Moving beyond teaching and research: economic and social tasks of universities in Latvia

**Anda Adamsone-Fiskovica, Janis Kristapsons, Erika Tjunina
and Inga Ulnicane-Ozolina**

As a small European country that joined the European Union in 2004 after being part of the USSR for half a century, Latvia and its system of higher education and research is continually adapting to changing conditions, both nationally and internationally. While it experienced a certain depression in the 1990s, conditioned by the reorientation from the principles and scale of the soviet system to the needs and resources of a small democratic country, more recently an upsurge exhibiting a more dynamic development can be observed. During the last decade, the universities in Latvia have undergone substantial transformations in respect of both their internal activities and the extending operations reaching out into society. This paper attempts to identify these emerging areas of activity, characterizing the relevant situation and the ways of coping with the existing challenges related to the new tasks faced by universities in the national context.

THE FIRST UNIVERSITIES were established in Latvia at the beginning of the 20th century and with the current number of higher education institutions (HEIs) now amounting to slightly over 30 (see also Adamsone-Fiskovica *et al*, 2008), their official mission and tasks are currently being redefined in the new draft Law on Higher Education.¹ It features an extended emphasis on the integrity of scientific research and study process; the focus on both fundamental and applied research; the contribution made by HEIs to the cultural and economic development of the country; the cooperation with entrepreneurs, employers and other social partners; the commercialization of research results; technology transfer; the provision of services geared towards the needs of society; and the popularization of science. Similar expectations with respect to the activities of universities can also be traced in several recent strategic policy documents; hence, on the

level of public policy, one can identify an intention to make universities take up the full spectrum of 'third mission' activities.

Although the very concept of the 'third mission' is not widely known in Latvia, even among the key stakeholders,² there is an emerging consensus that the mission of universities³ exceeds that of education and research. However, the 'third mission' of universities is treated somewhat differently by exact and social scientists, with the distinction being made along the lines of the disciplinary particularities of 'hard' and 'soft' sciences featuring a certain bias towards either commercial or social aspects. Thus, exact scientists refer primarily to innovation, knowledge and technology transfer, commercialization of research results and orientation towards the needs of the business sector, while the representatives of social sciences use phrases such as 'education of the nation', 'general culture function' and 'influence on society and people's minds'. These notions imply a vision of the university as contributing to the enlightenment of the public and raising its educational and cultural level rather than giving merely economic returns from its activities. Accordingly, a coexistence of the more narrowly defined and the expanded approach to the outreach activities of universities in the present discourse in Latvia can be observed.

Anda Adamsone-Fiskovica (corresponding author), Janis Kristapsons, Erika Tjunina and Inga Ulnicane-Ozolina are at the Centre for Science and Technology Studies of the Latvian Academy of Sciences, Akademijas laukums 1, Riga, LV-1050, Latvia; Email: anda@lza.lv; Tel: +371 6722 5175; Fax: +371 6782 1153.

Anda Adamsons-Fiskovica has been a researcher at the Centre for Science and Technology Studies of the Latvian Academy of Sciences (CSTS LAS) since 1998. Her background is in sociology (University of Latvia) and science and technology studies (Linköping University, Sweden). Her main research interests and publications are related to R&D and innovation policy analysis and investigation of science–society relations in Latvia. She is the Latvian team leader in several international research projects (e.g. Developing Universities — The Evolving Role of Academic Institutions in Innovation Systems and Development [UniDev]). She is also a member of a number of European innovation and science researchers' networks.

Janis Kristapsons is the founder (1991) and head of the CSTS LAS and advisor to the President of the academy. His academic background is in nuclear and solid state physics and sociology. His main research interests cover innovation and science policies in the East and Central European countries, R&D and inventing activity, technology transfer and industry–academia linkages, as well as research evaluation. Together with his Estonian and Lithuanian colleagues he has written a monograph on the transition of the Baltic R&D systems (2003).

Erika Tjunina is a researcher at the CSTS LAS since 1991. Her academic background is in chemical engineering and polymer mechanics with a range of scientific publications and monographs. The main fields of her current research focus on the evaluation of Latvian science and technology, studies of the inventions and inventors of Latvia, as well as innovation policy and indicators.

Inga Ulnicane-Ozolins was a researcher at the CSTS LAS from 2005 to 2008. Her background is in political science. Her main research interests include analysis of research and innovation policies. Among other projects she has participated in the elaboration of the Latvian part in the framework of the international project EraWatch.

Inevitably, all mission statements in the first place represent an ideal type rather than embodying a fully realistic reflection of the current state of affairs. While such rhetorical declarations represent an indication of certain conceptual trends in the general reasoning with respect to the 'third mission' of universities, these postulates can serve only as a frame of reference for the identification and assessment of the actual activities and initiatives undertaken to accomplish the set tasks.

