



# Social Science Knowledge Commercialization: The Case Study of Social Sciences at Tbilisi State University

Warunki komercjalizacji wiedzy w Gruzji:  
studium przypadku nauk społecznych  
na Tbiliskim Uniwersytecie Państwowym

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## Abstract

Nowadays, deep cooperation between universities, research centres, and industry is seen as a stimulus for economic growth. Yet, it is still unclear how the knowledge commercialization process works in the countries with an experience of the highly centralized economy and education. Tbilisi State University is seen as the optimistic catalyst for further commercialization, mainly due to its international ties, though the issue of social science knowledge commercialization is still mostly neglected. In our research, the case of the oldest, the largest, and the most internationalized uni-

## Abstrakt

W dzisiejszych czasach głęboka współpraca między uczelniami, ośrodkami badawczymi i przemysłowymi jest ważnym bodźcem wzrostu gospodarczego. Jednak nadal nie jest jasne, jak przebiega proces komercjalizacji wiedzy w krajach, które mają doświadczenie wysoce scentralizowanej gospodarki i edukacji. Tbiliski Uniwersytet Państwowy jest postrzegany jako ośrodek przyspieszający proces rozwoju komercjalizacji wiedzy, głównie ze względu na swoje powiązania międzynarodowe, choć kwestia komercjalizacji wiedzy z zakresu nauk społecznych jest

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versity in Georgia is analyzed. The comprehensive study aims to determine the macro and micro factors that make knowledge commercialization in social sciences successful or a failure. Results show that some university society representatives believe commercialization is mainly based on natural and exact sciences. In contrast, others claim that human development contribution is the most significant knowledge transfer that can be done.

**Keywords:** social science, knowledge commercialization, higher education institutions, Tbilisi State University, new institutionalism

nadal w większości pomijana. Niniejsze badania analizują przypadek najstarszej, największej i najbardziej umiędzynarodowionej uczelni w Gruzji. Kompleksowe badanie ma na celu określenie czynników makro i mikro, które sprawiają, że komercjalizacja wiedzy w naukach społecznych kończy się powodzeniem lub porażką. Wyniki pokazują, że niektórzy przedstawiciele społeczności uniwersyteckiej uważają, że komercjalizacja opiera się głównie na naukach przyrodniczych i ścisłych. Inni natomiast twierdzą, że wkład w rozwój społeczny jest najważniejszym możliwym transferem wiedzy.

**Słowa klucze:** nauki społeczne, komercjalizacja wiedzy, uczelnie wyższe, Tbiliski Uniwersytet Państwowy, nowy instytucjonalizm

## 1. Introduction

The higher education institutions of today are faced with the necessity to change their functions, which results from global trends. On the one hand, the shifting objectives of education driven by “knowledge society” transformed responsibilities of universities. On the other hand, the ongoing process of knowledge commercialization shapes the higher education system in an ever more significant ways. Changes relating to the content of curriculum are influenced by the logic behind the knowledge economy (Ponds, Oort, & Frenken, 2009). From this point of view, universities attempt to offer a new and valuable product to society and position themselves as service providers not only for students, but also for market forces. The trend is especially developed in countries where education is an integral part of economic development. And so, in those countries the commercialization of university-based research is already a well-established practice, particularly in the natural and exact sciences, though the same cannot be said about humanities or social studies.

The issue in question is further complicated by the fact that there is no universal model for implementing the process. It stems from different economic and education policies across the world (Gans & Stern, 2003). Indeed, societies with an experience of cooperation between industry, research centres, and universities have much more effective practices when it comes to knowledge commercialization (Siegel, Veugelers, & Wright, 2007). However, the situa-

tion is quite different in “inexperienced” states. In formerly communist, and especially former Soviet republics, characterized by highly centralized educational systems, social sciences and economics had been essentially isolated from western disciplinary researchers and societies (Tarnopolsky, 1988; Umland, 2005). The real and appropriate case to consider in this respect is Georgia, a country in the South Caucasus with an education background that had been strictly centralized in Soviet times, and the present challenges under the country’s ongoing Europeanization and democratization processes (Tabatadze, 2021). Like other former Soviet republics, Georgia has a small and fragile economy, and higher education institutions are trying to readjust to changing agendas. Nevertheless the oldest, the biggest, and the most internationalized one – Tbilisi State University (hereafter: TSU) declared the importance of knowledge commercialization.

