by the group of authors

It is interesting that in 2009-2015 the structure of aggregated unemployment level did not change substantially. The weight of under-employment rose slightly, while hidden unemployment reduces. The change in weight in the components of the aggregated unemployment rate falls within the frame of statistical errors and is not substantial.

2.2 Consistence of structure of employment and unemployment by qualification

In 2015, 38 percent of unemployed people identified by ILO criteria, according to certified profession, were high qualification specialists; 17 percent of unemployed people were medium level specialists, and 4 percent of lower than medium qualification (the latter includes groups 4-9).⁸

The biggest group of unemployed people includes those who do not have a certified profession i.e. people without a profession.

In the groups aggregated according to the level of qualification (see the table below), distribution of unemployed people does not change significantly between 2009 and 2015. A relatively clear tendency is an insignificant increase in the number of individuals not having a profession, which is quite low. General changes are statistically insufficient.

In the groups aggregated by level of qualification, 31 percent are highly qualified specialists by diploma, 17 percent are mid level specialists, 8 percent are lower-than-mid level specialists, and 45 percent of employed individuals do not have a speciality. Among identified trends slight increase in the weight of the highly qualified specialists is remarkable. On the other hand, no other trend is characteristic to the distribution of the employed people in aggregated groups of professions. It is important to view the em-

⁸ Distribution of employed and unemployed people in groups aggregated by profession was implemented on the basis of ISCO classificatory, which on the level of one digit codes includes 9 main groups:

Group 1. Leadership of all levels of government and governance bodies, including the heads of agencies, organizations and enterprises;

Group 2. Highly qualified specialists;

Group 3. Mid-level specialists;

Group 4. Office workers;

Group 5. Services and sales workers;

Group 6. Qualified agricultural, forestry, hunting and fishery workers;

Group 7. Qualified workers in industrial enterprises, artistic handicrafts, construction, transport, communications, geology and mineral exploration sectors;

Group 8. Plant and machine operators, machinists, assemblers and metal craftsmen;

Group 9. Non-qualified workers

ployment structure without rural self-employment, since this is such a large and amorphous group that it covers the tendencies ongoing in other sectors.

Without rural self-employment, 50 percent of total employment included highly qualified specialists in 2015, 16 percent – mid level specialists, and 9 percent lower-than-mid level specialists. Discluding rural self-employment, 25 percent of employed people do not have a profession.

Table N1: Distribution of employed and unemployed people in aggregated groups of professions (Percent)

	2009	2010	2011	2012	2013	2014	2015
Distribution of unemployed in aggregated groups of certified professions							
High level specialists	37	39	41	39	40	39	38
Mid - level specialists	18	18	17	18	15	15	17
Rest of specialists	8	7	5	5	7	5	4
Without profession	37	36	37	38	39	41	41
Total	100	100	100	100	100	100	100
Distribution of employed in aggregated groups of certified professions							
High level specialists	28	29	28	29	30	29	31
Mid - level specialists	17	19	19	19	18	18	17
Rest of specialists	9	9	8	8	8	8	8
Without profession	46	43	45	45	44	44	45
Total	100	100	100	100	100	100	100
Distribution of employed in aggregated groups of certified professions (without agro self-employment)							
High level specialists	48	49	49	49	50	49	50
Mid - level specialists	17	20	20	19	18	17	16
Rest of specialists	11	10	9	9	9	9	9
Without profession	24	21	22	23	23	24	25
Total	100	100	100	100	100	100	100

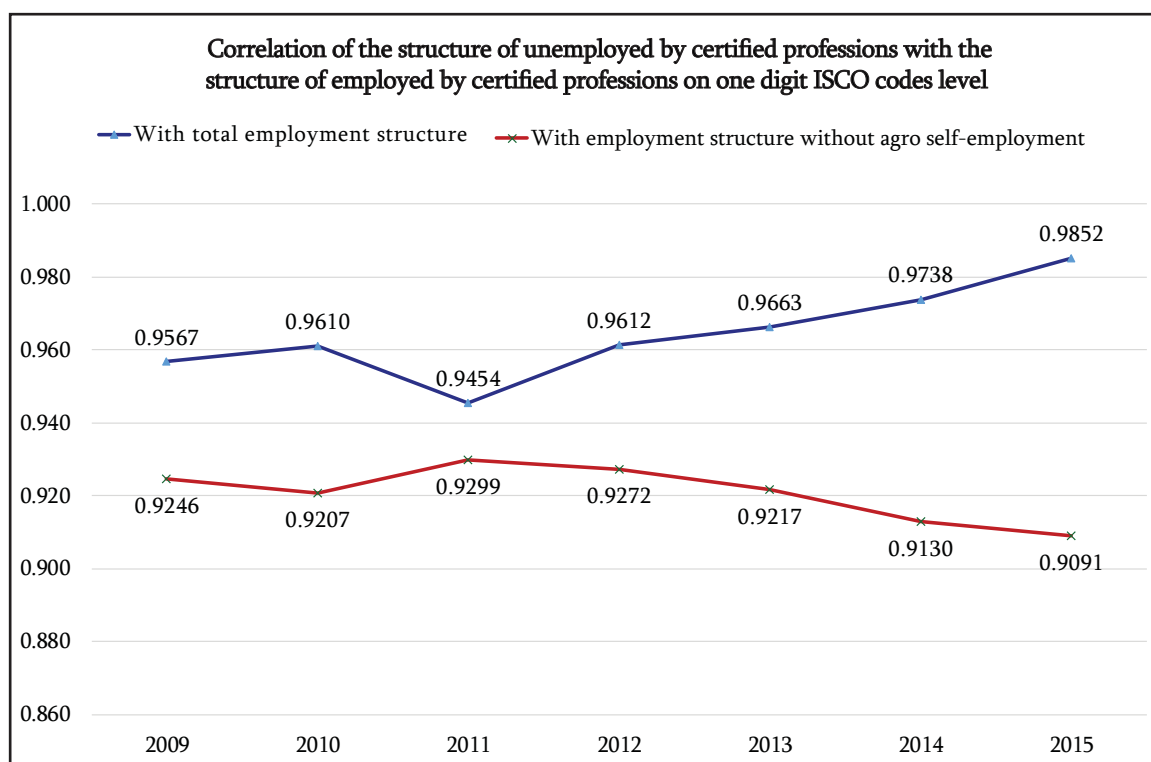
Source: IHS database processed by the group of authors

The employment structure without rural employment varies significantly from the total employment structure (see Table N1), which is reflected in a substantial decrease in the number of people not having a profession and an increase in the number of high level specialists. The decrease of specialists with mid and low level are also distinguished among the identified trends.

For purpose of comparison of the structures of employed and unemployed people by the level of qualification, a method of correlation analyses is used in the survey. The correlation coefficient quite precisely indicates the degree and direction of similarity of the structures. Factor analyses are recommended for deeper analyses.

As demonstrated by comparative analyses of the aggregated groups, distribution of unemployed people in said groups of certified professions is similar to the structure of total distribution of employed people in the same groups. Correlation coefficient equals almost -1, which means that both structures are in fact identical.

Without rural self-employment, the structure of employed people is less identical with a correlation coefficient of - 0.9091.



Source: IHS database processed by the group of authors

The correlation coefficient of structures of total employment and unemployment was characterized by a clear increasing trend in 2009 – 2015, while the non-agricultural employment and unemployment structure correlation coefficient saw a decreasing trend. The unemployment structure is the same in both cases. Thus, the change is preconditioned by the difference between the employment structures, which is increasing, as shown by the trend of correlation coefficients. The main reason for the difference is the indicator of the number of individuals not having a profession, which is a significant component of rural self-employment.

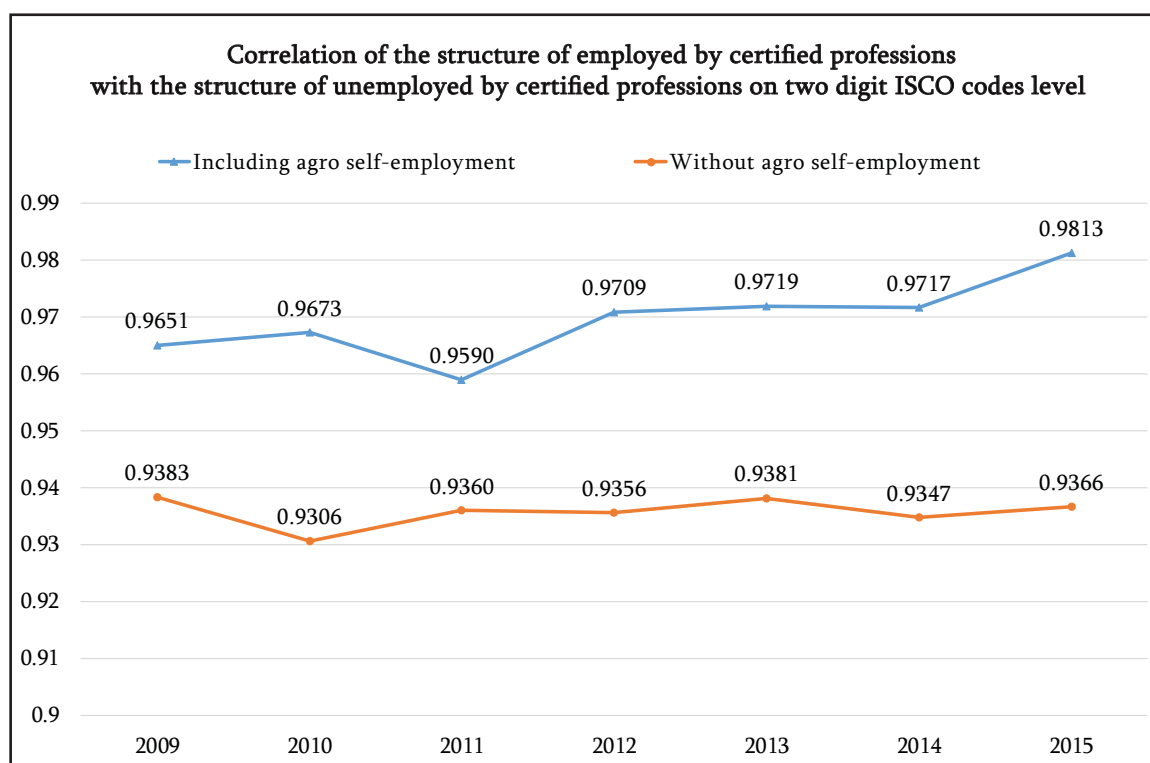
Thus, rural self-employment is an amorphous large field with low effectiveness which impacts on the absorption of the labor force without profession and improves the statistical picture of employment. This became clear while comparing the same differences between the urban and rural unemployment indicators developed by ILO criteria and the same differences in aggregated unemployment indicators.

Consequently, an essential precondition for systemic improvement of the employment structure is the introduction of a special education program for groups of individuals not having a profession.

The correlation of the distribution of employment and unemployment by qualification level in groups aggregated on the level of one digit ISCO codes, leading to less homogeneity of identified groups, was discussed above.

Employment and unemployment structure viewed on the level of two digit ISCO codes⁹ identifies relatively more homogeneous groups. Thus, the correlation degree in this area is more telling than in the case of aggregated groups.

Chart N6



Source: IHS database processed by the group of authors

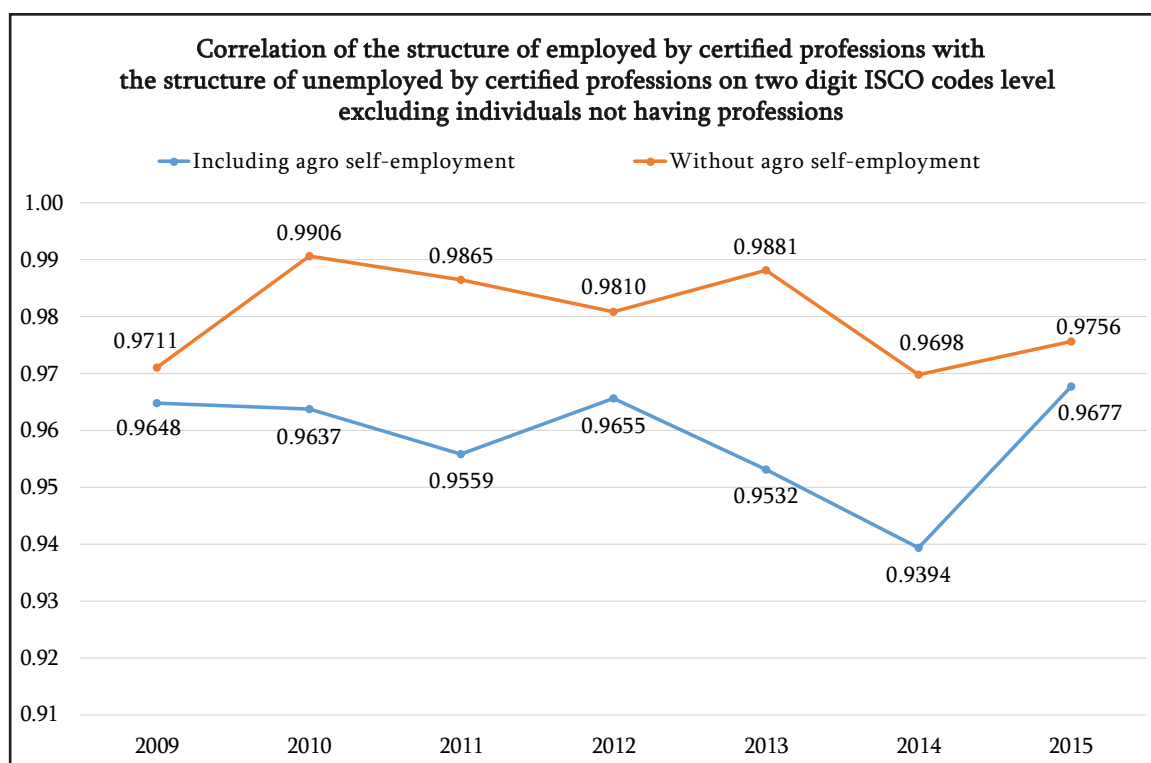
According to two digit ISCO codes, structure by qualification of employment and unemployment is also identical: the correlation coefficient equals almost 1, i.e. employment and unemployment structures are similar in this case also. In 2009-2015, the correlation coefficient displayed an increasing trend, i.e. the employment and unemployment structures became more and more alike.

⁹ The list of two digit ISCO codes:

- 11 – Leadership (representatives) of the government and governance bodies;
- 12 – Managerial staff of agencies, organizations, enterprises and their structural subdivision;
- 13 – Managerial staff of small agencies, organizations and enterprises;
- 21 – Specialists in natural and engineering science sectors;
- 22 – Biology and agricultural science and health care sector specialists;
- 23 – Education sector specialists;
- 24 – Other highly qualified specialists;
- 31 – Mid level specialists in physical and technical sciences;
- 32 – Mid level specialists in natural science and health care sector and support staff;
- 33 – Mid level specialists in education sector;
- 34 – Mid level specialists in financial, administrative and social fields;
- 41 – Workers preparing and processing information;
- 42 – Service workers;
- 51 – Individual service and property protective services workers;
- 52 – Salespersons, demonstrators and models;
- 53 – Utility workers;
- 54 – Film and TV workers;
- 55 – Advertising - decoration and restoration workers;
- 61 – Market-oriented qualified agricultural, forestry, hunting, fishing and fishery workers;
- 62 – Qualified agricultural, forestry, hunting, fishing and fishery workers;
- 71 – Extraction and construction sectors workers;
- 72 – Metal processing industry, machinery and associate trades workers;
- 73 – Precision instruments and devices manufacturing, printing and related trades workers;
- 74 – Other qualified workers of manufacturing and related professions;
- 75 – Transport and communication workers;
- 76 – Geology and mining professions;
- 81 – Stationary plant operators and machinists;
- 82 – Metalworking and mineral raw material processing machine operators and machinists;
- 83 – Moving apparatus drivers, operators and machinists;
- 91 – Unqualified workers in trade and services sectors;
- 92 – Unqualified workers in agriculture, forestry, hunting, fishing and fishery;
- 93 – Unqualified workers in manufacturing, construction, transport, communication, geology and mineral exploration;
- 94 – Unqualified workers in all other fields.

Without agriculture self-employment, the correlation coefficient, despite a decrease, is still quite high - 0.9366. The trend of this indicator in fact was immovable during the research period.

Chart N7



Source: IHS database processed by the group of authors

If we view the structure excluding people not having a profession (see Chart N7), the structures of employment by certified professions and of unemployment are still identical, but there is one not ever so large but important difference: excluding people not having a profession, the structures of employment and unemployment according to ISCO two digit codes correlate less than when not taking into consideration rural self-employment. Otherwise, the factor of rural self-employment in this case reduces correlation, which is due to the fact that the main shelter for those not having a profession is self-employment in agriculture.

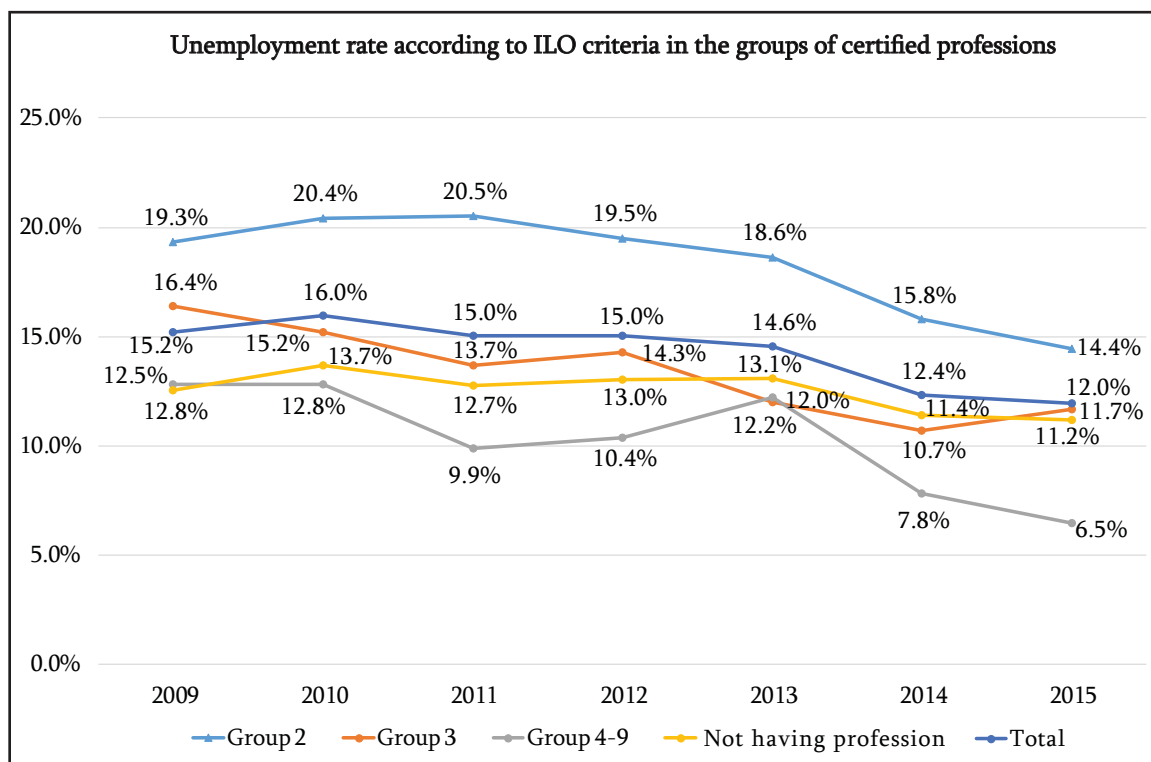
2.5 Dynamics of unemployment by qualification

According to ILO criteria, in 2009-2015 the unemployment rate in the 2nd group of ISCO professions, i.e. among highly qualified specialists, was higher than the average unemployment rate, despite pretty solid decreasing trends.

The unemployment rate in this group at 20.8 percent exceeded the average unemployment rate in 2015. As demonstrated by the Integrated Household Survey, this category of the professionals conveys a high risk of unemployment. The unemployment rate is lower than average in all other groups.

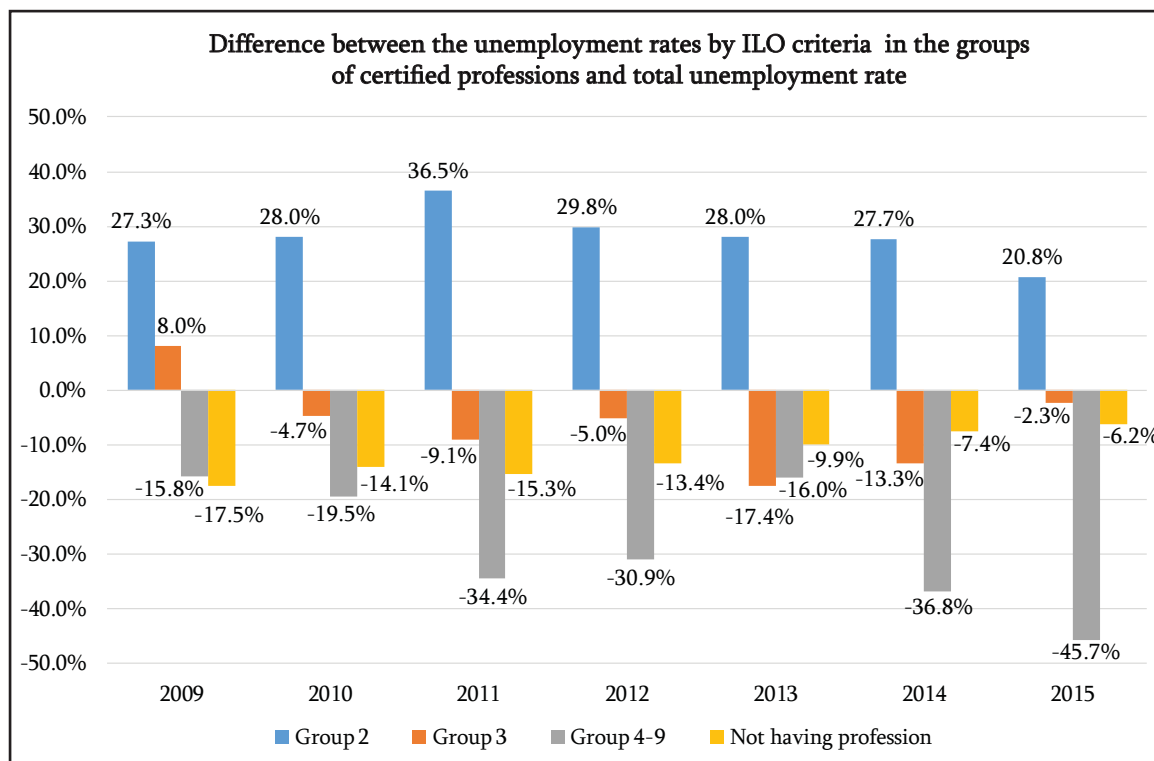
The unemployment rate is slightly lower than average among the professionals of mid-level qualification, and even demonstrates a decreasing trend.

The two times lower-than-average unemployment rate among low qualified professionals deserves special attention. This indicator was consistently lower than average in 2009 – 2015, and went even lower during the last three years.



Source: IHS database processed by the group of authors

The unemployment rate, according to ILO criteria, in the group of not having a profession is 6.2 percent lower than the average unemployment rate. The main pre-requisite for this is mass employment in agriculture. It is also noteworthy that the unemployment rate in the given group was lower than average throughout the study period, however, this difference was not as large as in the case of low qualified professionals.



Source: IHS database processed by the group of authors

The above-mentioned demonstrates that the majority of jobs generated on the labor market do not require high qualification.

As for rural self-employment, it may require quite high qualification, but in Georgia’s case it is still based on traditions. A person of working age living in Georgia might not have a winemaker’s certificate, but planting a vineyard and winemaking is part of his/her life, transferred from generation to generation. The same could be said, for example, about a Tushetian shepherd lacking a cheese maker’s certificate (which means quite high qualification), however, he is still a high-skilled professional, with experience accumulated by generations, but uncertified.

2.4 Unemployment structure by duration

One of the key aspects of the assessment of unemployment is analyses of duration of unemployment. The grounds for this are provided by certain important aspects, of which two are most important:

1. Long-term unemployment results in de-qualification;
2. Highly qualified unemployed professionals might be more vulnerable to long-term unemployment, since finding a job respective to their qualification is relatively difficult.

