



LATVIAN SMART SPECIALISATION STRATEGY (RIS3)
AREA WITH HORIZONTAL IMPACT

Social Sciences and Humanities

ANALYTICAL REVIEW OF THE RESEARCH ECOSYSTEM
(2014–2018)

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representation for research and development of Latvia as part of European Research Area”



THE NATIONAL
DEVELOPMENT
PLAN 2014-2020



EUROPEAN UNION
European Regional
Development Fund

Abbreviations

H2020 – EU Framework Programme
“Horizon 2020”

BSC – “Baltic Studies Centre”

DU – University of Daugavpils

EU – European Union

EU-28 – European Union member states

FARP – Fundamental and Applied
Research Projects

SDGs – United Nations Sustainable
Development Goals

ULiep – University of Liepāja

LKA – Latvian Academy of Culture

LLU – Latvia University of Life Sciences
and Technologies

LMA – Latvian Art Academy

LNB – National Library of Latvia

UL – University of Latvia

LZA – Latvian Academy of Sciences

NDP – National Development Plan

R&D – Research and Development

R&I – Research and Innovation

CSCC – Cross-Sectoral Coordination
Centre

RIS3 – Research and Innovation Strategy
for Smart Specialization

RSU – Rīga Stradiņš University

RTA – Rezekne Academy of Technologies

RTU – Riga Technical University

SSH – Social Sciences and Humanities

SSE Riga – Stockholm School of
Economics in Riga

ViA – Vidzeme University of Applied
Sciences

VentA – Ventspils University College

SRP – State Research Programme

RI – Research Institution

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Summary

Social sciences and humanities provide a horizontal contribution to five areas of the Latvian Smart Specialisation Strategy (RIS3). For the purpose of research policy planning and monitoring, social sciences and humanities are given the same status as the other RIS3 areas. The contribution of SSH to RIS3 manifests itself in various ways: by developing the human resources necessary to transform the economy, by disseminating the results of research in other RIS3 areas and boosting research impact, by identifying challenges in society, by analysing the effectiveness of activities, initiatives and organisations, and by conducting research in economics. Social sciences and humanities contribute towards achieving the UN Sustainable Development Goals (SDGs), the Sustainable Development Strategy of Latvia until 2030 and the National Development Plan (NDP).

Thematically, Latvia has well-developed capacity in Latvian studies, economic transformation research, economics, culture and creative industries, migration and diaspora research, inclusive society, teaching and education technologies, public sector innovations, sustainable growth, foreign policy and international relations, computational linguistics and various other, more specialised fields. The University of Latvia is the main centre for research in social sciences and humanities, employing 48% of all SSH research staff in the country. Significant research activities also take place at the Latvia University of Life Sciences and Technologies, Riga Technical University, Daugavpils University, Rīga Stradiņš

University, Art Academy of Latvia, Latvian Academy of Culture, Vidzeme University of Applied Sciences and other¹ research institutions (RI).

In the reporting period, SSH research was primarily financed through the State Research Programs (SRP) – 11.7 million euros, the EU Horizon 2020 framework programme – 6.91² million euros, the Theoretical and Applied Research Projects (TARP) – 5.8 million euros, as well as the post-doctoral research support programme, the applied research programme, and other research commissioned by public administration bodies, the Bank of Latvia and other policy-making institutions.

Within the SSH RIS3 area, the main challenges are ensuring high-quality participation in interdisciplinary projects; increasing the horizontal contributions to other research fields; achieving and demonstrating research impact; using and transferring specific and in-demand research methods and skills.

SSH research is affected by global trends such as the digitisation of science and an increased need for specific skills; a necessity to increasingly specialise and to continue to integrate in the global research environment. More than ever there is a need to demonstrate SSH research impact to various target groups, and to have research data management skills. National challenges in SSH include high workloads for researchers (including administrative and teaching workloads), difficulty publishing high-impact articles in the Latvian language, issues around academic integrity, and lack of sufficient

¹ For a complete list of research institutions conducting research in social sciences and humanities, see Section 8 of this report.