By determining the degree of knowledge commercialization process at TSU, the article aims to focus particularly on social and political sciences, as there are many unanswered questions regarding their further perspectives. Accordingly, our research question can be formulated as follows: Is it possible for social and political sciences (hereafter in the text – SPSs) to carry out knowledge commercialization, and what challenges does this process face? From the centralized state education system of the Soviet period, almost all the former republics switched to Western-style education systems. The given transformation meant the creation of a non-state sector in the education system, the introduction of unified national examination tests, decentralization, etc. The transformation process of higher education systems in post-communist countries is in the interest of researchers from different Western and non-Western countries (Huisman, Smolentseva, & Froumin, 2018; Suprun, 2018; von Berg, 2018; Vekua, 2018; Azimbayeva, 2017; Yegorov, 2009). However, academic works focusing primarily on knowledge commercialization in the former Soviet republics are rare – Georgia’s case is no exception. Hence, our research becomes more interesting as it is one of the first attempts to analyze the issue. Therefore, it could open quite exciting prospects for further investigation. At the same time, we reckon the study will enrich the academic literature on identifying reasons for the success/failure of the process in Georgia and other post-communist countries. Most of them, in many aspects, have been through the same or very similar socio-political and economic path. Also, the research highlights the importance of social science knowledge commercialization issues in general.

## 2. Literature review and research methodology

Despite the experience of successful practices, the definition of “knowledge commercialization” is still disputed. Some authors emphasize its transformative character: converting research-based knowledge into the market process (Salter & Martin, 2001; Astebro, 2004) when interactions between universities, research centres, entrepreneurs, and financial organizations are getting crucial (Etzkowitz & Leydesdorff, 2000). At the same time, others define the term as a business development process that creates a negotiable product (Jolly, 1997; Rosa & Rose, 2007). The opposite understandings are consolidated by Mehrabi et al. (2013). They present three main ways to define the concept, namely as: 1) the process of bringing an innovative idea to market, that reveals economic efficacy; 2) a transfer that makes a simple link between industries and research centres, and 3) merely the final phase of a new product development process. Despite differences, we reckon all these explanations focus on the business and neglect the education facet of the concept. Although “commercialization” undoubtedly is linked to business/administrative studies, the same cannot be assumed regarding “knowledge” that has different societal importance.

As the purpose of the study, we use the following definition of knowledge commercialization: “[...] academic scientific research [...] performed increasingly for-profit with results modified through primarily patents, copyrights and licensing” (Irzik, 2013, pp. 23–77). According to the explanation, academic science commercialization promotes academic modification by selling university-based research products and services to ensure profit (Radder, 2010). This definition is not broad enough to cover several streams of the process, yet at the same time not narrow to the point of neglecting the main focus – university-based knowledge.

One of the most common theories of knowledge commercialization, called the Triple Helix, involves the interrelationship of three components – university, industry, and government. The Triple Helix model is related to the concept of a knowledge-based economy, which implies a close connection between all three components. Even proponents of this model believe that cooperation between these three segments alone is not enough to succeed. The role to be played by universities is crucial, but the leading industry is still vital. Consequently, this model may only work in economically viable and manufacturing countries (Carayannis & Campbell, 2010). Some authors also focus on the role of so-called middle organizations in this model (Etzkowitz & Leydesdorff, 2000). The Quadruple Helix model, in turn, includes also the media (Carayannis & Campbell, 2009).

For a long time, however, the main focus was on research and development (the linear innovation model). It meant that universities focused mainly on basic

research while corporations focused on conducting experimental research. The universities' knowledge sector remains the leading actor within the Triple Helix model. However, "[l]ess research-intensive regions are by now well aware that science, applied to local resources, is the basis of much of their future potential for economic and social development" (Etzkowitz & Leydesdorff, 2000, pp. 116–117). At the same time, in post-communist countries with less historical experience of democracy and pluralism, what is still dominant are the statist models. Therefore, also in the case of implementing the Triple Helix model, in contrast to countries with free-market experience, where all three sectors are interdependent, the state is a dominant actor (Carayannis & Campbell, 2010). According to Etzkowitz and Leydesdorff (2000), "natural environment" should also be included in the Quintuple Helix model. Thus, as noted, the Quadruple Helix contextualizes the Triple Helix, and the Quintuple Helix – the Quadruple Helix (Carayannis & Campbell, 2011). According to some authors, in this model, there is a close connection between innovative knowledge and the high degree of democracy (Plasser & Plasser, 2002; Carayannis & Campbell, 2009; Carmines & Stimson, 1980).

Among the many possibilities to describe the mechanisms of the ongoing process of knowledge commercialization in higher education institutions is also a new institutional theory. It links the tendency of standardization and professionalization to adopt business sector structures and practices (Palmer, Biggard, & Dick, 2008). According to the framework, universities actively communicate with different economic and political systems to expand their influence and size. Political institutions are seen as sets of "rules" that guide and constrain the behaviour of individual actors (Lowndes, 2018), and institutional changes (Mahoney & Thelen, 2010) are pretty standard in the institutional contexts (Meyer & Rowan, 1977). So, universities with their rules attempt to be considered legitimate and to act in concert with other institutional actors (Koelble, 1995, p. 232).

