Abstract: Youth unemployment in Georgia is severe. In order to bring young people closer to the labour market, the strategy of building vocational education and training (VET) system is actively pursued. However, business engagement in this process is low, impeding the system to provide the skills and knowledge tailored to labour market needs. The purpose of the thesis is to find out the reasons behind the low business engagement. As the study topic is novel and specific to Georgian context, the interviews with VET centres are conducted to explore the subject and give the direction to the research. Consequently, the field of information technology is chosen to base the study on. After analysing the context of Georgia, two hypotheses are derived. In order to test the hypotheses, the method of interviewing enterprises is employed. The research reveals that first, there is a competition from higher education graduates and second, enterprises do not train and therefore, search for workers with relevant work experience. These circumstances discourage business to engage in the VET system in the field of information technologies.

Key words: Georgia, vocational education and training system, business engagement
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1. Introduction

Young people leaving education institutions and entering labor market lack work experience. In order to bring them closer to the labor market, a number of policy strategies are employed worldwide, including building vocational education and training (VET) system. The advantage of the VET over the general academic education is that it compensates the lack of work experience in the following way: VET trains young people in specific occupations tailored to labor market needs; it provides the youth with hands-on knowledge and skills acquired during doing something instead of just reading about it or observing it being done.

In Georgia, the strategy of building vocational education and training (VET) has been actively pursued recently. However, the mentioned advantage of VET has not been realized in practice so far. Previous research has identified several factors contributing to the failure to build the VET system matched with labor market needs.

1.1 Previous research

There is a scarcity of previous research fully focused on the VET system as it is quite a recent topic in Georgia: active reforms in this field have been launched since 2005. German Technical Cooperation Agency (GTZ) in 2010 has researched the mismatch of VET with the labor market needs in Georgia.

According to this research, the main shortcomings of the VET system can be classified in two categories: firstly, sectors employing large numbers of labor with technical skills are not covered by the VET system (GTZ, 2010).

Secondly, the existing VET programs do not match the needs of the business sector as business does not engage in the system (GTZ, 2010). Changes and technological developments take place in companies. Thus, without cooperation with them, the education provided by the VET system is most likely to be outdated.

The first type mismatch is thoroughly studied by GTZ (2010). This organization has conducted labor market surveys and found out a number of industries demanding the occupations that are not provided by VET centers. Since the companies in these industries are experiencing skill shortages, most of them provide in-house training. Some of them even send their employees abroad for upgrading their skills. Interviews with the companies unraveled that they are willing to build connections with the VET centers: if the VET centers manage to provide basic occupational skills, they are ready to offer in-house training to the VET students.

Even though these companies already contribute to skill formation of their workforce, the involvement of VET centers is still beneficial: occupational skills acquired at VET centers will
increase the employability of the workers. Thus, the workers equipped with occupational skills acquired at VET centers together with the firm-specific skills will be able to benefit from future professional mobility.

The second type mismatch and its underlying reason are not explored by the GTZ study. The explanation for low business engagement in the system is expressed in few words: employers do not perceive their involvement to lead to mutual benefits. However, the reasons behind that perception are not researched.

1.2 The aim of the research

The aim of this study is to fill the literature gap and find out the causes of low business engagement. Correspondingly, the research question of the thesis is:

What are the reasons for low business engagement in the VET system in Georgia?

While this paper cannot explore all underlying causes, identifying the part of them is already a step forward, especially when the topic is not researched previously in Georgian context.

Once the aim and the research question of the thesis are presented, this chapter continues as follows: The classification of skill formation systems by Busemeyer and Trampusch (2012) is introduced and in reference to this classification, Georgian vocational education and training system is studied. Afterwards, the concept of business engagement in the VET system in Georgian context is defined and the discussion is furthered accordingly.

1.3 Youth unemployment and the variety of skill formation systems

Youth unemployment is considered one of the biggest challenges of the world. According to International Labor Organization (2015) youngsters are three times more vulnerable compared to prime-age workers and approximately 73 million of youth throughout the world are searching for jobs. Youth unemployment is conditioned by demographic factors together with the economic activity of the country. Along with the population growth, youth cohort puts pressure on the job market capacity by generating more new entrants for every retired on the labor market (Schäfer, 2015), whereas reverse demographic trends increase aged to working-age ratio, creating the fiscal pressure (Bell, 2005).

Although youth integration into the labor market has been a worldwide problem over the last years, the number of countries successfully manages the transition of youth from school to work. However, analyzing demographic factors together with the structure and dynamism of the economy is not sufficient to explain the cross-country variations in youth unemployment
(Biavaschi, Eichhorst, Giulietti, Kendzia, Muravyev, Pieters, Rodríguez, Planas, Schmidl, Zimmermann, 2012). Thus, scholars often seek the explanations for such variations in labor market institutions and education and training policies.

The variety of education and training regimes are captured by different types of qualitative classifications. Busemeyer and Trampusch (2012), based on historical-institutionalist and firm-centered approach, analyze the division of the labor between firms and state in providing training. Accordingly they distinguish four skill formation systems: the liberal, the statist, the segmentalist and the collective (see table 1.1).

Table 1.1 The variety of skill formation systems in advanced industrial democracies (Busemeyer and Trampusch, 2012)

<table>
<thead>
<tr>
<th>Public commitment to vocational training</th>
<th>High</th>
<th>Statist skill formation system (SW, FR)</th>
<th>Collective skill formation system (GE, …)</th>
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<td>Involvement of firms in initial vocational training</td>
<td>Low</td>
<td>Liberal skill formation system (US, IR)</td>
<td>Segmentalist skill formation system (JAP)</td>
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In liberal skill formation systems, skill formation is provided in a general education system which is followed by specific on-the-job training for the entry-level workers. The involvement of both private and public sector is low. The prominent cases of liberal skill formation systems are the United States and Ireland.

In Segmentalist skill formation system, while state commitment is still low, firms are investing substantially in the skills of their employees. The segmentalist system is best exemplified by Japan.

In Statist skill formation systems, in contrast with liberal and segmentalist regimes, public commitment is high. The state is actively supporting vocational education and training (VET) as a viable option for higher education. The primary purpose of VET is to integrate young people with weaker academic abilities into education and employment. However, along with the active public commitment, business is reluctant to engage in the system. Sweden and France represent statist skill formation systems.

While in the segmentalist and statist systems firm involvement and state commitment are in conflict with each other, in collective regimes, both public and private sectors with the support of
intermediary associations such as trade unions and employer’s associations play an active role in VET development. In contrast with statist systems, in collective regimes, state does not intervene too much in the everyday organization of training. Instead, delegate the obligations to the intermediary associations (Busemeyer and Trampusch, 2012). Less state commitment in turn contributes not to marginalize the role of employers (Nilsson, 2008). In addition, VET takes place both in schools and in companies, labeled as dual VET system.

According to this classification of Busemeyer and Trampusch (2012), the countries- Germany, the Netherlands, Switzerland, Austria and Denmark belong to the group of collective skill formation regimes. In cross-country comparisons, it is found that these countries exhibit a much smoother transition from job to work, driving youth unemployment rates substantially down (Biavaschi, et al., 2012). The advantage of the dual VET is the combination of school-based occupational, transferable knowledge with the actual working experience within the training company. While firm-specific on-the-job training leads to the employment in the training company, transferable skills, acquired at vocational schools, serve longer-term purposes by increasing the employability of VET students (Biavaschi, et al., 2012), giving opportunity to make job transitions between and within organizations.

1.4 Vocational education and training system in Georgia

Vocational education and training system in Georgia under the Soviet Union occupation (1921-1990) resembled the VET system of countries, belonging to the group of collective skill formation regimes (Biavaschi, et al., 2012) as the VET was a combination of a classroom instruction and on-the-job training.

The classroom instructions were carried at professional, technical and vocational schools. The majority of these vocational-track schools were attached to state enterprises in order to provide VET students with on-the-job training, followed by employment (Roberts, Fagan, Tarkhnishvili, Ivaschenko, Abidekian, 2000).

