

Diversified Funding for Successful Transformation of Universities into Entrepreneurial Organizations

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Abstract

The paper discusses the significance of diversified funding for transforming universities into entrepreneurial organizations. Paper looks at the international experience of transforming higher education institutions (HEIs) into entrepreneurial organizations and the situation in Georgian private and public universities in this regard. To achieve stated goal of the research about analysing the situation in Georgia, questionnaire was developed and employees of higher education institutions and business companies were interviewed. Survey results showed that universities in Georgia are not entrepreneurial and the same survey results displayed the problems that exist in Georgia in this regard.

Keywords: entrepreneurial universities, funding diversification, Georgia, higher educational institutions, third-stream income

JEL: I22, I23, I25

Introduction

Entrepreneurial university is a central force that drives creativity, innovation and economic growth. Entrepreneurial universities play a significant role in the process of enhancing country's competitive advantage and creating wealth in the economy as well as in transferring the knowledge from universities to commercial application (Fayolle & Redford, 2014).

Entrepreneurial capacity for each university is new opportunity of dynamic changes. Due to differences in organizational culture and leadership, the process of building the entrepreneurial organization differs from one country to the other or from one university to the other. Successful implementation of transformation of universities into entrepreneurial organization strengthens university autonomy, university unity, educational achievements and achievements in transferring research to commercial practice in the environment.

Diversified funding of HEIs is considered as one of the main pathways toward entrepreneurship. This refers to the capacity of universities to diversify their incomes to avoid financial dependence on government funding. Funding diversification leads to self-reliance and autonomy of universities, they gain significant freedom in how they spend their resources. As a result, in the process of encouraging development of entrepreneurial universities, through diversification of funding, universities seek to become more self-reliant in resource planning.

Private financial resources, government financial resources and innovative financial resources are the funda-

mental characteristics for entrepreneurial universities to have a strong position against their competitors. Through having private funding resources, universities have academic freedom for choosing their research agenda. Research conducted by universities can lead to economic development with deep and complex relationships with the private and government sectors.

The purpose of the study is to investigate the international experience of transforming universities into entrepreneurial organizations, to demonstrate the characteristics of transformation and to emphasise the significance of diversified funding for development of entrepreneurial higher education institutions, as well as to find out the possibilities and alternatives of funding for overseas universities. The study also aims at investigating the situation in Georgian universities in respect of conducting entrepreneurial activities.

Universities in Georgia were expected to lack the cooperative relations with business companies within the scope of which higher education institutions could provide business sector with useful knowledge, research results that in turn would promote innovations and the economic growth of the country. Cooperation on the other hand would create new possibilities of funding for higher education institutions. Based on the expectations above, there were another logical expectations that Georgian universities heavily depend either on government funding or on the students' tuition fees and therefore have no financial independence in their resource planning.

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Based on the review of the literature the following research questions were shaped in the paper:

1. Are entrepreneurial universities promoting economic development of country?
2. Does funding diversification promote cooperation of HEIs with business companies?
3. Are HEIs and business companies collaborating in Georgia?
4. Do HEIs in Georgia have alternative ways of funding other than government funds or students' tuition fees?
5. If business companies in Georgia do not cooperate with HEIs, what are the reasons of this?

Entrepreneurial universities are relatively new concept in higher education system of Georgia. The novelty of the research is the attempt to analyse positive impact of entrepreneurial activities of universities, characteristics and possibilities of transforming universities into entrepreneurial organizations and the importance of funding diversification for development of entrepreneurial universities that is still less familiar concept for our country's education system.

Literature Review on the Essence of Entrepreneurial University and its Significance

In the classical model of the university, the importance is given to research and teaching, production and transmission of knowledge within a society. The economic and social valorization of knowledge produced by researchers within universities, set up the need for strategies, structures and mechanisms within universities that promote and reinforce knowledge transfer to the private sector, via divers avenues: patents, licensing, and facilitating academic spin-offs and start-ups, among others. Developing more entrepreneurial orientation and culture is needful for universities, and university researchers need to become increasingly entrepreneurial. This new model gives a greater importance to the relationships between three types of stakeholders: governments, universities and businesses. In the modern knowledge economy the entrepreneurial university is seen as a central force that drives innovation, creativity and economic growth (Fayolle & Redford, 2014).

Peterka (2011) states that "Entrepreneurial character of the university, because of its relationship with the stakeholders, and the concern for development of the environment (internal and external), contributes to the creation of a good university image, which plays a very important role in university's development. A positive university image is the main driving force that brings more students, greater number of projects, and thus larger income, necessary for functioning and development of the university" (Peterka, 2011, p. 555).

