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Elaboration of Foundations of University Business Incubator Platform

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Abstract

Business incubator (BI) and university business incubators (UBIs) are a quite recent innovation but it has become a useful tool for business development. Despite some experiments, for Georgian public and businesses BI/UBI concept is still known as interesting theoretical but not practical idea.

A set of surveys conducted by international organizations as well as individual scholars have revealed the main obstacles in doing business in Georgia. "Inadequately educated workforce" is one of the most serious problem. The authors' surveys show the strong demand for BIs/UBIs services from the business side; on another hand, a background for their establishment in terms of university students' skills and their willingness to start own business has been built. University based business incubators might be the most suitable and efficient type of BIs in Georgia. To realize this idea we have to learn a worldwide practice. The paper reviews the extent literature that examines the critical role of BIs/ UBIs in developed and developing economies. Based on this, the foundations of UBIs were proposed.

Keywords: business incubator, developing economy, Georgia, obstacles in doing business, university business incubator
JEL: M21

Introduction

The world statistics reveal, that no more than 20% of all new-appeared companies survive in market zone notwithstanding that 80% of them have productive and progressive ideas. Thus logical step would be to assist businesses during their start-up period, the most complicated stage, when the founders of the companies do not have enough experience and/or opportunities for overcoming both administrative and financial problems. This support for new ventures to survive and to grow during their early years may be effectively provided by business incubators (BIs)/university business incubators (UBIs). Generally, incubators are designed to address market failure because main goal of incubation program is to produce successful graduates that are financially viable and free-standing when they leave the incubator.

In Georgia business incubator practice has its own history. Despite some experiments, for Georgian public and businesses BI/UBI concept is still known as interesting theoretical but not practical idea.

The article aims to develop a framework for University Business Incubator Model as an important bridge between real business and academic studies. UBIs role is to provide support to government activities being a supplement and to stimulate innovation and competitiveness of domestic businesses.

The paper reviews extent literature that examines the critical role of business incubators and university business incubators in developed and developing economies.

Based on the results of surveys conducted by international organizations and the authors, the existing demand for creating of university-base business incubators in Georgia, which can be an engine in innovation, job creation, and economic growth in the country, have been identified and explored.

Doing business in Georgia: obstacles

Last decade the monitoring of Georgian business environ-

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ment by international organizations as well as individual scholars, has been carried out on regular bases. The results of surveys asking respondents to rate various factors as being obstacles in setting up and/or operating a firm, look very similar. Particular, The Global Competitiveness Report, 2010–2011 indicates "an inadequately educated workforce" as the most problematic factors for doing business in Georgia with 19.9% of all respondents. In the next year report this factor was ranked on the second place with 13.4% (The Global Competitiveness Report, 2011–2012). The situation did not change in 2013. In The Report "inadequately educated workforce" is ranked again on the second placed with 13.4% (The Global Competitiveness Report, 2012–2013).

The last survey of International Financial Corporation shows the similar picture – uneducated workforce was among the most serious problems faced by businesses in Georgia (Georgia Business, 2012).

According to The 2012 World Bank Entrepreneurship Survey stakeholders cited inadequate skills as a key hindrance to developing local industry (Fostering Entrepreneurship in Georgia, 2013).

The author's surveys have proved this tendency. In the survey of 2011 one of the central question concerned with the existing barriers to the development of small business in Georgia. Two groups of factors were included into the questionnaire: macro factors (such as unstable legal environment, low purchasing power of the population, lack of qualified human resources, lack of market information, etc.) and micro factors. Among the most serious micro factors were lack of proper marketing and management skills (Papiashvili & Ciloglu, 2012).

In June of 2013 two surveys were conducted online. The first survey aimed to define the main obstacles of business development in Georgia; 96 enterprises participated in the survey. According to the survey the most demandable services during the startup stage were marketing (17% of all respondents) and legal consulting (15%). New businesses also need consulting in information technologies, general management, business analysis, and others (8-10% of all respondents). Remarkable is the fact, that on the next development stage, Georgian businesses still feel lack of marketing and management skills (18% of all respondents), business analysis, legal consulting, consultancy on banking services, and so forth.