Accomplishing the 'traditional' missions

While discussions about the 'third mission' of universities in many countries take for granted the co-existence of two 'traditional' missions of education and research, this is still a disputable issue in Latvia. This is largely conditioned by its historical background (Kristapsons *et al*, 2003), with a rather sharp separation of educational and research functions during the soviet period, when educational functions were the sole competency of HEIs and research functions were mainly performed by research institutes of the Academy of Sciences. While there were individual cases of breaching the artificial separation present on a general organizational level,

these were rather the exception than the rule. It is only since the early 1990s that determined efforts have been undertaken to integrate the education and research functions to strengthen the 'second mission' of universities and raise the quality of the 'first mission'. Yet, while this has been postulated in various documents and the majority of former independent research institutes are now incorporated into universities, there are still many problems to be tackled in achieving their organic merger. Against this background, a large step has been taken in this direction by the recent declaration of the largest public university to profile itself as a research university.

Aside from the mutual integration of teaching and research, one has to look at these missions of universities as also undergoing individual alterations. While the educational function of universities is seen as their age-old trade, many HEIs are making continuous efforts to introduce novel and up-to-date pedagogical approaches (e.g. problem-based learning). Although there has been recent progress in terms of integrating studies and research in the learning process, this is not yet a rule in all HEIs, with practices differing even between faculties, study programs and individual lecturers. Additionally, a need for a more active internal reciprocity and synergy between different fields of science is being voiced to allow for a productive development of inter-disciplinarity as a crucial source of innovation. The labor market likewise demands new qualities for future employees, with growing concerns being voiced about the adequacy of the knowledge and skills acquired by university graduates for their successful adaptation to practical work.

Establishing links with the business sector

Development of linkages between universities and the private sector is a relatively new phenomenon in Latvia, with far less experience accumulated compared to many developed countries and an even shorter national record of accomplishment than integrating education and research, both of which can be

Development of linkages between universities and the private sector is a relatively new phenomenon in Latvia, with far less experience accumulated compared to many developed countries and an even shorter national record of accomplishment than integrating education and research

treated as a precondition for bringing forth the 'third mission'. Nevertheless, efforts to establish and strengthen university–business cooperation have been quite active in recent years, which must be viewed in the light of the fact that private sector development as such in Latvia has a track record of less than 20 years.

At present, there are at least three major factors driving the development of these linkages: the lack of a qualified labor force, the recent shift in public policy, and the accompanying incentives of universities. The recently aggravated shortage of qualified labor resulted from the 'horizontal brain' drain of science and engineering staff during the transformation period in the 1990s, the economic emigration of the labor force after joining the European Union, as well as the marked predominance of students in social sciences and humanities. These conditions have determined the need of the business sector to attract best graduates, with companies now developing various cooperation instruments with HEIs by means of offering internship opportunities, donating equipment as well as organizing competitions of student research papers and providing assistance in preparing their research projects. There is a widespread consensus in academia and in the business sector that employers have to be more actively involved in the study process to take account of the labor market needs.

In recent years, encouragement of university–business cooperation has been prioritized by the government as one important step in building a knowledge-based economy, which was set as a strategic policy goal to ensure the competitiveness of the national economy, which had so far relied mainly on cheap labor and natural resources. The need to facilitate these linkages is emphasized in many policy documents, and since 2005 concrete aid schemes have followed, including financial support for the establishment of technology transfer offices at universities as well as support for applied research infrastructure as an important precondition for universities to be able to offer advanced technological solutions for companies. Several new support measures facilitating collaboration (e.g. competency centers, clusters, researcher placements) are envisaged in 2007–2013 (Adamsone-Fiskovica *et al.*, 2007).

Largely in response to this policy orientation, universities have begun to take more focused actions to pursue industry linkages, spurred also by the need for additional sources of income and comprehension of the need to share their scientific and technological competence. Specific administrative units were established at various universities to elaborate measures for partnerships with the business sector. Cooperation with business is also emerging as one of the selection criteria when researchers apply for research grants.

Yet, some of the main obstacles for universities to collaborate more actively with the business sector are the lack of researchers; an underdeveloped

policy for the protection of intellectual property rights; the lack of an entrepreneurial spirit; and little responsiveness to the needs of the business sector. One of the major hindering factors is the shortage of researchers, with the existing staff already overloaded with teaching responsibilities and research tasks. There are also many opportunities for academics to participate in international research projects, frequently limiting additional capacities for cooperating with the business sector. Therefore recently special state aid schemes are starting to emerge, to prioritize training of new researchers and ensure the necessary critical mass of human resources.