According to Etzkowitz (2008), entrepreneurial university can be expressed in a set of inter-related actions: (1) the capitalization of knowledge becomes the basis for economic and social development and, thus, of an increased role for the university in society, (2) the correlation with the

government and industry, what Etzkowitz calls the "triple helix" model, (3) the university independence, (4) setup of hybrid organizational formats that incorporate business sector practices and those of "traditional" universities, and (5) the current renovation of the university's internal structure as its relationship to the industry and government changes (Etzkowitz, 2008).

Fayolle and Redford (2014) state that entrepreneurial university concept is best used when institution is formulating a strategy by both focusing on academic goals and by transforming knowledge produced at the university into economic and social utility. It must not only incorporate entrepreneurship education but also define how start-ups are supported at the university. There is clearly a need for more entrepreneurial universities. Despite the growing commitment of universities to this strategy of research commercialization and technology transfer in the developed countries there is strong resistance to change in the university (Fayolle & Redford, 2014).

Universities have always been acknowledged as important drivers of economic development. Traditionally, universities have contributed indirectly to economic development by disseminating knowledge across academics, students, and by providing educated and qualified personnel to industries. However, a shift in the primary missions of universities is making these take a more active role in economic development. Creating, transferring and commercializing knowledge generated by universities is one of the new proposed roles (Lopez, 2013).

The positive and supportive effect of entrepreneurial universities over economic development of countries is actively discussed by scholars.

Peterka (2011) declares that creation of entrepreneurial university contributes to the economic development of the region in which it operates and knows how to adapt to environmental conditions that are constantly changing. Entrepreneurial university is integrated and above all, responsible to the environment in which it operates (Peterka, 2011).

Using knowledge better than competitors is the key to success on today's global market and for surviving in the global market, investment in development of country's knowledge base is inevitable. Countries will be able to decrease the gap that separates them from industrially developed countries with educated and qualified people. Peterka (2011) describes that society needs the answer to challenges brought by globalization and in this process education has the critical role. It is the base for the development of knowledge-based economy; it is guarding research and analysis, which make it possible to face the oncoming problems and opportunities. Many international institutions and the World Bank recognizes the role of knowledge and education for social and economic development. Building of country's technical and professional capacities, diffusion, creation and utilization all for this education is the fundamental. The role of education in general and of tertiary education in particular, is now more influential than ever in the construction of knowledge economies and democratic societies. Tertiary education, in its training, research, and informational role, is vital if countries are to adapt to these

far-reaching changes. Tertiary education is indicated as vital because it has a direct influence on national productivity, which is the guarantee of quality and the ability of the country to compete and participate in globalization processes (Peterka, 2011).

Levine (2009) states that “the entrepreneurial university model amalgamates three theories of economic development:

1. “Endogenous growth theory” which argues that the stock of knowledge and technological innovation are the key determinants of the rate of economic growth; that ideas and technological change produce “increasing returns”.

2. “Competitiveness” theory popularized by Michael Porter (1998), in which regional prosperity flows from establishing competitive advantage for local firms in particular industry “clusters”.

3. “Market triumphalism,” in which the university becomes part of an “everything for sale” culture. The university focuses “on knowledge less as a public good than as a commodity to be capitalized on in profit-oriented activities”. A strong private market-orientation of universities, including “partnerships” with local businesses and extensive business elite involvement in university management, purports to serve the wider community interest by promoting economic growth” (Levine, 2009, p. 10).

Many scholars agree on major characteristics of entrepreneurial universities:

Peterka (2011) summarizes the characteristics of successful entrepreneurial universities as follows:

1. In order for university to become entrepreneurial, each of its parts has to become entrepreneurial; each of its employees, each department should share a common vision and values. It is essential for creation of an entrepreneurial university;

2. University’s leadership capacity is an important factor in transformation of university to entrepreneurial university. Strong leadership promotes transformation, helps fast recognition of changes in the environment, responds to them and focuses on the increasing and changing demand for university’s services;

3. Ensuring financial independence that considers finding the sources of funding other than state is another important characteristics of creating entrepreneurial university. It means universities develop third-stream income without complete commercialization or without compromising its mission and quality of its activities;

4. For creating successful entrepreneurial culture universities should develop partnerships and connections with the world outside the university. This ensures transfer of knowledge and technology, establishment of connections with business world, maintenance of connections with alumni, attraction of additional sources of funding (Peterka, 2011).

Kwiek (2009) describes European universities transforming process over a period of 10-15 years and shows few elements that differentiate them from others.

