

Economics - Latvia

Karnite, Raita

Veröffentlichungsversion / Published Version

Sammelwerksbeitrag / collection article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:

Karnite, R. (2002). Economics - Latvia. In M. Kaase, V. Sparschuh, & A. Wenninger (Eds.), *Three social science disciplines in Central and Eastern Europe: handbook on economics, political science and sociology (1989-2001)* (pp. 102-120). Berlin: Informationszentrum Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-279288>

Nutzungsbedingungen:

Dieser Text wird unter einer CC BY Lizenz (Namensnennung) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier:

<https://creativecommons.org/licenses/by/4.0/deed.de>

Terms of use:

This document is made available under a CC BY Licence (Attribution). For more information see:

<https://creativecommons.org/licenses/by/4.0>

Raita Karnite

Economics – Latvia

Discussant: Morten Hansen

1. Analysis of the pre-1989 situation

Introduction

Science and research have long-lasting traditions in Latvia. Analysts trace the first remarkable events in science back to 1775 and the foundation of the Academia Petrina in Mitava, now called Jelgava (Latvia, 1993). However, original scientific ideas in the humanities (history, ethnography, Baltic languages) emerged earlier. In 1985, the famous Latvian scientist, academician, and current President of the Latvian Academy of Sciences, Janis Stradins, divided the process of the development of science and research in Latvia into three typical periods:

- activities of individual scientists (until 1862),
- mainly educational (university) science organization (until 1946),
- mainly organization of research institutes – after the establishing of the Academy of Science of Latvia (Sovetskaya, 1985: 463).

Intense trade development (important West and East trade routes went through Latvia) and the early (12th-century) arrival of the Roman Catholic Church in the Baltic region allowed European culture to flow into Latvia to a very great extent and facilitated the development of education and science in Latvia (Anspaks, 1997: 5).

Scientific works in economics appeared later, based on earlier research achievements in the natural and other sciences. At the end of the 16th century, the medical doctor and stargazer Zachary Stopius (1535-1593, 94) compiled an encyclopedia, “Livlandische Oekonomie”. This document is considered the first scientific publication in economics in Latvia. In 1645, based on this encyclopedia, pastor Salomo Hubert (?-1653) produced Latvia’s first manual on agriculture “Stratagemata oeconomicum...”, which was translated into Russian by Mihail Lomonosov in 1747 (Sovetskaya, 1985: 463).

On the basis of research on Latvia’s natural resources and on a cartographic abstract of almost all its territory, August Hupel, a clergyman, geographer, and historian, produced a comprehensive systemic review of the history, geography, and economics of the Baltic region (“Topographische Nachrichten von Lief- und Ehstland”, 1774-1782).

In the 17th and 18th centuries, the professorial and teaching staff of local educational institutions, the Riga Academic Gymnasium and Academia Petrina, steeped themselves in studies of particular problems. They usually worked alone or in voluntary association. A perfect example is Mitava (Jelgava), the capital city of Courland, the Western part of Latvia, whose Academia Petrina developed as the center of scientific activities.

In the second half of the 18th century, Jelgava and Riga became centers for publishing scientific books, mainly in German. Important scientific essays by Immanuel Kant, Johann Gottfried Herder, and Mihail Lomonosov were published in Jelgava and Riga. Some essays by Johann Georg Eizen, Heinrich Johann Jannau, Garlieb Helwig Merkel (a typical representative of the Enlightenment period in Latvia), Carl Philip Snell, and others examined problems of Latvian economy and history. This period saw the first publications in Latvian, among them *Lielās gudrības grāmata* (The book of the great wisdom), published by Gothard (Gottfried) Friedrich Stender in 1774.

Courland's Association of Literature and Art was founded in 1815. This institution operating in cooperation with the Academia Petrina, which at this time was transformed into Courland's Gymnasium, may be considered the first regional academy of sciences in the Baltic Region.

In the first half of the 19th century, several professional unions and associations of scientists were established in Latvia, but there is no data on any association of economists.

The majority of scientists in Latvia were not Latvians, but many Latvian scientists were recruited or left to study outside Latvia in Derpte (nowadays Tartu) in Estonia, St. Petersburg and Moscow in Russia, Harkov and Kiev in Ukraine, and elsewhere. A local Latvian intelligentsia did not appear until as late as the turn of the 19th to the 20th century.

Intense economic development in the early period of capitalism promoted the development of education and science even more. The foundation of Riga Polytechnic School in 1862 (renamed the Riga Polytechnic Institute in 1896) marks the establishing of the first organized groups of scientists, but their main purpose was to teach in universities. They also worked to solve topical technical problems (Akademiya, 1986: 5). The establishment of the Riga Polytechnic Institute greatly facilitated the expansion of research in engineering, biology, and chemistry.

The end of the 19th century marked an increase in the significance of the social sciences. The activities of the *jaunlatvieši* (New Latvians) Juris Alunans, Krisjanis Barons, Kaspars Biezbardis, Atis Kronvalds, Andrejs Spagis, Krisjanis Valdemars, and Krogzemju Mikus (Auseklis) played an important role in the development of the humanities and social sciences. Since the main purpose of *jaunlatvieši* was to stand up for Latvian national values, they could not ignore economics. For instance, Krisjanis Valdemars was famous for his activities promoting seafaring in Latvia.

Economic aspects become even more important in the late 19th century, when Latvia's democratic intelligentsia created a movement called *jaunstrāvnīeki* (New Current), which was based on social democratic ideas and the writings of Karl Marx. Representatives of this group – Peteris Stucka, Janis Pliksans (famous as the poet Rainis), Fricis Rozins, Pauls Dauge, and Janis Jansons (Brauns) – emphasized the idea of fair economic and distribution relations, equality, and social rights. Later, *jaunstrāvnīeki* disseminated and provided education in Marxist ideas in Latvia.

The first Soviet period in Latvia (1919) brought important developments in education and science. The Latvian University (founded in 1919 on the basis of Riga Polytechnic Institute) was established to contribute to the fast recovery of the Latvian economy. The change in power at the end of 1919 encouraged even more development in education and science. The rapid development of Latvian University promoted research in Baltic philology, medicine, chemistry, biology, and agriculture, as well as economics.

Distinguished Latvian economists of the pre-war period included:

- Jānis Kārkliņš (born in 1877), Dr. oec., a professor and vice-chancellor of Latvian University, helped establish the Faculty of Economy and Law Sciences of Latvian University. Research fields: commerce (Karklins, 1931), development of Latvian shipping business (Es, 1975: 245);
- Matīss Arons (born in 1858), a journalist and folk teacher, worked with several newspapers. Field of activity: general economics, history of economic thought (Arons, 1908) (*Latviešu konversācijas vārdnīca I*, 1927–1928: 1454);
- Fricis Menders (born in 1885), a certified lawyer, politician, and journalist, studied economics and law at the Universities of Vienna and Bern (graduated with Dr. juris utriusque degree), and at the sociological institute in Brussels. Research field: socialism (Menders, 1931) (*Latviešu konversācijas vārdnīca XIII*, 1935-1936: 26599);
- Kārlis Balodis, an economist and professor at Latvian University. Research fields: economics, statistics (Balodis, 1921; *Es viņu pazīstu. Latviešu biogrāfiskā vārdnīca*, 1975:51-52);
- Eduards Balodis (born in 1880), Dr. oec., a professor of Latvian University, Faculty of Economics and Law. Research field: general economics (Balodis, 1935; *Es viņu pazīstu. Latviešu biogrāfiskā vārdnīca*, 1975: 49);

- Kārlis Puriņš (born in 1883), Dr. oec., a senator in the Latvian Saeima (Parliament), Administrative Department, and professor at Latvian University. Research field: finances (Purins, 1926/1927; *Es viņu pazīstu. Latviešu biogrāfiskā vārdnīca*, 1975: 398);
- Alberts Zalts (born in 1897), Cand. oec., the editor of *Ekonomists* and *Latvian Economic Review*. Research fields: economic crisis, economic geography (Zalts, 1931; Zalts, 1932; *Es viņu pazīstu. Latviešu biogrāfiskā vārdnīca*, 1975: 541);
- Arnolds Aizsilnieks (born in 1898), an agronomist, cooperator, and senior assistant professor at Latvian University. Research fields: history of Latvian national economy (Aizsilnieks, 1968);
- Eizens Ostvalds. Research fields: economics of forestry and others.