² Includes 2019 data.

knowledge in English to publish in international journals.

In many international research programmes the success rate for SSH projects is very low. In the Horizon 2020 framework programme there is a lack of SSH projects coordinated by Latvian research institutions.

Introduction

Within the scope of the report, social sciences and humanities (SSH) are defined as the 5th and 6th Fields of Science in the Latvian national fields of science classification³ and OECD FoS classification. In the Latvian Smart Specialisation Strategy, SSH is a field with a horizontal impact on other RIS3 areas. The horizontal contribution provided by SSH manifests itself on different levels and in different areas, and it is not evenly distributed among RIS3 areas. Adequately measuring the impact and contribution of SSH is difficult. In addition to the direct horizontal contribution to other RIS3 areas SSH creates a direct benefit to the economy and society as a whole. Therefore, for the purposes of policy planning and monitoring, SSH is equivalent to the other Latvian RIS3 areas. SSH contributes to the primary RIS3 objective via research in economics and business administration (e.g. market research, improvements in the efficiency of organisations and activities), labour market and migration research, as well as through knowledge transfer. Gender research, behavioural economics, research of narratives and attitudes, habits and user experience provide a horizontal contribution to all RIS3 areas. SSH research also supports the dissemination and transfer of research findings in other RIS3 areas.

The demand for research and impact in social sciences and humanities is largely driven by global and national social challenges, such as the need to strengthen democracies, preserve and popularise cultural heritage, support social and economic transformations in society and the economy. The demand for human resources, research methods and skills for publishing and disseminating SSH research is driven by research in other fields and the private sector. In the context of sustainable development goals⁴, social sciences and humanities foster societal transformations, the development of inclusive societies and compliance with ethical principles, promoting intercultural dialogues.⁵ In addition to this added value, SSH research is expected to influence society by promoting the understanding of various processes, identifying the links between various social and environmental challenges, offering the public a broader perspective (phronesis) in various relevant topics, enriching the culture, and fostering critical thinking. Closer ties of SSH impacts with economic transformation goals are particularly important. The Latvia 2030 sustainable development strategy also notes that "environmental, social and economic issues are closely interrelated, and must be solved in conjunction with one another".

³ <https://likumi.lv/ta/id/296661-noteikumi-par-latvijas-zinatnes-nozarem-un-apakšnozarem>

⁴ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

⁵ <https://en.unesco.org/sustainabledevelopmentgoalsforsocialandhumansciences>

1

The SSH specialisation area

1.1. Data used and data analysis

As part of the monitoring exercise, SSH research was grouped according to their respective research topics, based on the topics of Theoretical and Applied Research Projects (TARP), the thematic groups of Horizon 2020 and the state research programmes (SRP), and according to a social sciences and humanities expert panel review that took place on 1 August 2019. The bibliometric analysis was primarily based on Web of Science data, including the Emerging Sources Citation Index (ESCI). Data sources used in the preparation of the report:

- National Research Information System (NZDIS);
- Web of Science and Scopus databases of scientific publications;
- Ministry of Education and Science statistics on higher education;
- Cohesion Policy Fund Management Information Systems for 2014–2020;
- Latvian Council of Science data on the Fundamental and Applied Research Programme and National Research Programmes;
- European Commission CORDIS database on Horizon 2020 projects;
- Eurostat data.

2

The potential of SSH in RIS3

2.1. Smart Specialisation Strategy

The goal of Latvia's Smart Specialisation Strategy is to transform the national economy, moving it up the value chain, increasing the capacity of economic

knowledge, investing in research and innovation, and in measures promoting them. An earlier report of the SSH RIS3 ecosystem was published in 2016⁶.