After the Soviet Union collapse, VET system also crashed in Georgia. Many of the state enterprises the schools were linked to, either disappeared or experienced the crises themselves. They could not provide VET students with on-the-job training and jobs anymore. Therefore, the majority of vocational-track schools had to be closed or transform into general secondary schools (Roberts, et al., 2000).

Virtual stop of hiring by existing firms was accompanied with the slow growth of labor demand from the new private sector. New entrants have been particularly hit during the transition period (Biavaschi, et al., 2012). In 1990s youth unemployment skyrocketed and the legacy of it is still apparent.
At present, youth unemployment is severe, accounting for 43% and 33.8% for persons aged 15-19 and 20-24, respectively (Georgian Office of Statistics (Geostat), 2015a). These figures demonstrate how difficult the school-to-work transition is in Georgia.

Although the expansion of general education during the transition period can be considered as a positive development aiming for the ‘knowledge era’, building vocational education and training system is regarded as one of the most effective policies in bringing young people closer to the labor market. Therefore, active reforms addressing the VET system in Georgia was launched in 2005.

Since then, a number of priorities are declared for VET development. According to the recent steps taken, state commitment can be labeled as high. Similar to the statist skill formation regimes, the inclusion of all segments of population is highly prioritized and public VET centers, unlike the higher education institutions, are 100% financed by state (Ministry of Education and Science (MoES), 2013). In addition, resembling the collective skill formation systems, the Vocational Education and Training Strategy document for 2013-2020 stresses the importance of the involvement of social partners such as employers, professional associations and civil society in the whole process of VET, including the development and decision-making process (MoES, 2013).

Social partners’ and especially employers’ involvement in the VET system is crucial as they can solve the problem of mismatch by being the best source for information about the labor market needs.

1.5 Business engagement in the VET System

At present, *business engagement/involvement in the VET system* can be defined as being part of sector councils and/or providing internships to the VET students.

In 2009, the Ministry of Education and Science set up *sector councils* that are formed by the representatives of the employer associations, labor unions and the VET centers. The aim of these councils is to support the Ministry in developing and upgrading occupational curricula and standards (National Center for Educational Quality Enhancement, 2015). However, the councils do not function properly and the involvement of employers is the most problematic so far (GTZ, 2010).

Other steps to increase engagement with employers are taken by the VET centers themselves. The purpose of establishing the relationship with business is to provide VET students with internships. However, the success to build long-term relationships mostly depends on informal contacts several VET centers have (GTZ, 2010).

Low business participation is also reflected in high unemployment rates of VET graduates. The results from the interviews with the VET graduates of 2012/2013 academic year, conducted by
the Ministry of Education and Science in 2014, are as follows: 50.6% and 20% of the total respondents are unemployed or employed on the job that is not relevant to their profession, respectively. In case of summing up these two percentage points, vocational education does not seem to be beneficial in terms of employability for 70.6% of respondents. It is worthwhile to mention additional 10.5% of interviewed graduates that are not employed, but continue studying at higher education institutions, are interns, went back to schools, started enterprises and etc. (MoES, 2014).

GTZ (2010) suggests that cash inducements, such as financing sector councils, implementing salary subsidy programs or offering tax reductions to the companies in case they train VET students, can be an encouragement for them to participate in the system. While this suggestion seems relevant, according to the international experience, cash inducement is not always an optimal strategy to be pursued. For example, in Britain considerable financial resources are spent: *sector skill councils*, responsible for development and approval of vocational qualifications, are financed (Hoeckel, Cully, Field, Halász & Kis, 2009); moreover, employers obtain financial support for training under Modern Apprenticeship Program (Ryan, 2000). However, business participation is still modest (Hoeckel et al., 2009; Ryan, 2000).

In contrast with cash inducements, demand-driven VET may lead to a better performance of employers. More precisely, when the purpose of training is to hire VET students, employers are concerned that the training they provide are high-quality and relevant to their demands. Furthermore, interest in the content of the school-based education, their trainees acquire at centers, increases. In this way, involvement in sector councils becomes mutually beneficial.

Thus, in order to explain why business engagement is low in the VET system, we have to find out why companies are not willing to employ VET graduates. These issues are interconnected: the reluctance to employ VET graduates discourages business to engage in the system; low business engagement in turn creates the mismatch between the labor market demands and the VET, leading to higher unemployment among VET graduates (see figure 1.1).

*Figure 1.1 Vicious circle: why firms do not engage in the VET system*
2. Methodological Framework

Once the study topic is clarified, the following chapter presents the logics of the research, the choice of the design and the methods to research. Employed Methodological framework further sheds light on the purposes and the limitations of this study.

2.1 Research design

The extent of theoretical background determines the research design. Accordingly, there are two main approaches: deductive and inductive. The research design is deductive when the study employs an existing theory and derives the hypothesis from it; the research strategy is designed in a way to test the hypothesis. In contrast, induction uses data and data analysis in developing the theory (Saunders, Lewis & Thornhill, 2009). However, both of these approaches can be employed in one study. To be more specific, once the hypothesis based on data collection and analysis is derived, a researcher may want to collect data further to test the hypothesis (Bryman & Bell, 2011).

While deductive and inductive approach determines the nature of the relationship between research and theory (Bryman & Bell, 2011), strategy of research can be exploratory, descriptive or explanatory. Explanatory research seeks to discover causality and entails the elements of deduction whereas exploratory strategy is inductive, aiming for exploring new phenomena (Saunders, at al., 2009).

This study employs both inductive and deductive approaches and correspondingly exploratory and explanatory research strategies. Exploratory part of the research combines secondary literature analysis and the interviews conducted with VET centers. In the explanatory part, interviews with enterprises are carried out.

2.1.1 Exploratory part of the research

Exploratory research is employed when there is a little theory to guide predictions. The exploratory research is aimed for to ask questions, to seek new insights and assess phenomena in a new light (Sim & Wright, 2000). According to Saunders, et al. (2009), there are three principle ways to conduct exploratory research: ‘expert’/subject interviews, literature search and focus group interviews. This study employs the combination of first two.

As the research topic is novel and specific to Georgian context and there are no preconceived ideas what will be found, the first step is to conduct interviews with ‘experts’, in this case with VET center representatives. The aim of these interviews is to explore the difficulties VET centers experience while searching for internship opportunities for their students. The results of
interviews contribute to narrowing down the research area so that I can develop a tighter focus (Bryman & Bell, 2011).

The next step is to collect secondary data, originally collected for different purposes (Hox & Boeije, 2005), but relevant to the research topic. The secondary data, extracted from descriptive governmental and non-governmental reports is mainly quantitative. The aim of collecting and analyzing secondary literature is to gain a rich understanding of the context of Georgia- its labor market characteristics and skill formation system.

A theoretical framework for exploratory research- According to Saunders, et al. (2009), data collection, analysis and the development of propositions are interactive and interrelated processes, especially in inductive approach. The interactive nature of data collection and analysis allows identifying important themes emerging from data. New themes need further investigation (Saunders, at al., 2009). Further investigation includes discovering relevant theoretical framework that will generate deeper insights towards the subject. Linking empirics to an already existing body of knowledge offers better analytical framework (Saunders, at al., 2009). In this research the whole process of collecting, analyzing data and applying existing theory seeks to develop the theoretical position that is supported through subsequent data collection and analysis.

2.1.2 Explanatory part of the research

Explanatory research focuses on studying a problem or situation in order to explain the relationships between variables (Saunders, at al., 2009). Traditionally, explanatory research is quantitative in nature and measures relationships between variables using statistical techniques. Nevertheless, explanatory research strategy is also employed in qualitative research, but has limitations.

The limitation for qualitative research to verify causality lies into the lack of statistical generalizability, since probability samples are not used (Morgan, 2008).

As mentioned above, subsequent research method employed in this study is the interviews with the enterprises. The aim of these interviews is to test derived hypotheses and in this way explain why business does not engage in the VET system.