The first attempt to establish the Latvian Academy of Sciences, the main scientific organization authorized for the promotion and coordination of science and research activities in Latvia, was made in 1919 (under the first Soviet power), but actually it was not established until February 1946. The establishing of the Latvian Academy of Sciences was not on the agenda during the first period of independence (1919-1940), but the development of universities was strongly promoted.

In 1939, agricultural disciplines were transferred from Latvian University to Latvian Agriculture Academy (Jelgava). This period is significant for the first effort to establish independent scientific institutes – the Institute of History (1936) and the Institute of Natural Resources (1939) – but the impact of these institutes was insignificant.

The Latvian science community has always interacted with science communities in neighboring countries – Estonia (Tartu), Russia (Moscow, St. Petersburg), Ukraine (Kiev, Harkov), and Western Europe.

After World War II, the network of scientific institutions was greatly expanded. The Soviet power perceived science as the major factor fueling development. Immediately after World War II, it took measures to establish a powerful science system on the pattern of the Soviet Union's. 17 scientific institutes, among them the Institute of Economics, were established at the end of 1946, during the first scientific session of the Latvian Academy of Sciences. The structure of the Academy institutes' network has changed several times – some new institutes and institutions (laboratories, design offices, observatory, and atomic pile) were established and some other institutes were subordinated to state institutions or merged.

In 1940, there were 1,128 so-called “scientific workers” in Latvia; in 1960, 3,348; in 1971, 9,216. In 1971, 2.2% of all scientific workers had a doctorate, 29.5% were candidates of science, and 68.3% were without a scientific degree. Of all persons employed in science, 0.5% were academicians, 1.4% professors. In 1971, there were 101 research institutions, 32 of them research institutes. Of all persons employed in science, 680 (7.4%) were employed in economics, compared with 112 (3.3%) in 1960. Of those employed in economics in 1971, 7 were doctors of economic science, and 166 candidates of economic science (Kulturnoye, 1972: 113-122).

In 1986, the Latvian Academy of Sciences comprised 15 scientific institutions, organized in 3 departments, 3 experimental factories, and 6 special design offices. As of January 1, 1986, 7,623 persons were employed in the Academy of Science, 1,670 them qualified scientists: 116 doctors, 954 candidates of science (pre-doctoral qualification). The Academy of Sciences consisted of 24 academicians and 28 corresponding members (Akademiya, 1986: 14).

At the end of 1990, 75 research institutions carried out research in Latvia, 15 of them in the network of the Academy of Sciences (including the Institute of Economics) and 38 from sector institutions (including two with an economics profile). The total number of specialists employed in research was 17,733, of whom 402 (2.2%) had a doctorate and 3,308 (18.6%) had the candidate of science qualification. Women comprised 47% of those employed in research, 16% of the doctors, and 35.6% of the candidates of science. Of all those employed in research, 6.3% worked in economic research (Latvijas, 1991: 184).

At the end of 1990, the Academy of Sciences consisted of 78 academicians and corresponding members and employed 1,770 scientific workers, of whom 150 were doctors and 966 candidates of science (Latvijas, 1991: 185).

Economic research institutes were fairly large, with staffs of several hundreds persons. As statistics show, an average 7.5% of the equipment employed in research institutions was comparable with the world standards, 21.2% was not comparable, and 71.3% was not assessed in these terms. The worst situation was in research institutes (correspondingly 7.1%, 12.7%, and 80.2%), the best in universities (32.4%, 34%, and 33.6%) (Latvijas, 1990: 158). In 2001, the total number of scientists had decreased to 4,000 persons (Kristapsons, 2001).

The spectrum of Marxism-Leninism

After World War II, when Latvia was forcibly incorporated in the USSR, the organization, leadership, and development of Latvian education and research were subordinated to the authoritarian Soviet education and research system. Marxism-Leninism, clearly the only legal ideology, was the background of economic education and science in Latvia before 1990.

As the World Bank study found, during the post-war period, in universities specialized in either natural or social and human sciences, about 20% of the teaching content was ideology – the history of the Communist Party, philosophy, and Marxism-Leninism (Latvia, 1993: 177).

Marxism-Leninism was a mandatory subject for anyone trying to complete a scientific degree. No matter what field the applicant chose for a scientific career, he had to pass so-called “exams for candidate minimum”, including exams on the dialectic and historical materialism developed from the Marxist-Leninist ideology; for economic disciplines, exams on the history of the Communist Party and political economy were also required. References to Karl Marx, Friedrich Engels, and Vladimir Lenin, as well as to Party documents and the speeches of current political leaders, were mandatory elements in the preamble to every research paper. This requirement could be fulfilled in a routine manner; since there was no requirement that the citations selected had to be relevant to the research topic.

Marxist-Leninist theory could not be criticized, so it was not subjected to creative investigation and development. International cooperation in economics was restricted to within the borders of the Soviet Union. Publishing research results in foreign academic journals was practically impossible. Every published word was censored (including abstracts of doctoral theses), and a special institution – Glavlit (Central Department of Literature – Galvenā literatūras pārvalde) – was maintained for this purpose. Every piece of statistical data had to have clear reference and was carefully checked for compliance with the interests of the Soviet state. Data could not indicate negative trends or problems, except these recognized by the Communist Party.

Despite unfavorable conditions, researchers tried to illuminate threats or weaknesses of existing trends or of new decisions in the Soviet economy. For instance, researchers at the Institute of Economics, Latvian Academy of Sciences managed to eliminate baseless massive allocations of industrial enterprises in Latvia.

The research topics investigated by economic research in Latvia before 1990 covered fields such as: the fundamentals of the (socialistic) economy, the political economy of socialism, the history of economic thought, the history of national economy, the critics of “bourgeois economic theories”, the efficiency of the socialistic economy (methodological problems), employment and work productivity, the allocation of productive capacities, productive work organization, socialist competition, and sector development.

Latvia was famous for research in the application of mathematical methods in various fields of economics, especially in macroeconomic (financial) forecasting and agriculture. Several computer systems for planning were implemented.

Latvia was a pioneer in the implementation of agro-industrial complexes in the Baltics. In general, Baltic countries were famous for analytic research and advanced proposals that were courageous for the time. The reason was doubtless that economic development in the Baltic

countries was advanced by USSR standards. On the other hand, Latvian researchers were much more controlled and were much more likely to become dissidents.

All the theories formerly taught (except mathematics modeling) lost their foundations after Latvia's turn to the market economy.

Pre-war traditions

Before World War II, academic research was carried out exclusively at universities. Education was an important aspect of socio-economic development, and education and health care statistics were always placed at the beginning of every pre-war statistical report. The main institution carrying out education and research in economics was Latvian University in Riga.

Latvian University was opened for studies on September 28, 1919. Ten years later, in 1929, the university had a Faculty of Architecture, a Faculty of Engineering, a Faculty of Mechanics, a Chemical Faculty, a Faculty of Agriculture, a Medical Faculty, a Veterinary Medical Faculty, a Faculty of Mathematics and Natural Sciences, a Faculty of Economics, a Faculty of Philology and Philosophy, and a Theological Faculty (Latvijas, 1929).

The main topics in the field of economics were economic policy and business skills. The number of graduates was not large – about 10-15 students per year. Unfortunately, there are no statistics on research, but it can be assumed that the leading teaching staff was also the leading research potential.