2.2. Social sciences and humanities impact ecosystem

In the social sciences and humanities, the concept of research impact is particularly important, encompassing all changes that research can bring within the academic environments and beyond.⁷ Although different research funders use different definitions of research impact, the understanding is that research must in some way benefit the public or a some other target group. Impact is created as a result of scientific work and dissemination measures to communicate the results of such work. In SSH research, the impact component has a greater role than in natural sciences, because bibliometric indicators of excellence do not provide a complete picture of the added value

gained through the research. Attributing research impact to specific research programmes or individual projects is difficult. There must be continued support for key impact pathways in promoting research impact, policymakers must be convinced to use more scientific evidence in their work, infrastructure must be improved, and requirements must be introduced to share publicly funded research data. In addition, because of the non-commercial nature of SSH research, it is necessary to adjust the RIS3 area ecosystem approach to SSH, creating a research impact ecosystem, developing key impact pathways and connections between stakeholders in the field.



Academic impact

Changes in the academic field, improvements in theories or methodologies



Societal impact

Enrichment of culture, preconception change, leading narrative, call to discussion



Economic impact

More efficient use of resources, new workplaces, GDP growth, better productivity



Policy impact

Changes in developing, implementing and interpreting policy



Environmental impact

Less pollution and CO₂ emissions

Figure 2.1. Types of research impact

⁶ https://www.izm.gov.lv/images/zinatne/SHZ_SOCIALIE.pdf

⁷ LZP "Ceļā uz ietekmi: palīgmateriāls iesniedzējiem un īstenošanai", 2018.

One of the methods for conceptualising research impact is the mapping of various types and pathways of research impact (see Figure 2.1). In order to build up SSH research impact the impact guidelines for nationally-funded researchers must be updated; the key impact pathways must be improved; impact case studies are needed to demonstrate and boost research impact. These case studies must be communicated and put in a database for use in science communication; indicators for monitoring research

impact must be developed, and open science activities must be encouraged, including the promoting the reuse of research data. Research impact can be measured through various indicators, including Altmetrics, a set of alternative bibliometric indicators that offer an interesting look at the publication of results of the work performed by Latvian researchers on social media and in policy documents; however, these indicators cannot be used in policy planning reliably due to insufficiencies in the underlying data.

2.3. Contributions to other research fields

One of priorities of the Horizon 2020 framework programme is promoting the horizontal integration of SSH⁸ in research projects in other areas, in order to foster the implementation of solutions, and to investigate the consequences of scientific discoveries. The European Alliance for the Social Sciences and the Humanities (EASSH) has assessed the European Commission monitoring reports on Horizontal integration of SSH into H2020, and concluded that the horizontal integration progress is poor⁹, identifying the challenges and deficiencies that must be accounted for also when planning interdisciplinarity in national programmes. It is planned to continue integrating SSH in projects in other areas

as part of the Horizon Europe framework programme, paying more attention to specific successful forms of collaboration. The inclusion of horizontal integration in the agenda of the Horizon framework programmes creates challenges and opportunities for SSH researchers in Latvia. Those deliberately applying for "SSH flagged" calls outside the social sciences programme (SC6) can expect to have less competition in obtaining funding. However, a skills gap still exists for SSH researchers making it more difficult to participate in interdisciplinary consortia where specific skills are required, e.g. data analysis skills and legal knowledge.

2.4. Horizontal contribution to RIS3

The **horizontal contribution** of social sciences and humanities to other fields of science manifests itself in various **areas and at different levels**. In the context of smart specialisation, it is **not uniformly distributed** across the RIS3

areas. Interdisciplinarity brings together methods and knowledge from various fields and topics in science. Horizontal contribution of SSH can be identified on the level of the individual via knowledge and skills (e.g. computational

⁸ <https://op.europa.eu/s/nMiW>

⁹ http://www.eassh.eu/PDF/PP_on_3report_on_SSH_integrationFNL.pdf

linguistics mostly requires researchers with knowledge of programming and linguistics). Horizontal contribution can be created at the level of individual studies (consortia), by attaching an SSH researcher to a team of researchers in other fields. In this model, the SSH partner is often involved for the purposes of distributing results, and boosting knowledge transfer and impact. In larger research programmes, interdisciplinarity can manifest itself at the level of project tenders; for example, Horizon 2020 social challenge programmes offer additional thematic tenders for SSH research as part of a broader field in research. Interdisciplinarity can take place in various directions. The methods used in social sciences and humanities and

knowledge provided by them can make contributions to research in other fields. Conversely, expertise in other areas can result in contributions to SSH research. The most common example of such interdisciplinarity is the cooperation with ICT, e.g. in digital humanities, and the use of big data and artificial intelligence in research.