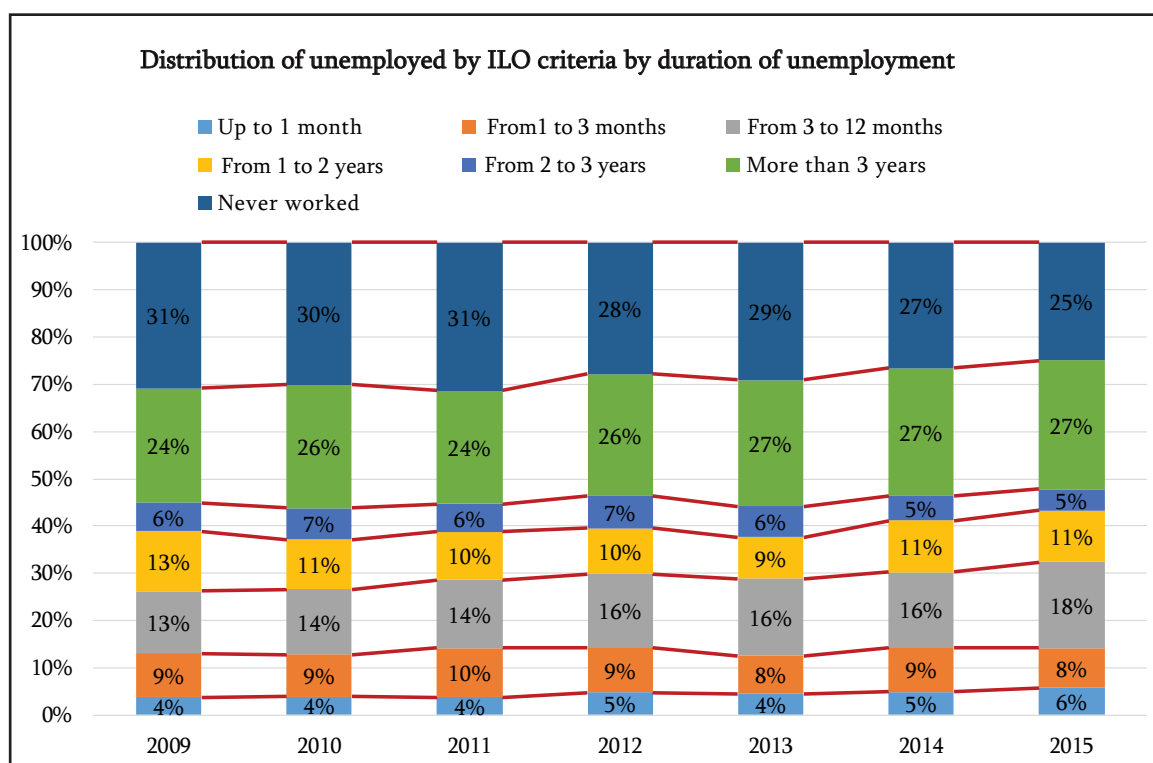
As demonstrated by the data of the IHS, the weight of unemployment up to 1 month, and 1-3 months unemployed by ILO criteria, is stable – around 6-8 percent during the research period and not showing any clear trend.

Unemployment from 3 to 12 months made up 18 percent of total unemployment in 2015. The weight of unemployment of this term had a growing tendency in 2009 – 2015.

From the unemployment structure by duration, most distinguished are an increase of the number of unemployed over three years and more, and the decrease of those unemployed lacking work experience.

The number of unemployed, who have never worked despite a decreasing tendency, was still on the 25 percent mark in 2015, i.e. 25 percent of those unemployed by ILO criteria have never worked. This is a pretty high indicator.

Chart N10



Source: IHS database processed by the group of authors

Age can be considered as one of possible reasons for the high number of individuals lacking working experience. The working age starts at 15 and even if the ILO criteria excludes students from unemployed people (59.6 percent of the population under 25 years old do not belong to an economically active popula-

tion, while the unemployment rate is 30.8 percent in the economically active population of this age, i.e. 2.5 times higher than the average unemployment rate), there is still a high chance that an individual employed by ILO criteria has no working experience due to age.

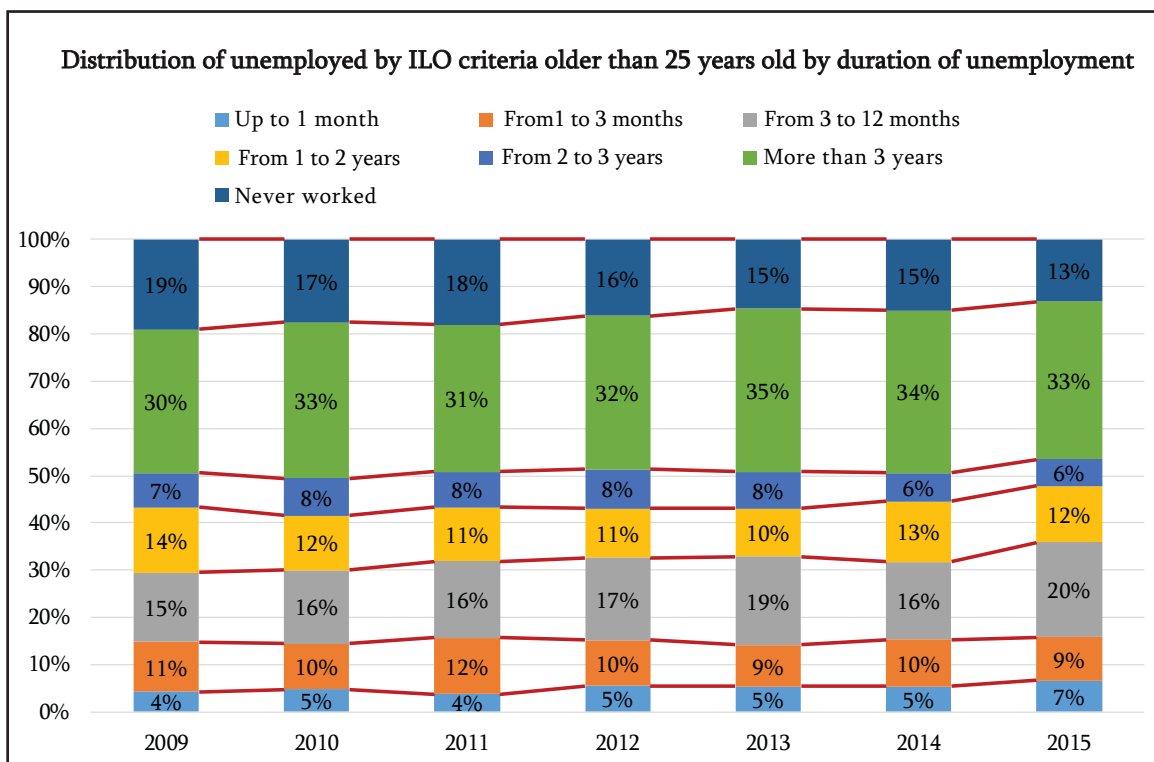
Taking into consideration the age factors, the unemployment duration structure among the population older than 25 is informative. Not having working experience is the factor of different grades- for the unemployed over-25s, than those 25 or younger.

The structure of unemployed over-25s is similar to the distribution of total unemployed population, however the differences between the proportions still exist and they are substantial. The number of individuals not having working experience is 13 percent, which is almost half the indicator of total unemployment distribution.

The weight of unemployed for more than three years is 33 percent among the unemployed over-25s years old, which is substantially more than the similar indicator of total unemployment distribution.

Thus, it can be categorically stated that the probability of long-term unemployment is being increased in parallel with getting older.

Chart N11

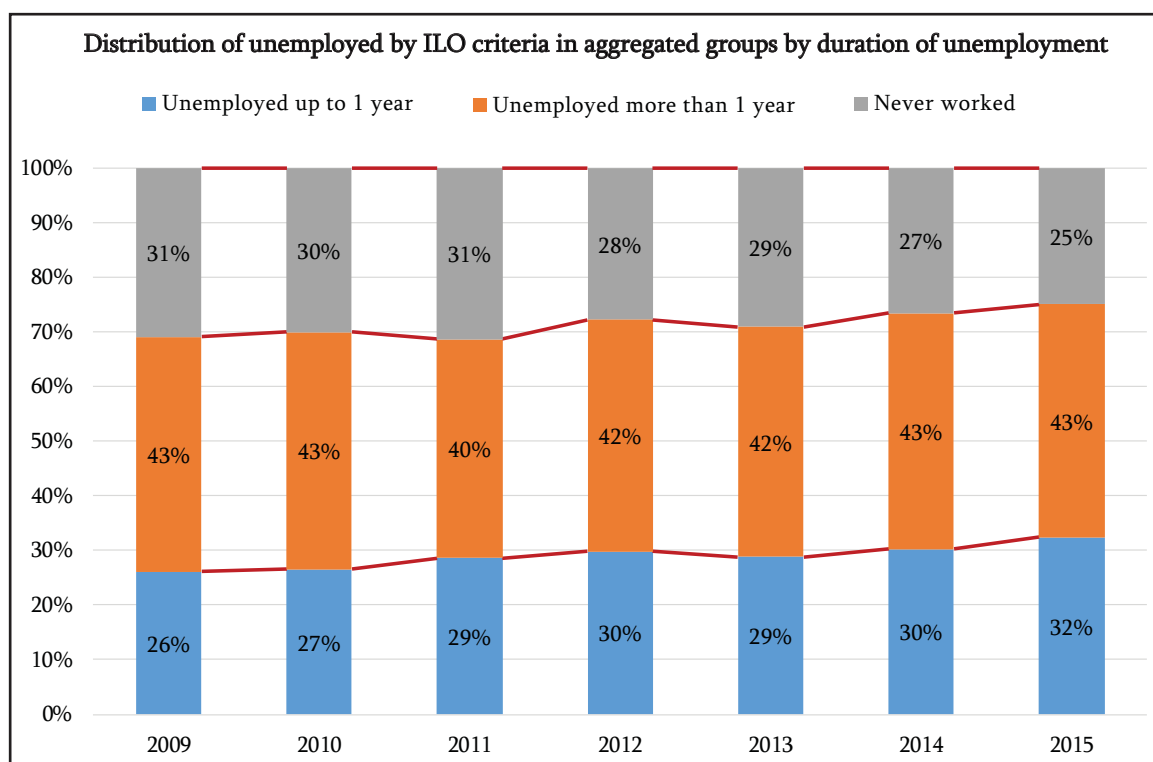


Source: IHS database processed by the group of authors

With the regard to the duration, unemployment up to 1 year can be viewed as short term unemployment, while unemployment which continues for more than 1 year can be considered long-term unemployment, which goes beyond the frictional unemployment, contains substantial threat of de-qualification and in fact goes to the dimension of structural unemployment.

Aggregation in big groups is preconditioned by substantially low reliability of assessment in small groups compared with aggregated groups. Further, homogeneous groups are developed by such aggregation.

Individuals unemployed up to 1 year make up 32 percent of the total unemployed, while those unemployed for more than 1 year make up 43 percent. As we already mentioned, 25 percent of those unemployed have never worked.



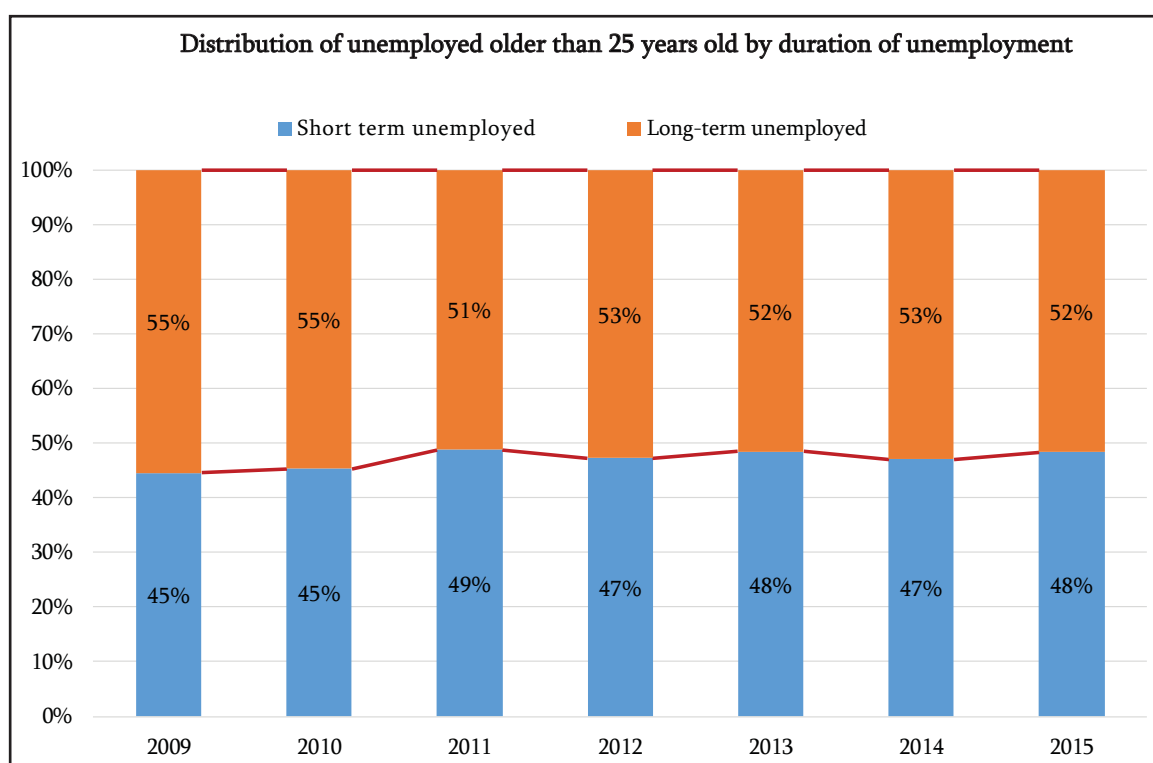
Source: IHS database processed by the group of authors

Due to the above-mentioned distributions, we considered as long-term unemployed those individuals who met the following criteria:

1. Stated that they have been unemployed for more than 1 year;
2. Unemployed over 25 years old who have never worked.

The latter assumption is preconditioned by the fact that not having any work experience due to lack of education is more or less explainable at a young age, but this argument loses strength with age.

Chart N13



Source: IHS database processed by the group of authors

According to the calculations made on the basis of such assumptions, 48 percent of unemployed individuals are short term unemployed, while 52 percent are long-term. The distribution of unemployment by duration saw no substantial change in 2009 – 2015. A slight decrease in long-term unemployment is identified which does not indicate substantial changes.

2.5 Unemployment structure by achieved education level

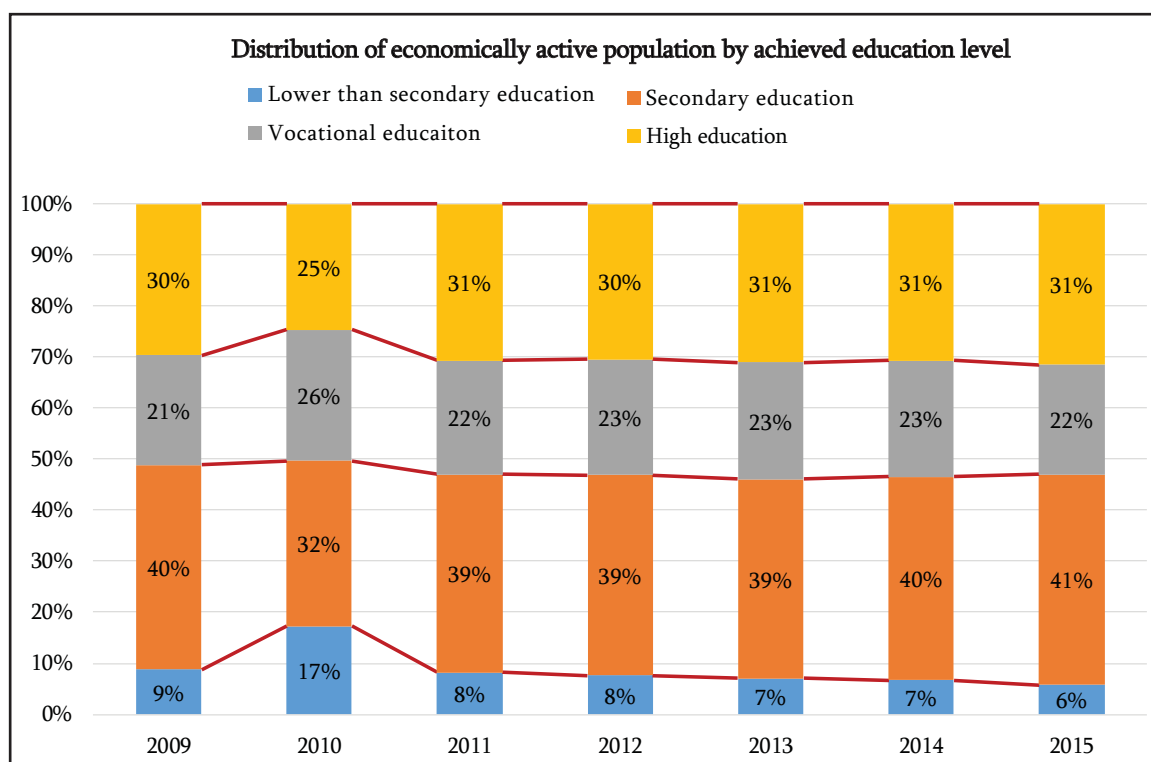
The Integrated Household Survey (IHS) allows for the calculation of various indicators according to achieved education level. For this purpose, an 11- step system for coding the achieved level of education is used. Due to the fact that data array broken down in 11 groups cannot ensure the generation of reliable assessments, it is reasonable to view each group in aggregated groups. The groups were aggregated according to the content and not mechanically, merged into four basic blocks:

1. The subjects with lower than secondary education included those whose achieved level of education complied with the following code:
 - Illiterate;
 - Does not have primary education but can read and write;
 - Primary level of education;
 - General education, basic level.
2. The subjects with secondary education included those whose achieved level of education complied with the following code:
 - Full secondary education (secondary school).
3. The subjects with vocational education included those whose achieved level of education complied with the following code:
 - Handicraft education certificate (diploma of primary vocational education);
 - Vocational education (secondary vocational) diploma.
4. The subjects with high education included those whose achieved level of education complied with the following code:
 - Diploma of high vocational education or equivalent education program;
 - Diploma of bachelor or professional health worker/veterinary or equivalent education program;
 - Diploma of master /graduate residency or equivalent high education program;
 - PhD or equivalent degree.

The analyses demonstrated (see Chart N14), that 6 percent of the economically active population had lower than medium education; 41 percent – secondary education; 22 percent – secondary vocational, and 31 percent – higher education. In fact, the distribution saw no change in 2009- 2015, though an exception was seen in 2010 due to technical rather than content reasons¹⁰.

Unemployment rate by ILO criteria normally is higher among economically active people with high education, than average unemployment rate. It is to be mentioned that these two indicators manifested decreasing trend in the research period; special attention requires the fact that the trend of decreasing unemployment rate among the individuals with high education is stronger, in 2009 – 2015 it gradually reached average unemployment rate. Positive decreasing trend became especially stronger in 2014 – 2015. In all other groups of education level, the unemployment rate is low than average indicator. The group of individuals with lower than secondary education shall be distinguished especially, since the unemployment rate is the lowest here.

¹⁰ The 7-step system for coding the achieved level of education was used in 2009, which is aggregated in the above-mentioned 4 groups. The coding system was changed in 2010. The problems associated with the transfer to a new coding system had an impact on the distribution of 2010. Further, the change was made between the 2nd and 3rd quarterly surveys and aggregation of the base of transition period appeared to be quite complex. Thus, the distribution of 2010 is somehow out of context.



Source: IHS database processed by the group of authors

In general, the trend of approximation of unemployment indicators in groups of different educational level are especially distinguished of the trends of 2009-2015: according to the 2015 data, the difference between the unemployment rates is not as substantial as in 2009 or 2011.

3. The Employment Structure

3.1 Sectoral structure of employment

The structure of employment by sectors outlines the balance between demand and supply on the labor market. This is a result which covers all episodic, structural and systemic problems.

The employment structure in Georgia is quite specific (see Chart N15). Almost half of total employment, 48.4 percent, falls on agriculture. The indicator of the weight of agriculture demonstrated a decreasing trend in 2009-2015 and for first time during the last 25 years went below 50 percent. This is undoubtedly a positive sign, especially taking into consideration that the share of agriculture in the GDP was steadily decreasing and just in the last two years increasing. This trend gains especially positive meaning against the background of slight but still increase of the employment rate, which means that the number of employed in other sectors got increased. The weight of agriculture in total employment is so big that small percent decrease of self-employment does change substantially general level of effectiveness of the employment, but the decrease of agricultural self – employment is clearly positive event.

The next weighty component in the structure of employment is trade and consumer services, with major part of trade. The indicator of the weight of this sector was stably around 10 percent during whole research period and no clear trend was identified here. The same could be said about one more significant component of the employment structure – education sector.

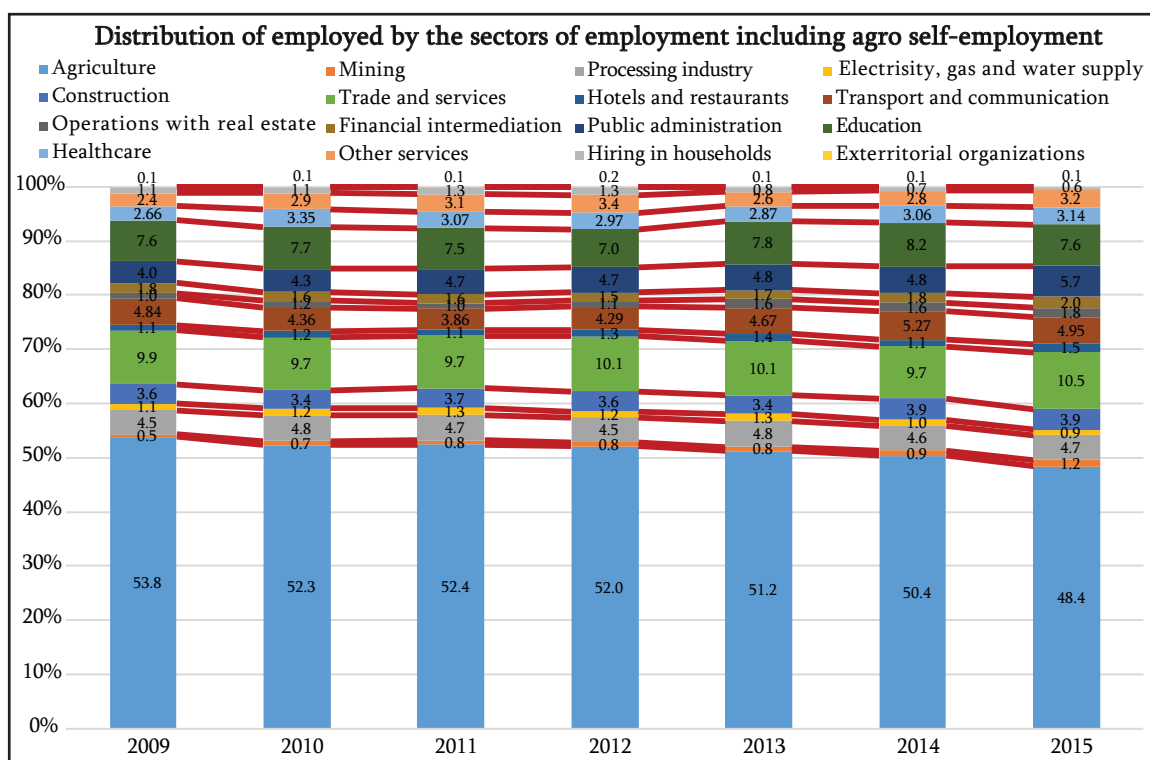
Due to Georgian specifics of the employment structure, its review is reasonable without self -employment, since its weight is so high that levels the processes and trends ongoing in all other sectors (see Chart N 16).

Exclusion of rural self -employment makes more visible the weights of other sectors. Despite of this the weight of the employed in mining and manufacturing, i.e. in real sector of economy, is very low. In 2009 – 2015 this indicator was near 11 percent.

In general, the structure of employment without agricultural self- employment was not substantially changed in the research period. This is not surprising, since such changes need decades in conditions of gravity flow, however in the event of development and implementation of effective industrial policy significant change of labor market structure is possible even during 3-4 years.

As the data provided on the charts N 15 and N 16 confirm, detailed sectoral distribution is less informative. The distribution in bigger groups – real sector and service sector, could be more important. Besides, it would be useful to take into consideration the sectoral specifics of the employment in Georgia and out of 16 viewed sectors identify 3 basic groups, significantly different from one another from economic point of view (see Chart N 17):

1. Agrarian sector, which includes the individuals employed in agriculture, forestry and fishery sectors. In case of Georgia their absolute majority – more than 95 percent – are self-employed. Obviously, this is also real sector of economy, but in its content the mentioned form of employment has rather social meaning than economic. Due to that, we considered unreasonable the inclusion of agriculture in real sector of economy for purposes of our study;
2. Real sector, which includes the individuals employed in mining industry, manufacturing, construction and electricity, gas and water supply sectors;
3. Service sector, which includes the representatives of other sectors, not producing natural – material products.