In response to the question about the main obstacles of firms' development, the respondents list insufficient accesses to finance and lack of business contacts (21% of all) and lack of skilled labor (19%) (Figure 1).

The second survey was conducted among the students of leading Georgian universities to determine their entrepreneurial readiness, to analyze their attitude towards business startup and obstacles they foresee. Students of ten Georgian universities participated in the survey and 147 answers were collected in the data base, and the response rate was 100% since the online survey granted the tool to collect all responses from the question's bank. IBSU students were the most active participants.

The question where the students are aimed to be employed after graduation, approximately a half of them answered that they want to be hired at the private sector and

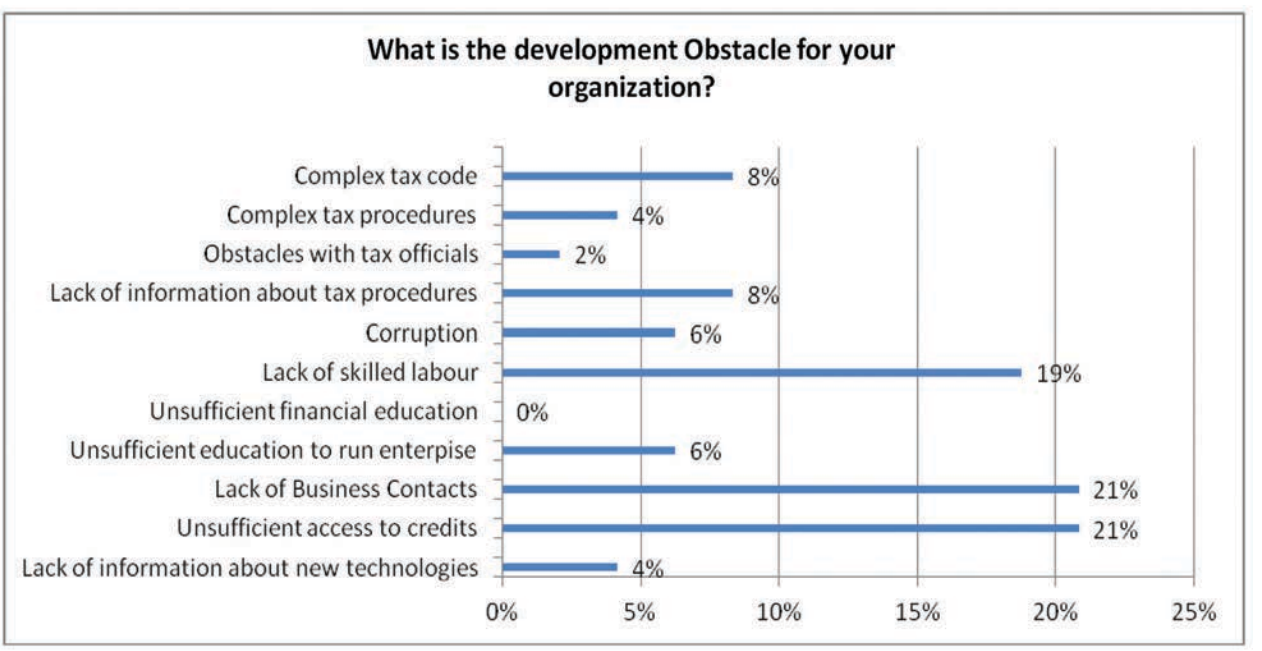

Figure 1. *What is the development obstacle for your organization?*

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one third foresees themselves at the public sector or government agencies (Figure 2). Remarkably the students of state universities prefer to be employed in public sector in contrary to the private university graduates. Moreover, the most part of IBSU students (70%) are planning to work in private businesses. It is not surprising because 84% of IBSU students already have the idea to start a business. And only due to the lack of financial resources (about half of respondents) and other barriers (absence of business contacts, insufficient education, etc.) they have not been able to realize their ambitions yet.