A more detailed analysis of the interdisciplinary links between SSH and the RIS3 areas in Latvia reveals that the horizontal contribution of SSH considerably differs in scope for different RIS3 areas. Strong links can be found to ICT and weak links have been identified to Smart Materials.

Interdisciplinary connections between RIS3 areas and social sciences and humanities

Smart specialisation area	Key interdisciplinary fields
Information and communication technologies	Computational linguistics and language technologies, education technologies, e-democracy and e-government, digital humanities, technology policy and ethics, privacy and data protection
Knowledge-intensive bioeconomics	Regional development, sustainable development, rural development, marine and ocean studies, marine spatial planning, coastline economy
Smart energy engineering	City and regional sustainable development assessment and planning; impact of energy transition on the environment and socioeconomic development; socioeconomic analysis of energy consumption and the market; availability of energy and energy poverty; planning of mobility systems
Biomedicine, medical technology, biopharmaceuticals and biotechnology	Bioethics, public health, pharmacoeconomics, history of medicine, medical ethics and deontology, anatomy in art, zooanthropology
Smart materials, technologies and engineering systems	Occupational and environmental safety, market re-search, fashion and textile technology, material technology and design, engineering economics, architectural engineering, architectural design, urban planning and development research

3

R&D competencies in Latvia

3.1. Social sciences and humanities funding programmes

Within the 2014–2018 period, top-down nationally-funded SSH research (especially in humanities) was primarily financed through **State Research Programmes (SRPs), with a total funding of 11.7 million euros**. Due to specific consortium requirements, SRPs are an important tool for encouraging cooperation between institutions in different regions of Latvia, research institutions and higher education institutions. Bottom-up research on the national level is funded through the **Fundamental and Applied Research Projects programme (FARP), with a total funding of 5.8 million euros for SSH research**. This program focuses on excellence when funding projects. In the 2014–2019 period SSH research received **6.9 million euros** in funding as part of the EU **Horizon 2020** framework programme. Other significant

sources of SSH research funding are the Post-doctoral research support programme (PostDoc) and Applied research programme. Social sciences research exceptionally high policy impact is usually funded through studies commissioned by various government bodies. The Cross-Sectoral Coordination Centre (CSCC) has developed a database¹⁰ that includes the studies commissioned and planned by different ministries. The database offers the options of filtering studies by type, field, commissioning body and other parameters; however, the database cannot be used to collect data on completed studies and sums cannot be read in a machine-readable format. MoES has begun negotiations with the CSCC with the intention of improving the government research database, by adding metadata fields and links to adequately deposited publications and research data.

3.2. Projects funded by thematic group and topic

The largest thematic areas in SSH in terms of funding are **cultural heritage and Latvian studies and comparative Baltic studies**, although their sources of funding differ considerably. Research in Latvian studies is primarily financed through state research programmes. Due to the design of SRPs, funding gaps sometimes emerge for research institutions. To address this issue, SRP funding must be complemented by

Horizon funding. To increase the success rate for Latvian Studies and Comparative Baltic Studies projects, more active interest representation is needed in the H2020 / Horizon Europe programme committees. Researchers must be more active in participating in Theoretical and Applied Research Project (TARP) calls, demonstrating the value of their work to international experts.

¹⁰ <http://petijumi.mk.gov.lv/>

The **sustainable development** thematic group includes interdisciplinary projects in bioeconomics. LLU, BSC and UL are well represented in the thematic group. Projects within the thematic group have been funded via Horizon 2020 and the post-doctoral support programme. **In education technologies and innovations**, have been funded by multiple programmes, across TRL levels and covering different researcher career stages. On the subfield level, a broad range of research is carried out, addressing national and international challenges. Researchers **in the field of demographics, migration and diaspora studies** are mostly (but not exclusively) based at the University of Latvia Centre for Diaspora and Migration Research, and they have been able to obtain funding via a broad range of programmes, developing

this important subfield in SSH research in Latvia. The **public sector administration and innovation** thematic group includes applied research involving partners from the public sector with the purpose of finding solutions that its end users need.