At the beginning Kwiek designates diversified funding as one of the most important characteristics of transforming universities into entrepreneurial universities. Funding of entrepreneurial universities is diversified by means of three streams of income: mainline support from government, funds from governmental research councils, and all other sources called “third-stream income”. The focus of public universities in the last twenty years have been on the second and the third streams of income, whereas private institutions in Europe find it hard to be entrepreneurial as their faculty and academic units do not compete globally or nationally for outside research funding. And the role of competition with others is vital to the entrepreneurial character of an academic institution. The road to excellence in research is difficult to follow, especially when it refers to external funding, but realizing that prestige and reputation of an institution accumulates when significant and internationally relevant research is done (Kwiek, 2009).

Seeking third-stream sources has become a very powerful trend for entrepreneurial universities in the Netherlands, the UK, Sweden, and Finland, as well as in several transition countries including Poland. University of Warwick in the UK and Twente University in the Netherlands are demonstrating the importance of all academic units to be involved in seeking external funding for research (consulting, patents and licenses, short courses, and from fees paid by international students). Support from other public agencies, support from large business firms, engagement with small- and medium-sized firms, philanthropic foundations, professional associations, university endowment income, university fundraising from alumni and willing supporters, student tuition and fees for foreign students, graduate students are considered to be new sources of income for European entrepreneurial universities (Kwiek, 2009).

Academic entrepreneurialism is associated with risk-taking, institutions have to cope with a high level of risk on a daily basis. Risks can be diverse, but for private institutions the major risk is a financial one, related to student numbers (Kwiek, 2009). However, as mentioned before Peterka (2011) states that entrepreneurialism contributes to the creation of a good university image, that promotes attraction of students, projects and thus ensures enlargement of income. Thus diversification of funding supports creation of entrepreneurial universities that in turn enhances attraction of finances.

Besides above mentioned elements Kwiek (2009) names transforming traditional universities culture as another important aspect of successful entrepreneurial university.

Responsibility and autonomy of universities are another two undivided characteristics of entrepreneurial universities. University autonomy paves the way to the freedom in choosing research approach and formulating educational programs, which meet future needs for specific competencies. Responsible behavior of the university implies caring for the needs of the environment, desire to implement projects which will contribute to solving problems in the environment (research and educational). In the model of entrepreneurial university all parts of a system cooperate under strong collegial leadership which is a precondition of mutual

connection of each component and value determinant. It also provides openness towards the environment (Peterka, 2011).

In addition, Peterka (2011) characterises entrepreneurial university as always oriented on future change. Its management is aware that if market position is once captured it does not last forever. This constantly forces entrepreneurial universities to seek more effective methods of adapting and responding to the changes in the environment (Peterka, 2011).

Estermann and Pruvoy (2011) state that "The ability to allocate and manage financial resources freely, to establish partnerships and raise income from the private sector are crucial elements to ensure a university's long-term financial health" (Estermann & Pruvoy, 2011, p. 17).

Diversified funding does not only lead to university's autonomy, but it should also ensure responsible behaviour of universities. These are the characteristics of entrepreneurial universities. Only through responsible behaviour towards environment, universities can obtain the right of freedom and autonomy in performing their activities. Responsible behaviour of the university means caring for the needs of the environment, endeavour to implement projects, which will help to solve problems in the environment (research and educational). University autonomy considers having a complete freedom. It is important in choosing research approach and expression of positions based on conducted research, and in forming educational programs that meet future needs of the environment for specific competencies (Peterka, 2011).

EUA (European University Association) and its members identified ten key success factors for European universities in the next decade at 2009 Prague Declaration. One of them highlights the importance of "increasing and diversifying income: to achieve financial sustainability, by implementing sound accounting practices that identify the full costs of all activities. Diversifying the income portfolio and securing adequate public funding thus provides the basis to fulfil the university's core missions over the long term" (Estermann and Pruvoy, 2011, p. 17).

Estermann and Pruvoy (2011) support the same idea that diversity in the funding structure is an important step for entrepreneurial universities to achieve financial sustainability. According to them generating additional income is a fundamental for institutions' balanced income structure. Financial sustainability aims to ensure that university's academic goals are reached by guaranteeing that the institution produces sufficient income to enable it to invest in its future academic activities.

According to Estermann and Pruvoy (2011) income diversification has a positive impact for:

1. Autonomy in staffing matters – setting salary levels of academic and administrative staff;
2. Decreasing the risks associated with dependence on a given funder - additional resources enable universities to invest strategically in otherwise overlooked areas.

Entrepreneurial universities have big challenges which increase competition but also provide new opportunities for activity expansion. These drive institutions to seek additional funding sources. Income diversification may be strategically used to develop activities and respond to new missions, as it may reinforce the position of an institution on the local, national or international stage by supporting its competitiveness. Developing additional funding streams becomes necessary to lightening negative consequences of an unexpected fall in income (Estermann & Pruvoy, 2011).