In the academic year 1939/40, 1,978 students and 5 auditors were registered at the Faculty of Economics and Law at Latvian University, of whom 987 students and 1 auditor studied economics. The Faculty employed 46 lecturers, of whom 7 were professors, 7 extraordinary professors, 8 docents, and 22 assistants and other teaching staff (Latvijas, 1940). The Faculty of Economics and Law was the largest faculty at the university. The total number of graduates from the Faculty of Economics and Law in 1939 was 1,724, of whom 544 were graduates in economics. Among them were 425 men and 119 women (Latvijas, 1940).

Of the 1,978 students, 1,824 (92%) were Latvians, 8 Germans, 36 Russians, 93 Jews, 8 Poles, 2 Estonians, 5 Lithuanians, and 2 persons of other nationalities.

The Agriculture Academy in Jelgava prepared specialists in agriculture and forestry. The total number of students in 1939/40 was 785; the teaching staff comprised 69 persons, of whom 11 were professors, 8 extraordinary professors, 22 docents, and 28 other teaching staff. Supposedly, the Agriculture Academy also provided basic knowledge in agricultural economics (Latvijas, 1940), among other disciplines.

For the obvious reason that, in pre-war Latvia, the national economy was based on market principles, Western traditions of higher education and research in economics dominated in both content and performance.

It goes without saying that, after Soviet occupation, the educational and research system in Latvia was substantially changed. As described earlier, science was partially transferred from universities to special research institutes, concentrated in the system of the Academy of Science, which was directly subordinated to the Academy of Sciences of the USSR. Science activities, as well as preparation of scientific staff, were planned within frameworks of the socio-economic development plan on the national and all-Union levels.

The impact of Western theories

During the Soviet period, Western theories were accessible to a limited circle of people who were employed in “secret” or “closed” research topics (among them topics in critical fields of the Soviet economy).

Still, specialists could learn about Western theories and classical economic theories in an indirect way – via criticism and explanations of the weaknesses of such theories in comparison with the strength of Marxist-Leninist theories. Experience with mixed economies (for instance, in

Central European countries) was also transferred in this way – through criticism or description written by Soviet economists.

By contrast, Western theories in fields of mathematical economics (cybernetics, mathematical modeling, statistical analysis, econometrics) were available for relevant specialists. This is why these specialists, along with some requalified specialists from the natural sciences, were the first advocates of the transformation of the socialistic economy.

Research publications of pre-war economists (Latvian, Russian, and other) were illegal, taken out of libraries, and deposited in the secret inventories of libraries or destroyed. They were used to illuminate the advantages of socialism over “dread” capitalism.

Oppositional activities

Oppositional activities before the 1980s were weak. Research in institutes and publications were strictly controlled. Any statement or conclusion that contradicted the spirit of socialistic thinking could lead to a layoff from the research institute, with very poor prospects of finding a good occupation afterward. Managers of institutes and chiefs of departments were easily replaced if their political stance was discredited.

Reliable historical sources on opposition activities in economic science in Latvia are not yet documented in publications. It is as if the history of Latvian economic science stopped in 1940. Unfortunately, even bystanders prefer to maintain silence about historical events of the post-war period. Still, there must be enough documents in the archives.

In the 1980s, perestroika warmed up the climate for economic research, and there were more criticism, analysis, and adventurous proposals to improve the economy and introduce market elements (for instance, private work in cooperatives). Still, it is difficult to identify individuals who offered strong opposition.

2. Redefinition of the discipline since 1990

Change of paradigms

In a country that radically changes its political and economic system, a change of paradigms is unavoidable. On the way from the socialist planned economy to a liberal and market-driven one, all institutional systems were reorganized; this process required fundamental knowledge and good examples. The transition was more revolution than evolution, and the socialist system's theoretical background and economic thought did not provide enough knowledge.

Both of the global changes of paradigms – the implementation of democracy and the implementation of a market economy – also have economic components. Within these two paradigms, there are lots of variant ideas on constructing new systems. Economists in Latvia are not fully agreed on which paradigms to choose.

Academics (science professionals, academicians, senior university staff) are much less radical supporters of massive transitions, striving for solutions that soften transformation and eliminate negative social impacts. By contrast, the middle and younger generations of academically educated specialists – high-level personnel in state institutions, in many cases coming from academic science or looking for academic affiliation – support radical reforms.

Whatever the knowledge of local economists was, the guidance of international organizations (the World Bank, the International Monetary Fund, the European Commission) played a decisive role in forming new paradigms in Latvia. But the input from international organizations was restricted to theoretical models and examples from other countries, as well as technical assistance in the implementation of ideas they supported. Decisions were the responsibility of local politicians and state managers.

The change of elites

The change of elites had several causes:

- ideological – some leaders of universities, the Academy of Science, and economic institutes (leading researchers) were communists forced to resign after 1990,
- financial – dramatic funding cuts put researchers in bad financial situations, while the transforming economy offered them numerous better job prospects in business or state institutions,
- practical – the newly established Latvian state needed good specialists in state institutions, and many leading researchers took high positions in parliament and the government,
- organizational – some former institutes were closed administratively or due to poor economic conditions and unstoppable losses in staff.

The staff of economic research institutions is typically composed of people older than 45 and younger than 25. Researchers between the ages of 25 and 45 are exceptions in economic science.

Today, the economic elite comprises advanced researchers in research institutes and new leaders; specialists in economics or other specialists who have been requalified in economics, working in government positions; teaching staff at universities; foreign citizens of Latvian descent who contributed to policy-making in Latvia, who either still work abroad or who have moved to Latvia, some of whom have established their own research or educational institutions in Latvia.

New institutional structures

Before 1990, economic research was incorporated in a unified research system, divided into three categories:

- the Latvian Academy of Sciences (LAS) (*Latvijas Zinātņu akadēmija*), a network of 15 research institutes. Economic research was represented by the Institute of Economics LAS (*LZA Ekonomikas institūts*), founded in 1946,
- higher education establishments. Economic research was carried out at the University of Latvia (*Latvijas Universitāte*), Riga Polytechnical Institute (*Rīgas Politehniskais institūts*), the Agriculture Academy in Jelgava (*Latvijas Lauksaimniecības akadēmija*), and to some extent also in Daugavpils Pedagogical Institute (*Daugavpils Pedagoģiskais institūts*; Daugavpils is a city located in southeastern Latvia, some 250 km from Riga),
- several sector research institutes belonging to ministries, state institutions, and enterprises.

There were also research entities in state enterprises.

Universities did not play a major role in economic research. One of reasons was the heavy teaching load expected of staff (about 25 hours of instruction per week). Almost all research was funded from the state budget (via the Academy of Sciences) and the State Plan research institute. Academic research institutes were also eligible for ministry funding on a contract basis.

Since 1990, the Latvian science system has gone through the most radical changes. Cut out from the united science system of a large country at the beginning of 1990s, it was somehow transformed into the research system of a small state and integrated in the united European space.

The reform period in Latvian science dates back to 1990 with the foundation of the Latvian Council of Science (*Latvijas Zinātnes Padome*). The Association of Scientists (*Zinātnieku savienība*), established in 1988, elaborated the ideology of changes.

In 1992, at the request of the Latvian Council of Science, the Danish Research Council organized an international evaluation of Latvia's research system. 19 expert panels appointed by the Danish council visited Latvia in the period June-October 1992. Economics had a separate panel that examined 14 economic research institutions. All these institutions were state-owned. Some of them still exist, some have been closed or reorganized, and some new institutions have appeared.

Management and regulatory organizations and institutions operating on the national, regional, and supranational level

The Ministry of Education, Culture and Science of the Republic of Latvia is the main management organization in the field. The ministry is responsible for strategic and methodological issues concerning all levels of education, academic and applied research, drafting and implementing laws, and funding education and research. The Latvian Saeima (Parliament) has a Deputy Commission on Education, Science, and Culture. Education is the primary interest of this commission. Ministries promote research by providing funding for applied research that is necessary for their own operation.