Language technology and computational linguistics is one of the most important fields in interdisciplinary research with significant capacity at IMCS UL and SIA Tilde. The research shown in the table does not include all computational linguistics studies, because ICT projects are not classified as interdisciplinary SSH research. There is a major lack of research capacity in economic methods and macroeconomics, with a small number of internationally competitive studies conducted outside SSE Riga and the Bank of Latvia.

3.3. Regional performance

In terms of regional distribution, SSH research is concentrated in Riga and its metropolitan area. Research, especially in the humanities, is also conducted in Rēzekne, Valmiera, Liepāja, Ventspils, Daugavpils and other cities. The Horizon 2020 framework programme shows good coverage of project application, though funded projects concentrate in Riga and its metropolitan area, Valmiera, Cēsis, Priekule and Ventspils. The other regions' apparently poor success in obtaining funding through Horizon 2020

can partially be explained by the small overall number of project applications submitted. We are aware of a few cases when researchers in regional institutions submitted failed applications for one or two Horizon 2020 projects, and felt unmotivated to participate in any further project competitions. In the long run, we need measures to motivate researchers to make more submissions, because less than 20% of applications are granted funding as part of the framework programme.

**Regional distribution of 2020 applications
for social sciences and humanities projects (by municipality)
(according to the location of the applicant)**

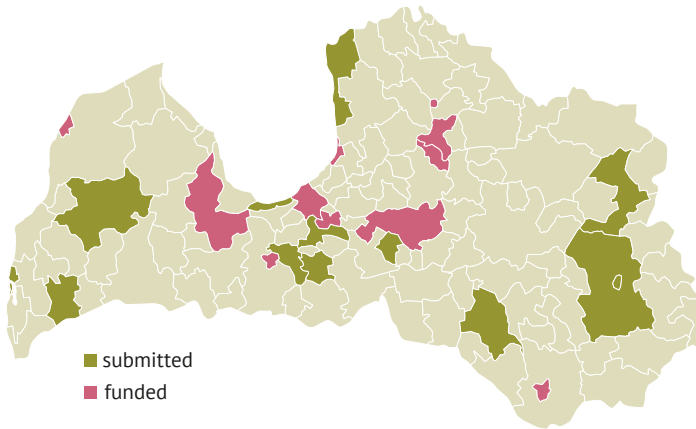


Figure 3.2. Regional breakdown of Horizon 2020 submitted and completed projects

Table 3.1. SSH thematic niches broken down by funding programme

Research field	Research subfields	Theoretical and applied research projects (FARP)	State research programmes (SRP)	1112 (post-doc)	1111 (practical research)	Horizon 2020
Cultural heritage (except for Latvian studies and comparative Baltic research)	Identity policy and facets, collective memory	0%	84%	3%	0%	14%
	Digital cultural heritage	16%	0%	32%	52%	0%
	Intercultural communication and ethnic minority perspectives; post-Soviet studies	0%	0%	100%	0%	0%
	Biographies, archaeology and war	67%	0%	0%	33%	0%
	Theology and philosophy	42%	0%	58%	0%	0%
	Narratives	100%	0%	0%	0%	0%
Sustainable development	Regional development	0%	0%	0%	0%	100%
	Transport/energy	0%	0%	100%	0%	0%
	Interdisciplinary research in agriculture and food science	20%	0%	0%	0%	80%
	Landscapes and locations	34%	0%	15%	0%	51%
	Environment-human relations	33%	0%	29%	0%	38%
	Economic transformation and development; macroeconomics	0%	95%	5%	0%	0%
Latvian studies and comparative Baltic studies	Baltic and small ethnic group linguistics	13%	87%	4%	0%	1%
	Latvian and Baltic literature and folk-lore	60%	0%	40%	0%	0%