The number of interviewed companies is 8. Since the sample size is small, insufficient for statistical generalizability, the results cannot be assumed to be valid, but rather supportive of the propositions emerged from the studied context. The results from the interviews can make inductive arguments stronger or weaker, determining the prospects for future study.
2.2 Interviews

2.2.1 Sampling
Most qualitative researchers consider non-probability sampling as most appropriate for sample selection. In non-probability sampling, researchers use their judgment in choosing the samples (Merriam, 2009; Patton, 2002; Bryman & Bell, 2011). For the first set of interviews, initially all VET centers in two cities – Tbilisi and Rustavi were intended to be interviewed, but the process of collecting data continued until empirical saturation - until no new and relevant information emerged (Strauss and Corbin, 1998). For the second set of interviews, non-probability sampling technique- purposive sampling with the purpose of reaching maximum variation is employed. The VET centers train students in both low and high-qualified occupations. Therefore, the companies are purposively sampled in order to cover all level occupations.

2.2.2 The interview techniques and their links to the purpose of research
According to Saunders, at al. (2009), in an exploratory study, unstructured interviews can be very helpful. Unstructured interviews often referred to in-depth interviews are informal. Moreover, there is no predetermined list of questions, though the researcher has a clear idea about the purpose of the interview (Saunders, at al., 2009).

In this research, unstructured ‘face to face’ interviews are conducted with VET center representatives. The interviewee is given the opportunity to talk freely and is interrupted when there is a need for exploring the topic deeper.

In an explanatory part of the research, semi-structured interviews with enterprises are conducted to test the possible causality that has emerged from studying the context. In semi-structured interviews, there is a pre-determined list of themes and questions that are covered (Saunders, at al., 2009). However, they vary from interview to interview: some themes and questions are omitted or added, depending on the business occupation and offered job positions.

The interviews are audio-recorded and subsequently transcribed. The interviews are conducted in the Georgian language. The transcripts are translated carefully into English and are available at request.
3. Interviews with VET Centers

The purpose of the interviews is to explore the difficulties the VET centers encounter while searching for the internship opportunities for their students. Several tendencies are revealed, determining the direction of the study.

3.1 The participants of interviews

The interviews are conducted with the VET centers. Three VET centers are interviewed in the capital city Tbilisi and one in nearby town Rustavi.

VET center A - profile: tourism; located in Tbilisi; Interviewee: Director;

VET center B and VET center C - no specific profile; these centers provide similar vocational programs in the field of information technologies: information technologies/computer engineering, internet engineering, computer network and system engineering, Java and Web programming, computer graphics; located in Tbilisi; Interviewees: Vocational Orientation and Career Planning specialists.

VET center D - no specific profile, offered vocational programs in the field of information technologies: information technologies/computer engineering; located in Rustavi; Interviewee: Director.

3.2 Findings

The responsibility of the VET centers, besides teaching, is to search for internship opportunities for their students at the end of the studies. The internship varies from one to two months and is not paid. It is usually understood as a temporary position, though interns can be hired when the internship is over.

As expected, the companies that are not planning to employ VET graduates do not perceive the internships mutually beneficial, therefore, refuse to accept interns. However, a number of companies, although do not plan to employ VET graduates, still accept interns. In this case, they allocate students to unskilled tasks and benefit from exploiting the unpaid workforce, instead of training them. The absence of mechanisms to monitor the quality of on-the-job training creates scope for that. The memorandum, signed, do not impose any obligation on the enterprises. Thus, whether they train or not is dependent on their goodwill.

Being aware of this, the centers are still willing to send their students in the hope that employers will retain and employ them afterwards, not necessarily in the occupation relevant to their
profession. It is frequent that VET centers’ staff uses informal contacts in the internship search. Sometimes, students themselves are active in internship search through the same channel. It seems that quantity is prioritized over quality: the performance of civil servant, responsible for ensuring internship opportunities, is assessed on the quantity basis.

Since the centers do not collect employment statistics of their graduates, the interviewees were asked to assess business activity in terms of willingness to offer internships to the VET students.

The interview with ‘VET center A’ revealed that in tourism sector most occupations, except operators, guides and restaurant administrators, are in demand. The explanation for restaurant administrators was that this is not the entry-level job, since it requires prior firm-specific knowledge and experience. The reason behind low demand for operators and guides was connected to the limited number of large and medium businesses operating on Georgian market, demanding aforementioned occupations. To the question ‘why large and medium enterprises mattered and not small ones’ they responded that small businesses engage in low-productive activities, hence, do not demand higher qualifications and mostly recruit through informal channels.

The interview with the ‘VET center A’ has demonstrated the necessity to discuss each occupation separately, taking diverse factors into account. As VET system prepares students in 133 vocational occupations (Vocational Education Institutions, 2015), it would have been impossible to explore the problems, encountered in each occupation. Therefore, during the following interviews, VET center representatives were asked to assess business engagement not in separate occupations but in industries. It turned out that the most in-demand occupations by employers are in construction and automobile industries. The apparel industry was reported to be active in Tbilisi, but not in Rustavi, since this industry is not sufficiently developed there.

The fields of information technologies and accounting and management were assessed as the least demanded. ‘VET center B’ could not verify the reasons, ‘VET center D’ stated that the market is saturated for the occupations in these fields, while ‘VET center C’ blamed the short duration of the vocational programs, not equipping students with sufficient knowledge, demanded on the market.

However, the study conducted in 2010 by the US Agency for International Development (USAID) and International Organization of Migration (IOM), paints a different picture: among the top ten scarce professions in Tbilisi are IT specialists, accountants and managers and in Rustavi-IT specialists.

According to USAID and IOM (2011), although there is a demand for accountants and managers on the labor market, employers almost always require a tertiary education diploma.¹

¹ higher education institutions provide degree programs in these fields
As for the field of information technologies, the same argument is not raised, albeit the higher education institutions offer degree programs in this field as well. Instead, the recommendation of USAID and IOM (2011) is to provide more specialized vocational programs (web design, programming, engineering and architecture, publishing, video editing, modeling, animation, etc.) apart from the programs in office and web-technologies. While this recommendation is more or less taken into account and interviewed VET centers train in a number of suggested specializations, business engagement is still low.

To conclude, the reasons for low business engagement in the field of information technologies are equivocal according to the results of interviews and the previous research. These circumstances lead to opt for this field to base this research on. Furthermore, almost all vocational centers train in information technologies, increasing the significance and hence, the contribution of the research.

While the context analysis provided in the following chapter is broad and not confined to the field of information technologies, the hypotheses derived from context study are tested in the said field and hence, the paper findings apply to it.
4. Context Study and Theoretical Analysis

This chapter is the synthesis of context study and theoretical discussion, offering better analytical framework.

Consequently, two hypotheses are derived:

_Hypothesis N1:_ higher education graduates compete with VET graduates in the occupations, where much on-the-job training is not needed.

_Hypothesis N2:_ in the occupations where substantial on-the-job training is necessary, employers search for employees with relevant work experience instead of training inexperienced.

4.1 Competition from higher education graduates

The first part of this section makes a brief overview of Georgian economy and discusses labor market characteristics. Consequently, the factors behind the high unemployment among tertiary education graduates are identified.

The second part is a synthesis of theory and empirics, analyzing first, why university graduates might apply for the jobs requiring lower qualifications and second, why employers might employ overeducated workforce.

The hypothesis derived from this section is as follows: higher education graduates compete with VET graduates in the occupations, where much on-the-job training is not needed.

4.1.1 The overview of Georgian economy and labor market

As a result of Soviet Union collapse, the links between Soviet enterprises and the system, consuming their production, was lost (Papava, 2013). The urgent need for reorienting to new export markets have failed, since the Georgian production was not competitive internationally (Papava, 2013). According to Papava (2013), aforementioned processes led to deindustrialization. Gross industrial output in 1995 represented only 13.6% of the 1988 level. Moreover, planned labor distribution was replaced by the free labor market and employment fell from 87% to 59% from 1988 to 1995 (Labadze & Tukhashvili, 2013).