Scholars outline two stages of the the knowledge commercialization process, both of them connected to universities. From the 1980s onwards, the first primarily had a conspicuous effect: universities started to implement the technology transfer process. The "science parks" may be seen as echoes of the period in question. At the end of the 20th century, the second stage began. The license protections, creating and supporting university-based innovations were in focus. In some universities, even knowledge commercialization departments and advisory boards were established (Rasmussen, Moen, & Gulbrandsen, 2006). While some universities remain traditional, trends show that higher education institutions seek entrepreneurial and innovative leadership (Audretsch, 2007). Universities improve their technical knowledge to solve local and regional problems (Miller & Acs, 2018). Generally, knowledge is seen as a stimulus for economic growth, and therefore, science products are preconditions for further

industrial development (Martin, 2003; Mansfield & Lee, 1996). If traditionally the central role of universities was seen in research and studying, nowadays they are also expected to play an essential role in the “development of their economic, social and cultural surroundings” (Arbo & Benneworth, 2007, p. 6). Even more, according to some researches, among the results of cooperation of academia and industry can also be enumerated an improvement in teaching (Wang et al., 2016), access for universities to different resources (Perkmann et al., 2013), and a rising amount of qualitative research (Breschi, Lissoni, & Montobbio, 2007).

All these changes promoted the discussion about the role of the universities in the process. Wissema’s (2009) typology of universities’ three generations, that is, combining the concepts of studying, research, and connection with the environment in present literature, is broadened with the idea of fourth-generation universities. According to Pawłowski (2009), the essential feature of an entrepreneurial university and that of the fourth-generation university is the managerial model. The most significant difference is that the fourth-generation universities have a unique strategic approach. They can shape their environment (Lukovics & Zuti, 2013). While some authors stress the importance of entrepreneurial culture, including staff organization support and increasing students’ motivation (Henderson & Rosenberg, 2001), others suggest that only motivated individuals can make entrepreneurship an essential part of daily university life (Chrisman, Hynes, & Fraser, 1995). The disagreement pertains to the top-down and bottom-up approach. Who should implement entrepreneurial and innovative universities – motivated individuals (bottom-up) or management (top-down)? The examples of top-down approach include: establishing knowledge transfer departments, organizing meetings between industry and academic staff, curriculum planning, and funding spin-offs of research. Though we believe the controversy is more practical than fundamental, higher education institutions’ role is to strengthen the knowledge commercialization process by specifying its contribution to economic development (Martin & Etzkowitz, 2001).

However, not all higher education institutions and researchers are always attracted by the idea of knowledge commercialization, fearing the research might be surreptitiously driven towards obtaining economic benefits (Blumenthal et al., 1996). Even though science “is not a marketable product” (Palo-oja, Kivi-järvi, & Aromaa, 2017, p. 3), it needs to be adjusted for business and different companies’ problems.

Also, several criticisms are manifested by some authors. Firstly, the issue of academic autonomy is questioned. While state funding declines, universities are trying to get more non-governmental funds to satisfy their needs. Thus, commercialization becomes an equivalent source of financing for higher education institutions (whose current social function is to create innovation for the market) (Florida & Cohen, 1999). Secondly, generating new ideas for large corporations

weakens the fundamental research that could have improved their economic conditions (Nelson, 2004). Therefore, university-based knowledge is getting captured and framed by market forces.

The final argument, usually neglected even upon criticizing the knowledge commercialization process, pertains to the issue of social sciences and humanities. The vast majority of successful practices of knowledge commercialization is generated in the fields of technology and natural sciences. Hence, some questions arise: Should the processes relating to the knowledge commercialization work the same way in the research fields of history, political science, sociology, and media studies?

There are some controversial points. First of all, the idea of knowledge commercialization is not attractive to some universities. In a way, this reluctance echoes the difference between traditional and modern approaches of higher education institutions. Second of all, there is no consensus about the definition of the term in question. Can knowledge commercialization be understood as a part of the product development process, or is it a result-oriented, independent industry-backed scheme? Thirdly, the lack of clearly defined success/failure factors for the knowledge commercialization process, particularly in social sciences.

As noted in our research, we will determine factors affecting SPS knowledge commercialization process/reality at TSU. Analyzing various subject literature and theories on knowledge commercialization, we think of a new institutional perspective, which helps determine how the national context (state policy and other institutional actors) shapes higher education system actions. Focusing on the commercialization issue is the most appropriate one for our case. There are several determinants of preference for the given theory in our case. First of all, in the light of the fragile economy and underdeveloped industry, we consider it less appropriate to speak about the relevance of the triple or quadruple helix models to the Georgian example. At the same time, as the research focuses on the case of Georgia – the post-Soviet country with strong statist and weak democratic experience, we think a fresh institutional perspective will be helpful. It will help us determine which factors or institutions on the international or national level (the state and other institutional actors) shape higher education system operation, in the facet of commercialization, and how they do it.