There have also been recent positive developments regarding the so far under-addressed policy of intellectual property rights at universities. Nevertheless, there are still many unresolved issues with present policy not providing strong incentives for researchers to commercialize their research results, as the current legal provisions define the state as the owner of inventions originating from public institutions. Moreover, the general attitude towards the involvement of researchers in business activities is still rather ambiguous. While some researchers manage to combine academic and business posts, which for a long time was also a necessity due to very low salaries in academia, such a rotation between academia and business is rare at present. An additional hindering factor is also the stifling bureaucracy at universities with extensive administrative requirements, for example, for signing a contract with business partners. To avoid these procedures, many researchers choose to enter into contracts as individuals or through different companies or non-governmental organizations.

At the same time, an important factor hampering more rapid development of university–business linkages is represented by the presence of former negative cooperation experience of the involved parties. Some of the companies cooperating with universities complained of their insufficient responsiveness to the needs of the business sector as well as the occasional outdated and non-timely quality of the solutions offered.

On the other hand, there is generally very little interest in proactive innovative activities and a rather limited demand for university services in the enterprise sector. In 2002–2004, only 17.5% of enterprises in Latvia had undertaken innovative activities (CSB, 2006). Many companies carry out research commissioned by foreign companies, or are subsidiaries thereof, whereby R&D activities are often undertaken in parent companies abroad. Company surveys demonstrate that most Latvian enterprises have short-term business strategies, while innovation-oriented cooperation with universities requires at least a medium-term business strategy.

Yet, the interest in innovative activities in the enterprise sector can be expected to increase in the future, given the above-mentioned shortage of labor, the recent rapid increase in labor costs, as well as the

It is being increasingly stressed that there is a need to promote scientific literacy among the general population and to make science more attractive to the public — a trend primarily motivated by the decreasing number of S&E students and graduates

sharp rise in the costs of energy resources that would force companies to innovate to boost their productivity. As viewed by many stakeholders, cooperation between universities and entrepreneurs in Latvia is a matter of time with emphasis placed on the necessity to arrive at concrete cooperation projects for both sides to apprehend the needs and capacities of the other.

Engaging with the public

A comparatively less explicitly addressed realm with respect to the expanding role of universities in Latvia is the development of a stronger link with the public. While references to universities as important cultural centers in modern society are being made in this context, generally, public outreach undertaken by universities is being treated as a way to raise overall perception of university activities and inform the public about the key developments taking place within universities through press releases, mass media, institutional websites, etc. More specifically, the term of public engagement is being applied in diverse meanings, ranging from one-way initiatives to popularize science to more interactive science communication activities. Likewise, they can cover both direct and indirect involvement of the public in the developments undertaken by universities.

Under current conditions, it is being increasingly stressed that there is a need to promote scientific literacy among the general population and to make science more attractive to the public — a trend primarily motivated by the decreasing number of S&E students and graduates. There are several established initiatives aimed to promote interest in science among schoolchildren (weekend seminars, science contests, competitions of research projects), organized by different university departments. A range of activities also aims to popularize science among a broader audience by means of popular science journals, participation of representatives from universities in various broadcast programs on topical societal and scientific issues as well as an increasing number of widely distributed popular publications of social research relevant for policy-makers and the general

public. More recently, universities in Latvia have started to engage themselves also in various interactive events such as *café scientifique*, the Researchers' Night and science festivals — all aimed at popularizing the role of science and making it more accessible to the public. The same principle applies to those emerging instruments of public engagement that envisage different practical services provided for society members or social groups, either by means of consultancy or public access to research.

One of the key stimuli for the development of public engagement initiatives undertaken by universities in Latvia has been provided by the process of trans-national learning, since many of the novel activities have been introduced with initial ideological and financial support from foreign-based public, private and non-governmental organizations. The public and academic discourse on the expanding tasks of universities evolving elsewhere gradually starts to infiltrate into the local reasoning, thereby contributing to a more comprehensive understanding of the social role of universities. References to this role are emerging in the rhetoric of public policy and this orientation towards extension activities of universities is also being gradually taken up by the academic staff. This is conditioned also by the need to look for new ways to attract potential students as well as by the recently improved financial position of universities that allows them to begin looking beyond a mere survival strategy.

At the same time, practically no formal appreciation of individual initiatives in public engagement is reflected in the assessment of the academic quality of the staff, which is still primarily based on the record of academic publications, citations, etc. On the whole, a systematic and structured approach is lacking to promote the social role of universities, which is currently based on the principle of voluntary participation. The existing activities are mainly initiated by individual enthusiasts without any additional monetary incentives, rather than as part of an established framework, with the main emphasis at universities still being placed on the teaching and research duties of the academic staff. Besides, there are still rather varied attitudes towards personal involvement in engagement initiatives on the part of individual members of the academic community. Many academics in Latvia are still relatively resistant to proactively involving themselves in addressing various problems of public concern, which can be partly attributed also to the lack of social skills and adequate training in undertaking public engagement initiatives, which would enable them to communicate and share their knowledge with the public in an attractive and accessible manner.