In the period of 1990 to 1998, Gross Domestic Product (GDP) decreased more than eight times. In 1999-2003, GDP growth rate was on average 4%, insufficient for restoring the economy. Since 2003, the new government managed to raise this number up to 9.3% (USAID & IOM, 2010). However, the growth of the economy was interrupted by the military intervention, followed by the global economic crisis in 2008. In 2009, we had a negative growth rate of GDP and since then up to 2014, the economy experienced a moderate growth, 5.5% on average. By
2014, real GDP per capita is 1998 USD (Geostat, 2015b) that leaves Georgia behind most of the post-Soviet Union countries (USAID & IOM, 2010).

Despite the mentioned periodic surges in the economy, the number of jobs has not increased in the long run, as job creation was accompanied by job destruction (see figure 4.1)

![Figure 4.1 Employment, unemployment and GDP growth (Geostat, 2015)](image)

At present, labor force accounts for 66.2% of entire population. Employment and unemployment rates are 56.6% and 14.6%, respectively (Geostat, 2015a). However, these figures alone do not tell the whole story.

According to the methodology of labor force statistics\(^2\), employed and therefore economically active population includes those who help other household members for free. Moreover, a person is considered to be a self-employed in case of having a private household farm in agriculture (Geostat, 2015c) which is labeled as *subsistence agriculture*\(^3\) in Georgia.

While looking at the ratios of distribution of the employed by economic activities, several characteristics are revealed. Firstly, 29% of employed are working for free. Furthermore, 35% are self-employed and mainly underemployed in subsistence agriculture, leading to the hidden unemployment (see Figure 4.2). Hired employees comprise substantially low share - 10% of employed, whereas only 1% has the status of the employer.

Consequently, demand for labor is extremely depressed, especially in urban areas, where only 46% of working age population is employed (World Bank, 2013).  

\(^2\) based on the International Labor Organization (ILO) methodology

\(^3\) Subsistence agriculture - the system of farming that is self-sufficient for the farmer or family without any significant surplus for sale (Business Dictionary, 2015).
Industrial and employment structures

The employment structure is dominated by agriculture, accounting for 46% (World Bank, 2013) while the share of agriculture in GDP is just 9.2% (Geostat, 2013).

According to the World Bank calculations (2013), the distribution of employment by industry, outside the agriculture, is dominated by trade, representing 20.3%. Jobs in trade sector are mostly low value-added. Modern, high productivity sectors such as business and financial services play a minor role, accounting for 5.9% of employment. The public service sector is relatively large, composed of education, health care and administration, 15.4%, 9.8% and 6.9%, respectively (World Bank, 2013).

To conclude, according to the employment structure, discussed above, the majority of jobs are located in low value-added sectors, demanding low qualifications and making career-oriented jobs scarce on the market.

4.1.2 The phenomenon of overeducation

The labor market of Georgia is characterized by overeducation- the phenomenon when an individual has acquired more education than it is needed for the current job (CEDEFOP, 2010). This phenomenon in Georgia has both supply and demand sides. Besides the fact that the employment structure, discussed above, creates low demand for high skills, the supply of highly educated workforce is even larger for the high-income countries in Europe (World Bank, 2013). According to World Bank calculations (2013), 31% of workers have tertiary education. Labor force with higher education is mostly concentrated in urban areas, every second having higher education. Furthermore, even one person out of 6 is highly educated in rural areas. Additional
evidence that the economy does not need such a big amount of highly educated workforce is that the 46% of unemployed have tertiary education in urban areas (World Bank, 2013).

4.1.3 Social movement towards higher education

The social movement towards higher education has already been apparent since the Soviet Union Era, although the occupations for tertiary education graduates were not always well paid compared to vocational occupations. For example, coal mining was much better remunerated than teaching and medicine. However, higher education was valued for its ‘own sake’ and the motives behind enrolling at universities was rather cultural, than financial (Roberts, et al., 2000).

Since the start of the transition period, the links between vocational-track schools and enterprises were lost, leading to declining enrollments in vocational schooling (Biavaschi, et al., 2012). This process was counterbalanced by the expansion of academic secondary and higher education. Students left vocational schools in order to pursue a tertiary degree and in this way meet the labor market demands of a deindustrialized economy (Sondergaard, Murthi, Abu-Ghaida, Bodewig & Rutkowski, 2012).

University enrollment grew especially from 1999 to 2005 by 30%, potentially leading to a positive development aiming for ‘knowledge era’. However, while the country experienced such a sudden increase of enrollment in higher education, the quality did not improve simultaneously (Livny, 2012). In addition, increased demand for higher education was followed by the emergence of ‘pseudo universities’ that got the authorizations due to an uncontrolled education system (Livny, 2012). As a consequence, Georgia found itself in an overeducation trap, still bringing efficiency losses such as a wasteful public funding and household investments in education (Livny, 2012).

High unemployment among university graduates, together with the poor quality education acquired, might lower the ambitions of its graduates. Therefore, they might apply for the jobs, requiring lower qualifications.

4.1.4 Theoretical discussion: motives of employers for hiring overeducated workforce

Once the possible reasons why university graduates might apply for the jobs demanding lower qualifications are identified, it is reasonable to analyze the motives of employers for hiring overeducated workforce.

Rosenbaum and Binder (1997) suppose that employers sometimes demand more than it is needed for certain positions, because this is a way for on-the-job-screening and promoting: if they hire less-educated workforce, employers will not be able to offer higher positions to them. Thus, the need for on-the-job screening and promotion may be the reason why employers hire overeducated workers (Rosenbaum & Binder, 1997). But this argument only applies to the companies with career advancement opportunities.
Solga (2000) offers different perspective. According to her, when the size of the group of highly educated workforce increases, social norms regarding education alter: if once, higher education deviated from the norm and less education was common, now it has changed to the contrary.

The perceptions of employers also adjust to new norms (Solga, 2000): it does not matter if someone satisfies the requirements of the certain occupation, as being in the minority already disqualifies him. Not having a university degree gradually develops into a stigma in the society. In order to avoid it, everyone tries to get a tertiary diploma (Livny, 2012). As a result, the size of the group of less-educated diminishes further and the vicious circle emerges.

Solga (2000) studies the composition of the group that did not participate in the process of credentialism⁴. As the social movement towards acquiring credentials rises, the group that stays out of this movement mostly constitute of the individuals with low capabilities and/or social background (Solga, 2000).

Before this movement, the group of individuals, not enrolled at higher education institutions though with the same abilities, was satisfying the needs of employers. However, the same category of people now acquires tertiary education. Thus, the reason why businesses might employ overqualified workforce is that the individuals, supposed to satisfy their needs, do not belong any longer to the group, enrolled in secondary general or vocational education.

The explanation, why employers rely on credentials, lies in the issue of asymmetric information, from where the theory of job market signaling by Spence (1973) takes its roots.

According to Spence (1973), the employer has uncertainties about the productive capabilities of the individual when hiring. The fact, that learning individual’s capabilities takes time and, therefore, is associated with costs, means that hiring is an investment decision, though under uncertainty. The theory makes an assumption that employer cannot observe the marginal productivity of new employee prior hiring. Therefore, the opportunity left is to hire according to the personal data in the form of observable attributes and characteristics of the individual. Spence (1973) classifies these attributes as indices and signals. Indices are unalterable such as race, gender, age, whereas signals are alterable, such as, for example, education. However, it is costly to alter signal as education and Spence (1973) refers to these costs as signaling costs. Signaling costs are not to be interpreted only in monetary terms. It also includes spent psychic energy and time and effort to study. Signaling costs are not the same among individuals. Spence for simplicity classifies two groups of individuals: the ones with higher and others with lower capabilities, affecting their productivity correspondingly.

The critical assumption in this theory is that the signaling costs are negatively correlated with the productive ability: individuals with lower productive ability incur higher costs compared to the ones with better capabilities as it takes more time and effort to study for students with lower capabilities.

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⁴ An excessive reliance on credentials such as academic degrees in hiring or promoting (Oxford Dictionary, 2015).
abilities to achieve the same level of qualifications to signal. If signaling costs exceed expected wages, individuals are discouraged to make signaling decisions. Therefore, the individuals with lower capabilities are less likely to invest in their education. This leads to the signaling equilibrium, which can be interpreted in the following way: suppose, the employer believes that education is positively correlated with the productivity. Then he will prefer to employ the one with a better observable attribute such as education. Based on the assumption that the signaling costs are negatively correlated with the productivity and more educated individuals turn out to be more productive, the employer should be satisfied with his decision. Hence, employer’s strategy to hire according signals proves to be successful and therefore, the behavior becomes persistent.