Nearly half of surveyed students have got the information about business incubator services. 34% of all students and 39% of IBSU students are ready to start a business under the mentorship of UBIs but 10-15% of surveyed youth are not willing to do business under any mentorship.

Quite interesting information was collected about the fields of interest in case of acquiring some financial resource, let say, $15,000 donation (Figure 3).

So, modern services such as IT and innovations alongside with trade (popular business in Georgia) and tourism (actively supported by the government), attract attention of young generation of Georgian businessmen.

Therefore, on one side, in Georgia strong demand for BIs/UBIs services exists, on another – background for their establishment in terms of university students' skills and their

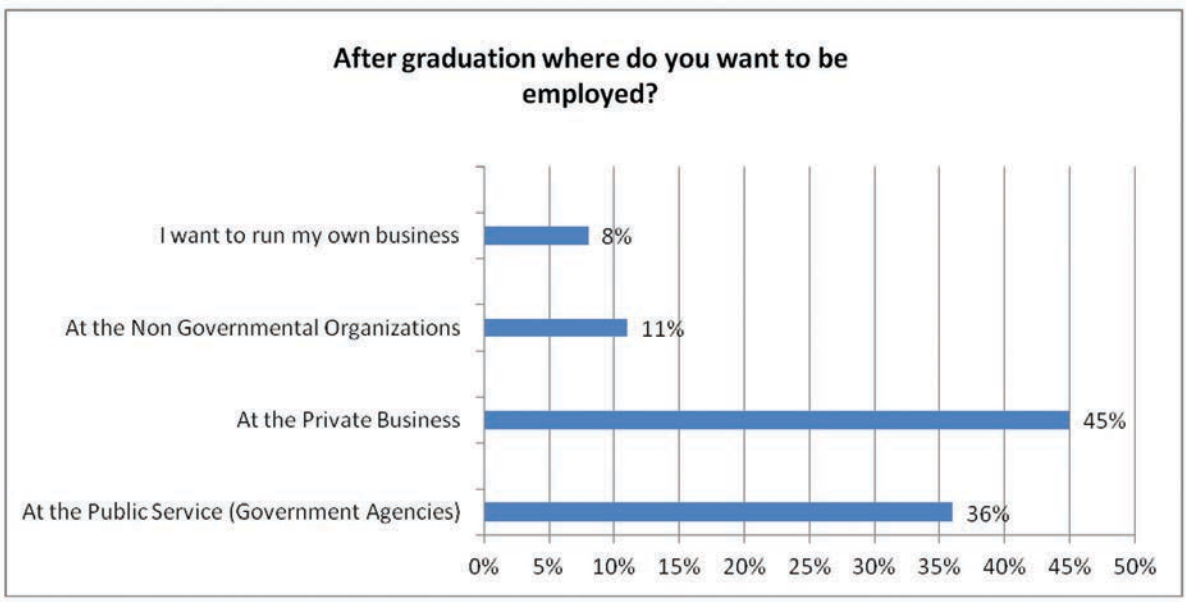

Figure 2. *After graduation where do you want to be employed?*

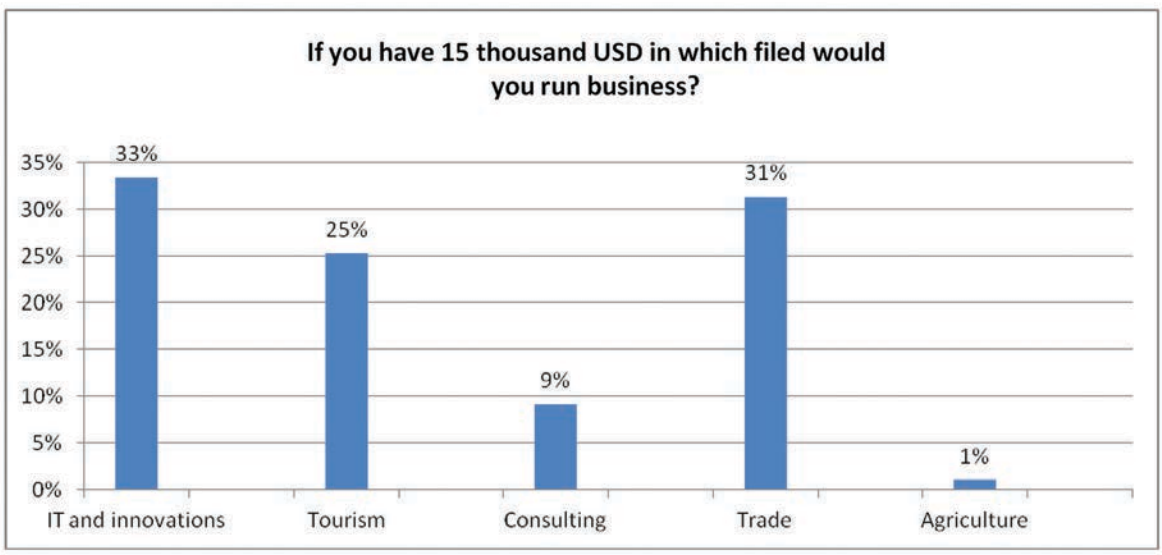

Figure 3. *If you had $15,000 in which field would you run the business?*

willingness to start own business has been built. Under these circumstances, it seems that university-base business incubators would be the most suitable and efficient type of BI in Georgia. Moreover, we do not need "to invent a new bicycle" and just have to learn a worldwide practice.

Business incubation: Literature review

Business incubator is a quite recent innovation but it has become a useful tool for business development and especially, for small businesses. Missing the debate where the first BI appeared, in New York or in the UK (McKee, 1992), let us start from historical retrospective which shows the evolution of different types of BIs along with modification of their goals and objectives.

Science Parks and Business Centers represent the type, which mainly stresses on delivering the flexible area and share services to tenant companies. They have non-particular intake and had no requirement regarding to business activities and technology content. Another strategy was a more apprehensive attitude to set up entities for leveraging resources and assisting enterprises to foster by sharing in tenant companies. Although providing space was still important, the focus was on developing the firms and success was defined in terms of tenant company expansion and its ability to eventually stand on its own (Smilor, 1987). From the beginning of 1990s BIs concentrated on providing services to assist business firms growth by sharing the resources. Therefore, the basic goals of incubators were to facilitate not only setup stage but economic growth of the firms as well as by promoting entrepreneurship, innovation, employment, and growth opportunities.