Research Methodology and Research Tools

The study employs qualitative research methodology. In order to compare the result of the analysis of literature about funding diversification in universities of Georgia with the attitudes of Georgian universities, the research participants of several universities in Georgia were selected through purposeful sampling. The research findings cannot be generalized, however, qualitative approach allowed to study the research problem from different perspectives.

In order to achieve research results study employed secondary and primary data analysis. Under secondary data analysis existing literature about transferring universities into entrepreneurial universities, the characteristics of the process, the roles of diversified funding in the process of transferring universities into entrepreneurial organizations and the funding alternative of overseas and Georgian universities were studied and analyzed.

As for the primary data analysis, data about current attitudes of Georgian universities and business companies was collected through two different questionnaires – one was developed for employees of universities in Georgia (questionnaire consisted of two sections – section I (entrepreneurial activities fulfilled by the HEIs in Georgia) addressed to faculty representatives responsible for social activities who could provide useful information about collaborations with business companies and section II (alternative of funding in universities of Georgia and perception of the role of diversified funding by university administration in becoming an entrepreneurial universities) addressed to university chancellor or financial directors who could provide information about funding diversifications of universities in Georgia. Second questionnaire (perception of the role of Georgian HEIs by market participants in country's economic development) was developed for representatives of business companies to collect the information about their attitude and desire to collaborate with Georgian universities. Consequently, the data about current situation in Georgian universities concerning entrepreneurial activities and funding diversification was collected through questionnaire #1 and the data about attitude of business companies in Georgia toward collaboration with universities and their readiness to finance this collaboration was collected through Questionnaire #2.

Second questionnaire was about perception of the role of Georgian HEIs by market participants in country's economic development.

Questionnaires were developed based on the research questions that were shaped through research problem that was formulated after literature review and analysis. The aim of the survey was to find out the current attitude of Georgian universities toward collaboration with business companies, current alternatives of funding of Georgian universities and the attitudes of business companies toward possibilities of collaboration with universities.

Within the scope of research collected data was analyzed and based on the analysis conclusions and recommendations were framed and presented.

Research Participants and Data Collection

The collection of the data occurred primarily by means of face-to-face individual interviews, telephone interviews and the questionnaires sent through electronic mail. The members of the focus group were representatives of higher educational institutions and business companies of Georgia.

Universities were selected from both private and public sectors of higher education. Five private universities (International Black Sea University, Free University, Caucasus University, University of Georgia, Grigol Robakidze University) and four state universities (Tbilisi Medical State University, Ivane Javakhishvili Tbilisi State University, Iakob Gogebashvili Telavi State University, Gori State Teaching University) of Georgia and ten different business companies (Beko, Avon Georgia, VTB Bank, World Vision Georgia, Live Branding, Remax Georgia, Favorite Print, Bank of Republic, First Online Market Company in Georgia, Aviation Private Custom-house) were randomly selected for survey.

University employees were purposefully selected. Respondents were Deans, Vice-deans for Social Activities, Head of Post Graduate Studies, Academic Program Coordinators, Head of PR department and the Chancellors or Financial Managers of the universities. Purposeful selection of respondents ensured collection of data from the informed audience that in turn increased the possibility of collecting qualified opinion and valuable data.

Out of 21 questionnaires (Section I of Questionnaire #1) distributed among 9 university representatives of Georgia (5 private and 4 state universities) 19 questionnaires filled out properly were collected back from 8 universities (4 private and 4 state universities). Free University refused to collaborate and consequently it did not participate in survey. There were telephone conversations (with 2 respondents from Caucasus University) and face-to-face interviews (with 9 respondents from 8 universities) as well. In some of the universities not all faculties participated in the survey. As for the diversification of funding and the financial support from business companies (Section II of Questionnaire #1) the Chancellors of International Black Sea University, Grigol Robakidze University, and the Financial Managers of Telavi State University, Gori State Teaching University, Ivane Javakhishvili Tbilisi State University, Caucasus University, Tbilisi Medical State University participated in research. Chancellors and Financial Managers from both private and state universities were interviewed face-to-face.