In the early 1990s, the Academy of Science was transformed from a Soviet-type organization (association of research institutes) to a European-type organization. It is now a personal academy consisting of individual elected members. It operates on the basis of its Charter and is financed from the state budget. The LAC is no longer authorized to directly manage scientific affairs in the country, but it has the right to evaluate practically everything in economics and science.

Similar functions are delegated to the Latvian Academy of Agricultural and Forestry Sciences (LAAFC) (Latvijas Lauksaimniecības un meža zinātņu akadēmija), which was founded within the walls of the Latvian Agriculture University (Latvijas Lauksaimniecības akadēmija) in 1992. The Latvian Council of Science (LCS) was founded in accordance with the decision of the Council of Ministers of the Republic of Latvia in July 1990. The Republic of Latvia Law on Scientific Activity determines the competence, obligations, membership, and rights of the LCS. The LCS is a semi-governmental body, a collegiate institution of scientists that comprises 140 scientists elected by academic staff by secret ballot for a three-year period. The Council itself consists of 20 members with representatives from the Ministry of Education, Culture and Science, the Latvian Academy of Sciences, the Board of Rectors (Rektoru padome) of the higher education institutions, the Latvian Academy of Agricultural and Forestry Sciences, the Latvian Association of Scientists, and Expert Commissions (currently 14, elected from 14 research disciplines). Scientists actively involved in the respective fields choose members of Expert Commissions. The LCS experts, in turn, select the members of the Council itself, a chairperson and a deputy chairperson, and other LCS officers. The Council's tasks include the advancement, evaluation, financing, and coordination of scientific research in Latvia. Jointly with the Ministry of Education and Research of Latvia, the LCS prepares the draft of the republic's science budget for the current year and elaborates projects for decisions and laws aimed at the development and organization of science in Latvia. It also awards to institutions of higher education and state research centers the rights to form the promotion boards. The LCS finances specific projects, not institutions.

In the Republic of Latvia, scientists' qualification are confirmed by promotion – conferment of a scientific degree for an individual's original research whose results are valued as an important contribution in the field. The Council of Higher Education (CHE) (Augstākās izglītības padome) was formed in 1996. The Council consists of outstanding persons elected from the academic staff and deals with strategic and methodological issues of higher education.

Legislation concerning academic education, science, and research

The Saeima adopted the law "On Scientific Activity" on November 10, 1992 (amended in 1996 and 1998). The law changed the status of research institutes from units subordinate to the Academy of Science to independent research units.

In 1992, the Ministry of Education, Culture, and Science worked out its concept for the development of technological centers in Latvia, and two first centers were established. The Saeima adopted the law "On Higher Education Institutions" on November 2, 1995. There are several Cabinet of Ministers Regulations that are important for research activities: "On state-ordered research projects", the Statutes of the State Commission of scientific qualification, "On state research programs", "On the arrangements and criteria for awarding scientific degrees", "On the Latvian Council of Science", and "On state scientists emeritus".

The Latvian Parliament adopted the “National Concept of Higher Education and Research Development” in Spring 1998. This was a summary of strategic statements intended to ensure a constantly growing role for research in the society and national economy up to 2010. The Concept recommended increasing research funding from the state budget to at least 0.8% of the GDP by 2001, but this recommendation, like many others, was ignored. The Concept also set priorities for research development: information technology, material sciences, forestry and timber technology, organic synthesis, biotechnology, biomedicine and pharmacy, and Lettonics (national humanities). Economics was not listed as an important field.

The Ministry of Education, Culture and Science has also identified the priority research directions in frameworks of European Commission research programs: information technology and telematics, life sciences and biotechnology (biomedicine, drug design, and biotechnology), new materials and technologies, and ecology and environmental protection. Again, economics is not among the priorities.

The Concept envisages the development of state research centers in research areas that may be established on the basis of current research institutes (singly or by merging several institutes). It was planned that the state would have to insure the maintenance of infrastructure in such centers. With this perspective, 11 academic institutes founded the first state research center, the Center of Material Science. But the expected financial system was never implemented, because the state was neither able nor willing to provide stable financing for research. To improve the quality of higher education, a new position of State Professor was introduced for educational staff.

At the end of 2001, the Ministry of Education, Culture and Science worked out a draft document called the “Program for the development of higher education and science 2002-2010”, a sort of guideline for the development of science in that time period. The document develops the idea that all research must be integrated in universities. It envisages that, about 2010, most of the science budget must be allocated to universities and only a small part to state research centers, which are expected to carry out high-quality fundamental research. Current academic institutes that up to now were independent legal entities affiliated with universities (mainly the University of Latvia) are expected to transform into sub-entities of university departments. Leaders of institutes say these changes in the status of academic institutes, the excessive concentration of financial resources in a limited number of universities, and the expected vagueness in distribution of funds between teaching and research activities are the most serious threat to their existence after 1990.

Education

The 1993 World Bank study concluded: “Important fields of study in a market economy either do not exist or are oriented in the wrong direction. Programs improperly oriented include economics, business, law, agriculture, and several fields of technology. Economics and management, in particular, need a complete overhaul. Moreover, owing to Latvia’s isolation from outside development, university teaching and scientific research have become seriously outdated. Lacking ready access to professional networks and literature, many teachers and researchers have fallen well behind developments achieved by their colleagues in the West. Staff, teaching programs, libraries and textbooks, and laboratory equipment are not as up-to-date as they need to be in a competitive market economy.” (Latvia, 1993: 181)

Having in mind the specificity of economic science and its political content, economic education needed to be completely changed. Today, numerous institutions, including main universities and high schools, offer study programs in business and economics, among them:

in Riga:

- the University of Latvia (Latvijas Universitāte),
- Riga Technical University (Rīgas Tehniskā universitāte),
- the Stockholm School of Economics in Riga (Rīgas Ekonomikas augstskola),
- the School of Business Administration “Turība” (Biznesa augstskola: “Turība”),

- the Medical Academy of Latvia/Rīga Stradiņa University (European Integration Institute) (Latvijas Medicīnas akadēmija/Rīgas Stradiņa universitāte (Eiropas integrācijas institūts)),
 - the Banking College of Higher Education (Banku augstskola),
 - the Institute of Social Technology (Sociālo tehnoloģiju augstskola),
 - Rīga International College of Economics and Business Administration (Rīgas Starptautiskā ekonomikas un biznesa administrācijas augstskola),
 - the Higher Education Institution for Economics and Culture (Ekonomikas un kultūras augstskola),
 - the Business Institute RIMPAK Livonia (Biznesa institūts RIMPAK Livonija),
 - Rīga Business School (within RTU) (RTU Rīgas Biznesa institūts),
 - Baltic Russian Institute (Baltijas Krievu institūts),
 - Rīga Institute of International Economics (Rīgas starptautiskās ekonomikas institūts)
- outside Rīga:
- Latvia University of Agriculture (Latvijas Lauksaimniecības universitāte) in Jelgava (central Latvia),
 - Vidzeme College of Higher Education (Vidzemes Augstskola) in Valmiera (central Latvia),
 - Liepāja Pedagogical Higher School (Liepājas Pedagoģijas akadēmija) in Liepāja (western Latvia),
 - Ventspils College (Ventspils Augstskola) (Western Latvia),
 - Daugavpils Pedagogical University (Daugavpils Pedagoģiskā universitāte) in Daugavpils (Eastern Latvia),
 - Rēzekne Higher School (Rēzeknes Augstskola) (eastern Latvia).

Economic subjects are included in the programs of 16 out of 34 institutions of higher education. Teaching quality and study orientation in these institutions vary, but all of them consider themselves academic institutions. Study programs include developing basic research skills (course papers, bachelor thesis), but students do not get practice in research institutes. Receiving very low study stipends, almost all students, including full-time students, take employment during their studies.