The advent and wide use of the Internet from the mid-1990s have changed the situation and the "second generation" of BI was appeared (Lalkaka, 2001). BIs specialized either on specific industry sectors (software, hardware, data storage, etc.) or on specific type of technologies (semiconductors, microprocessors, etc.). They had a highly specialized technology focus and were mostly established by universities or private sector organizations (Malan, 2002).

In the late 1990s and beginning of 2000s the internet and dot.com era continued to influence the viability of new incubation process and new "virtual" incubators were established. These new economy incubators are also called 'incubators without walls'. Generally, they were virtually presented with financial, business and technological services at the core of offering. They mainly focused on high technology and modern virtual services activities and did not have job creation as their principal objective. This type of incubators were private sector, profit-driven incubators with payback allocations from their investment projects rather than rental income. They typically provided workspace and focused on consulting services to a small growth-potential group of firms. Moreover, they often took equity in these companies and accelerated them to the market through technology licensing/acquisitions deals.

Therefore, as business incubator concept was developing, the focus was shifting from sharing space and facilities to providing services. In other words, the difference between the first and the second generations of incubators can be attributed to the level of management/marketing support that was always higher in the last case. Another fact is the shift towards providing services rather than a combination of services and physical space. Totally the National Business Incubator Association (NBIA) 2006 survey identified 33 different services being offered by incubators. Nowadays, according to NBIA estimation, there are about 7,000 incubators worldwide with approximately 1,500 in the United States (Business incubation, n.d.). Continued growth in the number of business incubators demonstrates their perceived value.