Information about financial support from business companies were collected from business companies of Georgia as well. Questions from questionnaires #2 about perception of the role of Georgian HEIs by market participants in country's economic development, were asked to 10 employees (representatives of top management) of 10 companies (Beko, Avon Georgia, VTB Bank, World Vision Georgia, Live Branding, Remax Georgia, Favorite Print, Bank of Republic, First Online Market Company in Georgia, Aviation Private Custom-house). Questionnaires were mostly distributed through e-mail (8 respondents of 8 companies), however there were telephone conversations as well with corporate managers of 2 companies, BEKO Georgia and Avon Georgia. Out of 8 questionnaires from 8 companies all 8 properly filled out questionnaires from all 8 business companies were collected back. Actually none of the business companies rejected to cooperate and take part in research. Companies were randomly selected, however employees were purposefully selected. Respondents were top managers of organizations, PR managers, directors and also owners of business companies. Intentional restriction of business representatives ensured again collection of data from informed audience, who would have full information about the collaboration with universities in case there is such a collaboration or who can be the decision makers whether to cooperate or not with universities, how to cooperate or whether to pay for this cooperation or not.

University representatives (Deans, Vice-deans for Social Activities, Head of Post Graduate Studies, Academic Program Coordinators and Head of PR department) of both state and private universities were asked if they carry out entrepreneurial activities or if have any type of collaboration with business companies, whether the collaboration happens regularly or not. They were also asked for their opinion about the possibilities of cooperation with market participants in terms of conducting some research for them or supplying any other type of service to them and if this type of collaboration would support their development and economic development of country in general.

University Chancellors or Financial Managers through interviews were asked if their universities have ever received any type of financial support or financial reimbursement from market participants for conducting an entrepreneurial activities and if they have received then whether it was a significant financial support or not.

As for the interviews with business companies, questions addressed to them were again about the collaboration between universities and business companies. They were asked if they have any type of collaboration with HEIs and do they ever spent some funds on receiving service from HEIs or not. In case of negative answer representatives of business companies were asked for the reasons of non-collaboration. They were also asked for what universities can do to increase their interest toward the cooperation with universities in Georgia or what those services they would pay for to HEIs are. The opinion of business representatives about the role of the government in promoting the process of collaboration between universities and business companies and the possible ways of supports from government to motivate them to collaboration with HEIs in Georgia were also collected.

Analysis of Data

Respondents from International Black Sea University, Caucasus University, University of Georgia, Grigol Robakidze University, Tbilisi Medical State University, Ivane Javakhishvili Tbilisi State University, Iakob Gogebashvili Telavi State University, Gori State Teaching University were first asked whether they are involved in entrepreneurial activities or if they have collaboration with business companies. The results of the first question showed that every university is involved in entrepreneurial activities to a certain extent (see the Table 1.1.).

Table 1.1. The Results of the Survey about Carrying out Entrepreneurial Activities and Receiving Request Order for Service from Companies

Type of universities	Number of universities under the study	Universities carrying out entrepreneurial activities	Received request order for service from companies
Private	4	4	0
State	4	4	0

The next question was about describing their collaboration with market participants. In International Black Sea University's collaboration with business companies is considered the memorandums signed between faculties and business companies. Companies are financing competitions on faculties. For example, in 2015 Singular financed IT competition, they gave 2000 Gel to winner team. Respondents from every university under the study mostly named students' internship programmes as the most usual way of collaboration between HEIs and business companies. Among the ways of collaboration respondents from universities under the study named invitation of business practitioners by the faculties to share their practical knowledge and entrepreneurial experience to students. Different type of collaboration was named by Tbilisi State University, respondents stated that university carries out entrepreneurial activities in terms of participating in researches financed by national centres and in programmes financed by international organizations. For example, in 2010-2013 Tbilisi State University participated in the scientific research financed by international foundations. The research about endophenotype was financed by Lausanne University (Switzerland) and by the Innovative Medical Centre (Lithuania).

The next question was about frequency of collaboration, university representatives were asked whether the collaboration with market participants carry regular or one-time character and all university respondents had one and the same answer that the collaboration they have named above carry a regular character.

To the question about whether universities have ever received a request order from a specific business company or from any participant of the market to supply any type of service to them, all the respondents under the study gave negative answers (see the Table 1.1.).

Respondents of the universities under the study were asked to provide some probable reasons why market participants are not interested in collaborating with HEIs in Georgia.

None of the respondents were able to give an answer to this question and to provide some reasons of this attitude of business companies.

As for the next question, universities were asked if they can help market participants in terms of conducting some research for them or supplying any other type of service to them that would support their development and economic development of country in general. All the respondent from the universities under the study completely agree that they can provide high quality researches for businesses. Respondents from every university under the study declared that not only academic staff, but students as well at junior or senior level already have sufficient knowledge to provide businesses with business-related consultations or to help them develop business plans. In addition, respondents think that researchers from universities can obtain valuable data through their studies and therefore, can give qualified recommendations to business entities. Respondents from Tbilisi State University declare that their long-term goal is to develop the research capacity to successfully compete with other universities in obtaining grants for their research activities.