Of all students (8,950) at the beginning of the school year 1999/2000, 47.6% studied social sciences, business, and law. This includes 40.7% of the full-time students, 63.5% of the evening students, and 55.7% of the correspondence students. If these proportions remain unchanged at the end of their studies, this sector will graduate about 5,700 students per year (Education, 2001).

Not all graduates choose economic research as their occupation, mainly because income opportunities in research are not competitive on the labor market. Employment in universities offers better income perspectives, and research here might be organized on the basis of the university. Unfortunately, the heavy teaching load hampers research in universities.¹

Research institutions

Today, research is carried out in:

- the universities and institutions of higher education listed above;
- a large number of small research institutes within the University of Latvia (the Institutes of National Economy, Accounting, Finances, European Integration, and the Center for European and Transition Studies) – but their main field is teaching;
- one sector institute (the Institute of Agricultural Economics);
- the Institute of Economics, Latvian Academy of Sciences;
- several private institutes and consultant companies, including the Baltic International Center for Economic Policy Studies (BICEPS).

The list of institutes and their names and ownership are still changing; new institutes appear and others disappear. Local and foreign auditing and consultant companies and state institutions (Latvian Development Agency, the Bank of Latvia, Department of Macroeconomic Analysis of the Ministry of Finance) also carry out applied research.

Financing

The main sources of financing for economic research are: the state science budget – state research grants and state research programs (administered by the Latvian Council of Science); research funding for ministries (applied research) – administered by the Ministry of Education, Culture and Science; the market-related research program – administered by the Ministry of Education, Culture and Science; the privatization fund of the Ministry of Economics; Cultural Capital Fund (very limited resources); local government budgets; local private companies; the Soros Foundation (very limited resources) and other foreign-owned foundations in Latvia; international organizations, programs, and funds; EU programs, direct contacts with EC Directorates; and foreign universities, funds, programs, and companies. Local expenditure for research is the lowest in Europe (Kristapsons, 2001: 14). In 2002, the financing of science from the state budget is a modest 0.2% of GDP (Stradins, 2001). Less than 3% of the science budget goes to research in economics and law.

Rehabilitation, repatriation, new departures

There is no reliable information about rehabilitation, repatriation, and new departures. There is one example of real rehabilitation – the director of the Institute of Economics of the Academy of Science, Pauls Dzerve, was publicly recognized long after he was laid off from the Institute and died. Some Latvian economists have returned to Latvia fully or partly. They have based their academic careers in universities and self-established private research institutions (companies) or business schools. Some economists have been elected members of the current Latvian Academy of Sciences.

3. Core theoretical and methodological orientations

The revival and adaptation of pre-war traditions is relevant to economic research only to the extent that they are introduced in the overall science system in Latvia (i.e., the change in the status of Academy of Science and institutes). These are rather Western (supposedly modern) traditions or experimental trials that are being implemented in economic research in Latvia. Research institutes, whether independent or parts of universities, have no basic financing, a situation unique in the world. Unlike the pre-war situation, when science was intensively supported, today the conditions for fundamental research in economics are insufficient in Latvia.

New East-West asymmetries

The change of paradigms in economics has also led to a substantial shift in partners. Scientific contacts with partners in the CIS no longer exist, mainly for financial reasons.² In contrast, cooperation with EU research institutions within EU programs (Phare, ACE, and others) contributed to economic research in Latvia financially and in content. Knowledge-intensive cooperation programs, Latvian researchers' visits abroad, and the dissemination of publications were essential for the rapid acquisition of basic Western economic theories and practice.

There does not seem to be comprehensive data about the participation of Latvian researchers in foreign research programs. The Institute of Economics alone, with its 20-member staff, has participated in about 20 international cooperation projects since 1994. EuroFaculty is also a good example of long-term and pan-Baltic cooperation between the Baltic and the West, creating new study programs, new research programs, and new contacts. The Stockholm School of Economics in Riga is another example. Today, Latvia is a full member of the 5th Framework European research program. Unfortunately, this program has no place for economic research.

New approaches

Up to now, economic research in Latvia has been neither sufficiently innovative nor academic. Still, some advanced researchers provide competitive research findings and ideas (in demographics, macroeconomics). These researchers are equal partners in international research projects. Most research is likely to be brief analysis or even simple description of the current situation or, at best, applied research. There are no examples of new theories or new approaches proposed by Latvian economists. The reason is the lack of fundamental research. The complete absence of basic research in all areas of economics was noted by the Danish expertise in 1992: "In the current situation of economic and social crisis, it is inevitable that economic research is considered primarily from the point of view of the needs of Latvian society, rather than from the purely scientific point of view. The transition of society implies massive needs for research and teaching in economics, but at the very same time the ensuing pressure on the state budget inflicts severe financial hardships on institutions. Staffs have been cut, and because of uncompetitive salaries there is a spontaneous brain drain of young and competent researchers." (Latvian, 1992: 621) The expertise also stated that "there is overwhelming emphasis on highly applied and short-term research projects".

The situation has not improved. The main reason for the poor performance in fundamental research is the lack of research staff, caused by still insufficient and unstable financing of economic research in general and dramatic lack of funding for fundamental research. It has been assumed that all economic research, including that financed by state grants, must manifest practical application. Also, Latvian researchers' dependent role in international research projects, where they are suppliers of information and facts rather than contributors to theoretical conclusions, hampers the development of fundamental research. An academic field is not established in a short time. It is necessarily a long-term process requiring institution building as well as human capital accumulation, both taking place in an environment of good will and understanding on the part of those who foot at least part of the bill, namely the government. It is my opinion that the development of the first two is unavoidably slow, while the third one has been regrettably slow.

4. Thematic orientation and funding

Transition as a major or exclusive object of study

Thematic orientation in economic research is determined to a great extent by clients, and it is very much applied research that is being financed in Latvia. Indeed, transition is a major object of study in Latvia. Research covers such areas as privatization, public finances, agricultural economics, statistical methods of national accounting, demography, and economic forecasting (the last was shifted from the science sector to the Ministry of Economics and the Ministry of Finance when important researchers left research to work in state management. Serious research on transition has also been carried out in cooperation with foreign partners within EU programs or contracted by EU institutions or other international partners. The result, supposedly, was used to prepare advice for Latvia or policy toward the country.

The choice of themes

Researchers in Latvia are free to choose research topics in research funded by the Latvian Council of Science. The Expert Commissions of the Science Council review applications for research relevant to their competence and recommend them for financing. Normally, the number of applications and their total financing needs exceeds the state science budget, and the expert councils choose one of three options – to support the project with the requested amount of funding,

to support the project with reduced funding (most initial financing is a half or more of the requested sum), or to reject the project.

Ministries initiate research topics in applied research, and their applications are discussed and approved by the Cabinet of Ministers. Researchers are free in their choice of themes when applying for funding in the “market-related research” program or Cultural Capital Fund, but these themes must be in line with the objectives of the program and fund. All other financial sources organize thematic calls.

Although fundamental research is poor in Latvia, the number of doctoral theses in economics is increasing and their academic quality improving. Fundamental research is carried out as a hobby separate from the scientist’s money-earning research or job. The topics of economic research in Latvia are quite multifarious and do not differ from research topics popular in any other transition country. Recently, research topics have been shifting from core transition topics to economic growth, sector development issues, social issues, the economics of innovation, and EU integration. Generally speaking, thematic orientation does not impact the institutional structure of research. It is economic conditions that forces research institutions to change ownership or affiliation.

Private vs. public funding

There are no reliable statistics describing the real structure of the funding of economic research, but probably the share of private and local government funding is not high. Private funding focuses instead on the products of marketing or consultant companies. Larger private companies, especially banks, have economic departments that are supposed to carry out economic research needed by the company. Still, growing competition forces companies to increase their knowledge about the overall economic situation and market. Companies need reliable forecasts of economic development, as well as interpretations of global and local trends outside their core business. For this purpose, companies and also advanced local governments approach research institutes and finance special research projects that answer their interest. Some companies (Grindex, Aldaris) help fund academic awards issued by the Latvian Academy of Sciences.