Summarizing, BIs may be distinguished as based on (1) physical space ("the first generation"); (2) management support provided vs. technology level ("the second generation" which gave the rise to nine different types of incubators: shared office incubators, business parks, science parks, industrial incubators, enterprise agencies, innovation centers, business incubators, business centers and technology centers); (3) primary and secondary objectives of their sponsors (for-profit vs. non-profit incubators, academic incubators; for-profit seed capital incubators)[1] .

Interesting is a business incubator lifecycle hypothesis developed by Allen and McCluskey (1990) which highlights three stages (start-up, business development, and maturity) and three specific strategies that BIs held. During the start-up stage management is focused on the establishment of the physical space through the reconstruction of facility or existing building, or construction of an accommodation. During the "business development" phase, emphasis is placed on developing a business advisory function and business network, dialogue and trading between tenants. When demand for space is appreciably greater than space avail-

[1] For-profit development incubators seek primarily to capture real estate appreciation (Nyrop, 1986). Non-profit development corporations (Allen & S. Rahman, 1985; Pacholski, 1988; Smilor, 1987) primarily focus on creating jobs and enhancing the entrepreneurial climate. Academic incubators seek to commercialize university technology (Allen & S. Rahman, 1985; Smilor, 1987) while at the same time providing local economic development benefits. For-profit seed capital incubators are mainly physical embodiments of the seed fund manager wanting to have the firms in their portfolio located at one location, so they can be given maximum attention (Allen & S. Rahman, 1985).

able for tenants and responsive businesses arrangements are operating in proper manner, the incubator is ready to upscale in the maturity stage. Maturity stage is when the incubators spread its influence around the region and can accommodate the increased demand for their services. Nonetheless, there is a common in their final objective - to provide entrepreneurs with services in order to enable tenants to reduce their overhead costs, to improve the survival of new start-ups, to support their growth and to strength competitiveness and innovations. As Smilor stated "the basic concept behind the new business incubator – whether technology- oriented or non-technical, urban or rural, non-profit or for-profit, public or private, locally owned or part of a chain – is to leverage entrepreneurial talent" (Smilor, 1987). Indeed, this makes the incubator concept unique. From this point of view, university-base business incubators is not a special type of BI because they meet all the above mentioned characteristics of "typical" BI. The crucial differences are that university, usually local, shares space and provides all services; students and graduates of this university are the main entrepreneurs of UBIs.

Nowadays UBIs attracts attention of business communities and public in different countries. The first globally University Incubator Benchmark (UBI Index) was developed in 2013. Global index is used to benchmark performance and best practices of University Business Incubators (UBI Index, n.d.). Five nominations are awarded – Top Global, Top Young, Top Biotech, Top IT, and Top Life Sciences. In 2013 Rice Alliance for Technology and Entrepreneurship Incubator of Rice University (USA) was awarded as Top Global. As it announced, the UBI aims to support of technology commercialization, entrepreneurship education, and the launch of technology companies. As the founders explain one of the key of success of UBI is that from very beginning UBI was focused on supporting startups and assisting entrepreneurs who wanted to launch technology companies (Rice Alliance, n.d.). Later the focus was on long run cooperation trying to help start launch companies with Rice. Rice students or companies that have been spun out of technology that has been invented at Rice. The UBI cooperates not only with local businesses but other universities as well. This large inter collegiate business plan competition is known as the Rice business plan competition.

Business incubation idea in Georgia: Brief history

In Georgia business incubator practice has its own history. Business Incubation Initiative team of Georgia started research from 2002, with the aim to develop model of incubator for Georgia. According to the survey of 2004, most Georgian businessmen thought that business incubation idea was utopia (SME Business Development). Later they have changed their opinion, business incubation idea raises interests and sympathy of all categories of Georgian businesses (Elizbarashvili, Samadashvili, & Burchuladze, n.d.) but mostly as theoretical experience.