Through last question from section I respondents were asked for their opinions about what can be done by the HEIs to motivate market participants to collaborate with HEIs of Georgia. The only answer from universities was that all big companies must spent some money on research and development of their fields, in this case university is a very good place to invest their money. All the respondents from universities under the study expressed their readiness for this kind of collaboration with business companies.

Questions from section II was for employees responsible for financial management of HEIs. They were asked about whether their universities have ever received any type of financial support or financial reimbursement from market participants for conducting an entrepreneurial activities. Respondents from all universities under the study except one, say that there is no funds paid to them by market participants for any type of service performed by them and that there is no collaboration of this type (see the Table 1.2.). Only Ivane Javakhishvili Tbilisi State University has received financial support for their researches, but not from businesses but from state.

Table 1.2. The Results of the Survey about Receiving Financial Support from Business Companies by HEIs of Georgia

Type of Universities	Number of Universities under the Study	Received Financial Support from Business Companies
Private	4	0
State	4	0

Next two questions were automatically rejected by Financial Managers of all universities other than Financial Manager of Tbilisi State University. And it was logical, as the second question requested to name the parties who have ever paid funds for services that university has performed for them and third question requested to name the percentage share of university's total revenue earned by them from entrepreneurial activities. Financial Manager of

Tbilisi State University said that they have received funds from international research funds. As for the question about the percentage share of university's total revenue earned from entrepreneurial activities the respondent from Tbilisi State university declared that the amount their university earns from entrepreneurial activities (from international research funds) amounts from 5% to 15% of university's total revenue.

To the question four "do you agree that allocation of funds from businesses will help your university to become more entrepreneurial university and thus more useful member of society and economy?", the chancellors/deans of International Black Sea University, Caucasus University, University of Georgia, Grigol Robakidze University, Tbilisi Medical State University, Iakob Gogebashvili Telavi State University, Gori State Teaching University gave positive answers and they completely agreed that universities will better transform into entrepreneurial organizations with this type of collaborations and funding from businesses. Financial support will help universities to develop their planned activities, objectives and to be useful member of society. Tbilisi Medical State University declared that allocation of funds from businesses will help universities to have additional funding which will be completely devoted to entrepreneurial activities among students and teachers.

The first question of the questionnaire number two, filled out by business companies, was about their experience of having any type of collaboration with HEIs of Georgia. 50% or half of the respondents (Avon Georgia, VTB Bank, World Vision Georgia, Bank of Republic, First Online Market Company in Georgia) answered that they cooperate with universities in Georgia and the other half, specifically, Beko, Live Branding, Remax Georgia, Favorite Print and Aviation Private Custom-house answered that they never had any type of collaboration with HEIs (see the Table 1.3.).

As a result, following four questions were automatically rejected by Beko, Live Branding, Remax Georgia, Favorite Print and Aviation Private Custom-house. The question number 2 that was rejected by them requested to describe what kind of collaboration businesses have with HEIs, question number three was about the frequency of collaboration, the question number four was about the case of sending funds by them on receiving any type of service from HEIs and the last question which was automatically rejected was about the amount of funds or the percentage share of their income spent for cooperating with HEIs.

As mentioned above the respondents from Avon Georgia, VTB bank, World Vision Georgia, Bank of Republic, First Online Market Company in Georgia stated that they collaborate with HEIs in Georgia. As for the character of collaboration all of them, except First Online Market Company in Georgia, named one and the same way of cooperation with HEIs, they offer students internships in their companies and in most of the cases they employ them later. Respondent from Avon Georgia declared that they have following relationship with HEIs: Avon involves students in the events and activities connected to Avon's charity program "fight against cancer" within the scope of which they are inviting students to take a public walk with them against breast can-

cer. At the same time they are providing information about risks of this disease and about the ways of avoiding breast cancer. The director of First Online Market Company stated that he had attempts to have collaboration with one of the HEI in Georgia when his company was planning to enter the market. He wanted to explore the market and to find out the steps of entering the market, but he was demanded to pay 6000 GEL for this research, which was a big amount of money for their start-up business. Therefore, the cooperation with higher education institution could not take place. As for the third question about frequency of the collaboration his answer was "it happened once". Avon Georgia, VTB bank, World Vision Georgia and Bank of Republic answered that their collaboration with institutions happens regularly. Even the second half of the companies claiming to have cooperation with HEIs in Georgia had negative answer for question number four. They have never spent any amount of funds on receiving service from HEIs (see the Table 1.3.). Consequently, these companies could name the percentage share of their income spent by them on collaboration with HEIs.