As we already mentioned, according to a new institutional approach, the policies of the higher education institutions are shaped mainly by the external actors and contexts. Since “the new institutionalism is not an approach that is ‘about institutions’; rather, it focuses on the role of institutions in explaining [away] politics” (Lowndes, 2018, p. 57), in academic literature it is also suggested to analyze the role and particular actions of the universities. Therefore, we divide the factors in question into two categories: macro- (historical experience and current state policy, funding issues, demands from market and business sector) and mezzo-level factors (university and faculty policies, curriculum,

academic staff, and students' involvement). This distinction allows us to identify factors that affect the process positively or/and negatively. When studying the issue, scholars usually use a case study design. For instance, Boehm and Hogan (2013) analyzed the role of the public sector stakeholders in the formation of the research-commercialization-science relationship. Based on the examples of Germany and the Republic of Ireland, they conducted in-depth interviews and analyzed documents. Rasmussen et al. (2006) researched commercialization initiatives, including entrepreneurship support. They used semi-structured interviews with university managers, faculty, and department representatives. Also, focusing research on a particular field is not unusual among the scholars (Sternitzke, 2010).

Interestingly enough, a survey of social scientists shows that the licensing and start-ups creation were the least frequently mentioned activities upon describing the knowledge commercialization process. On the contrary, the community-based and problem-solving activities the social sciences scholars took part in are much more essential in this respect. Indeed, those representatives of the academic staff are among the least willing to cooperate with the private business sector when their daily activities include public lectures, training, charities, and curriculum development (Bullock & Hughes, 2016).

### 3. Research methods

We use the case study method, which is one of the several new institutionalist strands (Lowndes, Pratchett, & Stoker, 2018) to achieve the goals of our study. Studying economic factors and policy development trends (Mahoney & Thelen, 2010) helps us analyze macro factors that affect knowledge commercialization in the case in question. At the same time, we attempt to arrive at an answer by collecting micro-level data via interviews and focus groups (Lowndes et al., 2006) and combining it with mezzo-level factors. Thus, we reviewed the experience and current institutional context of Georgia and TSU, studied major legislative frameworks, funding issues, and mission and curriculum of the university and faculty (BA, MA, and PhD programmes – 35 in total). To this end, we used the document analysis method, using keywords: “knowledge,” “commercialization,” “transfer,” “innovation,” “market,” and “entrepreneur.” Apart from this, 10 semi-structured in-depth interviews and 3 focus groups were conducted. We have selected faculty decision-makers and academic (staff) for semi-structured interviews due to their leading positions and different departments. In terms of age, all of them were between 35 and 50, in terms of gender – 6 women and 4 men.



The in-depth interviews covered the following issues: 1) positions toward the general idea of knowledge commercialization; 2) prospects/challenges for social and political science commercialization; 3) the roles of the university and faculty during the commercialization. Focus groups were conducted with students selected by proportionate stratified random sampling (using faculty department as a strata). Each focus group contained 9 students from different departments but the same academic level (a total of 27 students). Descriptive statistics: sex/gender (12 men, 15 women); age (from 18 to 31); departments (4 from political science, 4 from international relations, 4 from sociology, 4 from social work, 4 from journalism, 4 from human geography, 3 from interdisciplinary studies). All the focus groups and interviews were conducted from December to January 2020. The participants were encouraged to express their opinions freely and therefore they were ensured to remain anonymous.

The data from interviews and focus groups were analyzed using NVivo. The major categories and keywords include the following: TSU, university-based knowledge, positive/negative actor in knowledge commercialization, the role of market demands, industry, university, faculty, social science knowledge commercialization, and the practice of knowledge commercialization. After systematic and structural analysis, the findings are outlined in the following sections.

## **4. The institutional context**

### **4.1. State policy and funding**

After the collapse of the Soviet Union and regaining its independence in 1991, Georgia faced a complex social, economic, and political situation, which was accompanied by a tense international (confrontation with Russia) and domestic situation (civil war, ethnic conflicts in South Ossetia and Abkhazia). It took more than a decade to establish and strengthen state institutions, and in general, to overcome the crisis of statehood. Naturally, the institutional crisis affected all spheres in the state. The education system was no exception. The comprehensive reforms of the higher education system began only in 2004 (after the Rose Revolution). At the same time, in 2005 the country joined the Bologna Process. Involvement in the Bologna Process meant a fundamental transformation of the education system and necessarily bringing it in line with international standards. One of the most visible and successful examples of the implemented reforms is the creation of a National Assessment and Examinations Centre (NAEC). As a result, the decentralized (at the higher education institution level), inefficient, and often corrupt admission system to HEI, which had been in op-

eration since the Soviet era, was replaced by centralized at the state level and unified national exams.

Nevertheless, the reforms undertaken in the education system, which is the most fragile sphere, did not leave the impression of a long-term and consistent policy. The frequent change of ministers of education/higher education – up to the present as many as 11 ministries have held the office since 2004, and 17 – since 1991 (Ministers, n.d.). Consequently, the various reforms, visions, opinions, and legislative frameworks are what results from this uncoordinated process.