With support of World Bank and Eurasia Foundation the first business incubator was established in Tbilisi in 2008, accommodating 3 tenant companies and 2 virtually incubated external clients (BII history, n.d.)[2] .

The business incubator concept was replicated in other regions of Georgia. Particularly, in 2007 the SME Support Project awarded "Signaghi 2002" a nine-month grant to set up a small tourism-oriented business incubator that had to accelerate the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services were developed and managed by incubator managers and offered both in the business incubator and through its network of contacts. The Signaghi tourism business incubator intended to incubate and provide hands-on assistance to three businesses - a Signaghi tour operator, a crafts shop and an outdoor café - with the aim to produce successful small firms (Businesses Boosted, 2010).

In 2009 Gori Business Incubator was launched (Training of internally displaced women, 2009). The incubator was established by the Georgian Association Women in Business in partnership with USAID's Small and Medium Enterprise Support Project. The Gori Business Incubator was designed to provide quality demand-driven vocational training courses to internally displaced women free of charge and offer subsidized rental space to help them start their own micro businesses. In other words, the Gori Business incubator generally targeted women entrepreneurs who wanted to start up their own small business. The focus was on agriculture and service industry. The Incubator provided space for five micro enterprises - a catering company, a laundry and dry cleaning shop, a tailor, a beauty salon, and an IT training consultant.

In Batumi the business incubator initiative is part of the Adjara Economic Development Project, which has promoted

[2] Unfortunately, there is no one opinion about the date of set up of the first BI in Georgia. According to the information of the Georgian Association of Women in Business (GAWB), the first Georgian Business Incubator was established in Tbilisi in 1998. The second BI was set up in Mestia in 2007, and the third business incubator was in Gori (2008) (Elizbarashvili N., Samadashvili U., Burchuladze; p.1).

vocational education, tourism, and agriculture and business development in the region from 2009. Tenant companies are selected by representatives from the Adjara government, businesses and Batumi Shota Rustaveli University. The three-year project provides those businesses with office space and advisory services including management assistance, business counseling, writing business plans, financial analysis, and professional referral networks. Targeted sectors include trade and services, tourism and technology.

Despite the impressive examples, total picture of Georgian business incubation process is quite pessimistic. Serious weaknesses of business incubation in Georgia might be classified as followings: incredibility; fear of potential clients that business incubation may misappropriate their ideas; possible wrong estimation which business will be rent ability that will lead business incubation to failure (SME Business Development, n.d.). Additionally, less frequently but still unstable business environment and nonexistence of consultancy market are considered to be difficulties that business incubators meet.

From medium-size and small businesses point of view, there are some additional doubts about effectiveness of business incubators in Georgia (SME Business Development, n.d.). In particular,

• If international financial institutions do not support business incubation, its service will not be cheaper than analogous service on the market;

• Business "developed under conditions of incubation" will not be able to adjust reality after having left business incubator;

• Start up cannot be profitable. So, the success of business incubation as well as development of their clients is in doubt;

• There is no readiness for establishing such corporation (unstable political, economic and social situation).

Therefore, in Georgia incubation process is weak and BIs/ UBIs are still not a practice but experiment based on finance and initiative of international organizations.

Doing business in Georgia: University business incubator platform

The establishment of the business incubator is not a simple process and requires systematic approach. Numerous factors should be discussed and analyzed before making the decision of delivering BI/UBI services to the students and the community. These factors include existing business environment, SME sector development and its role in the domestic economy, quality of education and business education, in particularly, existing links between business and academic communities, government special programs on BIs and SMEs support, readiness of university and students and their ambitions, and so forth.