Table 1.3. The Results of the Survey about Collaboration of Business Companies under the Study with HEIs of Georgia and Spending Funds by them for Service from HEIs

Number of business companies under the study	Having collaboration with HEIs	Spending funds for receiving service from HEIs
10	5	0

In case companies have no cooperation with HEIs in Georgia they were asked to explain the reason of this. Only those 50% of business companies giving negative answer to the first question about having cooperative relations with HEIs answered this question and all of them declared that they have just never thought of that possibility.

Respondents from business companies under the study were also asked about what can be done by HEIs to make them interested in collaboration. Respondent from Avon Georgia noted that their company always makes decision on the base of results and through the analysis of probable risks, the management of the company has to be sure that they will receive promised results of services in the way it was planned and expected. In order to make them interested in collaboration with HEIs they must be sure that university can supply useful service to their business. The respondent from Aviation Private Custom-house answered, that universities should follow the example of China and send their staff and students to developed countries for upgrading their qualifications, and after they return back, universities will have possibilities to offer good services to business companies. Respondent from Remax Georgia answered that universities should have thoroughly structured agenda in order to make businesses pay attention and consider the collaboration with HEIs. The answers of the rest of interviewed companies can be joined, because they had the same answer – universities should be qualified enough and should have a broad range of expertise in order to cover different fields of activities and to make business companies be interested in collaboration.

The following question was about the service that companies would pay for to HEIs of Georgia. All the respondents from business companies under the study answered that they would pay for research and consultancy.

The next question was about the maximum amount of funds business companies would spend on receiving above specified desirable service from higher educational institutions. All the respondents from business companies under the study answered that they would spend on services and consultations from HEIs of Georgia less than 5% of their total revenue. The respondent from World Vision Georgia named specific amount they would pay for services or consultations from higher educational institutions in Georgia. This amount was maximum 5000 US Dollars.

To the question whether they agree that government support would motivate business companies to collaborate with HEIs, we got all the positive answers from respondents. Business companies agree that government support can be a good motivation for businesses to start the collaboration. As for the nature or the type of government assistance, all respondents from business companies under the study marked option "a" that was direct financial benefits (e.g. tax reductions).

Last question for the business participants of the survey was about their perception of the role of Georgian higher education institutions in economic and business development of country as well as about the ways of improving these roles of HEIs. All the respondents from business companies under the study designated their desire to improve the quality of education in universities of Georgia that according to them would better ensure business companies about possibilities of receiving relevant services and consultations from HEIs. Only in this case they affirm the role of academia in country's economic development and growth.

Conclusion

The conclusions and recommendations within the paper were drawn and framed based on both the analysis of reviewed literature and the analysis of research results and findings. Conclusions drawn from the literature review can be formulated as follows:

1. Investigation of international practices show that development of entrepreneurial universities and activities are significant for country's economic growth. Close cooperative relations among higher educational institutions and business companies might support start-up businesses to investigate the market or to obtain good business plans that most probably can better guarantee successful entrance into the market place and can better ensure and increase the probability of their successful future performance. As for the acting business companies, collaboration with HEIs may help to investigate some weaknesses of their performances (in case they have it) through conducting relevant researches, plus they can provide business companies with some technological improvements, medical achievements

through research results conducted by the HEIs. All the above could promote business development and growth, and consequently, social and economic development of a country.

2. The review of the literature and the observation on funding of successful entrepreneurial universities show that diversification of universities' funding and development of third stream income of universities is one of the significant characteristics of transforming HEIs into entrepreneurial universities. International practices show that successful entrepreneurial universities do have their funds diversified and do generate third stream income. Generation of alternatives of funding, other than government funding and student tuition fees, helps higher education institutions to gain financial independence in planning, managing and using their resources that in turn can promote closer collaboration of universities with business companies and motivate commercialization of its activities and products. According to many scholars university freedom and autonomy is important in choosing research approach and expression of positions based on conducted research, and in forming educational programs that meet future needs of the environment for specific competencies. Therefore, entrepreneurial universities are better involved in environment development as far as they are better aware of environmental or business needs. Intensified collaboration of higher education institutions with business companies facilitates generation of third stream income even more.

3. However, there is one concern about diversification of funding by HEIs that can be concluded through literature review and it relates to possibility of shifting the dependence of universities from government to private sector. In particular, if funding from private businesses becomes relatively important for higher educational institutions, they may tend to be interested in generating research results that can be commercialized in the short or medium term. Universities might be concerned that their researches should answer to the needs of the market.

4. As for the possibilities of generating third stream income by higher education institutions in Georgia, it can be concluded that universities in Georgia have possibilities to carry out entrepreneurial activities and consequently can diversify its funding, as according to Georgian legislation they are allowed to earn revenue from economic or entrepreneurial activities. Therefore, it can be concluded that the legislative framework of Georgia does not hinder diversification of university funding and development of entrepreneurial activities.