Among the institutional and non-institutional problems in the sphere of education, one of the most critical and problematic remains funding. In the case of Georgia, funding is mainly based on fees paid by students and their parents (The International Institute for Education Policy, Planning, and Management, 2013). At state universities, the lowest tuition fee equals 17% of the 2020 years GDP per capita of Georgia (<https://www.ceicdata.com/en/indicator/georgia/gdp-per-capita>). State funding is much less at the MA level than at the BA level, and PhD programmes are financed neither by state nor universities. Moreover, the state funding for science is at a very low level (not more than 1% of Georgia's GDP annually, so much less than in the European Union countries). Only 56 research institutions in Georgia can carry out independent research work. Education and science employees amount to only 4.5% of the employed population (National Statistics Office of Georgia, 2019a, b, c).

Therefore, we can assume that an independent or a university-affiliated researcher has only two chances to obtain funding. The first is state-based Shota Rustaveli National Science Foundation with a limited budget of nearly 27 million dollars for all types of research activities in all fields of study (Shota Rustaveli National Science Foundation of Georgia Budget 2021, n.d.) with research grants as follows: supporting the high-quality research in Georgia (basic, applied, etc.), supporting Georgian studies, science popularization, grants for young researchers, and the like (Calls and Programmes, 2019). From the given research grants, the most substantial are basic and applied grants within which during 2019 were funded – 67 projects in basic research and 36 projects in applied research categories (Winning Projects, 2019). Usually, the maximum amount for a research project does not exceed 19,000 dollars per year in social sciences and humanities and about 27,000 per year in natural sciences, engineering and technology, medicine and health sciences as well as in agricultural sciences (Terms of Reference of the Grant Call for “Fundamental Research”, 2018). The second possibility for funding research is international grants with more significant funding for each project but also very limited number of projects to be funded.

At the same time, the higher education system of Georgia focuses on the authorization and accreditation procedures relating to: material, technical, and human resources, curriculum goals, learning outcomes, and self-assessment (The

International Institute for Education Policy, Planning, and Management, 2013). Thus, the current unenviable policy may be assessed as criteria-oriented and less supportive.

## 4.2. Tbilisi State University

There are currently 63 higher education institutions in Georgia. Nineteen of them are state-owned, while 44 privately-owned. TSU is formally state-based. Out of the 148,000 students in Georgia altogether, 22,000 (the most significant proportion) studied at TSU (National Statistics Office of Georgia, 2019d). It was founded in 1918 under the influence of Georgian scientists educated in various European universities. It classified among the high performing universities by international university ranking systems. In *Times Higher Education World University Rankings*, it ranked 398th and among the top 5% of universities in Europe (TSU among Best Global Universities, n.d.), in 2020. The annual budget of the TSU equals 30 million dollars, and only 25% of it is state-funding based. The primary source of funding for the university are the tuition fees.

As for the factors that affect the knowledge commercialization process at TSU, the comprehensive document analysis was conducted on three (state, university, and faculty) levels. It helped us understand how institutional framework and policy practices meet the knowledge commercialization idea. Law of Georgia on Higher Education (2019) states that tertiary education goals are academic staff training and establishing further research and development conditions. The regulation does not necessarily cover the knowledge commercialization idea. More relevant findings can be pointed out in the Law of Georgia on Science, Technology and their Development (2018). It declares the strong will and importance of developing science and new technologies, supporting entrepreneurship and competition in technologies, and implementing joint educational programmes between universities and research centres. From this point of view, it can be said that state-declared policy is to create new technologies and to support entrepreneurship. Both of these statements cover the idea of knowledge transfer, but the funding issue remains neglected. Lastly, the Law of Georgia on Innovations (2016) states establishing stimulating national ecosystems for a knowledge-based economy and exporting the local intellectual property.

Nevertheless, there is no (at least declared) supportive scheme for the policy implementation. Finally, we can conclude that state-level legislation is mainly a non-specific one. Also, the lack of long-term state strategic schemes and policy documents shows that the knowledge commercialization issue has a minor role in the state education and science policy agenda.

Unlike in case of the state legislation, the analysis of the mission and strategic plan of TSU yields different results. Firstly, it should be mentioned that it

aims to enrich university traditions with research and innovation and to harmonize education programmes with the labour market. This statement shows the link between university knowledge and innovative research that echoes the idea of knowledge commercialization. Also, in the strategic plan, research and innovation activities are presented as the independent sections. There are phrases like: “promoting applied and technological research with commercialization perspective” or “commercialization of the scientific products – ways to protect patents and copyrights” (TSU Mission and Strategic Plan (2018-2024), 2018, pp. 10–11). Moreover, the importance of innovative activities (promoting start-up and spin-off companies) is highlighted.