4.1.5 Job market signaling in Georgia

The theory of job market signaling can be applied to Georgian case to explain why employers might prefer to hire individuals with higher education. In Georgian case, the assumption of the theory that low ability individuals cannot get higher education works in the following way: in order to enter university, they pass Unified National Exams. Applicants take several exams, including ‘ability test’, which assess their general skills (National Assessment and Examinations Center, 2015). The ones, with low capabilities, unable to overcome the minimum competence threshold in those exams, lose access to tertiary education.

Although acquired education at higher education institutions is not always of high quality (Livny, 2012), the students can use their qualifications for signaling productive ability. As a result, employers are satisfied employing higher education graduates as their perception about their abilities turns out to be right.

To conclude, each university graduate has the productive ability above the certain threshold due to the examination system in Georgia, whereas the same is not true for VET center students, whose admission is based on basic education diploma. Although the latter group may also include high-ability students, asymmetric information pushes employers to rely on credentials. Therefore, they search for higher ability employees among university graduates.
4.2 Theoretical review: why firms train

In this section, different theoretical perspectives about the motives for firms to train are presented. The aim of the theoretical review is to give broad introduction towards the subject and guide the subsequent empirical analysis.

Theoretical and empirical discussion leads to the generation of the second hypothesis: in the occupations where substantial on-the-job training is necessary, enterprises search for employees with relevant work experience instead of training inexperienced.

4.2.1 Introduction

A long-standing literature exists on the issue why firms train. This topic is discussed by a variety of schools such as neo-classical labor economics (Becker, 1993) and institutional economics. The latter in turn can be classified as neo-institutional labor economics (Acemoglu & Pischke, 1998, 1999a, 1999b), institutional political economics (Hall & Soskice, 2001; Finegold & Soskice, 1988; Hall & Gingerich, 2004) and historical institutional economics (Busemeyer & Trampusch, 2011; Thelen, 2004).

Neo-classical and neo-institutional perspectives are based on the cost-benefit analysis of the firm. However, neo-institutionalists’ partial answers lie in the role of institutions. According to them, firms are rational in investing skills, but their behavior is conditioned by labor market imperfections and surrounding institutional setting. The shortcoming of this approach is that it does not analyze the reasons for variation of institutions across country contexts. Furthermore, it is not clear whether the skill formation system is shaped by the economic processes of human capital formation or by politics and society (Thelen, 2004).

Scholars from institutional political economic school see the training institutions strongly embedded in a dense network of socioeconomic and political institutions. Moreover, skill formation system is not the outcome of rationally established strategies of firms but rather the result of political struggles among the important stakeholders of the system. Hall and Soskice’s (2001) seminal work about the varieties of capitalism study the network of institutions such as corporate governance and financing, industrial relations, labor market and welfare state policies that account for the establishment of the variety of skill formation systems. They distinguish liberal and coordinated market economies and based on this typology, low and high skill equilibriums, respectively.

Historical institutionalists dig deeper into the history to find out the origins of variation of skill formation systems. They acknowledge the importance of critical junctures - the critical points in the history of political economies that set countries on specific trajectories by renegotiating decisions about the skill formation systems (Busemeyer & Trampusch, 2011).
4.2.2 Neo-classical approach

Labor market economists have been interested in skill formation for a long time. Acemoglu and Pischke (1999) mention Pigou and Rosenstein-Rodan who argued already in 1912 and 1943, respectively, that training market failure connected to *poaching externalities* would discourage companies to invest in training: firms are tempted to ‘poach’ workers from other companies, since they are competitors and at the same time prefer to avoid the costs of training (Thelen, 2004). However, current thinking among neo-classical economists is strongly influenced by seminal work of Gary Becker who reaches different conclusions.

According to Becker (1993), training market failure mentioned above, not always discourage companies from providing training. To explain this statement, Becker distinguishes between *general skills* and *specific skills*. General skills are defined as the skills that can be used and valued by most of the other employers while specific skills increase the productivity of the employee only in current job (Acemoglu & Pischke, 1999a). Becker argues that the workers trained in specific skills cannot benefit from changing the job. Therefore, the company is ready to train in specific skills, as the return on the training investment can be fully realized.

As for general skills, in competitive labor markets, companies are discouraged to invest because of poaching externalities. Nevertheless, workers, instead of employers, should have incentives to invest, since workers are those who benefit most from general training. But they can also be discouraged because of credit constraints: they may fail in securing finances due to credit market imperfections. Thus, according to Becker’s argument, credit market constraints instead of poaching externalities appear to be the primary reason for the failure in skill formation.

However, Becker does not ignore the alternative sources of finances for employees such as for example, family funds. Moreover, the trainee can accept to be paid lower wage than his productivity until the company will be able to recoup its investment costs (Thelen, 2004). However, it has to be explained why trainee may accept lower wage as after acquiring sufficient knowledge and skills through the training, employees will be easily tempted to leave to another company if they earn a salary below market value at current company.

4.2.3 Neo-institutional approach

The explanation why trainee may accept lower wage is offered by Acemoglu and Pischke (1998, 1999a, 1999b).

Their approach deviates from Becker’s approach by criticizing his classification of two ideal/typical models: perfectly competitive and non-competitive labor markets. Acemoglu and Pischke (1999a, 1999b) refute the idea that the market for general skills is always perfectly competitive and therefore firms will never invest in general skills. According to them, there exists intermediate case such as *imperfectly competitive labor market*. The imperfections make investing in general skills beneficial even for employers. Acemoglu and Pischke (1998, 1999a,
1999b) mention various sources of labor market imperfections: asymmetric information and low labor turnover, wage compression, matching and search frictions. These imperfections allow employers to earn rents on training by not fully reimbursing the marginal productivity of the employee.

*Information asymmetry and low labor turnover*

According to Acemoglu and Pischke (1998), initial employers compared to others take advantage of the information they acquire about its workers’ abilities. The ability of worker is emphasized, since high ability workers benefit more from training than their counterparts with lower abilities (Acemoglu & Pischke, 1999a). The informational advantage, initial employers have, gives a stimulus to them to invest in training. Informational asymmetry in turn leads to reduce labor turnover: when worker quits, its ability is hardly observable for the firm from external labor market, despite the fact that the formal qualifications can be signaled; moreover, whether worker has quitted or was laid off is rarely found out by the outside company. Thus, the absence of complete information forces the new employer to offer a average wage to the quitter, discouraging high ability workers to quit, consequently making employers reluctant to hire quitters. Furthermore, when firing employees is costly, the firms are more careful about employing workers from external labor markets, since if they hire low ability workers, it will be expensive to lay them off.

Hiring quitters is termed as *passive poaching* by Acemoglu and Pischke (1998). The alternative is *active poaching* or *raids*, meaning that the company itself makes an offer to already employed worker (Acemoglu & Pischke, 1998). Acemoglu and Pischke (1998) make an assumption that the current employer can get to know when its employees are poached actively. In this case, it can make a better offer and not let high-ability employees leave to another company.

Circumstances, discussed above, develop the perception about the composition of external labor markets: the ones that quit have a low reputation. Therefore, workers try to stick to their present employers, leading to lower labor turnover. Low mobility in turn encourages employers to invest in general skills.

To sum, informational asymmetry, low reputation of the workers from external labor market and consequent low labor turnover contribute to setting wages that are below the productivity level of the worker, letting employer to recoup its investment costs.

*Wage compression*

Setting wages below the productivity level might be a sufficient condition for the company to train its employees initially. However, for the continual provision of training, as much as employees become skilled, wages must increase less steeply than their productivity (Acemoglu and Pischke, 1999b). In other words, if the wage increases at the same rate as the marginal
productivity, the profits of the company do not change together with the skills of its employees. This in turn discourages firms to upgrade its employees’ skills on a permanent basis.