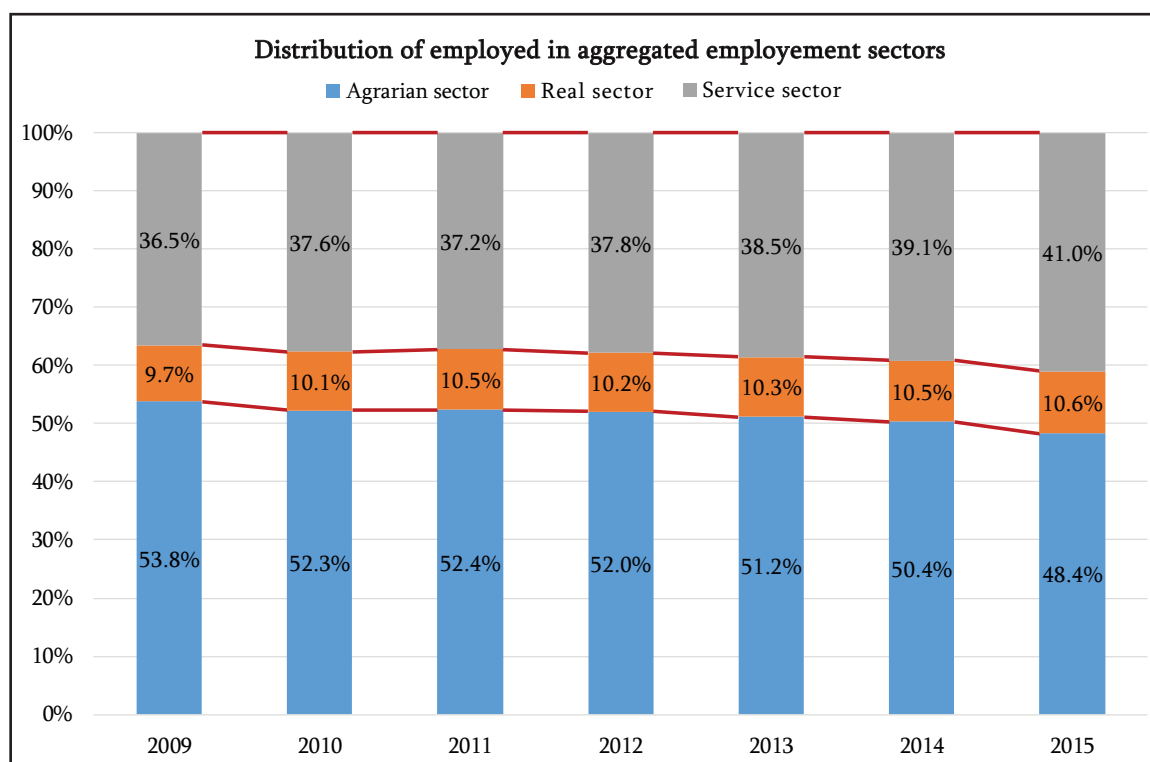


Source: IHS database processed by the group of authors



Source: IHS database processed by the group of authors

We have already mentioned about amorphous high weight of employment in agrarian sector. This is key problem of Georgian economy; in this case the proportions of employment in real sector of economy and service field are more important.



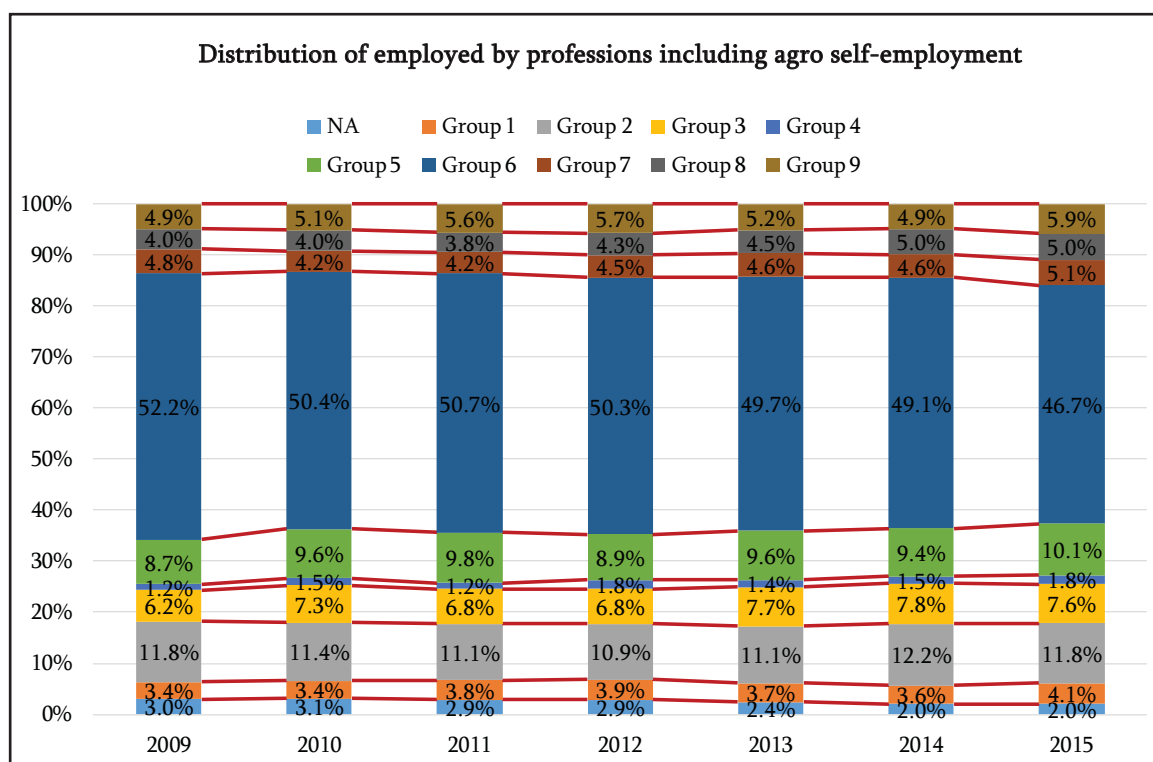
Source: IHS database processed by the group of authors

According to the data of Integrated Household Survey, the weight of employment in real sector of economy is 10.6 percent of total employment and this indicator remained unchangeable during 2009 – 2015.

The weight of employment in service sector was 41.0 percent in 2015 and had increasing tendency in 2009 – 2015.

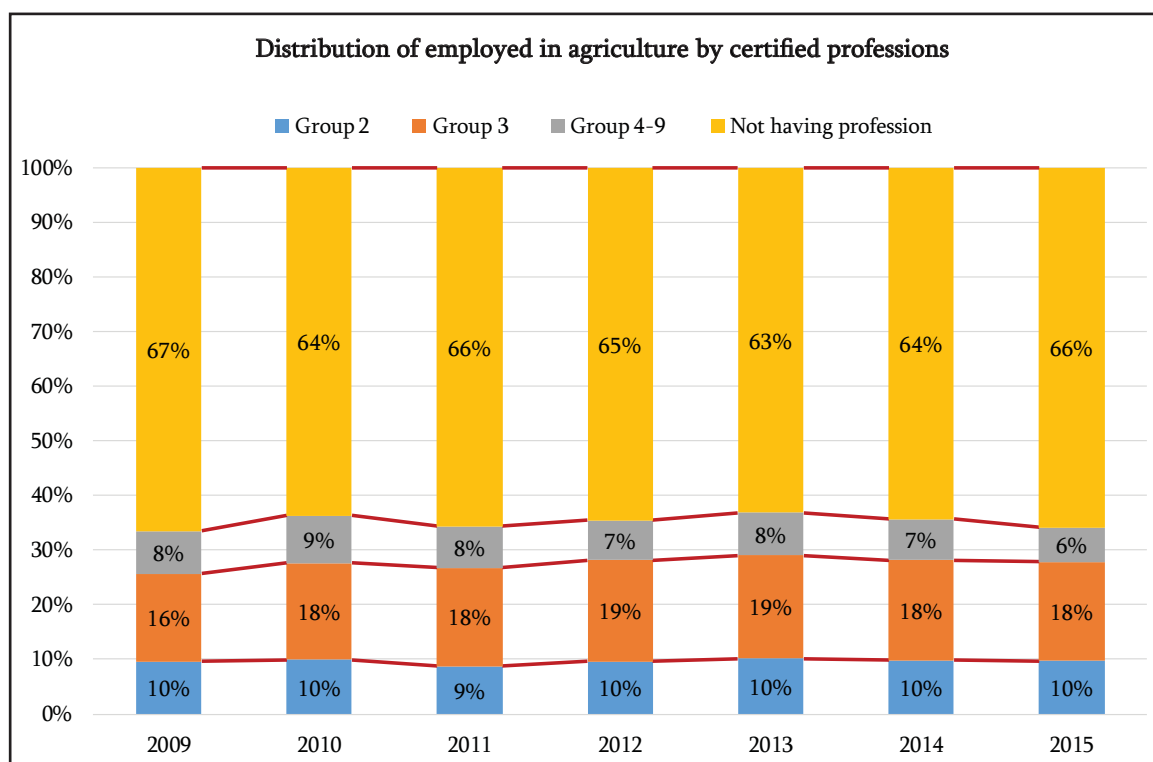
It could be said to summarize, that positive movements developed in employment structure during last 6 years, reflected in the decrease of the weight of agrarian sector, basically was preconditioned by the increase of the weight of employment in the service sector. The mentioned positive in fact did not touch real sector of economy, the weight of which is unchangeable. The study of employment by professions in accordance with ISCO classificatory is important for the study of structural aspects of unemployment.

The biggest group of the structure of employment by professions is N 6, which includes skilled workers engaged in agriculture, forestry, hunting and fishery. This is the army of people self-employed in agriculture, who compiled 46, 7 percent of employed in 2015. It is to be mentioned that the weight of this group in 2009-2015 is distinguished by obviously positive, decreasing trend.



Source: IHS database processed by the group of authors

Distribution of the employed in basic sectors of employment to the groups by the level of qualification is crucial.



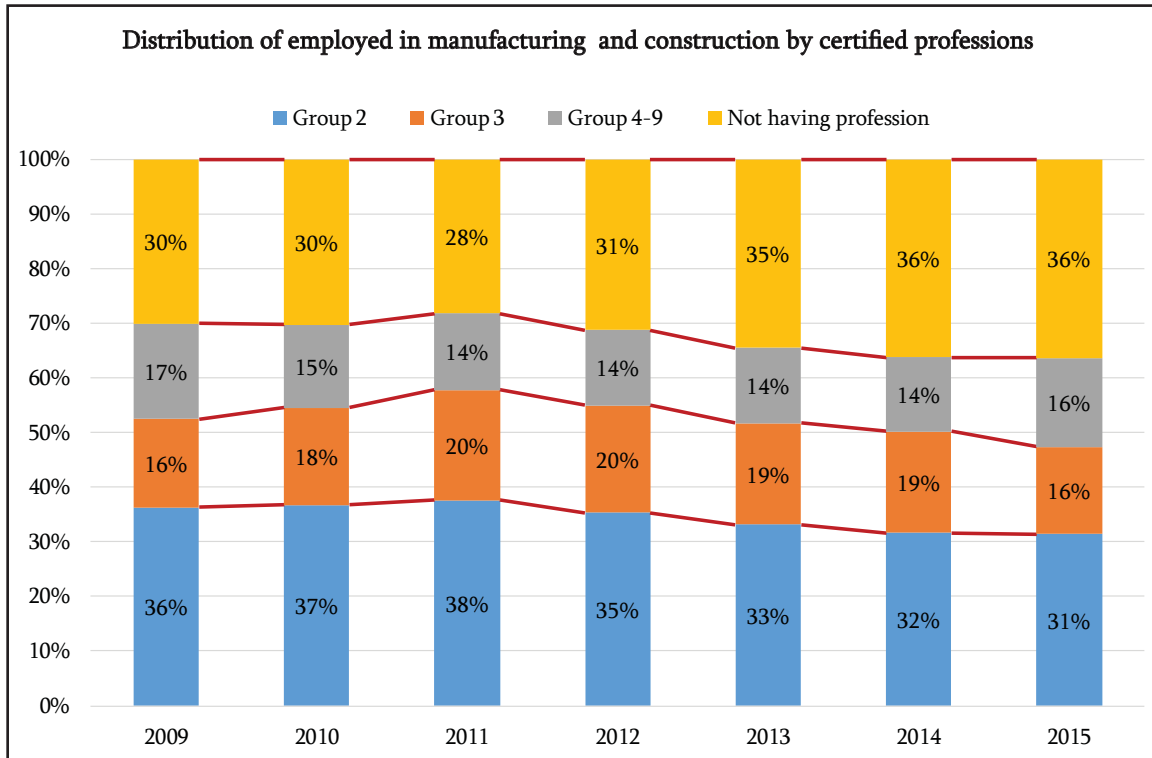
Source: IHS database processed by the group of authors

The individuals not having profession have advantage in distribution of employed in agriculture on these grounds: in 2015 their weight compiled 66 percent of employed in agriculture. This indicator was almost unchangeable in the research period.

The share of High level professionals employed in agriculture is stable – 10 percent, while of medium qualification specialists – 18 percent. Thus, pretty complex conditions for systemic change of the structure of employment are outlined, since ready for decrease of asymmetrically high weight of agrarian employment is ready just 34 percent of the individuals engaged in this field, and 66 percent is not ready for transition from this sector to another and the change of employment structure might require long-term, even decades without large scale vocational education.

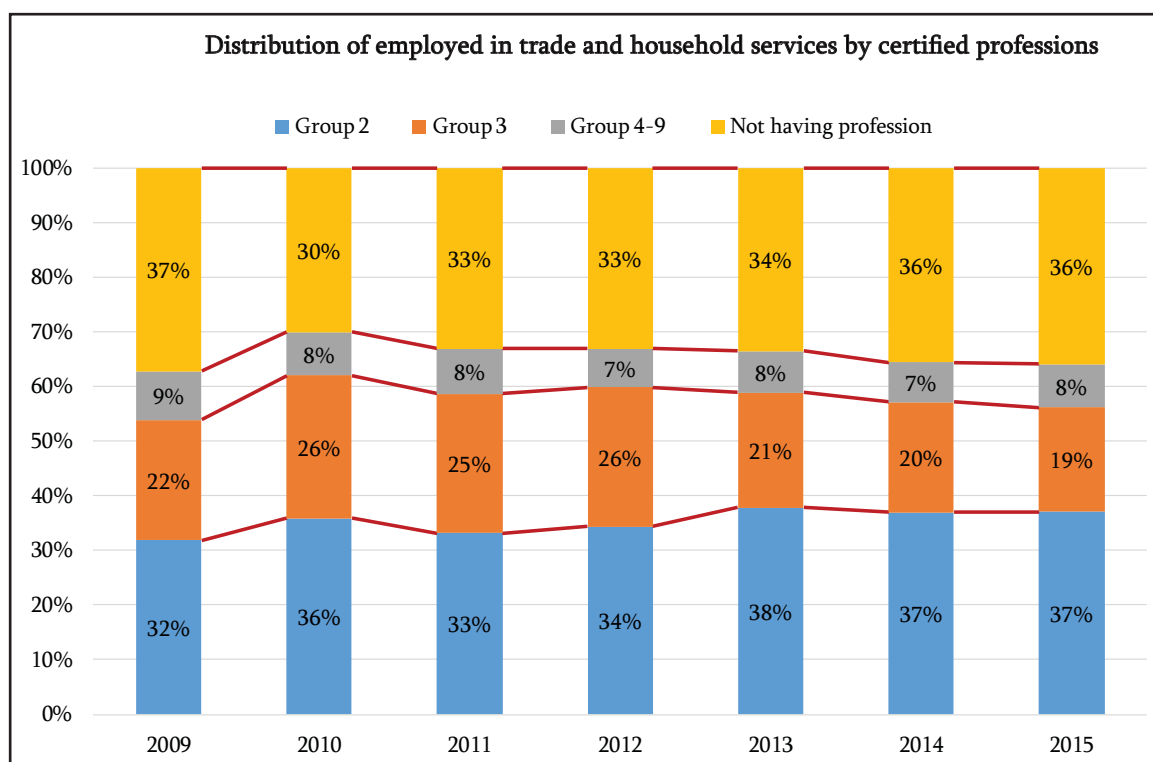
31 percent of employed in industry and construction sectors are highly qualified professionals, while 36 percent do not have a profession. The weight of specialists with medium and high qualification shows a decreasing trend, while the weight of those not having a profession is increasing. The latter is very hard to explain, though in general weak but clearly negative trends of de-qualification of employment in this field can be observed.

Chart N20



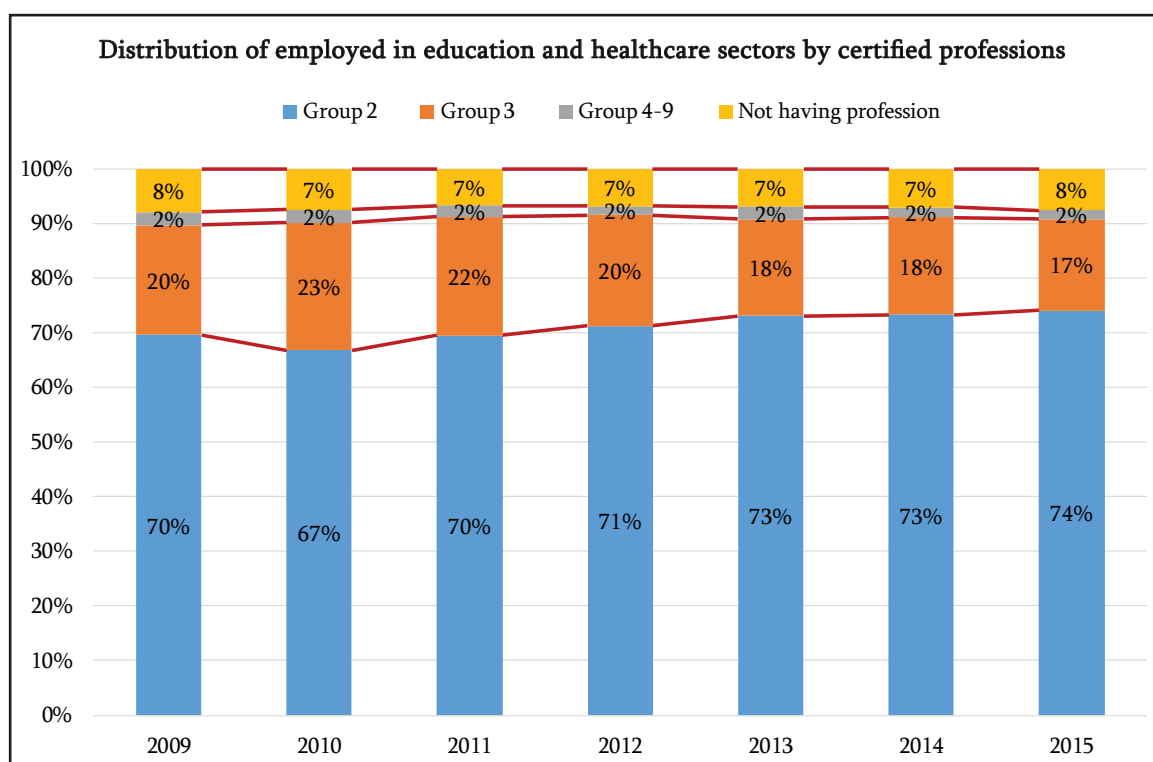
Source: IHS database processed by the group of authors

37 percent of those employed in trade and household services are highly qualified professionals by diploma. Almost the same number, 36 percent, do not have professions. 19 percent are mid-level specialists by diploma. The weight indicators for the highly qualified specialists and those not having a profession show a weakly expressed increasing trend, while the number of mid-level specialists is decreasing.

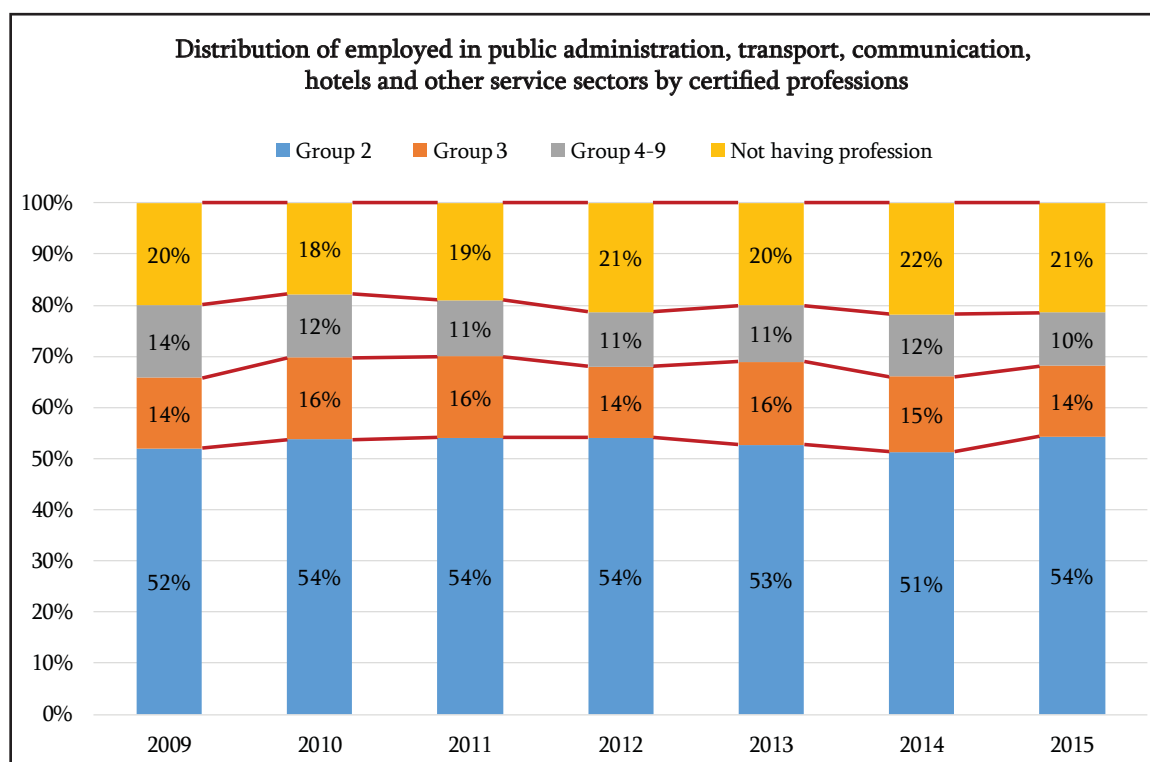


Source: IHS database processed by the group of authors

Most interesting is the distribution by qualification of those employed in the education and healthcare sectors. The majority of people employed in these sectors are highly qualified professionals and the weight manifests a positive trend of increase. Further, the weight of mid-level specialists, which showed a decreasing trend, is low. In the education sector, such trend can be assessed as positive, but in the healthcare sector it indicates an unfavorable condition.



Source: IHS database processed by the group of authors



Source: IHS database processed by the group of authors

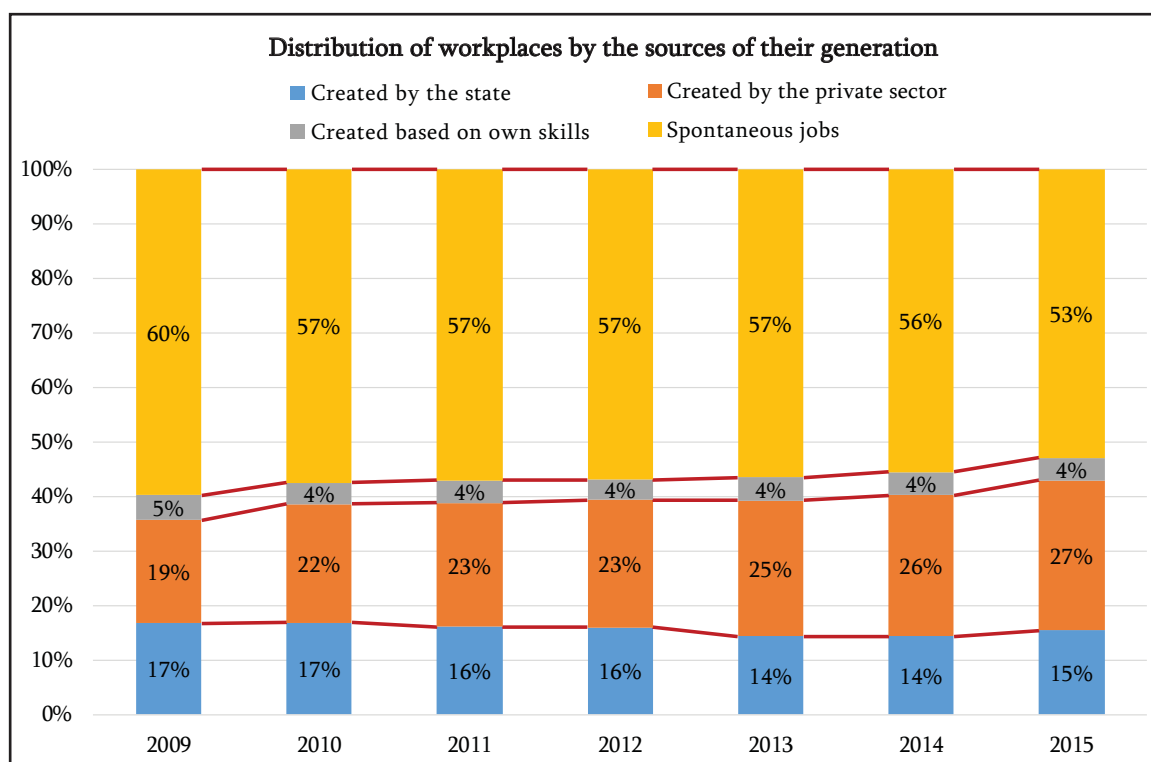
The majority of those employed in a diverse group such as public governance agencies, transport, hotels and other services, is highly qualified professional (see Chart N23). An individual review of these groups does not give reliable assessments; however, the weight of highly qualified professionals in this amorphous group was the highest in 2015 compared with previous years, which could be considered as a sign of the beginning of a positive trend.