The majority of economic research institutes are state-owned and affiliated with universities. There are also some small private institutes. The Institute of Economics of the Latvian Academy of Sciences is the first example of public-private partnership. The owners of this institute include the Latvian state (20% of equity capital), the Latvian Academy of Sciences, the Latvijas Finieris wood-processing company, two private sociologist companies (Baltic Data House and Baltic Social Research Center), two private higher schools (Turība and the International Institute of Practical Psychology), the Latvian Intelligentsia Union, the Latvian Telecommunication Association, two agricultural farms, and private research economists.

5. Public space and academic debates

Debated themes, problems, methods

Conferences and seminars are organized to disseminate research results on a regular basis. The debated themes include the transition to the market economy in general, macroeconomic development, privatization, public finances, monetary and finance policy, sector development, labor market issues, social development, and other topics. Almost all of them are considered in the light of European integration. The largest forum of Latvian academic thought is the World Congress of Latvian Scientists. The first Congress was organized in 1991, the second in August 2001, both in Riga. The first Congress brought together more than 1,000 participants, of whom 800 were local and 200 of Latvian origin, living and working in foreign countries.

Principal academic journals

Two important publications should be mentioned. The academic journal *Zinātņu akadēmijas vēstis* (Proceedings of the Academy of Sciences) serves the needs of academic research in two sections: (A) social and human science and (B) natural science. The social and human science section comprises philosophy and philology, history, sociology, and also economics. The majority of articles in this journal come from the humanities sector (language, Latvian literature, and history).

In 1997, in cooperation with the Academy of Sciences and private persons, Latvian University established the journal *Humanities and Social Sciences. Latvia*. The main mission of this journal – published only in English – is to provide foreign readers with information on academic research in Latvia. Publications are grouped in thematic issues (four per year) and reflect academic research as well as the situation in very different spheres of human life in Latvia (demography, history, social problems, agriculture, education, and also economics).

The Baltic Journal of Economics has made some effort to bring together research articles from all three Baltic states. Recently, the Baltic International Center for Economic Policy Studies (BICEPS) and the Stockholm Institute of Transition Economics (SITE) have started jointly producing the academic publication *Baltic Economic Trends*. The thematic part of the issue includes reports by Latvian and foreign researchers on the economies of the Baltic countries. Each issue includes a general report on economic developments in the three Baltic countries.

Universities and institutions of higher education are producing large numbers of serial publications, for example *Latvijas universitātes zinātniskie raksti* (Proceedings of the University of Latvia), etc.

Depending on its financial resources, the Institute of Economics, Latvian Academy of Sciences publishes the journal *Activities of Institute of Economics* (bilingual) and, on a regular basis since 1997, a serial *Apcerējumi par Latvijas iedzīvotājiem* (Articles about the residents of Latvia) in Latvian, with abstracts in English.

The economics and law sciences experts' commission of the LCS publishes an annual journal, *LZP Ekonomikas un juridiskās zinātnes galvenie pētījumu virzieni* (The main directions of research in economics and law sciences in 1994-1996 by the Latvian Council of Science). A total of 6 issues have been published.

The UNDP Latvia publishes the annual *Latvia. Human Development Report* (bilingual). The Latvian economy is also reflected in some local and pan-Baltic business publications, including *Baltic Review* (Vilnius), *Revue Baltique* (Vilnius), *Review Baltic* (Tallinn), *Journal of Baltic Studies* (AABS, ASV), and the local business press.

Selection of publications in world languages

As the economics and law sciences experts' commission reports, more than 400 books and articles and a great number of analytical papers and policy papers were published in 2000 in the framework of state-financed grants in economics, demography and management sciences, and law sciences.

The number of publications by Latvian researchers in world languages, mainly in English, is quite large for a small community. These publications include the results of international cooperation projects; reports on international conferences with participation by Latvian economists; expert reports or comments in regular surveys by European banks or public institutions (associations or other sources); and special thematic publications prepared in cooperation with Latvian researchers.

New manuals, databases

Latvian research institutions participate in international databases as country co-coordinators. There is no information on internationally significant databases organized by Latvian researchers. Every research institution keeps several databases for local needs.

6. Views on further development

International cooperation (East-West, East-East links, bilateral vs. multilateral links, institutional, informal, and project-based cooperation)

International cooperation will play an important role in the development of economic research in Latvia. East-West cooperation is likely to be more intensive than East-East links for years. Latvian relations with CIS countries have not been properly investigated up to now; it is difficult to find funding for such research. Development patterns in Latvia and the CIS countries differ. Latvia has frequently performed well in specific fields, but it lacks the capacity to engage in active research cooperation.

A very promising field of research is Latvia's cooperation with the Central European countries. Up to now, scientific cooperation between Latvia and Central European countries has taken place in EU projects, but these projects were comparative research, not research on interrelation between countries. For Latvia, multilateral links are more promising, because they provide more experience and information. Latvia is a small country, and it might be difficult to find partners and motivation for bilateral cooperation. All sorts of cooperation are accessible and have been applied now. There is neither a strong canon nor administrative regulations in this field. Latvian research institutes and universities participate and presumably will continue to participate in networks and cooperation projects.

The impact of accession

There is a saying in Latvia that while the country is preparing for integration in the EU, science has already been integrated in the EU. Latvian researchers, including economists, participate as full members in EU programs. There are no factors in connection with EU accession that could adversely affect the development of economic research in Latvia.

The problem of the “brain drain”

The problem of the brain drain is still important. It has two aspects – the withdrawal of advanced specialists from research institutes and universities, and the withdrawal of potential researchers from Latvia. It is likely that some graduates would like to work in research, but economic conditions are not satisfactory. Research institutions employ specialists on a project basis and do not have sufficient resources for the preparation phase (the selection of a core research topic and preparation for an academic career – basic research, publications, formalities and funding of writing a thesis, etc.) that every novice researcher needs. The biggest danger to Latvian science is the concentration on short-term projects that economic conditions and financing impose on research.

Conclusion

Describing the paucity of Latvian economic literature, Arnolds Aizsilnieks wrote in the introduction to his famous book *History of the Latvian National Economy 1914-1945*: “Few cultural nations have so few written thoughts in the field of economics. Even translation from the work of other nations is limited. All this indicates that the broader society has little interest in theoretical concepts in economics or in economic policy. Economics is precisely what affects each and everyone's personal interests, but people in Latvia consider economics something strange and interesting only to narrow specialists. Unfortunately, this situation did not improve after 1935.³ (Aizsilnieks, 1968). The situation got even worse after 1990.

Still, once the economic situation in Latvia improves, the situation in science must also improve. This truth is only a half-truth in Latvia, since although public finances are increasing due to strong economic growth, the science budget remains unchanged. Within the science budget, the financing of natural sciences dominates. It is expected that economics in particular will have to be

financed by ministries and state institutions, as well as business enterprises. This approach fragments economic research dramatically.

Scientists themselves have initiated and implemented several essential reforms (mainly institutional) in higher education and science in order to modernize Latvian science and keep it operating. The results were apparently good in the mid-1990s and led the European Commission to give a surprisingly high evaluation for the Latvian R&D sector. In Agenda 2000, the Commission declared that Latvian science and its R&D system are developing satisfactorily and have gained capacity and an organizational setting suitable for integration in the unified EU science and research area.

These conclusions are perhaps too optimistic about economics. The lack of academic research in economics is cause for serious doubt whether there is any economic science in Latvia today. Latvian economists participate actively in local and international research programs, but only some of their research findings or papers are truly academic products published in highly reputed international publications.

Without relevant economic research, the national economy is developing on a trial-and-error pattern. There is also an obvious disproportion between the declared goal of developing Latvia into a high-tech country and the long-term “dietary” regime of every field of natural and social science.