Acemoglu and Pischke (1999b) discuss a range of possible labor market frictions contributing to the distortion of wage structure. Along with the informational asymmetry and matching and search frictions, labor unions that are involved in wage determination can play an important role in wage compression (Pischke, 2005).

Wage structure can also be compressed by labor market institutions in a way to make employers train unskilled workers. While information asymmetry, matching and search frictions and labor unions distort a wage structure of skilled labor, institutions like minimum wages, employment protection and unemployment insurance compress the wages further by paying unskilled labor more than their productivity is worth.

When the minimum wage is more than the productivity of the worker, without enhancing the skills of worker, company makes a loss (Pischke, 2005). In the competitive market, the company will not employ the worker whose marginal productivity is lower than the minimal wage, due to poaching externalities. But in the imperfectly competitive labor market, the employer hires and trains unskilled worker as the investment in training can be recouped (Pischke, 2005).

4.2.4 Back to neo-classical approach - transferable skills

While Acemoglu and Pischke criticize Becker for not considering *imperfectly competitive labor markets*, Stevens (1999) disapproves the stark categorization of general and specific skills. He argues that purely general or specific skills do not exist and introduces *transferable skills*- skills fallen between general and specific skills. In addition, he states that the ‘bundle’ of the skills determines the competitiveness of the market. For instance, for general skills, the market is competitive, whereas specific skills are useful just for one company. According to him, most skills are transferable and are valuable for the limited number of firms on the market, making the latter imperfectly competitive. Furthermore, even if the training produces the skills that are valuable for a large number of companies, the number of such companies may be small in local market, giving the training company *monopsony power* (Stevens, 1996), making it the sole purchaser of the certain kind of labor (Bunker, 2015).

The other mechanism that can reduce the employee’s interest in leaving the firm can be a generous package of company-specific benefits, for example, internal career ladder can be a powerful incentive for workers to attach to the current employer (Thelen, 2004).

4.2.5 Institutional-political approach

Political economists see the whole bunch of political-economic institutions that make firms train and contribute to the establishment of low or high skill equilibriums. Finegold and Soskice (1988) present such institutions in the following categories: the organization of the industry,
companies and the work process, the industrial relations system, financial markets and the education and training system itself. The core point of their analysis is that the shifts in one institutional variable without corresponding changes in other directions will not have substantial effects in the long-run. In other words, in the micro perspective, when company decides to invest in training and at the same time does not change work design, style and quality of management and etc., the mentioned investment’s potential will not be fully realized. Correspondingly, at the macro level, without taking surrounding industrial structure into account, investments in education and training system may become wasteful (Finegold & Soskice, 1988).

The dominant theoretical approach among political economists is the Varieties of Capitalism (VoC). In order to grasp the said approach, we will briefly elaborate on the key issues it is based on.

According to the VoC approach, firms are the central actors in the economy and their performance forms the aggregated performance of the economy. The firm, in order to prosper, needs to coordinate with other actors efficiently (Hall & Soskice, 2001).

It can be distinguished two modes of coordination: market and strategic coordination and accordingly, *liberal and coordinated market economies* (Hall & Gingerich, 2004). In liberal market economies (LMEs), equilibrium outcomes are determined by market demand/supply and price signals. Market relationships are based on arm’s length principle in a context of formal contracting and competition (Hall & Soskice, 2001). In addition, LMEs are characterized by flexible or decentralized labor markets with low union density, enterprise-level bargaining and limited social dialog with poor coordination across firms. Education and training system is focused on general education, complementing the fluid labor markets, prevalent in LMEs (Crowley & College, 2008). In contrast, coordinated market economies (CMEs) are characterized by strategic interactions between firms and other actors and equilibrium outcomes are supported by the dense institutional fabric of the economy (Hall & Gingerich, 2004). In CMEs, the level of trade union membership is high. Employer associations are well-organized, resulting in collective agreements at the sectoral and national levels. Strong employer associations contribute to preventing the problem of poaching and therefore, strengthening vocational education and training system (Crowley & College, 2008).

According to the VoC approach, liberal and coordinated market economies stand at the opposite ends of a spectrum. Germany is assumed to be a good example of the coordinated market economy, whereas the United States and Great Britain are typical liberal market economies (Hall & Soskice, 2001).
4.3 The characteristics of liberal market economy in Georgia

While VoC literature is mostly focused on advanced capitalist societies, recently a number of studies have applied a simplified VoC framework to the post-communist region. For example, by looking at several measures of varieties of capitalism, Crowley and College (2008) place the post-communist countries of east-central Europe, with the exception of Slovenia, in the liberal camp.

The literature identifying the capitalism type in Georgia is not accessible. Therefore, I follow the analysis by Crowley and College, (2008) and discuss the role of intermediate associations such as trade unions and employer associations in establishing a liberal market economy of Georgia.

Weak trade unions - weak labor

Although, during Soviet Union rule there were surface similarities of Georgian economy with coordinated market economies5, the fundamental differences are evident (Crowley & College, 2008). In Soviet Georgia, there was no market economy and instead of coordination among private actors, the state planned the economy centrally.

While trade unions in market economies are responsible for protecting worker’s interests against employers, in communist countries they were established as entirely different institutions (Stephen, 2004). Trade unions operated as social welfare agencies and distributed benefits such as free holiday packages to its members (Transparency International (TI) Georgia, 2014). Furthermore, they were typical management allies (Crowley, 2004).

After Soviet Union era, unions turned into corrupt institutions. They did not engage in the provision of benefits to its members anymore, instead served the private, primarily economic, interests of its leadership (TI Georgia, 2014).

The situation altered in 2003, though not positively: the new government of neoliberal ideology was elected, which saw trade unions as enemies of economic development. This ideology was reflected in the new labor code, passed in 2006 and was regarded as one of the most unfavorable towards employees 6(Jobelius, 2011).

In 2013, along with the arrival of the new government, a new labor code was issued, this time more favorable towards employees. Nevertheless, it is hard to assess whether the new labor code

5 Vocational education and training system resembled the dual apprenticeship model, prevalent in coordinated market economies (Biavaschi, et al., 2012).

6 Employers could terminate the employee contracts without reason. Moreover, strikes should not have exceeded 90 days and employers were not obliged to pay during that period. Additionally, if there were collective agreement signed between an employer and one or more employee associations, the employer could ignore and enter into individual employment contracts with other non-unionized employees (Jobelius, 2011).
is applied in reality or not, especially when the trade unions that are responsible for preventing code breaching are still least trusted institution by society with only 15% approval (IRI, 2015).

**Weak Employer associations**

The lack of strong employer associations can be partially explained by the legacy of Soviet Union since the private sector was absent. Though, labor weakness seems to be also a significant contributor to it. To be more precise, when labor is weak, the employers have no interest to establish the social dialog with trade unions (Crowley & College, 2008). As an evidence of it, the social dialog between unions, employers and the government is assessed as nonexistent by the chairman of Georgian Trade Unions Confederation (TI Georgia, 2014).

### 4.4 Education and training system in Georgia

Weak labor unions and employer associations in turn determine the characteristics of education and training system in Georgia.

The VET in contrast with general education system generates industry-specific and firm-specific skills and knowledge. However, the success to produce industry and firm-specific skills depends on solving two main problems: first, the firms need to know that workers they train will not be poached by other companies and second, workers need to be ensured that there will be external demand for them, in case the training company will not employ them.

In coordinated market economies, these problems are solved by the coordination between employer associations and trade unions. While employer associations limit free-riding on the training efforts of other companies, trade unions ensure that the skills acquired at training company will secure employment elsewhere (Hall & Soskice, 2001).

In liberal market economies, due to underdeveloped institutions, on the one hand, companies tend to undertrain their employees; on the other hand, employees acquire general education to increase their employability. As a consequence, firms continuously report skill shortages.