3.2 Sources for job generation

The distribution of jobs by the source of their generation is crucial for the study of the demand of the labor market. In this regard, we identified from the database of the Integrated Household Survey of four types of jobs:

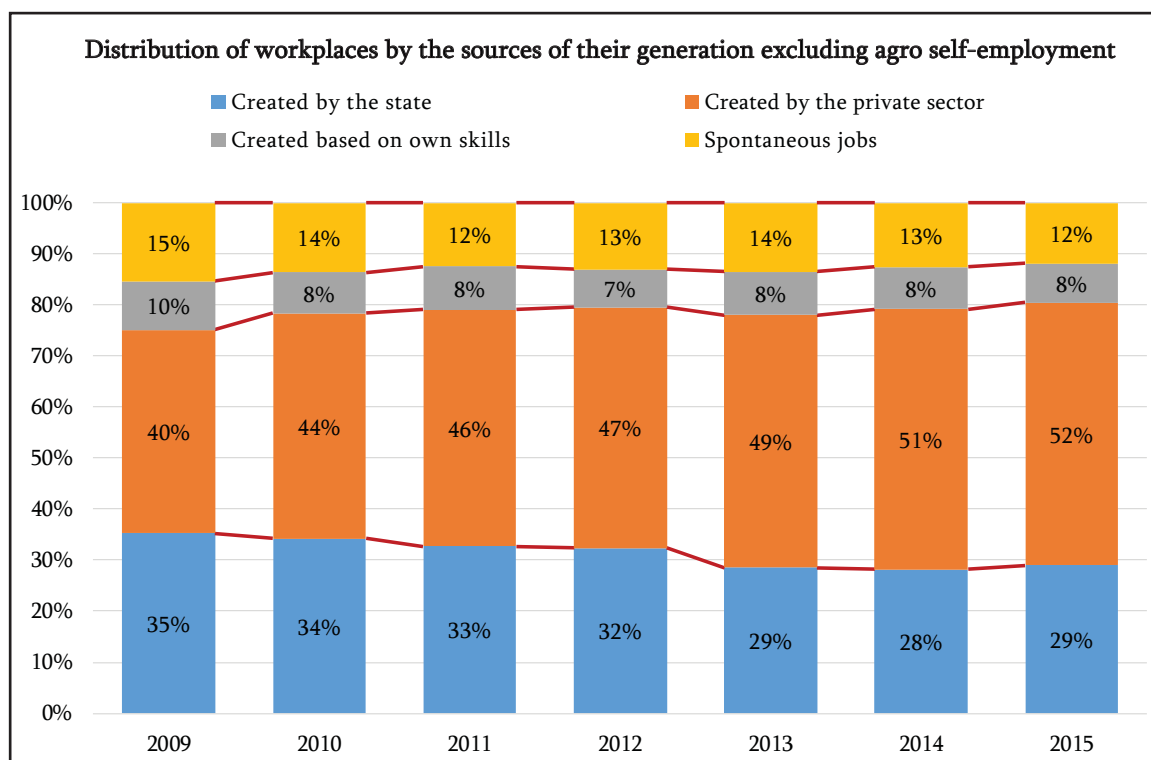
1. Jobs created by the state – which include those employed in public institutions and governmental organizations;
2. Jobs created by the private sector, which include those employed in private enterprises and organizations and entrepreneurs with hired employees;
3. Jobs created based on own skills, which include non-agricultural self-employed who were employed due to their own skills. Those are individual entrepreneurs, self-employed thanks to their professional knowledge;
4. Spontaneously created jobs, which include self-employed in agriculture, small traders, taxi drivers and so on which does not require high qualification.

According to the data of 2015, 53 percent of workplaces were created spontaneously, 27 percent were generated by the private sector, and 4 percent – based on own skills.



Source: IHS database processed by the group of authors

The identified trends are important and demonstrate a broadening picture. In 2009 – 2015, the decrease of the weight of spontaneously created workplaces and the increase of the weight of workplaces generated by the private sector were clearly identified. At the same time, a slight decrease in the weight of workplaces created by the state and the stability of the weight of workplaces created based on own skills are also clear.



Source: IHS database processed by the group of authors

In general, the above-mentioned trends convey quite high positives, which are reflected in the increase of the influence of the private sector in job generation, basically to the extent that we see a decrease in the number of jobs created spontaneously. However, these positive trends are slow against the background of the scale of the problem.

The present analyses once more demonstrate that in Georgia the most significant problem in the employment field is the hypertrophic high number of rural self-employment. Abstracting from rural self-employment, the above-mentioned trends look clearer and more positive (see Chart N25).

4. Structural Unemployment

4.1 Structural unemployment: methodological aspect

It is difficult to assess structural unemployment in more or less exact percentages, particularly in Georgia. To do this, it is necessary to study the existing vacancies in the labor market. Job-seekers in Georgia are not registered for a long time and the only source for professional assessment of the structure is the Integrated Household Survey.

The structural unemployment paradigm in Georgia can be illustrated as follows:

- The education system does not or cannot prepare staff with relevant (in demand on the labor market) specialties (qualifications). In other words, the education system and the labor market are not congruent. For example, there is a demand for zoo-technologists on the labor market yet the education system is preparing an inadequately excessive number of business administration specialists;
- On the other hand, the education system - high as well as vocational - does not give the in-demand knowledge (qualifications), which means that the educational qualification and actual knowledge and acquired skills do not match. For example, an engineering degree does not mean the graduated student has the real knowledge of a modern engineer. This can be called a professional inconsistency problem.

As a result, the country's economy is unable to generate jobs respective to the labor force existing on the labor market. In this respect, it must be stressed that Georgia's economy creates predominantly low-skilled jobs, the majority of which do not require special education.

As a result of long-term unemployment, the labor force prepared by the education system loses qualifications or is forced to work in jobs with lower qualifications (and salary). De-qualification of the labor force is one of the main negative results of structural unemployment. However, it is noteworthy that this problem is diverse in its turn. With existing information arrays, it is possible to assess:

- The weight of long-term unemployed individuals with high or mid-level qualifications among the unemployed according to ILO criteria;
- The weight of individuals employed inconsistent to their qualifications among the employed.

In many countries, there is no possibility for such assessments. In Georgia, information support is at a reasonably high level; however, there is a very important condition for the assessment; in which equally successful can be people whose:

1. Actual qualification does not match the qualification received through education. They cannot find a job appropriate to their education qualifications and/or are forced to agree to low-skilled jobs or wait for jobs that match their education qualifications.
2. Education qualification matches their real skills, but because of the institutional weakness of the labor market, they are unable to find a job with the relevant qualification and/or are forced to agree to low-skills jobs or wait for jobs which match their education qualification for a long time. They often do not have the informal links necessary to find a job.
3. They got their diploma a long time ago and after that they were unable to follow technological developments, because of which their knowledge is outdated in terms of practical use. They are forced to agree to low-qualification jobs or wait for jobs according to their relevant educational qualification for a long time.

It is very difficult to say which category, with which weight, determines the level of structural unemployment. For such assessments, in order to study the liquidity of education, it is necessary to conduct a large-scale research.

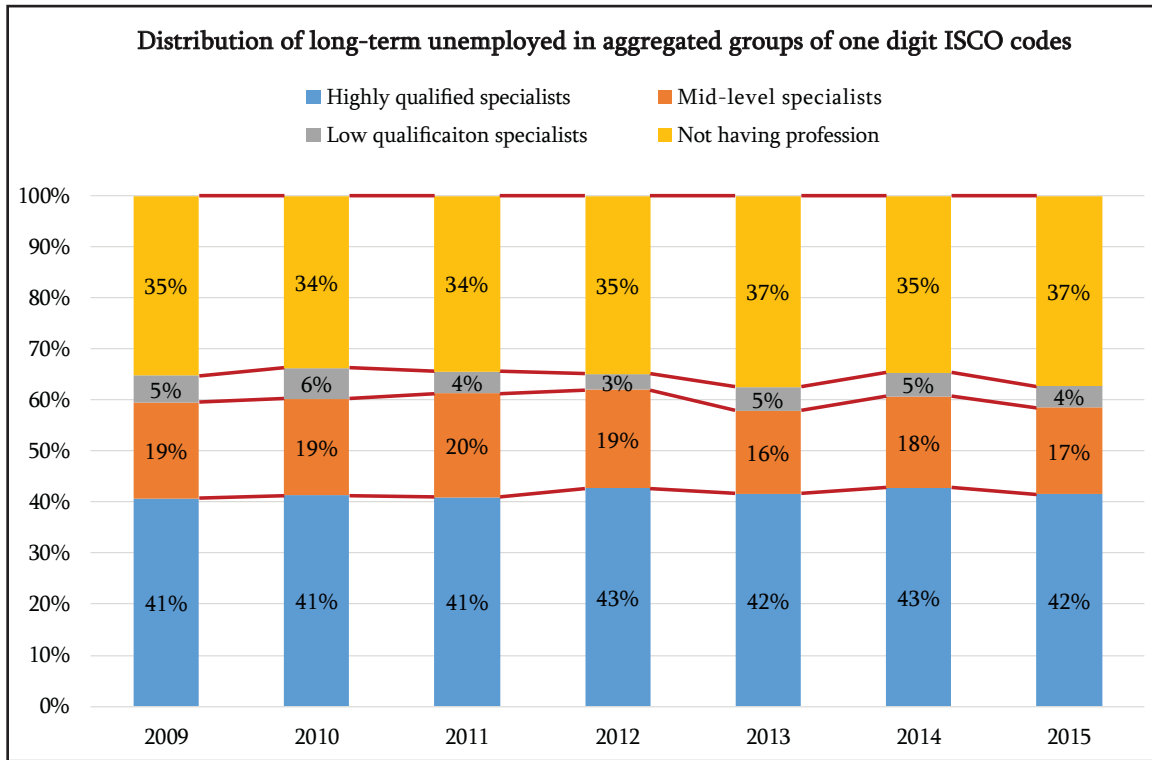
Studying the liquidity of education is an important issue which has central importance not only in terms of studying structural unemployment, but also because it is one of the decisive informational pillars for elaborating a strategy for further developing the education system. We will see below how impressive the part of the problem related to structural unemployment is, the evaluation of which is possible with the available information range.

4.2 Long-term unemployment and de-qualification as a manifestation of structural unemployment

In terms of structural unemployment, it is particularly important to discuss long-term unemployment in professional dimension.

The majority of long-term unemployed surveyed during the study period consisted of highly qualified professionals and those with no profession. The weight of medium and low-skilled specialists among the long-term unemployed is relatively low. Among them, low-skilled specialists, whose number throughout the study period is in the range of 4-5 percent, should be especially underlined.

Chart N26

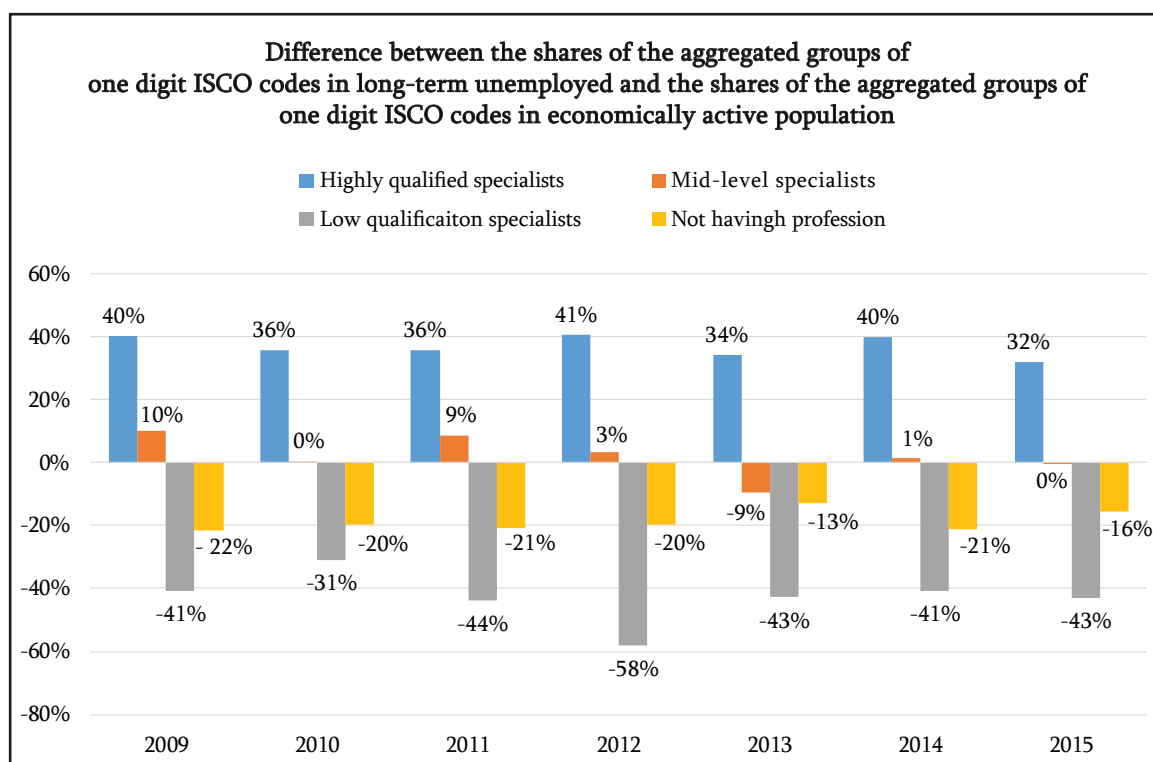


Source: IHS database processed by the group of authors

It should be noted that in terms of structural unemployment, the distribution of long-term unemployed only according to professional characteristic, is not enough. Obviously, this distribution contains some information, but comparison of the distribution provided in the same context of this structure and the economically active population is more informative.

According to the comparison of structures, the weight of highly qualified professionals in long-term unemployment is 32 percent higher than the weight of professionals in a total economically active population. This difference manifests a decreasing trend in 2009-2015, but the 32 percent means that the highly qualified professional has a 1/3-higher than average chance of long-term unemployment and in case the subject is a low-skilled professional, this chance is 1.42 percent lower. The chance of long-term unemployment is also 16 percent lower in case the subject has no profession.

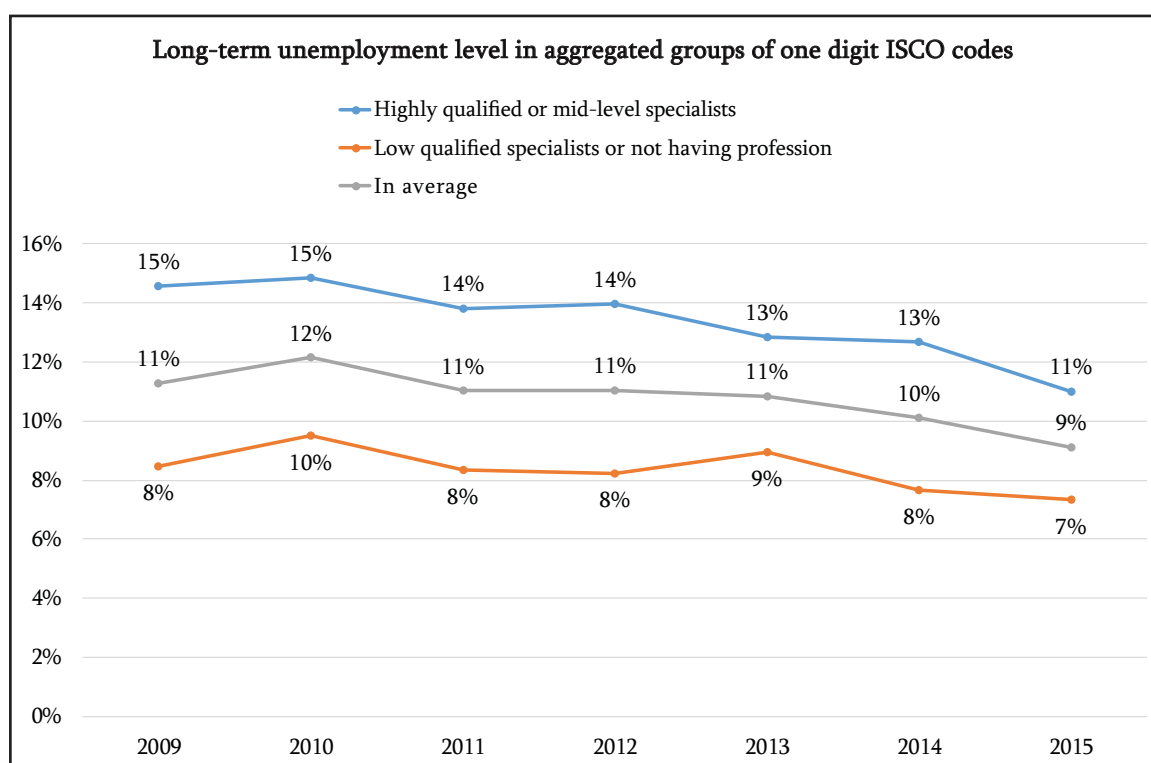
Therefore, we can say that the problem of de-qualification determined by long-term unemployment is very important. The following gives us a basis to conclude: almost 60 percent of the long-term unemployed are highly qualified professionals and medium-qualification specialists, from which the majority (43 percent) is highly qualified professional and long unemployment is almost half the total unemployment. Thus, nearly 30 percent of the overall unemployed are de-qualified professionals. Such scale of de-qualification clearly proves the severity of structural unemployment in Georgia.



Source: IHS database processed by the group of authors

The long-term unemployment indicator in the years of 2009-2015 is characterized by a well-established trend of reduction. It should be noted that the long-term unemployment rate among medium-skilled specialists and highly qualified professionals, as a rule, is higher than among the low-skilled specialists or persons with no professions. The long-term unemployment rate, according to the data of 2015 was 9 percent, or not substantially lower than 12 percent, of the total unemployment level. This means that the friction unemployment rate is only 3 percent in Georgia, which is generally regarded as being in the normal range.

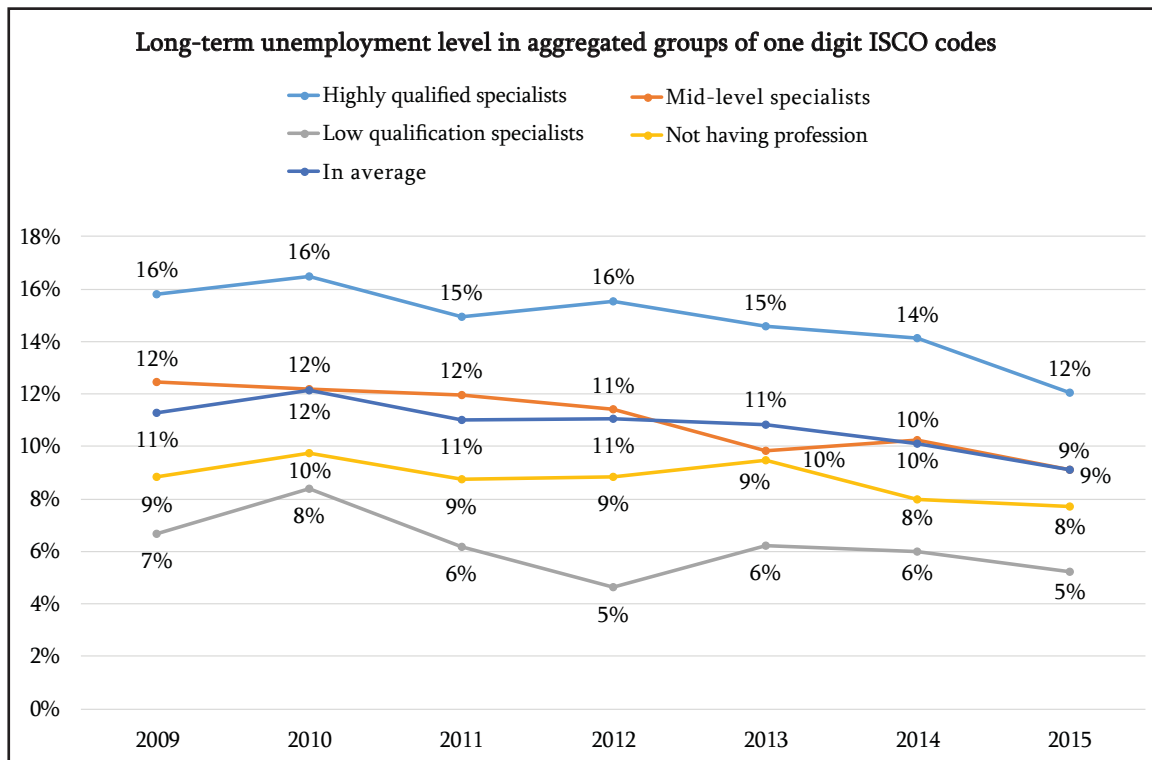
Chart N28



Source: IHS database processed by the group of authors

The unification of mid-level specialist and professionals into one group, and the comparison of these group's indicators to the group of low-skilled specialists or persons with no profession is determined by the fact that the trends developed in both groups are more or less homogenic.

Chart N29



Source: IHS database processed by the group of authors

As for a relatively detailed review (See Chart N29), the trends are the same as in the case of aggregated indicators in two groups, although the group of highly qualified professionals is clearly distinguished, where the long-term unemployment rate, in comparison with all other groups, is distinctly higher. While in 2009-2015 a clear trend of decrease is observed in this group, in 2015, too, the long-term unemployment rate is at quite a high benchmark - 12 percent.

4.3 “Unsatisfied” workers or hidden structural unemployment

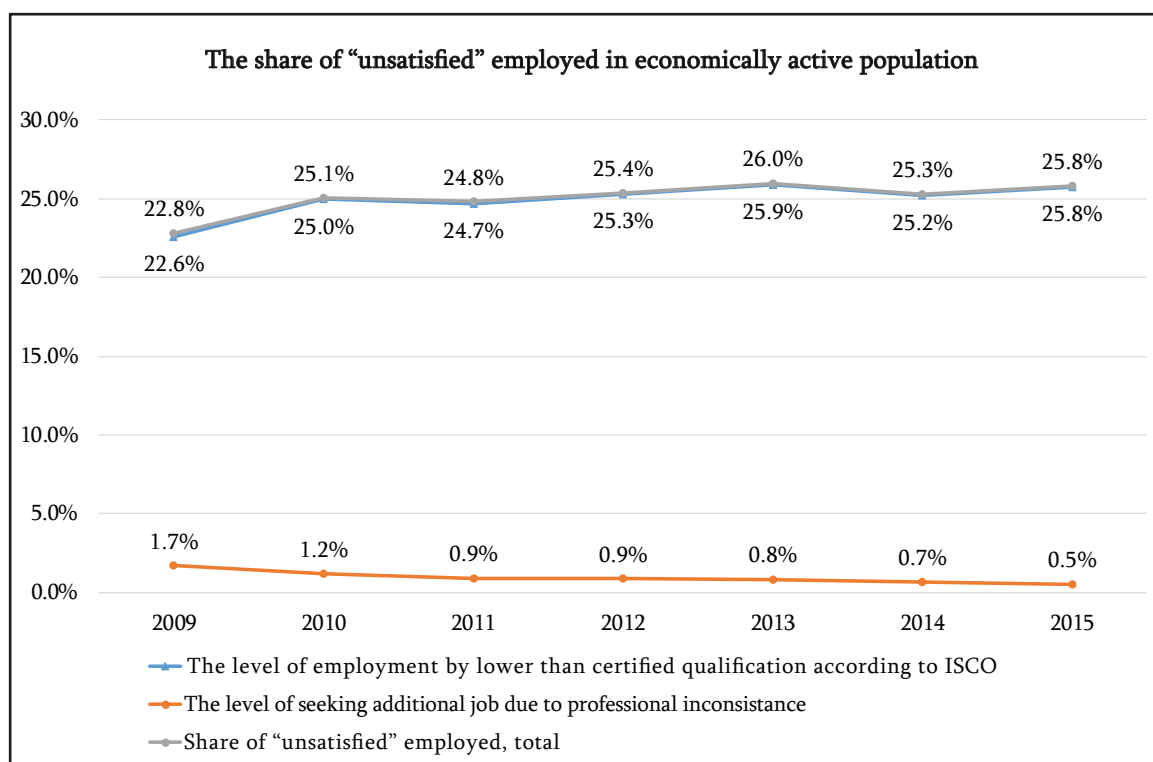
In the context of structural unemployment, the problem of “satisfied” employees is no less important than the problem of long-term unemployment. These are the people who could not obtain a workplace according to their qualification and agreed to a job with other qualifications or lower-skills. Although they are formally employed, in fact they are not satisfied with the job. Therefore, this phenomenon can be called hidden structural unemployment. Here we can consider two cases:

1. When the labor force is employed, but is looking for another job, the reason of which, as a rule, is professional mismatch;
2. When the labor force is unable to find a job matching their qualifications and is forced to agree to a job of lower qualifications.

For the second case, we took the main profession for each employment according to a diploma and compared it to its actual employment according to the diploma. We excluded those employees who, according to the actual employment, belong to the 1st ISCO group, i.e. leading positions, or professions which are not certified by diploma.

The calculations demonstrated that the number of job seekers due to professional inadequacy is within the margin of statistical error and is characterized with a trend of reduction. According to the data of 2015, such employees compile just 0.5 percent of the economically active population.