As the best practice of University Business Incubator shows the UBI offers a number of diversified services to new entrepreneurs and established companies including sharing offices and other common resources, business plan development; counseling on starting a business; consulting services related to accounting, bookkeeping, marketing, finance, strategic planning, operating management, site search, and so forth; government contracting; student interns for business projects; collaboration with faculty staff and students, others. Even simple but so important for business service such as filling documents for registration a firm or sales tax application, or documents for bank may be provided by UBIs (Indiana University, n.d).

Such cooperation between business and university is very important and extremely beneficial for both sides (Factors Determining, 2006) because being connected to a university allows the UBI to have access to new ideas, technology and sometimes to laboratory space they may not have had otherwise. Special opportunity to business is an access to a high trained workforce. Another advantage for BI to be linked to the university is the opportunity to attract potential new tenant companies. The overall benefit that BIs can derive from universities depend on their capacity to absorb technology, institutional support structures, degree of involvement of the university talent, type of commercial opportunity that exists and the role of the nascent entrepreneur.

On another side, within the BI, university students are able to work and to gather experience that is very important for their future job perspectives. Because UBIs usually focus on newly stared companies run by students or newly graduates from the university, the students become a part of creative and stimulating environment. UBIs get students to be more interested in entrepreneurship and help them to develop and commercialize their business ideas through educating the students in the field of entrepreneurship and business start-up development; giving business advices to the students with all kinds of business innovations. When the students have a business idea that they would like to develop or are discussing how to start own company, the business incubator is the place of experienced counseling. It does not matter what idea is about. Students are able to get free of charge confidential counseling and guidance and the business incubator staff always tries to give them advice which can help to take students and their ideas forward. BIs have large network of other useful organizations as well as different professional business partners to guide the students. Besides, many universities during semesters arrange special lectures and seminars concerning different matters

in the field of entrepreneurship and business development. These lectures are delivered by invited guest speakers who are the experts in the specific fields.

For society and local community the performance of business incubators and university-base business incubators should be judged primarily in terms of the results achieved, that is the impact they have on businesses, country's economic development and other national priorities. This is a topic for the further research but the short-term effect is statistically proved: with the support of BIs/UBIs the percentage of succeeded organizations has been raised from 20% up to 60-80% (World experience, n.d.). In terms of the long-term aggregate impacts, BIs/UBIs achievement are the following: overcoming of market failures; wealth creation effect through generating jobs and incomes inside and outside; improvement of quality of jobs; favorable impact on local/regional labor markets; promotion of regional development; raising of investment in R&D, the others. Besides, all stakeholders, tenants, research institutes and universities, local business, local community, international community, also can benefit from a well-managed incubator.

Conclusion

World experience reveals that business incubator as a supporter of startups and growth stage is an effective tool of economic development in any economy. BIs/UBIs contribute to overcoming of market failures, to wealth creation through generating jobs and incomes, to improvement of quality of jobs, to promotion of regional development, to raise of investment in R&D, etc. BIs/UBIs benefit all stakeholders such as tenants, research institutes and universities, local business, local community, and international community as well.

Georgia has a small experience in business incubation process. Since 2008 BIs/UBIs were set up in Tbilisi, Signaghi, Gori, and Batumi. Generalizing this experience it should be said that all of them were (1) founded and financed by international organizations; (2) focused on support to small and specific group of population such as temporary displaced persons, women, minorities, and so forth; (3) part of short-run programs or international projects; (4) not included into Georgian national strategy of business development and SMEs support; (5) not widely launched to public and business community.

In Georgia to get the most advantages of incubation process, from the beginning the most BIs should have close ties with universities or be University Business Incubators. This cooperation between business and academic communities would be beneficial for both sides because being connected to a university allows the BI to have access to new ideas, technology, and laboratory space, to attract potential new tenant companies, etc. On another side, within the business incubator university students are directly included into entrepreneur activity and are able to work and to gather experience that is very important for their future job perspectives.

Moving in this direction, skeptical\conservative attitudes of Georgian businesspersons to the new types of services provided by UBIs will be overcome because naturally Georgian businessmen have good "animal spirit" and would be able to evaluate real benefits of business incubator.

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