Resembling liberal market economy, the Georgian education and training system is characterized by the lack of training in occupational skills, generating skill shortages. According to IOM studies, (2010, 2011) 34% of business entities encounter problems in finding required personnel and 2/3 of required staff are skilled workers. Moreover, 37% of employers are dissatisfied with their new employees’ skills, but only one-fifth of them carry out the activities to improve their personnel skills. The dominant method of implementing training is on-the-job training, reported by 64% of those employers that are committed to improving their staff skills.

Mostly large and medium enterprises are experiencing skill shortages in Georgia: only 7% of small businesses encounter such problems constantly while the same is true for 12% of medium-sized and for 18% of large enterprises. Furthermore, 12% of small enterprises rarely have this
problem, whereas this figure increases up to 35% and 40% for medium and large businesses, respectively (IOM, 2011).

Based on these figures, large and medium-sized enterprises should be interested in supporting the VET system in Georgia, as they are the ones that demand skilled labor and at the same time experience skill shortages. In addition, large and medium enterprises generally recruit more staff on entity basis compared to small ones, increasing the incentive to support VET centers in upgrading the content of occupational curricula.
5. Interviews with Enterprises

This chapter first presents the interviewed companies. More precisely, a number of employees, description of business occupation, year of foundation, geographical location and the position of the interviewee are given. Following the introduction of enterprises, findings from the interviews are discussed.

5.1 Participants of interviewed enterprises

Large and medium-sized enterprises are purposively chosen to be interviewed as they are the ones that experience skill shortages in Georgian context and therefore, should be willing to engage in the VET system.

1. Medium enterprise A (29 employees)\(^7\)
   Interviewee: Head of Support Department
   IT Business Solutions Company- providing business process automation in manufacturing, retail and wholesale trade and service companies; Founded in 2004; Location: Tbilisi

2. Medium enterprise B (55 employees)
   Interviewee: Founder and Director
   Computer Retail Company; Founded in 2004; Location: Rustavi

3. Medium enterprise C (98 employees)
   Interviewee: HR manager
   Telecommunication Company- providing telecommunication service package, including telephone, internet and television; Founded in 1995; Location: Rustavi

4. Large enterprise D (more than 100 employees)
   Interviewee: HR manager
   IT Business Solutions Company- providing enterprise systems, business and IT infrastructure solutions; Founded in 1995; Location: Tbilisi

5. Large enterprise E (up to 210 employees)

Enterprises in Georgia are grouped as small, medium and large. According to the definition, small enterprises are those that employ 1-20 workers or/and annual turnover reaches 500 thousand Georgian Lari (GEL). As for medium enterprises, the number of employees is up to 100 employees or/and annual turnover -1500 Thousand GEL. Large enterprises hire more than 100 employees or/and annual turnover exceeds 1500 Thousand GEL (Geostat, 2014).

In order to determine the size of enterprises, the interviewees were directly asked about it. The number of employees is provided additionally, to be more informative.
5.2 Findings

The transcripts of the conducted interviews are disaggregated into themes that are extracted from studied context and theoretical framework. New themes that emerge from interviews are also included.

First of all entry-level jobs are categorized as either low-qualified or high-qualified: according to the interviewees, programmers and network administrators are most in-demand high-qualified occupations, whereas sales operators, call-center operators and information technologists including IT technicians, can be labeled as most in-demand low-qualified jobs.

5.2.1 Low-qualified occupations

Required qualifications

For sales and call-center operators, soft skills such as ability to learn quickly, communication and presentation skills are highly favorable. Technical skills are an advantage, but not a requirement. In contrast, information technologists should either have basic technical skills or should be technically-minded: “IT technicians have to solve real problems” (Large H, 2015; 7:33). ‘Medium B’ and ‘medium C’ do not require specific technical knowledge, but search for technically-minded persons who can acquire technical knowledge on the job. Additionally, for ‘medium C,’ it is extremely important that its employees have business understanding, referred to the ability to make offers to the customers and sell services and products of the company. Moreover, almost every enterprise emphasizes the importance of technical English. Several
companies also demand the Russian language, since the training for the employees sometimes are held in Russian.

For low-qualified occupations, companies receive high number of applications as they do not require specific high skills: “These are the most competitive positions; applicants may even exceed 1000 when there are only ten vacant places” (Large H, 2015; 10:15); “We may receive 2000 applications within ten days” (Large E, 2015; part II: 1:48). The applicants are from various educational backgrounds, including higher education graduates.

While sorting out the applications preference is given to highly educated candidates. The reason behind this preference is not connected to the content of the education, students acquire at universities. Instead, highly educated candidates are perceived to have the soft skills discussed above.

For a number of enterprises, in addition to higher education, preference is given to experienced applicants as the experience also signals certain abilities of the candidates. According to ‘Large H’, candidates who have worked previously, absorb new skills and knowledge easily.

However, according to ‘Medium B’, the drawback of employing experienced workers is that they have high salary expectations. Therefore, this enterprise prefers to hire new entrants on the labor market. Furthermore, the skills it needs are not necessarily connected to experience: “We search for people with ideas and motivation, problem-solving and leadership skills” (Medium B, 2015; 14:18).

Training

Each interviewed company trains new hires in these occupations: they provide short-term firm-specific training. Training period varies from two weeks to maximum six months. A number of enterprises have their own training centers where they train in company specific products and services.

Labor turnover

Labor turnover is high. The interviewed enterprises do not apply to the practice of employing less ambitious applicants and in this way reduce labor turnover. On the contrary, a number of them purposively search for strong candidates to screen them on the job and promote accordingly.

Relationship with education institutions

Companies mainly recruit through the internet. Additionally, some of them also recruit from higher education institutions, though not from vocational centers. The reason behind the low willingness to employ VET students was stated by ‘Large H’ (2015; 23:04) in the following way:
“The memorandums signed with higher education institutions are already sufficient. We cannot cover everything”

‘Large E’ and ‘large D’ do not see the necessity for recruiting from education institutions. After announcing vacancy through the internet advertising, they receive a high number of applications and choose the best out of them. Thus, according to them, there is no need to use additional channels to recruit.

5.2.2 High-qualified occupations

Required qualifications

Most in-demand high-qualified occupations are programmers and network administrators. In these occupations, companies require specific technical knowledge such as for example, competence in programming languages. Therefore, when announcing job vacancies, requirements are formulated in specific rather than in broad terms in contrast with the low-qualified occupations. Consequently, the recruitment process is less dependent on the signals such as education and experience: applicants during interviews are tested by giving specific tasks.

Enterprises report skill shortages in these occupations. According to them, suitable candidates are already employed and if the company poaches them, it has to offer a higher salary. While it is costly, interviewed companies still apply to this practice, though to different extents.

‘Large D’ and ‘Large H’ do not train and always search for workers with relevant experience. Training in these occupations requires considerable financial resources and time and they are not sure whether trained employee stays with them or not after acquiring sufficient experience and knowledge. Thus, these enterprises are reluctant to train.

‘Medium A’ and ‘large F’ that are providers of IT business solutions have a specific area of expertise: they develop Enterprise Resource Planning (ERP) software. The programming languages of the software are not taught in any education institution in Georgia. Thus, the companies themselves have to train.

They do not require prior experience. Instead, recruit those with good logical and analytical skills, with basic knowledge of programming and ability to learn easily. “We prefer to train students, as we can develop their skills in the direction we need. Applicants with prior experience gained in other companies work in a different way” (medium A, 2015; 10:36).

‘Medium A’ and ‘large F’ sometimes recruit from higher education institutions, though not from vocational centers. ‘Enterprise F’ perceives higher education students stronger compared to VET students, while Enterprise A have had no experience with VET students yet.
‘Medium C’ and ‘Large G’ apply to both practices: either employ experienced or train inexperienced. Employing experienced applicants is preferred. However, when it becomes hard to find a candidate with relevant qualifications for offered salary, they train current employees, working in the positions at a lower level. “Recently we were looking for a network administrator. The candidates applying were not fully qualified for the job and therefore needed further training. So, I said, why hire and train new employee whom we do not trust, when we can train our current employee and promote him” (Large G, 2015; 07:07). Current employee training proved to be successful. Therefore, to follow this practice, these companies recruit low-level employees from diverse educational backgrounds in order to promote them when needed. According to ‘Large G’, internal recruiting affects positively not only promoted worker, but the entire staff morale: when there is an opportunity to move into a higher position, employees are motivated to perform better. Moreover, while recruiting internally, companies can evaluate the true qualities of the candidates.