The European Commission has repeatedly noted the situation of Latvian science. The Commission remarked in its last *Progress Report* (Strasbourg, November 13, 2001) that it is important to increase GDP expenditure for R&D, if Latvia wishes to integrate in the European science area.

The overall conclusion from this research is that serious efforts must be made to revitalize economic science (or at least high-quality economic research) to the level required for effective economic development.

-
- ¹ Morten Hansen observed that “transparency is not the first word that springs to mind when describing economics education” in Latvia. In his comments on this paper, Morten Hansen expresses his concern that “institutions are changing, and it is fair to add concerns over lack of standards and possible corruption in some places. In addition, high tuition fees are a looming specter over the whole education business. It remains to be seen how many from e.g. the poorer rural areas will be left out.”
 - ² One can only agree with Morten Hansen, who suggests that “Latvian researchers should use their comparative advantage in language skills to renew cooperation with the East”.
 - ³ Author’s translation.

References

- Aizsilnieks, Arnolds (1968): *Latvijas saimniecības vēsture 1914-1945* (History of Latvian National Economy 1914–1945), Sundbyberg, Sweden, Ab Dubvo Tryckery;
- Akademiya Nauk Latvyskoy SSR v 1946-1986 (Academy of Science of Latvia SSR in 1946-1986) (1986), Riga, Zinatne;
- Anspaks, Janis (1997): “The establishment of pedagogical ideas in Latvia from the very beginning until 1940”, in: *Humanities and Social Sciences. Latvia*, 17, No. 4, Riga, University of Latvia, 4 - 48;
- Arons, Matiss (1908): *Ievads tautsaimniecībā* (Leading course in economics), Riga, Riga Latvian Society;
- Balodis, Eduards (1935): *Latviešu sabiedriski-saimnieciskie veidojumi tautiskās atmodas laikmetā* (Latvian socio-economic figurations in the period of national wake), Riga, Latvian Association of Co-operative Publishers;
- Balodis, Kārlis (1921): *Ievads tautsaimniecībā* (Leading course in economics), Riga, Kulturas Balss;
- Education institutions in Latvia at the beginning of the school year 2000/2001. Statistical Bulletin* (2001), Riga, Central Statistical Bureau of Latvia;
- Es viņu pazīstu. Latviešu biogrāfiskā vārdnīca* (I know him. Latvian Biographic Dictionary) (1939, 1975), Riga, Archive of Biographic Publisher House;
- Karklinš, Jānis (1931): *Mācība par tirdzniecību* (Doctrine of Commerce), Riga, Latvian University;

- Kristapsons, Janis (2001) "Latvian science in transformation", in: *2nd World Congress of Latvian Scientists. Congress Proceedings*, Riga;
- Kulturnoye stroitelstvo v Latvyskoy SSR. Statisticheskiy sbornik* (Cultural building in Latvia SSR: Statistical bulletin) (1972), Riga, Central Statistical Department with the Council of Ministers of Latvia SSR;
- Latvia. The Transition to a Market Economy: A World Bank Country study* (1993), Washington, D.C., The World Bank, 171 - 185;
- Latvian research: An international evaluation* (1992), Copenhagen, The Danish Research Council, 621- 671;
- Latviešu konversācijas vārdnīca I* (Latvian Conversion Dictionary, Volume I) (1927-1928), Riga, A. Gulbis Publishers House;
- Latviešu konversācijas vārdnīca XIII* (Latvian Conversion Dictionary, Volume XIII) (1935-1936), Riga, A. Gulbis Publishers House;
- Latvijas Padomju Socialistiskās Republikas statistiskās tabulas 1940. gadā* (Statistical tables of Latvia Soviet Socialist Republic in 1940) (1940), Riga, Statistical Department of Latvia Soviet Socialist Republic, 50-52;
- Latvijas PSR tautas saimniecība: Statistikas gadagrāmata, 1989* (Economy of Latvia SSR: Statistical Yearbook, 1989) (1990), Riga, State Statistical Committee of Latvia;
- Latvijas PSR tautas saimniecība: Statistikas gadagrāmata 1990* (Economy of Latvia SSR: Statistical Yearbook, 1990) (1991), Riga, State Statistical Committee of Latvia;
- Latvijas Statistikas gadagrāmata, 1930* (Statistical Yearbook of Latvia, 1930) (1931), Riga, State Statistical Department;
- Latvijas Universitāte ilustrācijās* (Latvian University in pictures) (1929), Riga, Latvian University;
- Menders, Fricis (1931): *Kas ir sociālisms* (What is socialism), Riga;
- Puriņš, Kārlis (1926/1927): *Finansu zinātnes kurss* (The course of financial sciences), Riga, Latvian University;
- Sovetskaya Latvija. Latvyskaya Sovetskaya Enciklopediya* (Soviet Latvia. Latvian Soviet Encyclopaedia) (1985), Riga, Encyclopaedia Principal editorial office, 463-489;
- Stradins, Janis (1998): *Latvijas Zinātņu akadēmija: Izcelsme, vēsture, pārvērtības* (Latvian Academy of Sciences – Origin, history, transformation), Riga, Zinatne;
- Stradins, Janis (2001): "Some topical problems in development of science in Latvia": The introductory speech at the General Meeting of the Latvian Academy of Sciences, 29 November 2001, in: *Zinatnes Vestnesis*, 229, No. 21, 17 December;
- Zalts, Alberts (1931): *Saimniecību ģeogrāfija* (Economic geography), Riga, Valters and Rapa;
- Zalts, Alberts (1932): *Izeja no krīzes. Konjunktūras politikas galvenās problēmas* (Way out of crisis. Major problems of conjuncture policy), Riga, Zelta Grauds.

Selected Bibliography

- Abele, Druvis (1999): *Privatisation of Government Property in Latvia and Changes in Property Structure*, RRT Working Paper, Sponsored by ICEG, USA, Riga, Institute of Economics, LAS;
- Berzins, A. and Zvidrins, P. (2000): "Population development in Latvia", in: *New demographic faces of Europe. The changing population dynamics in countries of Central and Eastern Europe*, Berlin-Heidelberg, Springer-Verlag, 183-197;
- Berzins, A., Ezera, L., Greitans, A. and Zvidrins, P. (2000): *Socio-economic status and living arrangements of older persons in Latvia: Country Report*, United Nations, New York and Geneva;
- Bikse, Veronika (1998): *Makroekonomikas pamati. Teorija, problēmas, politika* (Basics of Macroeconomics. Theory, Problems, Policies), Riga, University of Latvia;
- Brivers, Ivars (2001): *Ekonomikas teorijas vēsture biogrāfijas* (Economic theory in biography), Riga, Banku augstskola;
- Cice, Ausma Mara (1995): Chapters in: *Economic and Social Changes in the Baltic States in 1992-1994*, Tallinn, Estonian Academy of Sciences, Institute of Economics;
- Cice, Ausma Mara (1996): "The Labour market and unemployment in post-socialist Latvia", in: *Humanities and Social Sciences. Latvia*, 10, No. 5, Riga, University of Latvia, 79-97;
- Cice, Ausma Mara (1998): "The employment structure in Latvia and forecasts concerning same through the year 2010", in: *Humanities and Social Sciences. Latvia*, 21, No. 4, Riga, University of Latvia, 104-124;