Interestingly, the Knowledge Transfer and Innovation Centre (similar to the knowledge commercialization office) opened at TSU in 2018. It aims to discover researchers with original ideas and develop entrepreneurial, start-up skills. The centre uses non-formal education activities: training and seminars (TSU Knowledge Transfer and Innovation Center, n.d.). We can argue that a newly-emerged centre positions itself as an information and supportive hub between university-affiliated innovative researchers and public/private sectors. Thus, we can conclude that unlike in the case of the declared state policy, TSU acknowledges the idea of knowledge commercialization and carries out relevant activities. This reality can be explained by a close and active relationship with other international universities – up to 200 partner universities and 56 research centres worldwide (Information, n.d.). On the other hand, along with teaching, research, research influence, and international outlook, one of the criteria of the evaluation methodology in the universities global ranking systems is also knowledge transfer. With the help of this criteria, research income from industry and commerce are evaluated (World University Rankings: methodology, 2021).

### 4.3. Faculty of Social and Political Sciences

In accordance with our research goal we investigated the faculty of SPS at TSU in terms of knowledge commercialization. At first glance, the only thing that can be linked to the issue is the statement at the faculty’s strategic plan that research products commercialization should be promoted (TSU, Mission and Strategy of the Faculty, n.d.) Also, Scientific Research and Development office has responsibility for managing and carrying out research activities. Yet, these results are not sufficient to understand the entire picture. Therefore, we studied the faculty curriculum: 35 educational programmes concentrating on objectives, learning outcomes, and content. Before presenting the results, some details are essential to be mentioned. The SPS faculty was established in 2005 and currently has 7 BA, 17 MA, and 11 PhD programmes, which adds up to a total of almost 3,000 students. It consists of the following departments: Politi-

cal Science, International Relations, Human Geography, Sociology, and Social Work, Journalism and Mass Communication, Interdisciplinary Studies (TSU about faculty, n.d.).

After analyzing the faculty curriculum, several conclusions can be drawn. Firstly, BA and MA level programmes focus on preparing competitive personnel for the labour market, while PhD programme(s) declare the necessity of contributing to the study of social sciences. However, the above does not necessarily meet the knowledge commercialization criteria. Secondly, learning outcomes are presented in three parts: knowledge, skills, and responsibilities. The only thing that can be linked with the issue is that graduates will demonstrate their ability to the labour market independently. Thirdly, it is manifested that two administrative units (Geographic Information System Laboratory and Multimedia Centre) of the faculty are essential during the teaching process. The laboratory plays a crucial role in developing the vital competencies for future human geographers, while the said centre is a versatile (TV, radio, audio, etc.) platform for future media workers. However, there are no similar structural units in political science, international relations, sociology, and social work. Thus, the practical component is reduced to the 5 ECTS courses that mostly mean internships in the public or NGO sector. And, for sure, we cannot conclude that the faculty curriculum has any actual supportive scheme for knowledge commercialization issues.

We can conclude that the legislative framework neither explains the concept in question at the state level nor presents the supportive policy for knowledge commercialization. Lack of financial support and experience of centralized, planned education policy are proxies for less readiness to implement the knowledge commercialization process. On the one hand, research institutions do not try to be connected to market forces despite low funding. On the other hand, industry actors do not believe in its possibilities. At the same time, the most prominent and most internationalized university of Georgia supports the idea of knowledge commercialization, opens the Transfer and Innovation Centre, and tries to fund start-up projects. If we consider the state policy, the confusing situation of TSU can be explained by a high degree of internationalization and university administration's strong will to stay abreast the global trends. However, significant progress in knowledge commercialization has not been manifested at the faculty level yet. That is why the question still arises: Is knowledge commercialization essential for social sciences?

## 5. Possibilities of knowledge transfer/commercialization in social sciences: Perceptions of interviewees

As we already mentioned, the focus groups were conducted with the randomly selected BA, MA, and PhD students. The three main discussion issues can be outlined. The first is how students understand knowledge commercialization and the significant constraints of the process? The second: Is social science knowledge commercialization possible at all? And the third: Who can play a positive role in this process and how? Aggregated results show that most respondents believe that knowledge commercialization means gaining the competencies that adequately respond to the market demands and deliver the material benefits. However, the students recognize that this course of events cannot be guaranteed by formal education. During the discussion about “knowledge commercialization,” BA and MA students mention practical courses, while PhD candidates focus on funding their scientific projects.

Interestingly, respondents do not link business, research, and industry to one another. Their positions are more generalized. Yet, one issue seems clear: none of the respondents defines the concept as TSU does.