The problem of poaching and the strategies to solve it

Since employers see the risks of poaching of the workers in whom they have invested, they prefer to train current employees instead of hiring and training new employees. The advantages of training current employees are the following: first, they can earn trust and demonstrate loyalty, giving incentives to the company to invest in their training; second, employers and employees both can better assess whether they match or not the company and the position, reducing labor turnover and the skepticism of employers about the return-on-investment of training.

Another strategy to solve the poaching problem, emphasized by most of the interviewed companies, is to offer benefits, such as interesting and friendly working environment, and advancement opportunities. ‘Large D and ‘Large H’ send their employees abroad to upgrade their qualifications. ‘Medium C’ employs multitasking strategy in order to make the work non-routine. Moreover, ‘medium C’ recruits only from the local labor market of Rustavi and not from the nearby capital city, Tbilisi, since fewer competitors operate in Rustavi, reducing the risks of poaching.
6. Discussion

The following chapter analyzes the findings from the interviews and discusses how these findings relate to the prior study of the context and established theoretical framework. The hypotheses derived earlier on are supported and developed further.

Hypothesis N1

Findings from the interviews support the first hypothesis: higher education graduates compete with VET graduates in the occupations, where much on-the-job training is not needed. Such occupations are labeled as low-qualified.

As the requirements for low-qualified occupations are not highly specific and therefore a large number of job searchers meet those requirements, the competition becomes fierce. It is noteworthy that the applicants come from diverse levels of educational background, including tertiary education graduates.

It seems that the assumption that highly educated workforce might apply for low-qualified positions works in practice. While the reason behind it can be the high unemployment among university graduates, the argument of lowered ambitions does not always hold, as some of the interviewed companies offer career advancement opportunities to them.

The prior theoretical and empirical discussion about the motives of employers for hiring overeducated workforce also corresponds with the findings from the interviews.

As mentioned, in these occupations high technical knowledge is not required. Instead, employers search for the applicants with motivation, leadership and communication skills and etc. As it is harder to test these skills than the specific knowledge, employers have uncertainties about applicants’ productive capabilities when hiring. Asymmetric information in turn pushes them to rely on credentials such as education and prior experience.

While sorting out, university graduates are given preference as they are perceived to have higher abilities compared to secondary or vocational education graduates. Tertiary education does not signal any specific knowledge acquired, but the applicants’ productive capabilities.

The findings from the interviews cannot provide the explanation why employers search for higher ability employees among university graduates. The answers can be found in the prior empirical analysis.
For low-qualified occupations, companies provide short-term and firm-specific training. Despite the high labor turnover, the training cannot be avoided, since it is firm-specific. Moreover, as training is short-term and does not require substantial financial resources, companies can afford its provision.

*Hypothesis N2:*

Findings from the interviews support and develop the second hypothesis further as follows: in the occupations where substantial on-the-job training is necessary\(^8\), employers either search for the workers with relevant work experience or train current employees instead of hiring and training new personnel in these occupations.

The context study provides the overall picture why employers, encountering skill shortages, might not train in Georgia. Additionally, theoretical discussion about the motives of firms to train, done earlier on, casts light on the findings from interviews.

Becker’s (1993) categorization of general/occupational and specific skills can be applied to the analyses.

The companies that have specific area of expertise and therefore train in firm-specific skills are not disrupted by poaching externalities, as according to Becker (1993) workers trained in specific skills can not benefit from changing the job. Furthermore, since these enterprises do not require prior experience, they might be willing to cooperate with VET centers. However, they prefer to recruit from tertiary education institutions, as students there are perceived to have a better basic knowledge and higher abilities to absorb the firm-specific skills and knowledge.

In contrast, the companies that need to train in general/occupational skills are reluctant to do so. Thus, they mostly search for already experienced workers. However, some enterprises, though not on a regular basis, train and promote current employees instead of recruiting externally.

As there is a risk of poaching when investing in occupational skills, current employees by earning trust and demonstrating loyalty can reduce this risk, giving incentives to the company to invest in their training. Furthermore, both employers and employees can better assess whether they match or not the company and the position; this in turn reduces the labor turnover and the skepticism of employers about the return-on-investment of training.

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\(^8\) Such occupations are labeled as high-qualified.
7. Conclusion

Theoretical and empirical analyses of Georgian context together with the findings from interviews provide the answer to the research question of this thesis.

The reasons behind the low business engagement in the VET system are identified in the field of information technologies and are formulated as follows:

First, higher education graduates are given preference in low-qualified occupations, discouraging enterprises to recruit from VET centers.

Second, employers are reluctant to train new hires in high-qualified occupations; therefore, instead of employing VET students, they search for already experienced workers or recruit internally.

The advantage of the VET is that it provides specific/occupational skills and makes an emphasis on practical education. However, for low-qualified jobs, specific skills are less important than the general abilities. Additionally, these positions are highly competitive and companies do not experience labor shortages. If they recruit from VET centers they have to limit the pool of suitable applicants.

As for high-qualified occupations, besides the skills and knowledge acquired at education institutions, further on-the-job training in occupational skills is needed. Therefore, companies are reluctant to train new hires because of poaching externalities. Instead, they either search for already experienced workers or train current employees whom they trust.

In contrast with higher education that is mostly general, theory based and lacks practical relevance, VET has a potential to provide skills that can compensate the lack of experience without further need for employers to train in occupational skills. However, building such VET system requires an active engagement of private sector. It seems that it is a vicious circle and in order to break out, the problem of poaching on the labor market should be solved.

To conclude, the paper has identified the reasons behind the low willingness of business to engage in the VET system in the field of information technologies. However, it is not argued that this research covers all the underlying factors. Moreover, due to a limited number of conducted interviews, the results cannot be generalized statistically.

Nevertheless, the contribution of the paper is that it explores a new topic, not researched previously in Georgia. Therefore, it can be used as a starting point for future research: the findings from the context study and theoretical analyses can be useful while studying business engagement in the VET system in other fields.
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Interviews

Interviews with VET centers- Summaries of interviews [Available at request]

Interviews with enterprises- Transcripts of interviews [Available at request]
## Appendix A

### Interview Questionnaire (Enterprises)

<table>
<thead>
<tr>
<th>Topics</th>
<th>Questions</th>
</tr>
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<tbody>
<tr>
<td>-General questions about the organization</td>
<td>1) The Description of business occupation;</td>
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<tr>
<td></td>
<td>2) The enterprise size;</td>
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<tr>
<td></td>
<td>3) The number of employees;</td>
</tr>
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<td></td>
<td>4) The year of foundation;</td>
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<tr>
<td>-Entry-level occupations</td>
<td>1) Please, state the most demanded entry-level occupations;</td>
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<tr>
<td></td>
<td>2) Can you divide these occupations as high and low-qualified?</td>
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<tr>
<td>-Recruitment channels</td>
<td>1) Which recruiting channels do you use? Do you recruit from education institutions?</td>
</tr>
<tr>
<td>-Recruiting process</td>
<td>2) Describe the steps of recruiting process;</td>
</tr>
<tr>
<td>-Required qualifications</td>
<td>3) What are the qualifications you demand when announcing job vacancies?</td>
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<tr>
<td>-Training</td>
<td>4) How difficult is it to find suitable candidates?</td>
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<tr>
<td>-Labor turnover</td>
<td>5) What is the number of applicants?</td>
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<td></td>
<td>6) What are the educational levels of your applicants? What are their shares?</td>
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<td></td>
<td>7) How do you sort out the applications?</td>
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<td></td>
<td>8) Do you provide training in these occupations?</td>
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<td></td>
<td>9) If yes, what kind of trainings do you provide?</td>
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<td></td>
<td>10) If no, what are the reasons the company does not train its employees</td>
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<td></td>
<td>11) How high is labor turnover? If high, how do you address it?</td>
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