By summarizing and analysing the survey results about Georgian situation in terms of fulfilling entrepreneurial activities by universities in Georgia, degree of financial diversification of HEIs in Georgia, perception of the role of diversified funding by university administration in becoming an entrepreneurial universities and the perception of the role of Georgian HEIs by market participants in country's economic development, the following conclusions and recommendations can be formulated:

1. It has to be mentioned that most of the business participants of the market have never spent funds on receiving

any type of service from higher education institutions. Moreover, during the conversation they admitted that they have never thought of having any kind of collaboration with HEIs of Georgia. For the majority of respondents cooperation between university and business is limited, because business sector perceives university only as the source of prospective employees for their business companies.

2. The survey inspired them to think of the new type of collaboration. Business companies stated to be ready to order universities to carry out researches at reasonable prices. However, they need to be sure that research will be carried out by qualified academic staff and that they will provide valuable and relevant service. Thus, it can be concluded that universities have some doubts about the research results provided by universities and that universities have to demonstrate their knowledge and qualification.

3. In addition, engagement of external stakeholders (e.g. government) can be considered as a significant component for entrepreneurial development. Respondents from business companies under the study do emphasize the role of the government in promoting the collaboration of higher education institutions with business companies. Under the government support business companies considered direct financial support or tax reductions for those businesses who will collaborate with higher education institutions, those who will order and use university services. As a result, it can be concluded that if government believes that the process of transferring HEIs into entrepreneurial universities is useful and important for economic development of country, it can support and promote the process of transformation by providing direct financial support to those business companies who collaborate with higher education institutions in Georgia. Government support can be a good starting motivation for businesses to start the collaboration. Later, after some period of cooperation with HEIs, companies can themselves observe the benefits of this cooperation and thus will have motivations other than direct financial support from government to continue and increase the intensity of entrepreneurial activities.

4. In order for universities to become entrepreneurial, each of their part has to become entrepreneurial. For ensuring universities financial independence they should find other sources of financing (beside the state). As it was already mentioned, diversified funding provides a degree of autonomy and allows them to become more self-reliant in resource planning. University autonomy considers having a complete freedom. It is important in choosing research approach and expression of positions based on conducted research. The survey results revealed the fact that universities do not have additional sources of income in Georgia. This fact can be impediment for transforming universities into entrepreneurial organizations in Georgia.

5. Analysis of survey results show that HEIs in Georgia are not actively collaborating with business companies and do not actively carry out entrepreneurial activities. There are some cooperative relations of HEIs of Georgia with business companies, however, in most of the cases the collaboration implies only offering internships or employing of students of HEIs of Georgia, or visiting the universities

to share their practical experiences to students that cannot be considered as entrepreneurial activities. These are not the activities that would provide business companies with useful knowledge and the expertise from HEIs of Georgia and to promote their development and growth. On the other hand, this is not the activity that would help HEIs of Georgia to earn some funds that would support their financial independence in planning their resources.

6. In order to motivate collaboration of business companies with HEIs of Georgia the universities should have a model for integrating entrepreneurial activities at all levels across the university. The university should be a driving force of the process by exchanging knowledge with industry, society and public sectors. Higher educational institutions in Georgia should conduct trainings on characteristics of entrepreneurial universities and the positive impacts of entrepreneurial activities for staff and staff should take an entrepreneurial approach in teaching and promote innovation in teaching and learning. They should provide opportunities to students to be involved in conducting entrepreneurial activities and to support individuals to realize their entrepreneurial ideas into action.

7. HEIs of Georgia should have sustainable financial strategy to support entrepreneurial development and their entrepreneurial goals must be encouraged by university attempts to earn third stream income and to diversify university funding.

8. Finally, survey results demonstrated that it is critically important to inform business companies about possibilities of cooperation with HEIs in Georgia (most of the respondents from business companies under the study stated that they have not even thought of the collaboration with universities). It is also vital to show the benefits of cooperation and to demonstrate the capabilities of HEIs to do qualified research or to give qualified consultations as companies doubt the qualification of universities in Georgia. The attitude of business companies toward HEIs in Georgia and their belief about university capabilities can be improved through showing the specific structure of collaboration, demonstrating the results of the collaboration and all the possible benefits of collaboration.

One very important issue that has to be stated and has to be paid attention to by universities is the degree of commercialization of their activities by higher educational institutions. The universities should not become the part of an "everything for sale" culture. The process of transformation should not make universities to focus "on knowledge less as a public good than as a commodity to be capitalized in profit-oriented activities". By carrying out entrepreneurial activities universities should not forget their primary objectives and should follow responsible behaviour.

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