During the discussion about implementing the process, students point out several obstacles. First and foremost, it is the lack of will of the state. In their opinion, Georgian educational policymakers do not care about improving the education quality and funding innovative research; therefore, public universities carry the burden of responsibility. They meet with the problem of private-business sector volatility. They argue that the candidate selection in the private sector is arbitrary. Also, applying the social and political sciences is quite rare: “[...] the only way to start a job with your profession is in the NGO sector that is financially supported from international grants” (student of BA focus group). The third barrier is linked to transferring the same university-based knowledge over the years, as PhD students believe that university has a minor role in supporting young researchers. Hence, we can identify three major obstacles that students face during the process: the state’s unwillingness to help, the unpredictability of the business sector, and less support from the university.

There is a difference of opinion between the representatives of faculty administration and professors regarding the acceptance of knowledge commercialization ideas by TSU and the evaluation of the steps taken in this direction. Integrating the concept of knowledge commercialization into the TSU mission is logical as means to keep pace with the global trend – getting more and more finances (Interviewers 1 and 2). However, others have different positions: “Frankly speaking, the idea of commercialization has been copied from the missions of foreign higher education institutions as nowadays it is so popular, and we

have to be in this frame” (Interviewer 3). Similar positions are manifested by other interviewers, too: knowledge commercialization is not an issue to worry about (Interviewers 9 and 10). During the interviews, the reservations towards the process were also mentioned. Firstly, the Georgian business sector is quite limited to providing an effective supply-demand curve. Secondly, TSU creates pointless challenges and complicates the information exchange process. Thirdly, faculty curriculum problems are highlighted: “[...] transmission of the same theories for many years is quite problematic, teaching activities should be more practical, soon there will be no more option” (Interviewer 6).

Nevertheless, the positions are divided on the prospects of SPS-based knowledge commercialization. Some students, especially PhD candidates, are pessimistic (mainly due to lack of demand from market forces), while others give us some examples from practice. As the faculty consists of several departments, we will present the positions accordingly. For political science students, formulating a new public policy course or writing a policy paper or political blog are appropriate examples for knowledge commercialization in their academic field. For sociologists, desk/market research reports or establishing a supporting centre for any vulnerable social group can be similar. Human geographers use GIS technology to create urban/architectural companies or economic advisory bodies. Some examples are presented from Journalism and Mass Communication programmes students too. These include creating online media, radio shows, blogs, internet channels. For instance, an MA student said the following:

Our faculty graduates have opened a new political pub – the platform for public lectures and political meetings. Food and drinks are named after famous politicians and political events. The issue of occupation is also well-sold: on bags, wallets, and passports, the inscription that Russia occupies 20% of our territory has gained popularity in Georgia and outside the country. (Student from an MA focus group)

Our respondents mostly agree that natural or exact sciences have better experiences and prospects in the field, though social sciences can also provide appropriate products or services for the market. Research made in western countries shows that knowledge transfer in social sciences involves partners such as government agencies, firms, non-profit organizations, think tanks, or other non-governmental organizations (Olmos-Peñuela, Benneworth, & Castro-Martínez, 2013). During our research, respondents from the faculty administration and staff members also specified some fields, organizations, or jobs where social science knowledge could be used: joint housing for elderly and children, online media platform, tourism, and urban services, political analytics in governmental and non-governmental organizations. Knowledge commercialization and

transfer in the exact and technological sciences are more visible and effective. However, the role of the social sciences is also essential (The British Academy, 2010). According to the European Commission Report of the Expert Group on Humanities (2007), the contribution of SSH (Socioeconomic Sciences and Humanities) research to society consists of the provision of contents and the promotion of self-reflection, critical and conceptual thinking.

In contrast, the provision of technologies is more typical for engineering and experimental science fields (Olmos-Peñuela, Castro-Martínez, & D'Estea, 2014). A similar opinion was expressed by one of our respondents from a faculty staff, who claims: "The major product of our faculty refers to the human resources that promote all processes, including commercialization. While others make visible, computable, and observable products, we create ideas that reproduce the whole society" (Interviewer 7).

It should be noted that BA and MA students see social science knowledge commercialization as realistic as the same process in remaining fields (considering: skills can be highly paid). In contrast, PhD students think differently: they tend to focus on the lack of experience and state policy.

Graduates can't find jobs within their professions. There is no demand from the market, as we don't have tradition and culture of it. We all know that social sciences are not the priority for this country. Financial grants are primarily for natural sciences, like math or physics. (Student from a BA focus group)

The last topic deals with the potential positive actor in the process. Despite worries, the university is indicated here by the majority of respondents. It is somehow connected to the top-down approach that stresses the responsibility of higher education institutions to create an active communication platform for the business sector and university-based researchers. Interestingly enough, the university and business are pointed out as positive catalysts for further commercialization: "[...] if demand exists, innovative research will determine the outcome" (Student from a PhD focus group). Waiting for state support is the least desirable for students. Legislative regulations should not complicate cooperation between research and industry, they believe. Finally, it should be noted that during the discussion about positive roles, respondents stressed mostly macro-level factors (business openness and state policy).