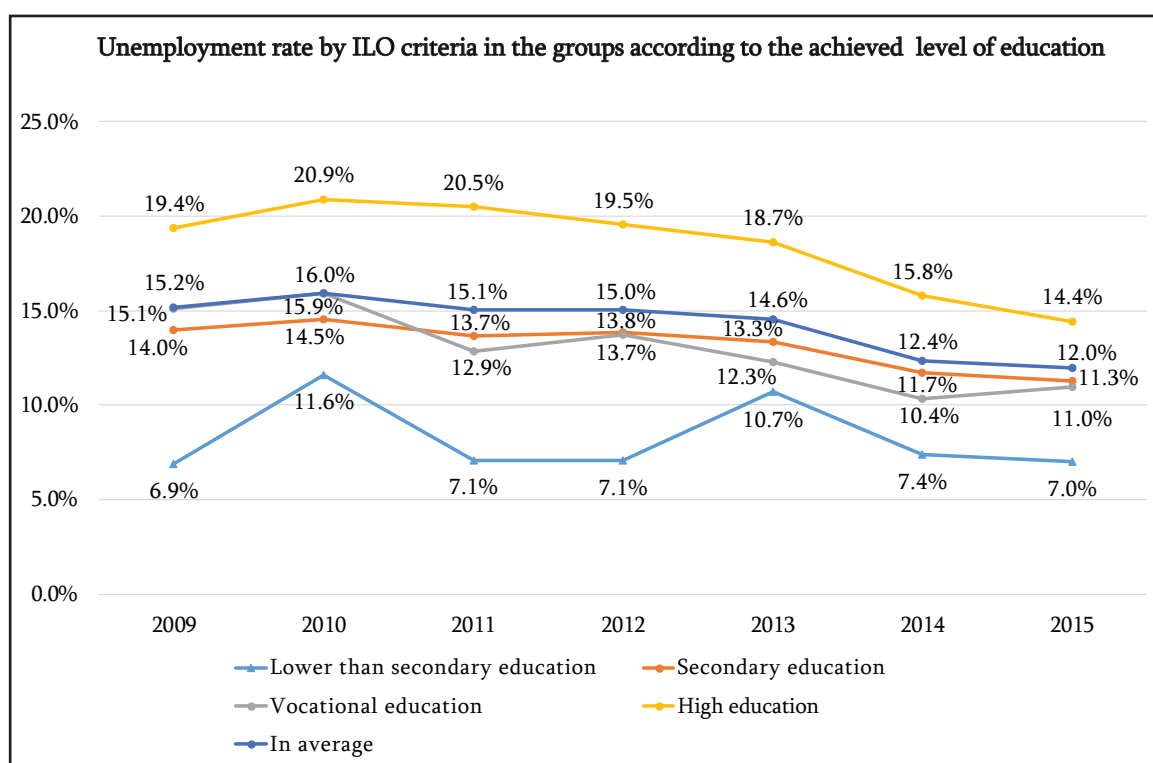
As for employees having diplomas working in lower-qualification jobs, for instance taxi drivers, sellers in kiosks or engineers working on their own land, their weight is 25 percent of the economically active population and the trend shows very mild, but some, growth.



Source: IHS database processed by the group of authors

As the above analysis demonstrated, the problem of “unsatisfied” employees, as a manifestation of hidden structural unemployment, is mostly a result of low congruence of the education system and the labor market. The distribution of employees and unemployed in professional groups according to ISCO classification was discussed above according to both certified professions and actual employment by occupation. The study showed that the structures, on the one hand according to certified professions and, on the other hand, actual employment, do not practically correlate with each other. Thus, it can be said that one of the important components of the problem of “unsatisfied” employees is exactly this circumstance.

Chart N31

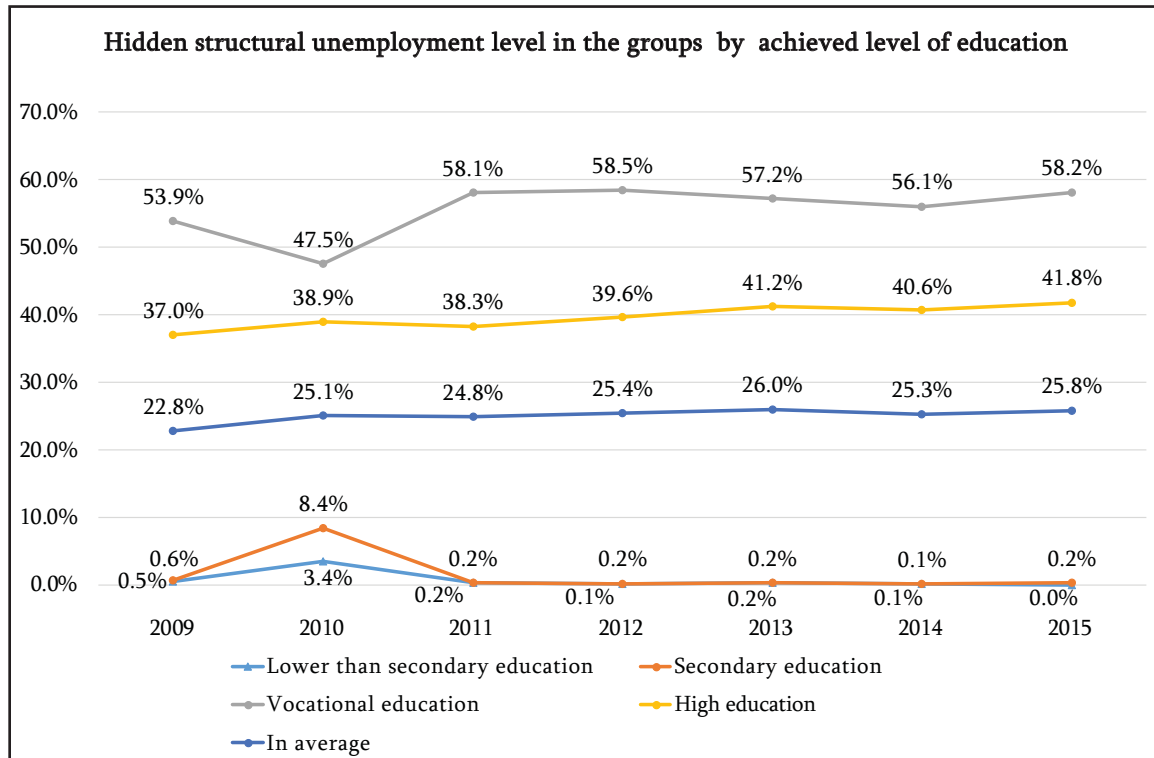


Source: IHS database processed by the group of authors

If the indicators of hidden structural unemployment are calculated according to our approach, the difference between the groups is substantial and, one might say, even dramatic.

The hidden structural unemployment rate is the highest, as a rule, among the population with secondary-special education. This indicator is also high among the population with high education, but it is still substantially lower than the rate of unemployment among the population with secondary-special education.

Chart N32



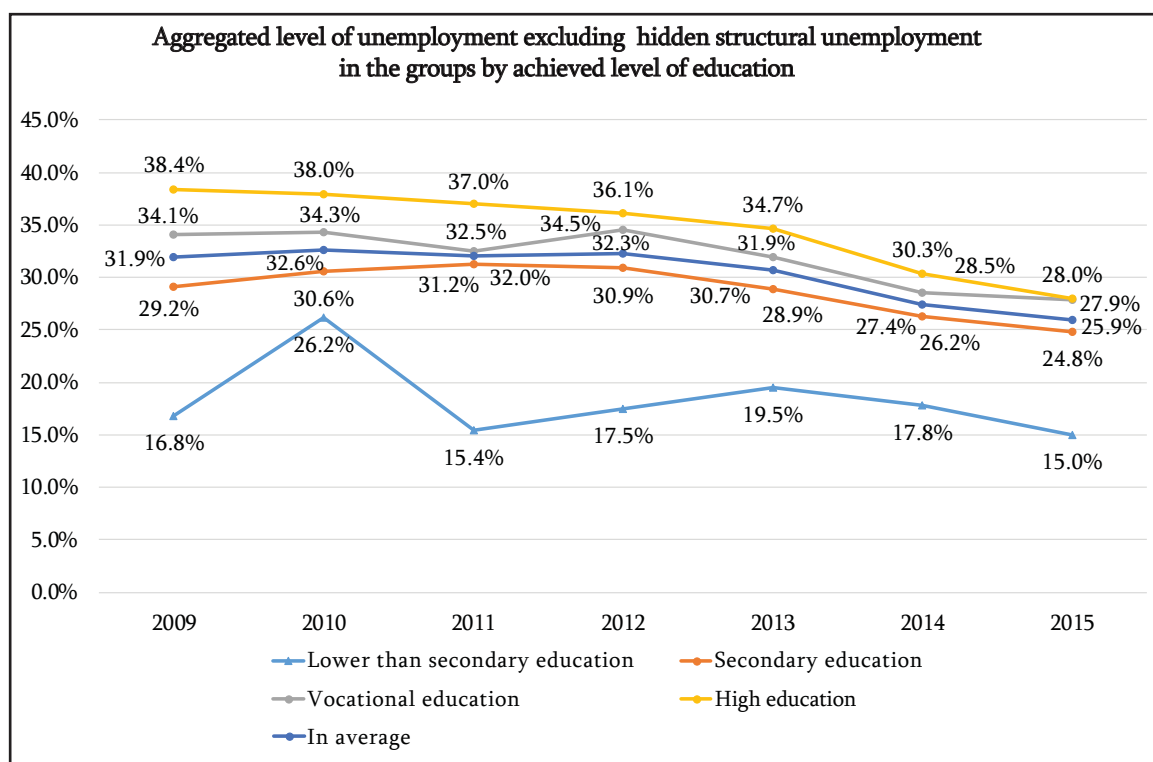
Source: IHS database processed by the group of authors

It is a noteworthy trend and underlines the fact that the secondary-special education gives a very low chance of employment according to qualification.

Quite natural is the fact that the structural unemployment rate is actually zero among the population with secondary and lower than secondary education: This is a group of persons who does not have professions and whose absorption takes place in mostly agricultural employment.

The aggregated level of unemployment in groups with different education levels is significant. If we consider the aggregate unemployment rate without the hidden structural unemployment, we will see that this indicator is characterized with a tendency of reduction in all groups. It is also significant that for almost all groups it is in a rather narrow range, especially in the years 2014-2015.

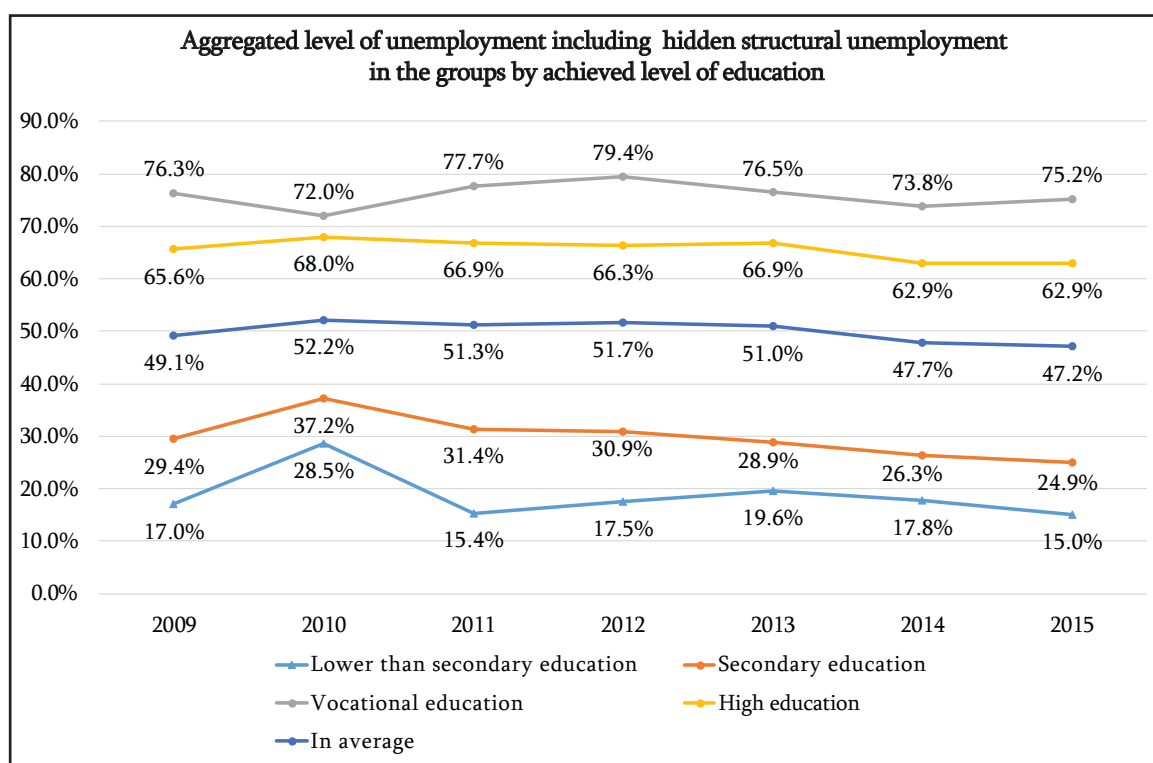
A completely separate case can be found in the group of the population with an education level lower than medium, in which the aggregate unemployment rate is the lowest. A downward tendency is also revealed in this group, though at the expense of employment with the lowest qualification.



Source: IHS database processed by the group of authors

The difference becomes significant if we consider the aggregate unemployment rate including observable structural unemployment. In this case, the unemployment rate in the population with secondary-special education already hits quite a high number. The aggregate unemployment rate in the population with high education is substantially lower, but generally still high.

Chart N34



Source: IHS database processed by the group of authors

The significantly lower level of the aggregate unemployment rate indicator for the population with secondary and lower than secondary education is determined by structural unemployment characteristic for this group.

Most important is that the aggregate unemployment rate indicator, including the hidden structural unemployment, stands out for the tendency of invariability in 2009 -2015.

4.4 Structural compatibility of labor market demand and supply

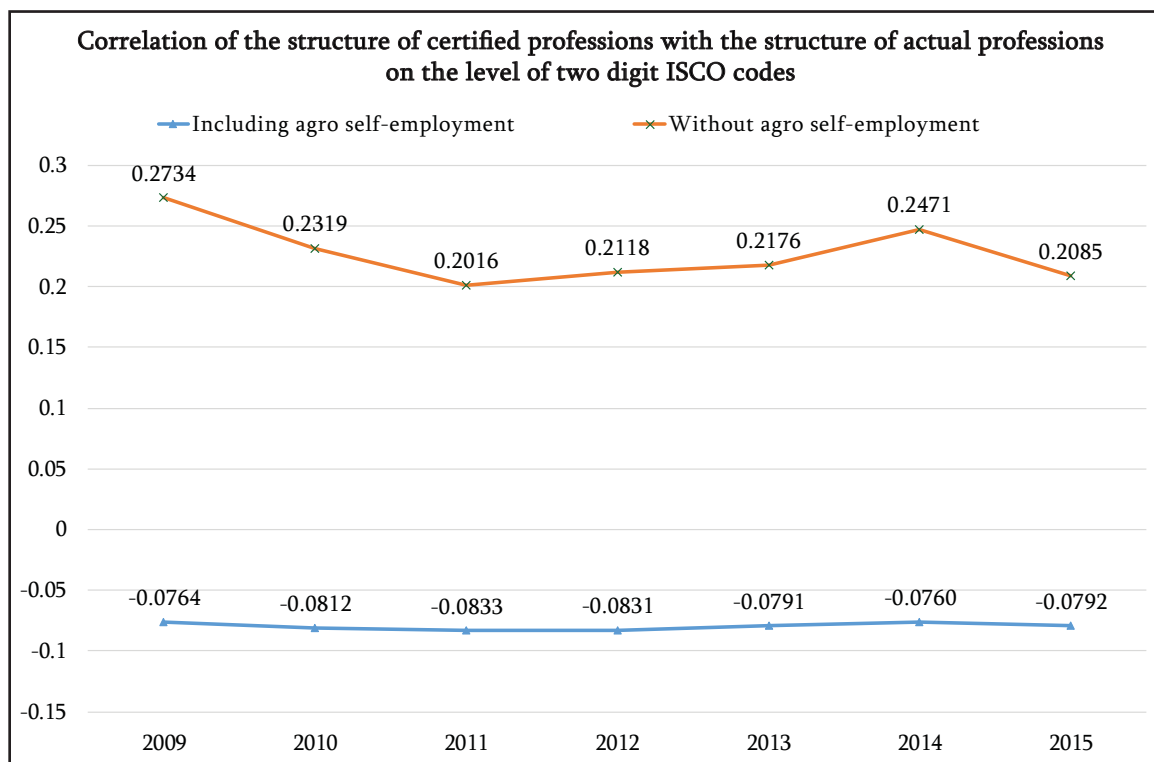
The distribution according to certified professions, or the component of workforce supply, is reviewed in the sectoral analysis part of the labor market. Here, we must question whether the supply structure is adequate in relation to the structure of demand.

For the review, the distribution according to ISCO double-digit codes was compared. As the comparison demonstrates, the distribution of the employed, according to the certified and actual professions, practically does not correlate with each other: the correlation coefficient is -0.0792.

When discussing the employed without those self-employed in the agricultural field, the correlation coefficient increases significantly, but its absolute significance is still low at the 0.2085 benchmark. This means that these two structures are quite different when we review them without self-employment.

Including the self-employed in the agricultural sector, the correlation of distribution according to certified and actual professions was more or less similar during the research period. Even discussing the case without self-employment in the agricultural sector, the correlation of the structure is characterized by a certain tendency of reduction. The reduction rate is not high, but the tendency in itself is well-defined and confirms the low congruency of the education system towards the labor market.

Chart N35



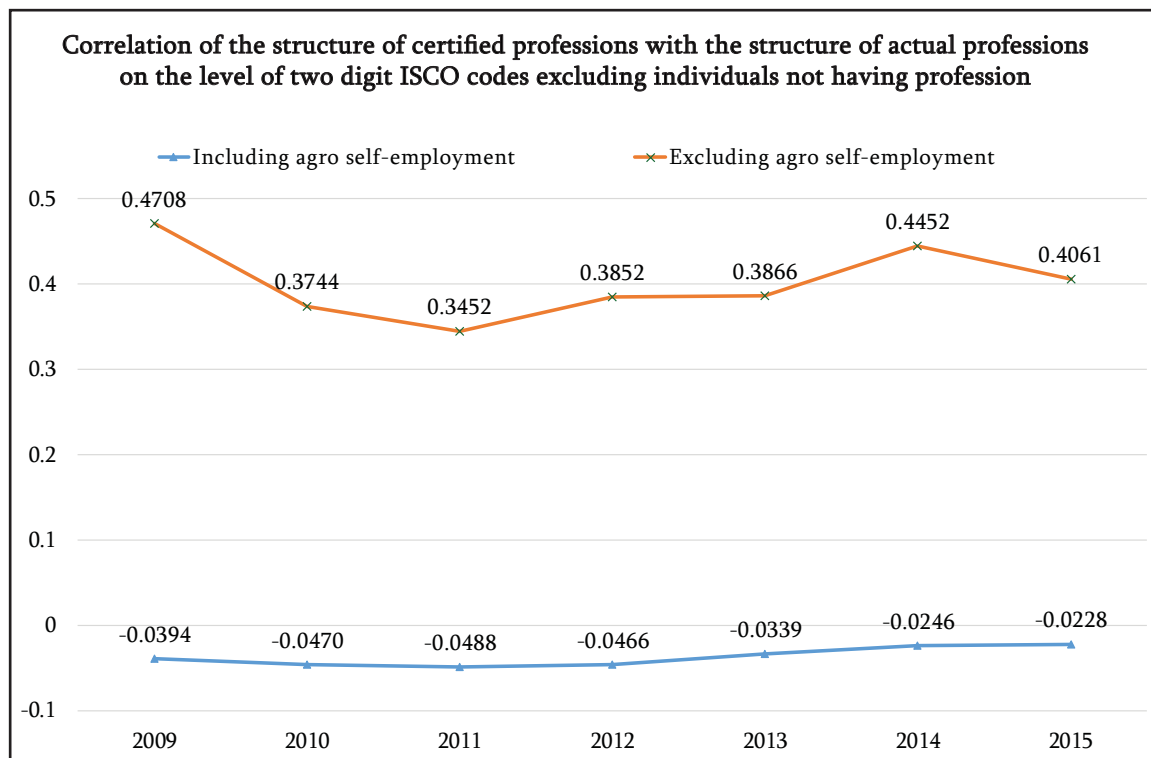
Source: IHS database processed by the group of authors

While comparing the distribution of the employed according to certified and actual professions, the important factor that reduces the correlation is quite a large group of people who do not have a profession- individuals who do not have any kind of certified profession, but actually do something, even a very low-skilled job, and so are still employed.

If we exclude the group without professions from the structure and compare the distribution according to actual and certified professions, the correlation of the structures including self-employment in agriculture is still zero. The correlation coefficient of -0.0228, instead of -0.0972, does not reveal any essential difference and the correlation, as in the previous case, is actually zero here, too.

If we exclude self-employment in the agriculture sector from the structure, the correlation coefficient increases by almost 14 times - from 0.0288 to 0.4061. The latest in itself is not a high figure, but it is clear that by excluding those who are employed in the agricultural sector and do not have professions, the structure of certified and actual professions is much more correlated.

Chart N36



Source: IHS database processed by the group of authors

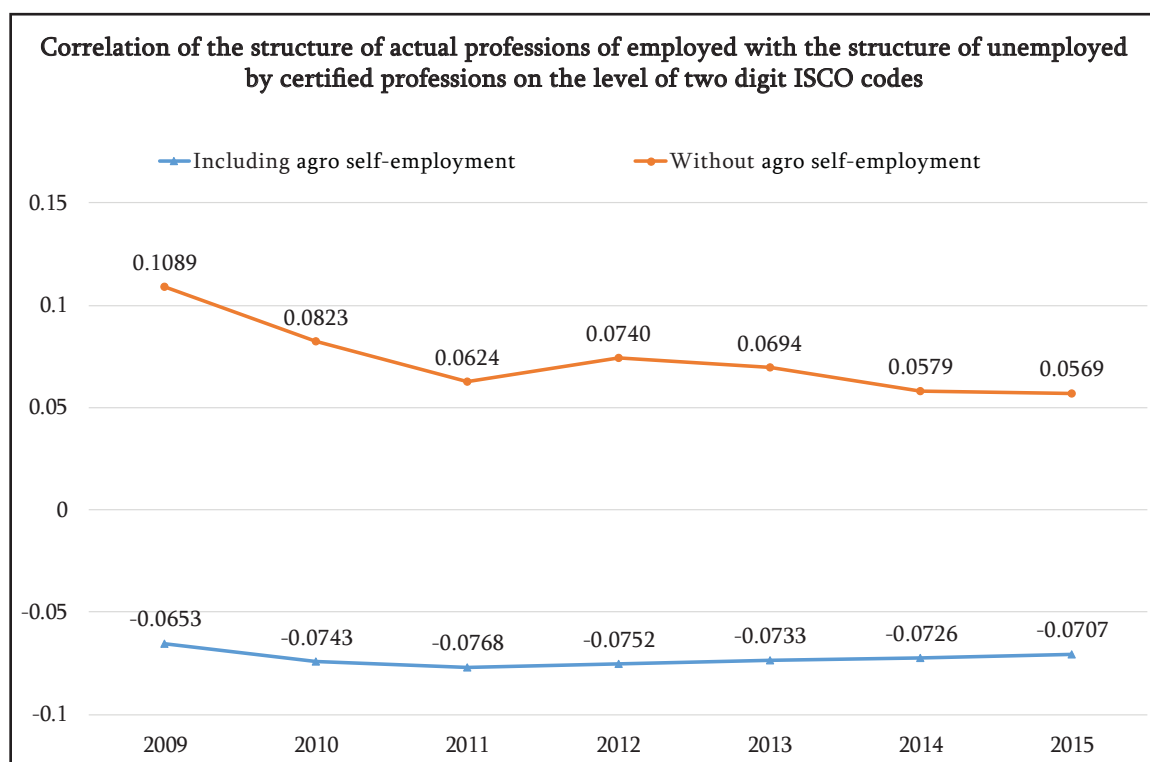
The correlative analysis of the professional structures of employed and job-less persons demonstrated that the quality of the education system and its relevance to the labor market is very low in Georgia: the distribution of employed persons according to actual and certified professions is characterized with almost zero correlation.

The degree of correlation increases several times if we exclude such large components from the structure as the group not having a profession. However, the correlation between the structures is less than 0.5 or lower. This means that a certified profession determines less the actual place of employment, or specialists trained by the education system do not meet labor market needs.

The correlation of the employed and unemployed according to certified profession equals to almost 1, which means that the influence of certified professions on employment is very low. This also means that the weight of certified education received from the education system does not play a significant role in the job seeking process. In addition, the education system ensures the generation of a whole 'army' of those who do not have professions, and their competitiveness on the labor market is very low. The absolute majority will be self-employed in the agricultural area or in jobs with very low qualifications.

Thus, as noted above, one of the main problems for those who do not have certain professions is to develop and implement a vocational education program. This, of course, cannot be expected to solve the problem automatically.