Another way to provide services to the surrounding community is embodied in the linkages of universities with national authorities, with collaboration agreements being concluded with ministries and local governments. On a more strategic level, of directly engaging social partners in the process of

determining the development priorities and strategies of universities in Latvia, guided by the need to increase their transparency and accountability, there is an on-going discussion about setting up advisory committees as a mechanism to bridge the gap between the universities and the rest of society. An important factor facilitating cooperation schemes with the public sector is the presence of prior personal contacts. This feature is especially relevant in Latvia, given its small size and with people knowing each other through formal and informal networking.

Yet, a fully productive collaboration between universities and other public institutions is sometimes hindered by the lack of any notable and concrete follow-up to rhetoric statements on cooperation, which is largely caused by the limited managerial capacities of the involved parties. On other occasions, the interests of the partners are not being sufficiently well balanced, leading to unproductive collaboration attempts. Public universities also have certain reservations about openness in cooperation with social partners (Muiznieks, 2007:196), due to concerns regarding the potential personal motives of involved individuals, as well as the fear that political interests at stake via such an involvement could pose a threat to the autonomy of the universities.

On the whole, the comprehension of the broader goals and essence of public engagement is still rather limited within the academic community at large. Usually science communication and public engagement initiatives undertaken by universities in Latvia are primarily motivated either by the desire to educate society and fill in the 'missing knowledge' or the need to raise the prestige and publicity of the particular academic institution. To a lesser extent, it is perceived as an effort to engage in discussion with society and stimulate feedback on topical and frequently controversial scientific matters with broad implications for society. Although initiatives of public engagement are starting to emerge, for now it is too early to speak of an officially declared and determined strategy for such communication efforts as an integral mission of the universities in Latvia.

Concluding remarks

Although the concept of the 'third mission' is still quite unfamiliar in Latvia, elements thereof are being increasingly addressed in both the academic and public domains. The 'third mission' of universities in the national context is still in the making, currently undergoing an active phase of apprehension and development. While various mission statements on an institutional and policy level make rather explicit references to the needs to promote cooperation

with the business sector, to commercialize research results and to ensure public accountability and engagement, the actual implementation of these outreach activities is still rather limited, not least due to the lack of human resources and strong incentive structures. Other issues are currently being given higher priority, not least in terms of integrating the first two missions, a successful merger of which is seen as an important precondition for the extension activities.

While there is a certain tension between the social and the commercial role of universities in terms of the underlying goals and the means employed, these should be treated as two sides of the same coin, since both are based on the premise of the need to communicate and cooperate more extensively with stakeholders beyond the academic community. While generally it is possible to speak of some common trends in the activities of universities in Latvia, there are still rather diverse conceptions of the overall mission of universities in terms of the scope, profile and number of their specific tasks that currently to a large extent determine different levels of readiness to undertake specific initiatives within the 'third mission' framework.

Notes

1. The initial draft law to substitute the Law on Higher Education Institutions (1995) was elaborated in 2006 and is still (October 2008) in the process of harmonization.
2. The study is based on document analysis, expert interviews, case studies, and a special workshop.
3. Although in Latvia a differentiation exists between universities, HEIs and academies, here the term 'universities' is used to refer to all academic institutions simultaneously providing higher education and undertaking research.

References

- Adamsone-Fiskovica, A, J Kristapsons and I Ulcinane-Ozolins 2007. *INNO-Policy TrendChart: Policy Trends and Appraisal Report: Latvia*. European Commission, Enterprise Directorate-General.
- Adamsone-Fiskovica, A, J Kristapsons, E Tjunina and I Ulcinane-Ozolins 2008. The Evolving Role of Academic Institutions in the Knowledge Economy: the Case of Latvia. UniDev Discussion Paper Series Paper no. 12. Published online at <<http://developinguniversities.blogspot.com/>> by Research Policy Institute, Lund, Sweden.
- CSB, Central Statistical Bureau of Latvia 2006. *Research and Development and Innovation Statistics*. Riga: CSB of Latvia.
- Kristapsons, J, H Martinson and I Dageys 2003. *Baltic R&D systems in Transition: Experiences and Future Prospects*. Riga: Zinatne Academic Publishers.
- Muiznieks, I 2007. University in Latvia: on the way to the knowledge society. In *Science, Research and Innovation: Advancing Latvia's Development*, Strategic Analysis Commission, Research papers no. 3(14)2007, pp.189–208. Riga: Zinatne Academic Publishers. (In Latvian)