Unlike other issues, the most significant differences are outlined about the role of the faculty and the university. It shows that even on the faculty level, there is no consensus about the functions of the key actors. We can outline some of the significant points that challenge the process: a) academic staff should have more responsibility while researching with students, but the university should operate as an active hub between the business and academi-



cians; b) curriculum transformation and renewed academic staff is urgently needed; c) macro-level factors: “ingrained nepotism” in business/industry and the post-Soviet experience when the government and society unconsciously support kinships and clans; d) limitations relating to funding research which prevents the faculty from becoming the forerunner for the fundamental changes (Interviewees 7, 10, 5, 3).

As a result, the knowledge commercialization agenda is ambivalent for the management and staff members of the SPS faculty. Some of them see the process as aimless, while others stress the challenges in the field. Yet, two major findings may be mentioned. Firstly, shifting responsibility from the faculty to the university and neglecting “student” as a participant and stakeholder of the process. Secondly, the positions are divided and unanswered regarding the question: Who can play a positive role in the process – the state, university, faculty, academic staff, or young researchers?

## 6. Conclusions

The article is one of the first attempts to study empirically the knowledge commercialization process that has been ongoing in Georgia. We aimed at determining the macro- and micro-level factors impacting the process. Also, we specifically stress the commercialization of social studies. The new institutional theoretical approach explains the results of the study. We used both macro- (post-Soviet experience, state’s economic and education policy) and mezzo-level factors (university and faculty actions) in order to explain the influence of institutional actors.

The case of TSU shows that the national institutional context negatively affects the process, while the opposite is true for the international context. The post-Soviet reality of Georgia can be the reason for a fragile economy and weak industrial actors that pay no attention to the university-based knowledge perspectives, while academic staff also do not welcome the commercialization of their “knowledge.” Moreover, the legislative framework and the state policy, particularly funding, cannot be assessed as supportive of further commercialization. Thus, neither state nor business sector and higher education institutions show deep readiness for cooperation.

However, TSU declares the importance of knowledge commercialization, both in terms of the university’s mission and its strategy. Majority of our respondents define knowledge commercialization as a practical utilization of knowledge, while the proposed explanation by TSU is quite different. The said

discrepancy may only be explained by the high level of internationalization of the university and the strong desire of its top management to keep pace with the global trends. Therefore, TSU acts to gain its legitimacy with its international partners. As Pietila (2014) mentions, when positions of university management and state policymakers differ, higher education institutions can merely symbolically respond to the global demand to strengthen its corporate image. However, disseminating it through the university is another exciting issue.

What is more, in the case of TSU the faculty curriculum is incommensurate with the declared commercialization policy despite establishing the Centre for Knowledge Transfer and Innovation. Indeed, SPSs need to formulate a different approach. Having analyzed interviews and focus group results, we were able to outline some exciting findings. Most of all, it should be noted that students (especially those enrolled in BA and MA programmes) see the process more positively than the faculty administration members do. The skepticism of PhD students and management stems from the national institutional context – a minor attention for social sciences from the public as well as from business sectors. The main focus of the state policy in terms of commercialization and knowledge transfer is the technical sciences, while the social sciences (along with humanities) are paid relatively little attention, which is corroborated by different Western researchers. Even in some countries with highly developed economies, social sciences (and humanities) are excluded from the research funding in interdisciplinary research (Olmos-Peñuela et al., 2014; Crossick, 2009; Holm & Liinason, 2005, pp. 38; Krebs & Wenk, 2005). Data obtained in our study including on positions regarding the SPS knowledge commercialization confirm the above.

The significant challenges indicated by our respondents are ignorance of education policymakers and industry compounded by the nepotism, the frustration of academic staff, students and the scarcity of support from the university as well as the lack of financial aid. Despite this, students and administration see their higher education institution as a potential catalyst for the process: taking responsibility for changing curriculum and working as a hub between researchers and business to get more and more profit. The top-down and bottom-up approach are outlined as only active scholars and students can press the university to transform its mission into reality. Interestingly, our respondents' perceptions of university-business-public relations and the problems cited by our respondents are pretty similar to those mentioned by representatives of different Polish universities and research centres: the lack of favourable institutional environment, effective communication, and mutual trust, as well as the lack of financial support from the state budget (Młodzińska-Granek & Kwieciński, 2018)

Finally, we have to conclude that positions on the social sciences knowledge commercialization issue at TSU are divided. The first vision states that it can be done easily if there is enough will and support for the process. However, the op-

posite vision claims that aligning social studies with natural sciences is aimless. The essential product of commercialization are the human resources and societal ideas that create and shape everything. Indeed, the human development contribution approach can be used to characterize the social science knowledge commercialization issue. Ultimately, proponents of both views agree with the vision of DEA (2011, p. 22) that SSH can play an essential role in solving societal challenges which “demand alternative solutions and new ways [...] and this is not done by losing the Social Sciences and Humanities.”

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