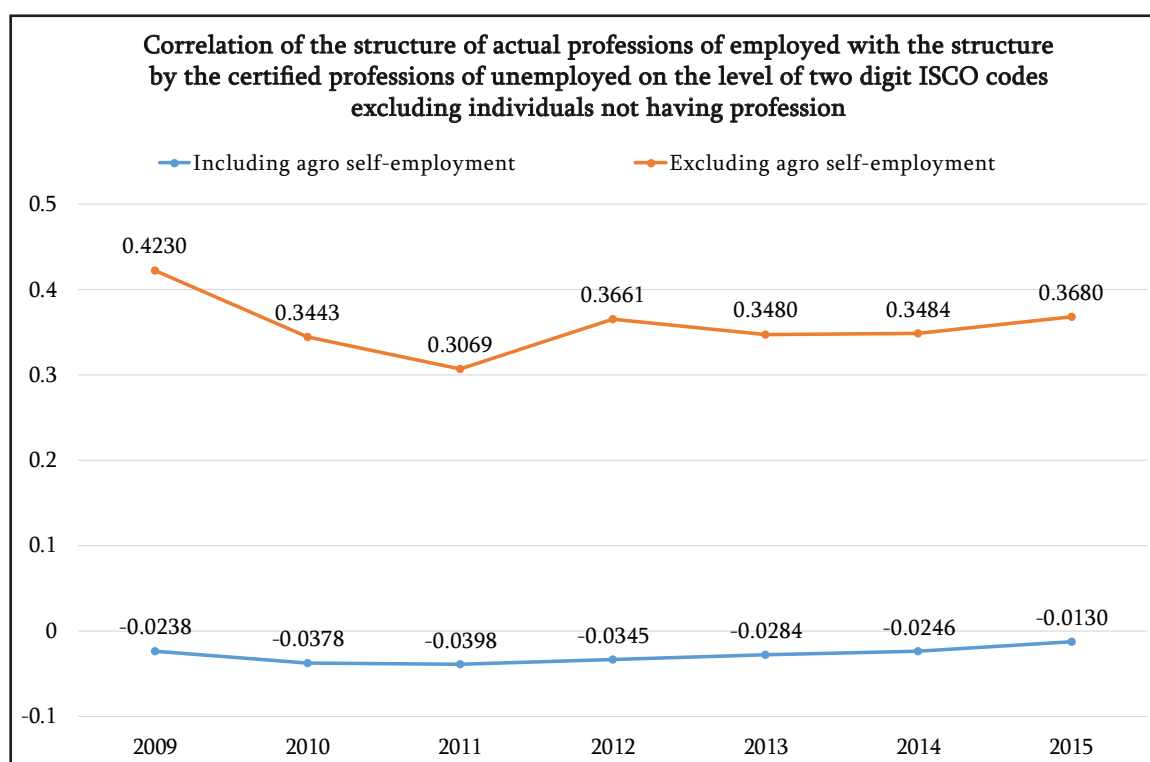
It is interesting to illustrate the correlation among the structures according to actual profession of employed and certified profession for unemployed workers. Here, too, in the case of the distribution of the employed according to actual and certified professions, the correlation is zero, while the correlation without agricultural self-employment results in an increase. Yet the correlation is still zero. Moreover, even in these zero correlations show a declining tendency.



Source: IHS database processed by the group of authors

The correlation substantially increases when excluding those who do not have professions from the structure, although it is still unable to be considered a high correlation.

Chart N38



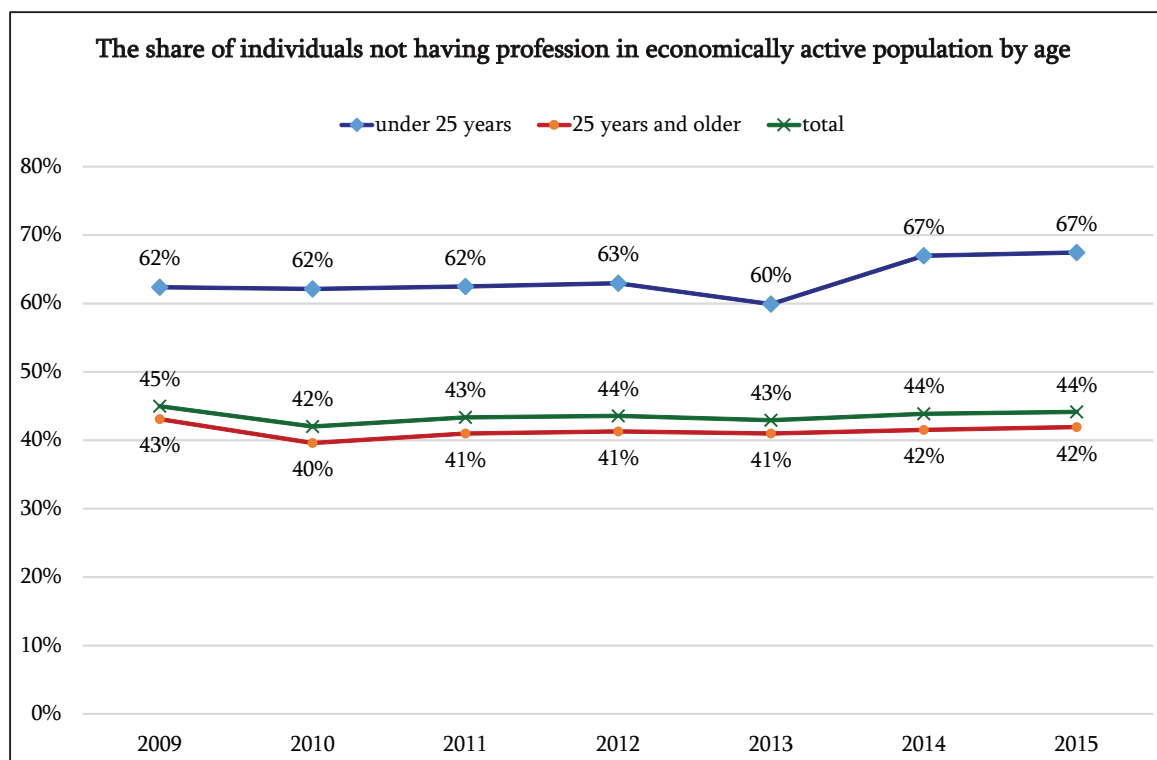
Source: IHS database processed by the group of authors

The level of structural relevance of the education system and the labor market is very low. The degree of correlation somewhat increases if we exclude a large opponent from the structure, such as the group that does not have a profession, but despite this, the correlation between the structures is less than 0.5, or in low correlation with each other. This means that a certified profession determines less the actual place of employment and the output of the education system matches less with the demands of the labor market.

Among the employed, explaining the existence of the high number of those who do not have professions is possible by age factor (See Chart N39). The potential labor force includes a population of 15 years plus, including school pupils and students, or the population in the early stages of education who have yet to receive any certification. The number of those who do not have professions until 25 years of age, situated among the economically active population, is 67 percent. This indicator revealed a less positive tendency of growth in the research period.

Further, the number of those who do not have certified professions among the economically active over 25s is also very high. According to the data of 2015, it stood at 42 percent and remained virtually unchanged during the monitoring period - although with some growth likelihood, as the weight among the economically active population under 25 shows a tendency of increase.

Chart N39



Source: IHS database processed by the group of authors

The large part of the population above 25, who do not have professions, with high probability will not begin education to receive an independent profession without a special offer- or the labor market will be saturated with low-skilled workers, which may become a prerequisite for the degradation of labor relations and the labor market in general.

To study the labor market supply structure, two sources were chosen - the website www.jobs.ge and the newspaper "Sitkva da Saqme" (Words and Deeds). Of course, these sources cannot completely cover vacancies existing on the labor market, but can serve to create a certain impression on the professional structure of the job supply. In order to generate a time series, we tried to obtain material for the identical period from both sources. However, because of the difficulties which we discussed above (P.1.4 - "Research Methodology"), making quantitative assessments based on combined historical data from both sources was not possible. As such, below, the analysis of only structures and not quantitative assessments are discussed.

The structure of vacancies according to the professions that were posted through both sources is substantially different in the same period. On vacancies uploaded on jobs.ge, the demand for senior-level workers and professionals with the highest level of qualification is predominant, while in announcements made through the newspaper "Sitkva da Saqme", the proportion of workers in the service area and trade organizations is very high. The demand for the same group of specialists is also high on jobs.ge, but their share in the structure substantially lags behind the demand for the same group of specialists in "Sitkva da Saqme" while, on jobs.ge, the demand for such professions is insignificant. Thus, it can be said that these two sources focus on totally different segments.

While it is true that the two sources focus on different segments, they complement each other, and this is also confirmed by the results of the correlation analysis.

Table N2: The structure of vacancies published in the second half of May 2016 in the newspaper “Sitkva da Saqme” and the web-site jobs.ge in main ISCO groups (Percent)

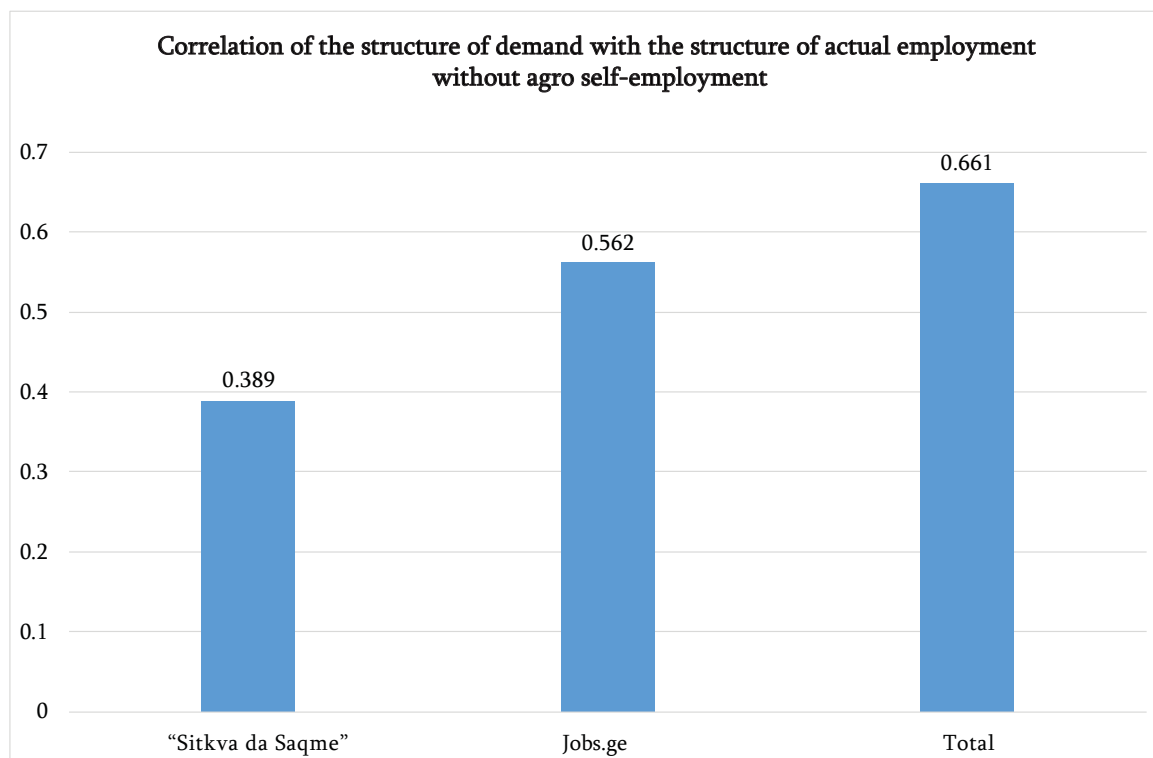
	“Sitkva da Saqme”/Words and Deeds	Jobs.ge	Total
Leaders of all levels	1	21	16
Highly qualified specialists	2	25	20
Specialists with med-level qualification	3	13	11
Office workers	8	16	14
Workers in the service and trade organizations	45	18	24
Skilled workers in agriculture	1	0	0
Qualified workers of industrial enterprises	16	3	6
Plant and machine operators	2	1	2
Unskilled workers	21	4	8
Total	100	100	100

It is true that the mentioned two sources work on different segments, they complement each other, and this is also confirmed by results of the correlation analysis.

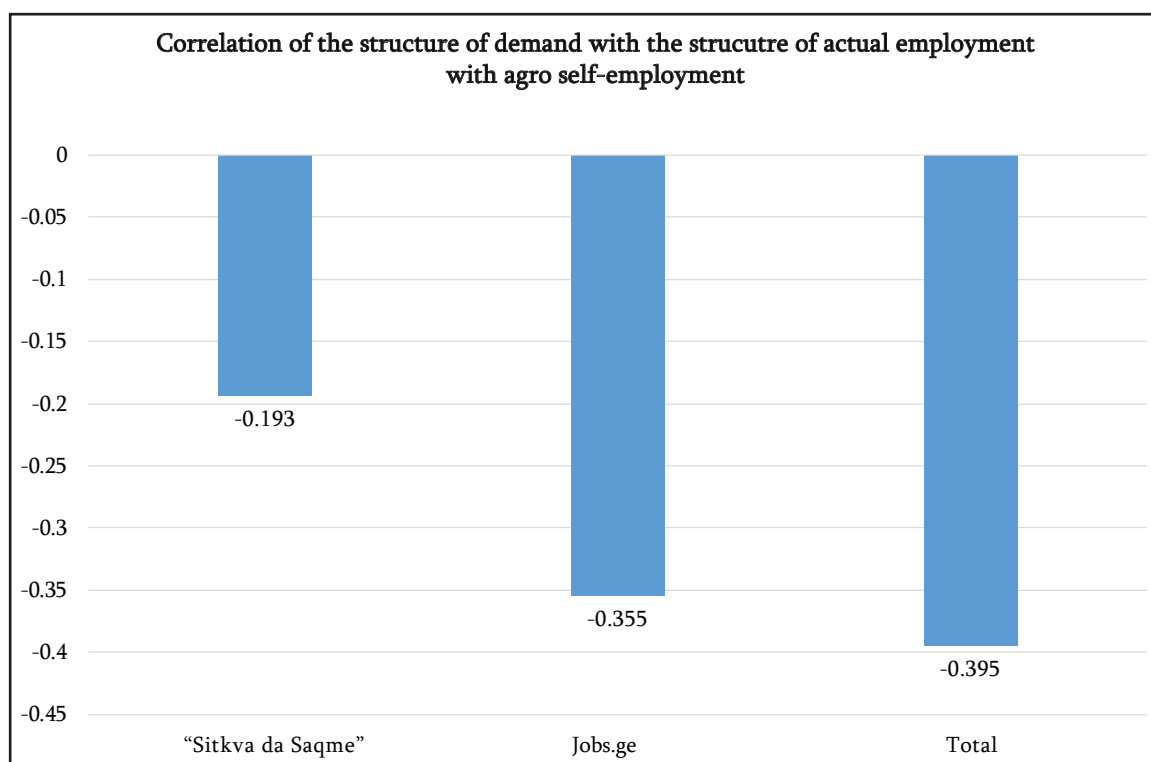
Including the self-employed in the agricultural sector, the correlation between the employment structure and vacancy structure is negative, which can be explained by the fact that the scale of agricultural self-employment is in itself very big and amorphous. The demand for employment in the agricultural sector does not appear in the vacancies, while in the employment structure this sector has the greatest weight.

It is notable that the correlation coefficient of the vacancy structures announced separately for “Sitkva da Saqme” and separately for jobs.ge is essentially lower than the correlation of the united structure of vacancies announced on the basis of both sources with the actual employment structure.

Chart N40



The correlation between the demanded structure and employment structure when reviewed without agricultural self-employment is also noteworthy.



The change in the correlation is noteworthy - if the correlation between the demand and actual employment including the agricultural self-employment was negative, the correlation without the agricultural self-employment is positive.

The vacancy structure of the newspaper "Sitkva da Saqme" correlates relatively less with the actual structure without agricultural self-employment - the correlation coefficient stands at 0.389, but, here, the correlation vectors are noteworthy and the correlation is positive. The structure of jobs.ge is in relatively high correlation - and the correlation coefficient here stands at 0.562.

It is noteworthy that the correlation coefficient following the unification of the data from "Sitkva da Saqme" and jobs.ge significantly increases to 0.661.

This confirms the necessity to solve the problem of structural unemployment and, in general, the implementation of the proper employment policy through the formation of a cumulative database of vacancies.

As mentioned above, the generation of a time series became possible only for the data from "Sitkva da Saqme". Of course, the data is incomplete and, as seen above, only works on certain segments. Yet it is still interesting to observe the dynamics of the announced vacancies through this source.

As seen from the data brought below (Chart N42), the reduction in the share of highly qualified professionals and medium-qualified workers is clear, as is the substantial increase in demand for workers from the service field and trade organizations. This tendency matches precisely the weight reduction of agricultural self-employment in the employment structure and the trend of growth of that number in the service field. Certain conformity can be seen but quantitative transformation does not reach such scale that could determine qualitative changes. Employment possibilities in real sector of the economy, and vacancies, have not changed.

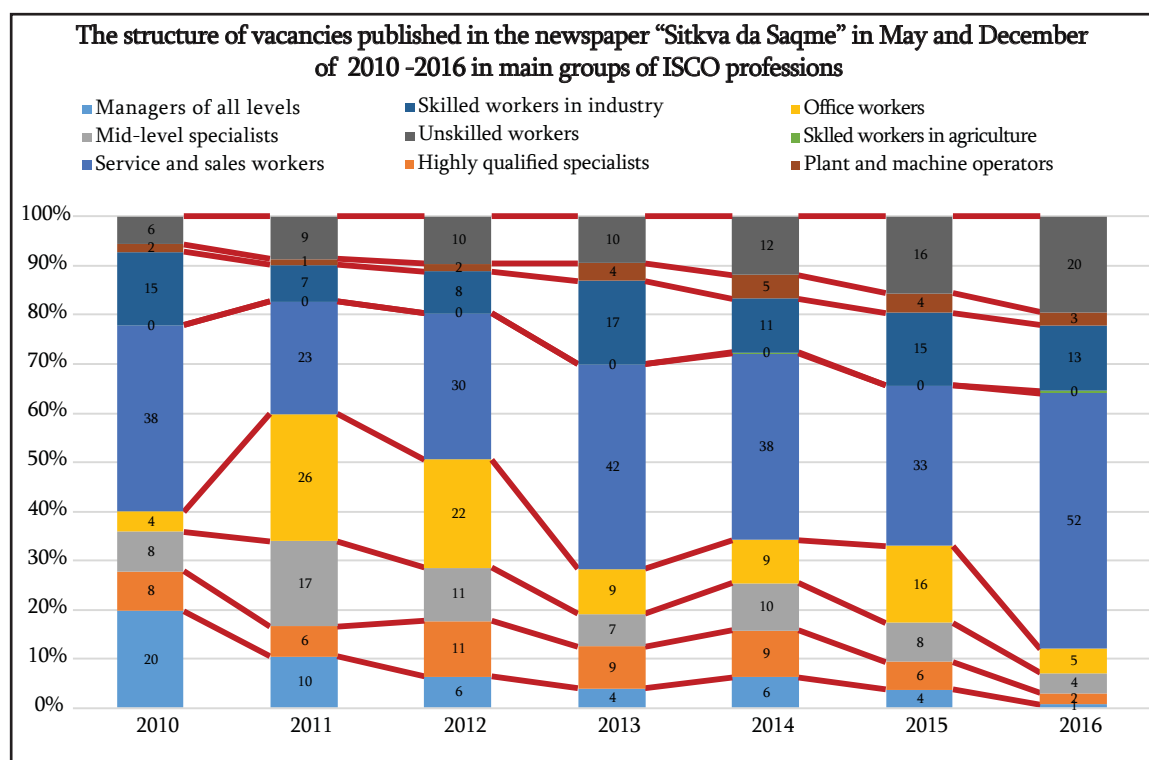
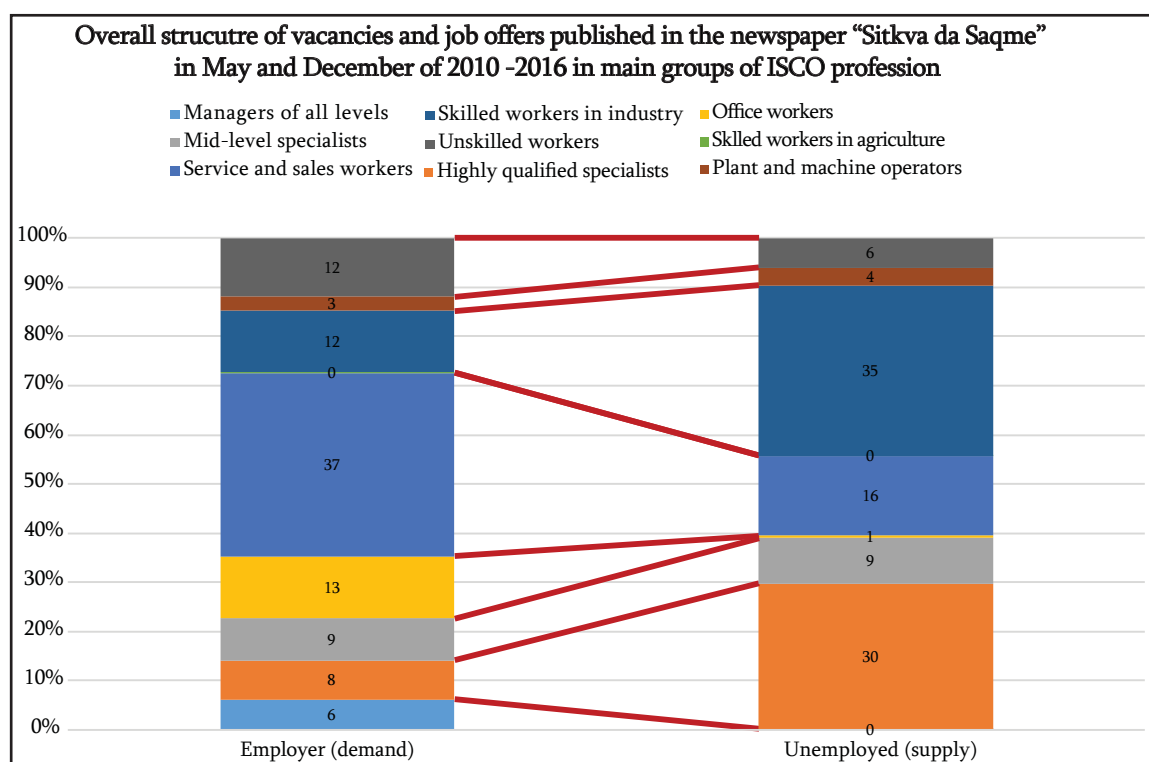


Chart N43



Newspaper “Sitkva da Saqme” published announcements not only about vacancies, but also job offers. Thus, this source enables us to simultaneously conduct correlative analyses for the demand and supply. As can be seen from the cumulative structures of 2009-2015, the supply and demand have substantially different structures.

In response to 30 percent of offers in professions that require high qualifications, only 8 percent fall in the demand part (Chart N43).

A similar asymmetry is observed in the case of skilled workers in industrial enterprises, where only 12 percent is in response to 35 percent of offers. However, of 16 percent of the offers to workers in the

service field and trade organizations, the response in the demand part is 37 percent of vacancies.

Overall, these two structures are in very weak correlation with each other, and the correlation coefficient stands at only 0.2921.

The above-mentioned structural analysis only reflects the percentage distribution. This in itself is very important for the qualitative analysis of supply and demand. We should note that job offers from the unemployed in the database are 1.8 times higher than the demand by employers for work.

In-depth interviews with employers revealed that jobs.ge is the most important portal for them, enabling job seekers and employers to meet. During the in-depth interviews, 10 leading companies from 10 different sectors of the economy were interviewed. None of them mentioned the newspaper “Sitkva da Saqme” as a source of searching for a work force. This once again confirms the assumption that this resource focuses on a totally different segment.

All in-depth interview respondents named online resources as a means for searching for employees, which means that the universal internetisation project currently being implemented is also very important in the context of employment.

It should be noted that even large companies tend to look for desirable personnel through relatives and friends. The larger the company, the lower the likelihood of seeking employees through a non-institutional search.

The main reason of staff turnover was named by almost all respondents as disciplinary. Only the wine producing respondent did not name this as a reason. In all other interviews, except for this respondent, tensions between the employee and the employer were clearly felt.

From the list of professions that are difficult and easy to find, an important circumstance emerges. As a rule, specialists from technical branches and fundamental science (physics, mathematics, chemistry) are difficult to find while it is easy to find competent staff in the social and humanitarian professions.