- Ciemina, Inta and Krastins, Olgerts (1999): "The standard of living of Latvia's residents in the most typical demographic groups", in: *Humanities and Social Sciences. Latvia*, 24, No. 3, Riga, University of Latvia, 23-36;
- Deksnis, Eduards Bruno (1996): *Eiropas Savienība: Mīti un realitāte* (European Union: Myths and Realities), Riga, Junda;
- Deksnis, Eduards Bruno (1998): *Eiropas apvienošanās ...: Integrācija un suverenitāte* (European Union ...: Integration and Sovereignty), Riga, Baltic Centre for Strategic Studies of LAS;
- Didenko, K. and Saulitis, J. (2000): "Conditions and problems in the economic development of Latvia on the eve of the 21st Century", in: *Humanities and Social Sciences. Latvia*, 26, No. 1, Riga, University of Latvia, 35-48;
- Dovladbekova, Inna (2000): "Problems and trends in development of financial markets in Latvia", in: *Obshestvo i ekonomika*, No. 8, Moscow, 95-117;
- Dovladbekova, Inna and Muravskaya, Tatyana (1996): "Institutional and isomorphic tendencies in the (re-)emergence and transformation of social insurance funds in Central and Eastern European countries", Country Reports: Latvia, in: *Journal of Transforming Economies and Societies*, EMERGO, Spring 1996, 68-80;
- Dubra, Ellen (1997): *Evolution of institution building as an industrial strategy for regional convergence between the CEECs and the EU*, UK, Cambridge University;
- Eglite, Parsla (1997): "Migration. Europe's integration and the labour force brain drain. Latvia", in: *Brain Drain from the Central and Eastern Europe*, European Commission;
- Eglite, Parsla (1999): "Population policy in Latvia: Declared and undeclared...", in: *Revue Baltique*, No. 13, Vilnius, 182-195;
- Eglite, Parsla (2000): "The Dynamics of Latvia's urban and rural population at the end of the 20th Century", in: *Geographic Proceedings/Folia geographica VIII. Living with Diversity in Latvia*, Riga, Latvian Geographers Union, 36-46;
- Greitans, A. (1999): "The acceptance of fertility regulation methods in Latvia and other countries of the Baltic Region: Common and different features", in: *Revue Baltique*, No. 13, Vilnius, 137-148;
- Gulans, Peteris (1998): Several chapters in: *New neighbours in Eastern Europe, Economic and Industrial Reform in Lithuania, Latvia and Estonia*, Hirschhausen, C. (ed.), Paris, Les Presses de l'École des Mines, 142-160;
- Jaunzeme, Malda (2001): *Finansu matemātika* (Mathematics of Finances), Riga, Turība;
- Karnite, Raita (2000): "National Review. Latvia", in: *Transition, Cohesion and Regional Policy in Central and Eastern Europe*, Bachtler, John, Downes, Ruth and Gozelak, Grzegorz (eds.), EPRC Studies in European Policy, University of Strathclyde, Ashgate, 131-142;
- Karnite, Raita (2001): "EU Companies in Eastern Europe: Strategic Choices and Labour Effects. Latvia: Assessment of the Situation and Major Trends", in: *CEE Countries in the EU companies' strategies of industrial restructuring and relocation*, Grigor Gradev (ed.), Brussels, European Trade Union Institute (ETUI);
- Karnite, Raita (ed.) (2000): *Latvijas integrācija Eiropas Savienībā* (Latvia's integration in the European Union), Riga, Institute of Economics, LAS;
- Karnite, Raita and Dovladbekova, Inna (1996): Chapters in: *Direct Foreign Investment in the Baltic States*, van der Hoek, M. Peter and Miltenburg, Hans (eds.), England, Avebury, 29-53;
- Karnite, Raita and Solomennikov, Andrei (2001): "Baltic – CIS trade relations in volume, structure, models, conditions and future trends", in: *Ten years of Economic transformation, Volume III - Societies and Institutions in Transition*, Kari Liuhto (ed.), Lappeenranta University of Technology, No. 16, 375 – 390;
- Karnite, Raita, Cice, Ausma Mara, Klava, Maris and Traubergs, Martin (2000): "Country report", in: *Regions of the Baltic States*, NORDREGIO, Report 2000/2, 130 - 235;
- Kassalis, Edgars (1999): "The development and internationalisation of accounting in the Republic of Latvia: The background and problems", in: *Emerging Issues in International Accounting*, Niagara (USA), Niagara University, CIERA;
- Keišs, Stanislavs (1996): "The infrastructure of Latvian financial market and its development problems", in: *Humanities and Social Sciences. Latvia*, 10, No. 5, Riga, University of Latvia, 20-28;
- Keišs, Stanislavs and Kazinovskis, Andris (2001): *Reģionālā administratīvi teritoriālā iedalījuma reformas problēmas Latvijā* (Problems of the regional administrative division reform in Latvia), Riga, Local Government Department;

- Krastins, Olgerts (1997): "Returning to History: The last national budget of independent Latvia before World War II", in: *Humanities and Social Sciences. Latvia: State and Local Government as promoters of the Economy*, 15, No. 2, Riga, University of Latvia, 111-124;
- Latvian Science Council (1994-1996, 1997, 1998, 1999, 2000): *LZP Ekonomikas un juridiskās zinātnes galvenie pētījumu virzieni* (The main directions of research in economics and law sciences), Riga;
- Libermanis, Georgs (1994): *Tirgus, cenas, konkurence* (Market, prices, competition), Riga, Kamene;
- Linde, Janis and Vanags, Ilmārs (1999): "Technological and economical aspects of the integrated statistical data processing system", in: *Report on results of work in 1988*, Riga, Institute of Statistics;
- Markausa, Ieva Marga (1999): "Changes in Demographic processes in Latvia", in: *Geopolitical patterns of Central and Eastern Europe*, Rzeszów, 439-460;
- Pavlina, Iveta (2000): "Child-rearing conditions and factors which influence them in modern Latvian families", in: *Activities of Institute of Economics, Latvian Academy of Sciences in 1999*, Riga, Institute of Economics, Latvian Academy of Sciences, 32-36;
- Pocs, Janis and Karnite, Raita (eds.) (1995, 1996, 1997/8, 1999): *Institute of Economics, Latvian Academy of Sciences, activities in XXXX*, Riga, Institute of Economics, LAS;
- Pocs, Janis and Pocs, Ugis (2000): "Privatisation in Latvia: Drawing to a close", in: *The Baltic Review*, No. 20, Tallinn;
- Porietis, Janis (1992): *Ārvalstu ekonomikas vēsture* (History of foreign economy), Riga, Zinatne;
- Skapars, Roberts (1995): *Mikroekonomika* (Microeconomics), Riga, University of Latvia;
- Sprogis, Andris and Vitola, Irija (1997): "Opportunities for beef production in Latvia during the transformation period from the year 2000 to the year 2005", in: *Options for national agricultural policies of the EU associated countries*, Finland, 5-97;
- Steinbuka, Inna (ed.) (1999): *Latvia on the verge of the 20th century*, Riga, Jana seta, 152;
- Thorborg, Marina and Zariņa, Inna (eds.) (2000): *Gender Equality in Latvia at the Threshold of the New Milenium*, Riga, Institute of Economics, LAS;
- Vanags, Edvīns and Vilka, Inga (2000): "Local Government in Latvia. Decentralisation: Experiments and Reforms", in: *Local governments in Central and Eastern Europe*, Vol. 1, Horvath, Tomas M. (ed.), Budapest, Local Government and Public Service Reform Initiative, 115-164;
- Vanags, Edvins and Vilka, Inga (2000): "Territorial statistics and regional development in Latvia", in: *Humanities and Social Sciences. Latvia: Latvian Economy at the turn of Centuries*, 26, No. 1, Riga, University of Latvia, 17 – 34;
- Zarina, Inna Bronislava (ed.) (1999): *Time use by gender in Latvia*, Riga, Latvian Women Studies and Information Centre;
- Zarina, Inna Bronislava and Pavlina, Iveta (1999): "Time spent on child care in Latvia", in: *Revue Baltique*, Vilnius, No. 13, 111-119;
- Zelgalvis, Elmārs (2000): "Currency exchange rate impact on development of economics", in: *Proceedings of Kauna's University*, Vol. 14, Kaunas, 251-261;
- Zvidrins, Peteris and Ezera, Ligita (1999): "Dynamics and differentiation of cohabitation in Latvia", in: *Revue Baltique*, No. 13, 71-81.