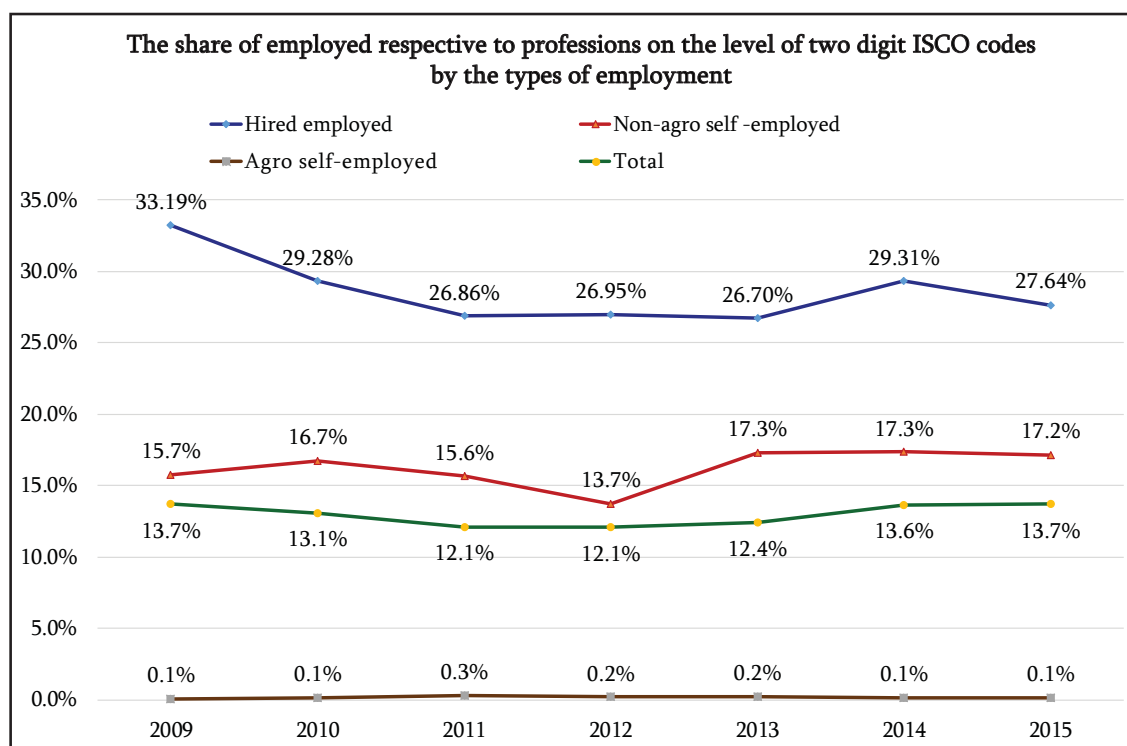
4.5 Effectiveness of the educational system in the context of structural unemployment

The relevance of employment and a profession received through education is the most important component of the employment and unemployment analysis. The Integrated Household Survey provides an opportunity for such analysis. In particular, the study toolkit envisages the classification of the profession of respondent's actual employment, as well as the profession confirmed by a diploma or other type of certification.

According to the survey data (see Chart N44), only 13.7 percent of the total number of employees is employed according to their certified professions at the level of the ISCO double-digit codes, which is exceptionally low.

As everywhere, here, too, the main determinant of the average rate is agricultural self-employment - almost half of the total employment. Among those who are employed this way, only a minority is employed according to certified professions.

The highest level of unemployment according to profession is observed among the hired employees - 27.6 percent, which is generally very low. In 2009-2013, the rate was characterized with a decreasing trend. After the growth in 2014, it again declined in 2015. As for the same data among those who are self-employed in the agricultural sector, the share is insignificant- higher by only 3.5 percentage points than the average indicator (17.2 percent and 13.7 percent respectively).



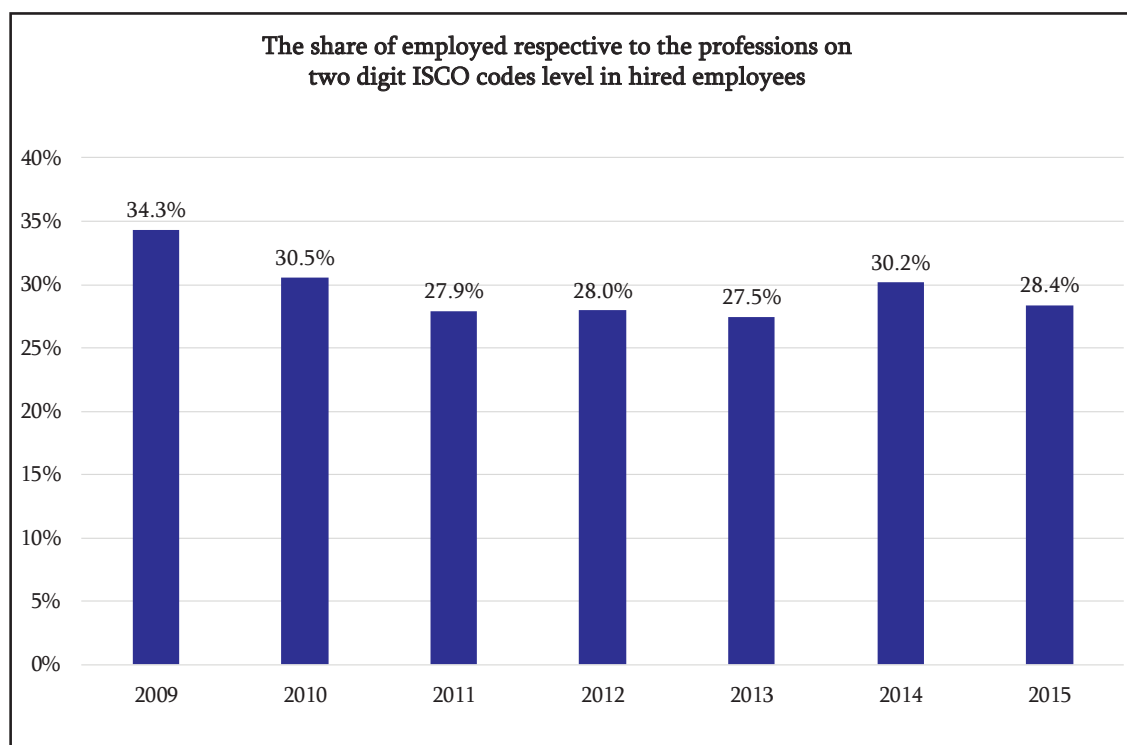
Source: IHS database processed by the group of authors

The not enviable tendency of the number of those who are employed according to their professions may indicate two facts:

1. The education system fails to provide knowledge which ensures employment in accordance with profession;
2. Education received during the Soviet period cannot meet the demands of the modern labor market.

From these two conditions the first is more significant, as on the labor market, the weight of those who received their education during the Soviet period decreases in proportion as time passes.

Chart N45



Source: IHS database processed by the group of authors

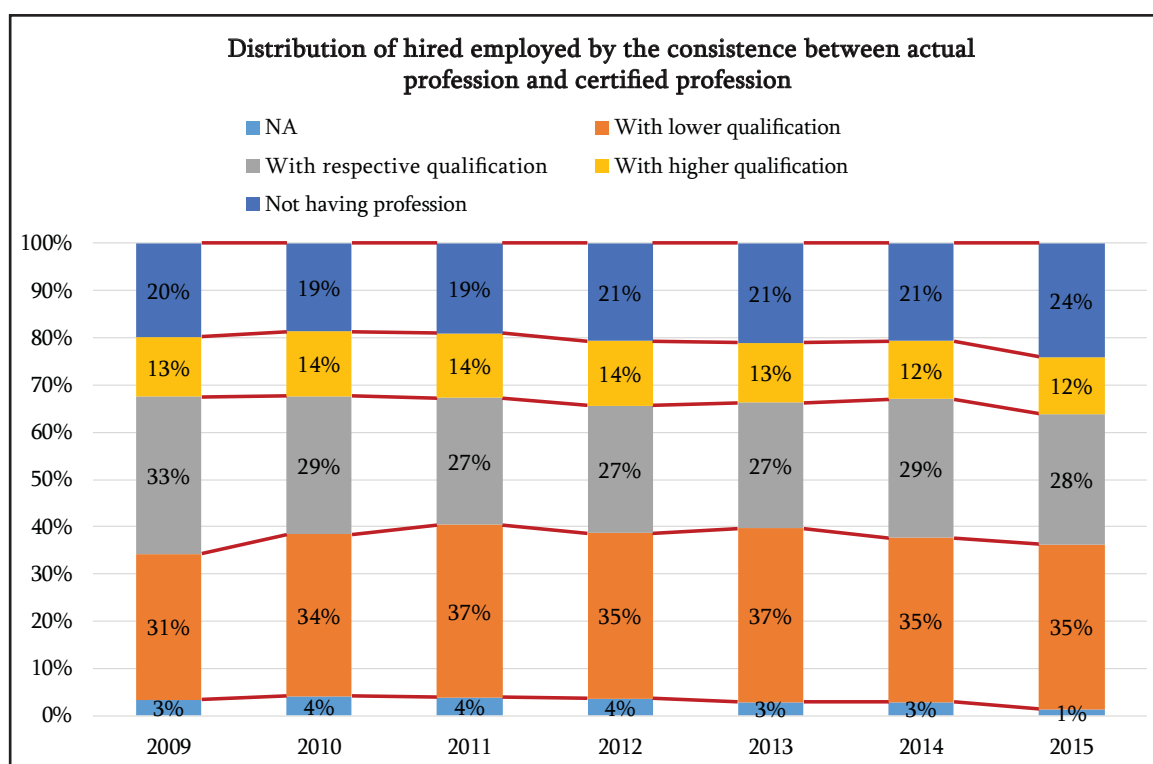
12 percent of those who are contracted are employed with a qualification higher than the qualification by diploma, while 35 percent have a lower level of qualification. 24 percent of employees do not have any certified profession. The number of this category of employees has somewhat increased in 2015 comparison to 2014.

The structure of relevance of the actual employment with the qualification according to the diploma shows that, according to the received qualification, it is difficult to find a job in Georgia. This can be determined by two main circumstances:

- Educational qualification and real knowledge are not relevant to each other, and obtaining a diploma does not equate to knowledge gain;
- Either the structure of professions offered by educational facilities does not match the labor market demand structure or the educational institutions are preparing educated personnel according to qualification, but with fewer employment prospects.

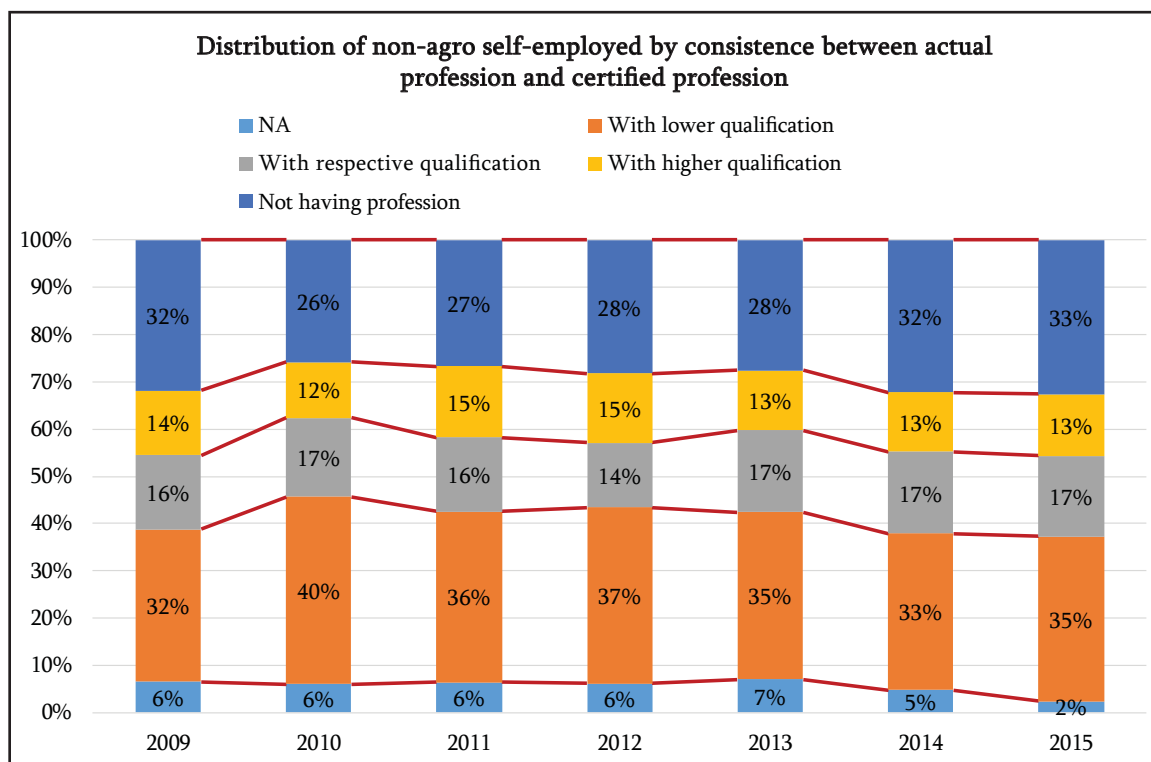
Most likely, these two reasons are proportional to force and demonstrate that the educational system is less oriented at the labor market. The distribution structure of the employees by contract according to the actual profession and the professions indicated in the diploma, which has not changed during the last eight years (2009-2015) also indicate the same.

Chart N46



Source: IHS database processed by the group of authors

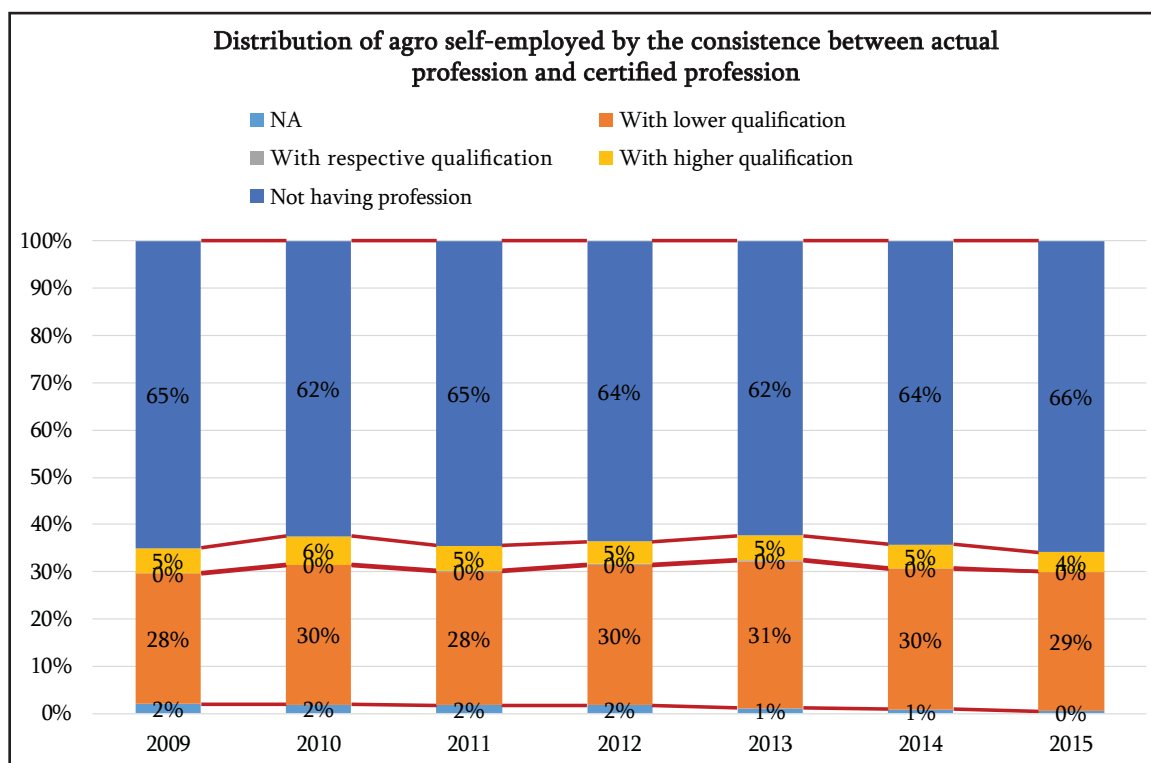
35 percent of those who are self-employed in non-agricultural sectors are employed with qualifications that are lower than the profession according to their diploma, while 33 percent do not have a profession. In the study period, the increase of the weight of those who do not have a profession shows a clear negative trend of growth. Only 13 percent of non-agricultural self-employed are employed with higher qualifications than the qualifications provided by their diplomas.



Source: IHS database processed by the group of authors

In terms of matching employment according to profession by diploma with the actual profession, the most severe situation, as expected, is regarding self-employment in rural areas. 66 percent of the agro self-employed do not have a profession and 29 percent are employed with a lower qualification. This group received a certain profession but was unable to find employment according to their professions, forced instead to become employed on their own farm (See Chart N48)

Chart N48



Source: IHS database processed by the group of authors

The employment weight in accordance with qualification is in fact zero in the agricultural sector. The number of rural employed who are certified agronomists, veterinarians, machine-operators, melioration specialists and persons with other agricultural professions is almost close to zero. Therefore, we can conclude that persons with certified agricultural professions almost never turn to agricultural self-employment, but it does not mean that they have a real possibility to be employed by their profession.

From trends that were revealed in 2009-2015, the slight increase in the number of agro self-employed who do not have professions is noteworthy. As for the weight indicator of those who have lower certified qualification, it is stably in the range of 30 percent.

The share of those who are employed with higher qualifications is only 4-5 percent among the agro self-employed. This seems strange at first glance, but there are some professions that are considered to be lower-skilled than activities in the agricultural sector (for example, the 9th group - “Non-qualified workers”, 8th group - “Plant and machine operators, machinists, assemblers and metal craftsmen”). Overall, in NACE aggregated groups, the weight of those employed according to their professions at the level of ISCO two digit codes, is the highest in the education and health sectors. Yet it is also in these sectors that the employment indicator in accordance with qualification is also characterized by a tendency of reduction.

The same indicator is also relatively high in the most diverse group, which include transport, hotels and restaurants, financial intermediation and public administration bodies. It should be noted that this figure has a tendency to decrease.

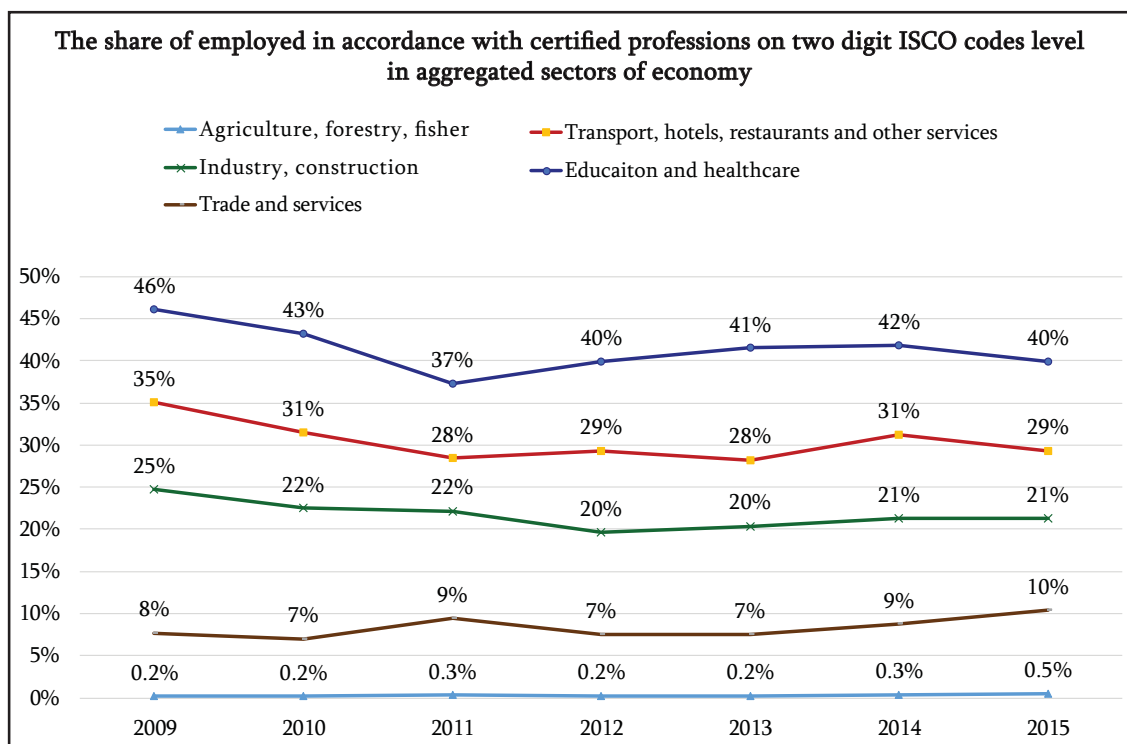
In the industry and construction sectors, the indicator of employment according to qualification is in the range of average, although it is also characterized with a tendency to decrease.

The only sector where the indicator of employment in accordance with qualification shows a growth tendency is trade and households service, although this figure itself is too low, with quite weak growth.

In the agricultural sector, the employment indicator according to qualification is so low that it is not worth discussing.

Overall, in leading sectors, the clear reduction tendency of the employment indicator according to qualification once again underlines the fact that this problem is more connected with the education system, rather than with the Soviet legacy. While the Soviet legacy will decrease and transient, the downward trend is a sign of future problems.

Chart N49



Source: IHS database processed by the group of authors

The problem of matching the educational system with the labor market, revealed during the Integrated Household Survey data analyses, was also confirmed by the in-depth interviews. Almost all respondents named the low level of actual knowledge as one of the main difficulties in searching for personnel. Against this background, it is only natural that the majority of surveyed companies applied headhunting as a recruitment practice.

From other in-depth interviews another issue was identified: entrepreneurs are not satisfied with the product of the education system or the qualifications of the labor force trained by it. However, none of the respondents think about taking any steps to improve the existing situation, not even through direct contact with higher educational institutions.

Thus, the problem of mismatch of the educational system and the economy has to be resolved by the state as the market, as world practice shows, cannot resolve it on its own.

5. Institutional Weaknesses of the Labor Market

An important aspect of the in-depth labor market analysis is ways to search for jobs. The Integrated Household Survey contains important information about the job search.

According to the IHS, about 1/5 of the unemployed (18.8%) are actively looking for a job, while over 4/5 (81.2%) are not. Unemployed citizens who are job seekers were mostly looking for employment with contracts. Solving the employment problem through starting one's own business is minimal.

Table N3: Distribution of the unemployed by job search methods (Percent)

	2009	2010	2011	2012	2013	2014	2015
Yes, I was looking for a paid work:	20.5	21.1	20.6	21.6	20.7	18.4	18.8
I was screening announcements in the press, through TV, Internet and other means	2.7	2.4	2.5	3.0	3.4	3.0	3.0
I was searching for information through acquaintances	16.9	17.8	17.4	18.1	17.0	15.0	15.3
I was directly contacting the administration	0.7	0.6	0.5	0.4	0.3	0.3	0.4
I was publishing announcements in the press, through TV, Internet and other means	0.0	0.0	0.1	0.0	0.1	0.1	0.1
I applied to the employment service	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Yes, I tried to start my own business:	0.1	0.2	0.1	0.2	0.2	0.2	0.0
For starting my own business, I applied to the relevant authorities for a permit	0.0	0.1	0.0	0.1	0.1	0.1	0.0
I established contacts with potential partners	0.0	0.1	0.1	0.0	0.0	0.0	0.0
I tried to take a loan/credit to start a business	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I was looking for a building, raw materials, equipment, land plot	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	0.0	0.0	0.0	0.0	0.0
No, I did not try:	79.4	78.6	79.3	78.2	79.1	81.4	81.2
In total	100	100	100	100	100	100	100

Source: IHS database processed by the group of authors

It is important to group job search means according to the degree of institutionalization on the labor market. In other words, how the system works, by which citizens are looking for work. The means listed in the table subject above, we grouped depending on whether they include a formalized approach to searching for work or to starting one's own business. Accordingly, we have defined two conditional job search groups:

1. Institutionalized job seeking, which includes respondents who answered the following questions regarding their job search:
 - I was screening announcements in the press, through TV, Internet and other means;
 - I was directly contacting the administration;
 - I was publishing announcements in the press, through TV, Internet and other means;
 - I applied to the employment services
 - To start my own business I applied to the relevant authorities for a permit;
 - I established contacts with potential partners;
 - I tried to take a loan to start a business.
2. Non-institutionalized job seeking, which included the respondents who answered the following questions regarding the job search:
 - I was searching for information through acquaintances;
 - I was looking for a building, raw materials, equipment, land plot;
 - Other

The distribution of aggregate estimates shows that in Georgia, the labor market is institutionalized only by 20 percent (see Chart N50). Thus, social capital remains the main source for seeking a job. .

The mainly non-institutional character of the job search, which has not changed over the years, high-

lights the imperfection of labor market. The institutionalisation of the demand and supply on the labor market is one of the first activities to address the problem of unemployment. This is quite a complex goal that requires thorough understanding and consideration of the specificity existing in Georgia.

Chart N50



Source: IHS database processed by the group of authors

The distribution of jobs according to their generation sources is important. From the database of the Integrated Household Survey, we have identified four job types according to the sources of their generation:

1. Jobs created by the state, which included employees of state institutions and public sector organizations;
2. Jobs created by the private sector, which included employees of private enterprises and organizations and entrepreneurs themselves with hired workers;
3. Jobs created through own skills, which included those who were non-agricultural self-employed, whose employment was determined by using their skills. Individual entrepreneurs self-employed using their professional knowledge, belong to this category.
4. Spontaneously created jobs, which included those who are self-employed in agriculture and petty trade, taxi drivers and others- in short, self-employed in the fields that require low capital capacity and in the fields those are not characterized by demand for high qualifications.

According to the situation in 2015, 53 percent of jobs were created spontaneously, 27 percent of jobs were created by the private sector, 15 percent were created by the state and 4 percent - based on their own skills.

The problem related to the spontaneous nature of employees and employers was revealed during the in-debt interviews. Despite all respondents using an Internet resource (jobs.ge, LinkedIn, Facebook, android application and so on), these resources, due to the lack of a unified system, were not connected to each other. The institutionalization of the platform of “meeting” of employers and job seekers, defining relevant rules and framing them in one system, is a higher objective than disseminating vacancies via the Internet.

The general background highlighted as a result of conducting interviews reveals that the employee has just responsibilities and the employer has just rights. The state placing these processes within an institutional and legal framework is an important and topical task.

6. Key Findings

6.1 Empirical findings

1. The indicator of aggregated unemployment in Georgia (including under-employment and hidden employment) was 25 percent in 2015. This indicator was characterized by a decreasing trend in 2009-2015, which became especially strong in 2014-2015.
2. 43 percent of the aggregated unemployment level consists of the unemployed according to ILO criterion, approximately one third - 32 percent is the share of under-employment and one fourth - 25 percent - the share of hidden unemployment.
3. Aggregated unemployment indicators calculated by urban and rural areas are not that significantly different from those of the indicators calculated by ILO criteria.
4. In 2015, 38 percent of unemployed people identified by ILO criteria according to certified profession were highly qualified specialists; 17 percent of unemployed people were mid-level specialists, and 4 percent lower than medium specialists.
5. The distribution of the unemployed in aggregated groups by certified professions is analogous to the structure of the employed in the same groups - the correlation coefficient equalling almost 1, which means that a certified profession according to a diploma does not have a decisive influence on employment.
6. The structures of employed and unemployed by qualification are even identical according to ISCO two digit codes: the correlation coefficient equals almost 1 here. In 2009-2015, the correlation coefficient showed an upward trend, i.e. the structure of employed and unemployed became more and more similar.
7. The unemployment level among the highly qualified specialists according to ILO criteria in 2015 was higher than the overall unemployment level by 20.8 percent. The different vector was also analogous in 2009-2015. The unemployment level is almost twice lower than overall level among specialists with lower qualifications. It is also low among those who do not have a profession.
8. 48 percent of unemployed identified according to the ILO criteria in 2015 were short-term unemployed, while 52 percent were long-term unemployed. The distribution of unemployment by duration did not change in 2009-2015.
9. In 2015, nearly half of total employment - 48.4 percent - was a share of self-employment in the agricultural sector. This indicator was characterized by a reducing trend in 2009-2015, as a result of which it dropped below 50 percent for the first time in the last 25 years.
10. The next weighty component in the employment structure is trade and household services, the weight of which was in the neighbourhood of 10 percent throughout the research period.
11. According to the data of the Integrated Household Survey, the weight of employment in the real sector of the economy (without the agricultural sector) is 10.6 percent of the total employment. This figure remained unchanged throughout 2009-2015. The employment weight in the household service sector was 41.0 percent in 2015. In 2009-2015, it was characterized by an overall upward trend.
12. In 2015, 53 percent of jobs were created spontaneously, 27 percent were generated by the private sector, 15 percent by the state, and 4 percent based on a person's own skills.
13. In 2009-2015, the reduction in the weight of spontaneously created jobs and the increase of the weight of jobs created by the private sector was clearly noticeable. At the same time, the slightly noticeable reduction in the weight of jobs created by the state and the stable weight of jobs created based on a person's own skills were apparent.
14. The weight of the highly qualified professionals among the long-term employed was 32 percent higher than their weight in the economically active population, which means that a highly qualified professional has a 32 percent higher than average chance to have "the status" of unemployed. In case of low qualified professionals, this chance is 42 percent lower than average. The chance of long-term unemployment is 16 percent lower than the average in the absence of a profession.

15. In the context of structural unemployment, the problem of “unsatisfied” employed is no less important than the problem of long-term unemployment. These are people who could not obtain jobs according to their qualification and agreed to other jobs or jobs with lower qualifications. Formally they are employed, but in reality they are not satisfied by their jobs. The level of structural unemployment detected this way was 25.8 percent in 2015. In 2009-2015 this indicator showed a weak tendency of reduction.
16. The level of hidden structural unemployment is the highest, as a rule, among the population with vocational education - 58.2 percent. This indicator is also high among the population with higher education - 48.2 percent, but is substantially lower than the unemployment level among the population with vocational education. This means that vocational education gives a very low chance of finding employment according to qualification.
17. The aggregate unemployment level, including hidden structural unemployment, is at a very high level among the population with vocational education - almost 75 percent. The aggregate unemployment level among the population with higher education is essentially low, but in general is still very high - almost 63 percent.
18. The aggregate unemployment level, including hidden structural unemployment, was characterized by a tendency of invariability in 2009-2015.
19. The comparison of the distributions of employed according to the ISCO two digit codes demonstrates that the distribution of employed by certified and actual profession does not correlate and has a correlation coefficient of -0.0792. This means that the professional structure of certificates issued by educational institutions does not coincide with the needs of the labor market.
20. If we consider the distribution of employed by certified and actual professions, without those who are self-employed in the agricultural sector, the correlation coefficient increases significantly, but its absolute value still remains at a very low level (0.2085).
21. At the level of ISCO two digit codes only 13.7 percent of the total number of employed are employed according to their certified professions, which is a very low indicator.
22. The number of those employed according to their professions is relatively high in the case of the self-employment in the non-agricultural sector, where this rate is at the level of 17.2 percent or even higher than the average indicator, although the number in itself is very low.
23. The employment level according to profession is highest among those who are employed by contract - 27.6 percent, which is also very low. In 2009-2013 this indicator reduced. After the increase in 2014, it again decreased in 2015. To name the Soviet legacy as the reason for this has already become illogical.
24. Approximately 19 percent of the unemployed were actively searching for a job, while approximately 81 percent were not. The unemployed citizens were mainly seeking jobs with contracts. Employment by starting one’s own business is minimal.
25. The assessments show that the labor market of Georgia is institutionalized by 20 percent. Thus, the main source for job seekers is still social capital (acquaintances, friends, relatives).

6.2 Qualitative findings

From the empirical analyses described above, the following qualitative findings were revealed:

26. The majority of the jobs generated on the Georgian labor market do not require high qualification. The country’s economy mainly creates jobs with low qualifications which do not require special education.
27. Among the unemployed, the largest group are those who do not have a certified profession, i.e. those who do not have a profession.
28. The majority of the long-term unemployed (42 percent) are highly qualified specialists. This trend was retained during the whole research period (2009-2015). The weight of specialists with mid-level and low qualifications is relatively low among the long-term employed.
29. During the last 6 years, positive developments taking place in the employment structure, demon-

strated in the reduction of the agricultural employment weight, were determined by the weight increase in the service field. This positive trend has left practically untouched the real sector of the economy (without the agricultural sector).

30. The weight of the private sector in generating jobs is increasing, which mainly takes place at the expense of reducing the weight of spontaneously created jobs.
31. The correlative analyses of the employed and unemployed according to certified profession demonstrated that certifying education received from the education system does not play an important role in searching for jobs.
32. The analyses of the relevance of actual employment with a qualification according to a diploma demonstrates that searching for jobs according to the qualification is very difficult in Georgia, which in reality can be a result of two aspects:
 - a. The education qualification and real knowledge do not coincide and the received diploma does not signify gained knowledge;
 - b. The structure of professions offered by educational institutions does not coincide with the structure of the demand on the labor market and educational institutions are preparing personnel who have a diploma of educational qualification, but have lower chances of employment.
33. The paradigm of structural unemployment in Georgia can be described in the following way: On the one hand, the education system does not or cannot prepare personnel with relevant qualifications (in demand on the market). On the other hand, higher and vocational education does not provide students with relevant knowledge (qualifications), i.e. the education qualification and actual knowledge do not coincide. The personnel prepared by the education system lose their qualifications as a result of long-term unemployment, or are forced to work in jobs that require lower qualifications. De-qualification of the labor force is one of the negative results of the structural unemployment in Georgia.
34. The problem of “unsatisfied” employed as the manifestation of structural unemployment is the result of the low congruence of the education system and the labor market.
35. The Georgian economy is unable to generate highly qualified jobs. As a result, hidden and “unsatisfied” structural unemployment, as well as unemployment calculated by the ILO criterion, is the highest among those who have high qualifications according to education qualification.
36. The agricultural sector remains the absorbent of the low-qualification work force. This sector “absorbs” the part of the work force which is unable to find any kind of employment.
37. The weight of the private sector in generating jobs is essentially increasing, which undoubtedly is a positive trend, although its tendency is unsatisfactory and does not have great growth potential.
38. The weight of agricultural self-employed in total employment is decreasing, which is also a positive tendency. But the rate of decrease is not so high as to determine important changes in the employment structure of Georgia.
39. The hidden structural unemployment level is essentially high in the group with vocational education. The certified specialists of this class, as a rule, are successfully replaced by those who do not have professional qualifications, but are more actively seeking jobs.
40. The level of institutionalization of job searching is extremely low in Georgia, which means that in the search for jobs, acquaintances, friends and relatives play the leading role.
41. The non-institutionalized character of searching for jobs, which has not changed for years, denotes the imperfection of the demand-supply mechanism on the labor market.

7. Recommendations

The following recommendations were developed on the basis of the qualitative findings revealed as a result of the research:

1. In order to identify in-depth trends of the unemployment structure, it is necessary to conduct regular complex analyses of the databases within the Integrated Household Survey.
2. For more comprehensive study of unemployment and to develop a more effective employment policy, the unemployment level should be calculated not only by the ILO criteria, but also using the aggregated indicator which also includes under-employment and hidden unemployment.
3. In order to develop an effective employment policy, it is necessary to create a system of regular registration of both the unemployed and job vacancies.
4. It is expedient to start calculating the indicators of structural unemployment used in world practice; including the construction of the Beveridge Curve.
5. Taking into account that Georgia's economy mainly creates jobs that require low qualifications, we consider it necessary to speed up work on the Industrial Policy of Georgia which should determine the ways of transition to a knowledge-based competitive economy.
6. As the largest group of unemployed are those who do not have professions, we consider it worthwhile to develop a system that ensures the receipt of labor market-demanded certified professions by those who do not have professions.
7. By taking into account that the majority of long-term unemployed are highly qualified professionals, It would be expedient to conduct periodic research of the in-demand labor market professions that require a high level of qualification, as well as to regularly inform educational institutions about the results of those research and take the findings into account during the accreditation of education programs.
8. As the weight of the real sector of the economy (without the agricultural sector) in total employment does not increase, it is necessary to implement a more effective SME support policy in this sector, especially in terms of ensuring real access to finances.
9. With the purpose of making a significant increase in the weight of the private sector in job generation, we suggest a set of moral and financial (fiscal) incentives is developed for job creation by private enterprises.
10. In order to ensure concurrence between the education background and real knowledge, it is essential to make farther steps for improving the effectiveness of the quality management of higher and vocational education.
11. The structure of professions offered by educational institutions should be in compliance with the structure of the demand of the labor market, which requires the development of direct relations between the educational institutions and the employers, their associations and leading HR companies.
12. In order to address the problem of de-qualification of the labor force due to long-term unemployment, it is necessary to establish an efficient system for identification and diagnosing of the long-term unemployed, and their professional rehabilitation or retraining.
13. To increase the concurrence of the education system and labor market, we suggest including large employers or their associations, and respective representatives of large HR companies in the process of the accreditation of appropriate educational programs.
14. For further substantial reduction of the weight of rural self-employment in total employment, it is necessary to speed up the concentration of agrarian farms through cooperation, development of agrarian clusters and the use of modern technologies.
15. Taking into consideration that the hidden structural unemployment rate is substantially high in the group of people with vocational education, we suggest revising the curricula of such educational institutions with regard to concurrence with the demands of the labor market and elaboration of targeted programs for the employment of graduates.
16. Development of internet portals and organizing job fairs and weeks are not enough for improving

the institutionalization level of job seeking - it is necessary to speed up the creation of the network of employment centers which is envisaged by the state strategy for formation of a labor market.

17. In order to ensure the effectiveness of the programs elaborated within the frame of the employment policy, we consider it essential to elaborate a complex system for monitoring and evaluation based on a net of measurable indicators.

8. Scenarios for Development of the Labor Market

Unemployment is a systemic problem and its reduction requires the implementation of complex measures. The present model cannot pretend for high preciseness, since elaboration of a precise model requires a wide circle of indicators. It is necessary to cooperate with the actors envisaged by the model and analyse the structure and possibilities. It is also important to study information arrays of institutional statistics and analyse informational flows.

The present model is based on the following three conditions, identified by the results of the study:

- High share of employed with qualifications lower than a certified profession in total employment;
- High share of the labor force not having a certified profession in an economically active population;
- Amorphous high weight of self-employment in agriculture in total employment.

Of the identified problems, the groups not having a certified profession and those self-employed in agriculture are substantially crosscutting.

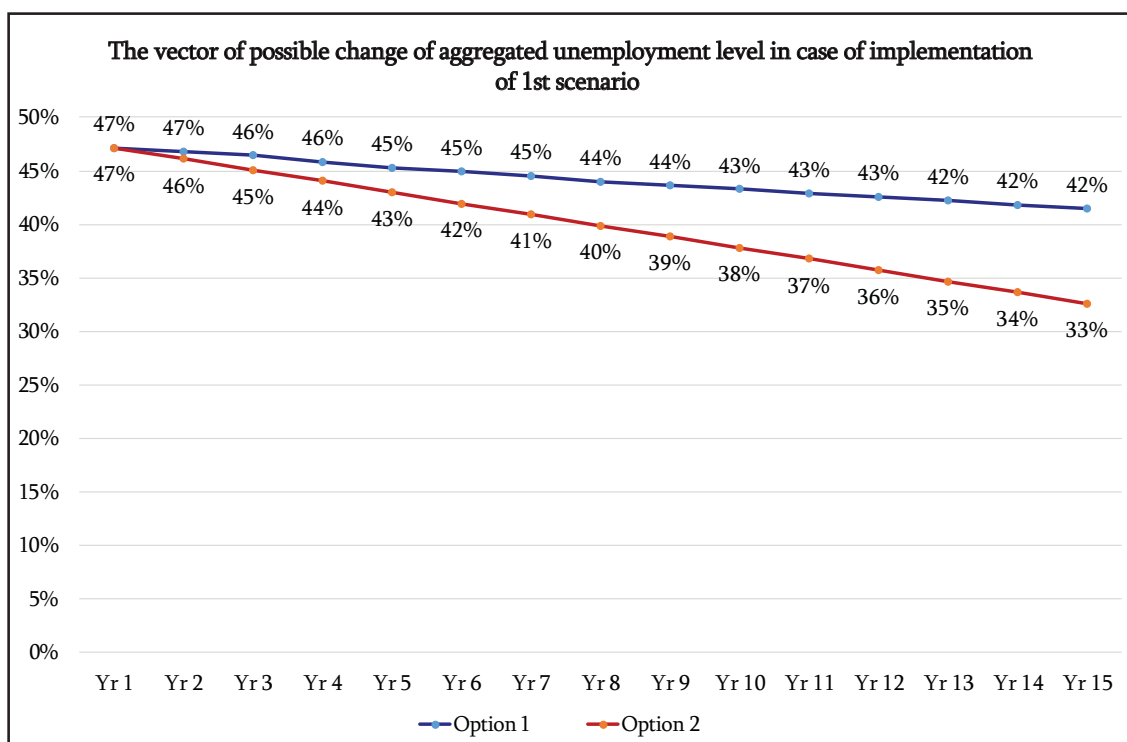
Three scenarios for further development of the labor market are given below, a mean reduction of the scales of the above three problems:

- Retraining of those not having a profession and encouraging them to obtain the skills in demand on the labor market, which is outlined by recommendations Nos 6, 10, 11, 13 and 15;
- Implementation of an efficient policy by the government in other equal conditions, with the purpose of increasing the demand of the labor market for the professions necessary in the real sector, which is outlined in recommendations Nos 5, 8 and 9;
- Reduction of the amorphous high number of self-employed in agriculture, to which the recommendation No 14 is associated.

Due to the above mentioned, the following three scenarios are viewed:

Scenario 1: The Ministry of Education and Science reviews the results of the survey, but the strategies for vocational and higher education improves basically independently, without active participation of the ministries of Economy and Sustainable Development, Agriculture and Labor, Health and Social Affairs, due to which, the expected requirements of the labor market are not fully envisaged.

Chart N51



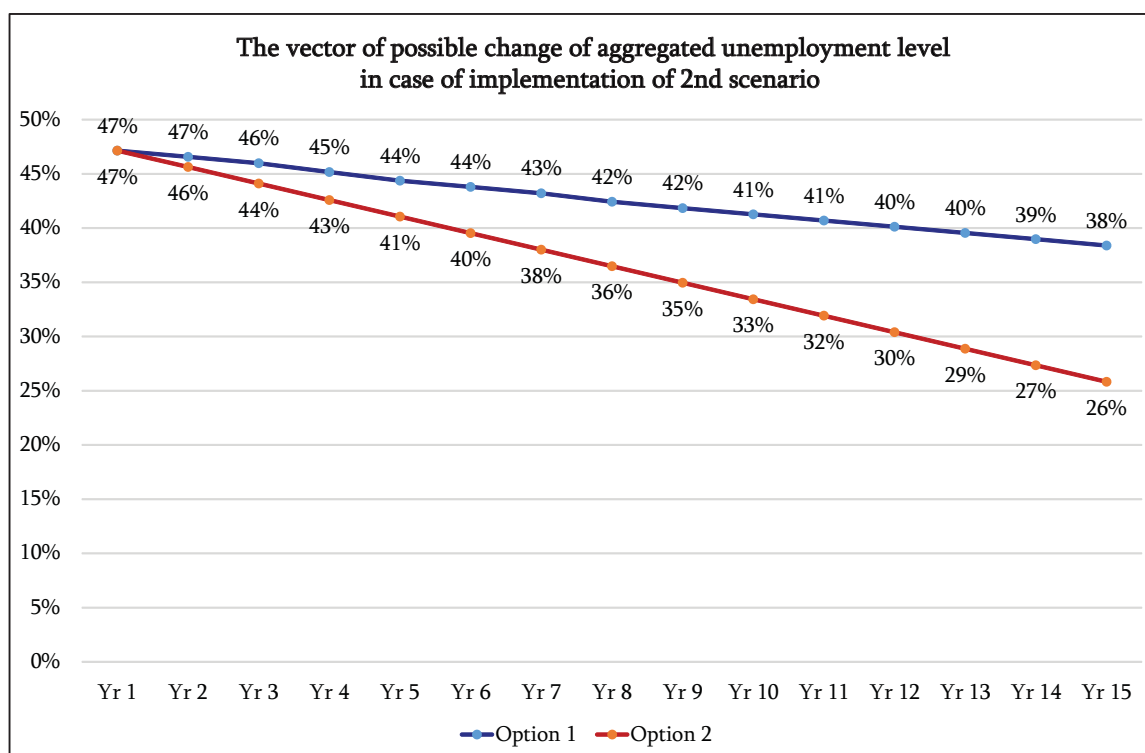
In such a case:

- The labor force retrained within the frame of vocational education will have just 24 percent chance for employment (taking into consideration in average 76 percent unemployment rate among those with vocational education);
- The graduates of higher education institutions have a 34 percent chance for employment;
- If the strategy for vocational education states merely the task of retraining and does not cover professional orientation of the students of upper grades of secondary school, almost 80 thousand¹¹ individuals can be added to the potential labor force, of which about 60 thousand will be additional jobseekers, according to the existing proportions.

For the purpose of better illustration of the expected results of implementation of the first scenario, two options can be viewed (see Chart N 51): the first envisages professional retraining of 30 thousand individuals during the year in conditions of an unchanged strategy for higher education, and second – vocational retraining of about 30 thousand individuals during the year and elaboration of the strategy of higher education with the focus on the labor market, independently from other public agencies.

Scenario 2: The Ministry of Economy and Sustainable Development takes into consideration the results of the study and strengthens the policy focused on the increase of small and medium businesses in the real sector; at the same time the Ministry of Agriculture continues active promotion of the concentration of agrarian farms through cooperation and increase of their productivity. Taking into consideration these strategies, the Ministry of Education and Science ensures concurrence of the strategies¹² of vocational and higher education with the demands of the labor market. Meanwhile, the level of institutionalization of the labor market is still low, i.e. the matching point of a trained labor force and announced vacancies is not institutionalized.

Chart N52



In such a case:

- 20 percent of the labor force retrained or having higher education and seeking jobs institutionally, have a very high chance to find employment, while for the remaining 80 percent, the chance remains the same as in the first scenario;

In order to better illustrate the implementation of this scenario, two options are viewed (see Chart N 52): the first envisages the retraining of about 30 thousand people during the year, in conditions of immu-

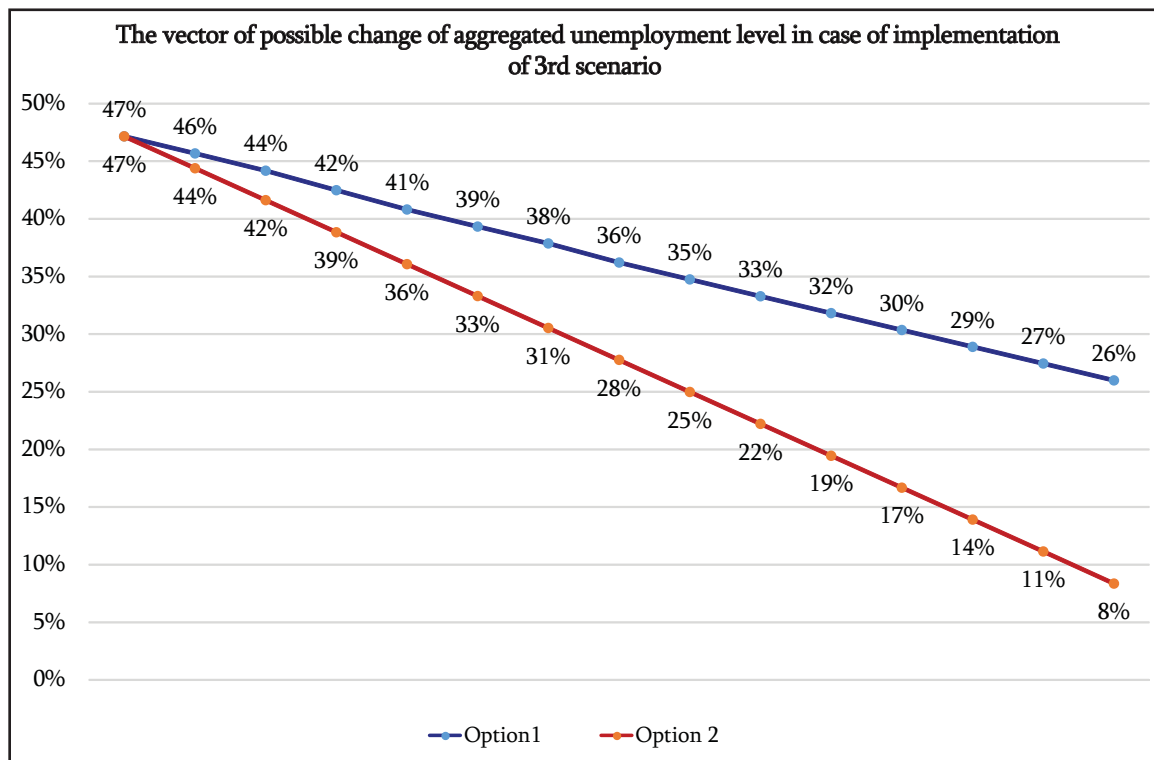
¹¹ According to data provided on the Geostat website

¹² In this scenario, vocational education should cover adults as well as students of the upper grades of secondary school.

tability of high education strategy, and second - vocational retraining of another about 30 thousand people during the year and elaboration of a strategy of higher education with the focus on the labor market.

Scenario 3: The Ministry of Economy and Sustainable Development takes into consideration the results of the survey and strengthens the policy focused on the increase of small and medium business in real economy sector. Further, the Ministry of Agriculture promotes the concentration of agrarian farms through cooperation and the increase of their productivity. The Ministry of Education and Science, also taking into consideration these strategies, ensures the concurrence of the strategies¹³ for vocational and higher education with the demands of the labor market; and the Ministry of Labor, Health and Social Affairs ensure the sharp increase of the level of institutionalization of the labor market.

Chart N53



In such case:

- The weight of retrained individuals or those with higher education, seeking jobs institutionally, will be substantially increased; they will have higher chances for employment. However, part of the labor force will continue non-institutional job seeking. Precise forecasting of this proportion is very difficult. Following the Pareto principle, it can compile 80:20. In other words, the weight of individuals seeking jobs institutionally will be increased up to 80 percent, while the weight of those seeking job not institutionally will be decreased to 20 percent.

Like in the previous scenarios, for better illustration of the expected results of implementation of this scenario, two options are viewed (see Chart N 53): the first envisages vocational training of about 30 thousand individuals during the year, in conditions of immutability of the higher education strategy, and the second - the vocational training of another 30 thousand people during the year and elaboration of a higher education strategy with the focus on the labor market.

The above mentioned analyses demonstrate that merely a focus on vocational education is not enough to solve the systemic problem of structural unemployment as this requires qualitative change at each stage of education.

It is clear that the problems accumulated over 30 years cannot be resolved promptly and the results of any, even the most effective measure, will need years to become substantial.

The simultaneous operation of one or several structures is not enough to achieve significant results, since that requires a synergy of all relevant structures.

¹³ In this scenario, vocational education should cover adults as well the students of the upper grades

Implementation of this task with complex content will be impossible without proper monitoring and assessment systems.

The present calculations demonstrate a basic direction, and they are far from the real model since its elaboration requires much more detailed institutional statistics and inside information. However, this is the first attempt to study the structure of unemployment and structural unemployment in Georgia and its further extension is not just desirable, but essential.

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