Teaching, education technologies and personalised learning		10%	31%	14%	33%	12%
Demographic, migration and diaspora research		21%	41%	28%	0%	11%
Innovations in public sector and administration	Innovative public services and e-services	0%	0%	19%	0%	81%
	Urban policy	0%	0%	0%	0%	100%
	Tax and tax policy	60%	0%	40%	0%	0%
Disinformation, media literacy, critical thinking, Language technology, computational linguistics*		15%	0%	0%	0%	85%
		0%	0%	0%	100%	0%
		86%	0%	0%	0%	14%
Inclusive society	Inequality and social policy, resilience	100%	0%	0%	0%	0%
	Disability	100%	0%	0%	0%	0%
	Public and political trust	100%	0%	0%	0%	0%
	Heterogeneous society	100%	0%	0%	0%	0%
Foreign policy and defence, international relations		19%	56%	25%	0%	0%
Other political sciences		0%	0%	41%	0%	59%
	Improvements in competitiveness and human re-sources management	0%	0%	68%	0%	32%
Art, art history and creative industries		0%	0%	0%	0%	0%

* The language technology and computational linguistics calculations do not include the ICT projects not classified as interdisciplinary SSH projects.

4

Research capacity in social sciences and humanities

4.1. Human resources in research institutions

As of April 2019, 1113 social sciences and humanities research staff were employed in Latvia, accounting for 26% of the total number of research staff in the country. Research staff in social sciences and humanities are largely concentrated in the University of Latvia and its institutes (see **Figures 4.1 and 4.2**); there is a significant, but relatively smaller number of research staff in RTU, LLU, LAC, ULiep and other research institutions. The proportion of SSH researchers to researchers in other fields is relatively low in Latvia compared to the rest of the EU (see **Figure 4.3**). In Lithuania and Estonia, they took up a share of 33.1% and 34.5% (in 2017), which is

considerably more than in Latvia, where only 22.1% of researchers working in the public sector and higher education work in the corresponding fields. In terms of gender, women make up a numeric majority both in social sciences and in humanities. However, there are exceptions. In Turība University most of the SSH researchers are male. An analysis of the age structure of research staff in social sciences shows a relatively high number of researchers over 65, and a low number of those between 25 and 34 (see **Figure 4.4**). The distribution of research staff according to their position (see **Figure 4.5**) does not significantly differ from the other RIS3 areas.

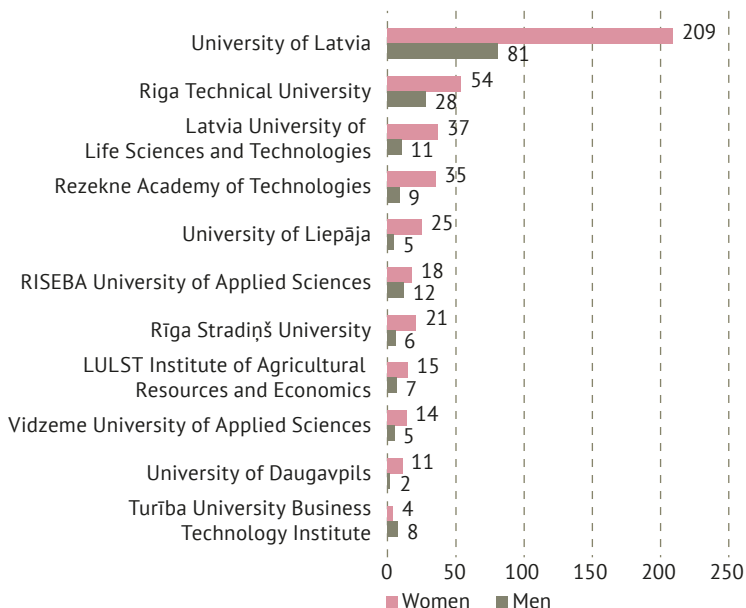


Figure 4.1. Number of **social sciences** research staff by gender research institutions with at least 10 research staff members (approximate data, NZDIS, 2019)

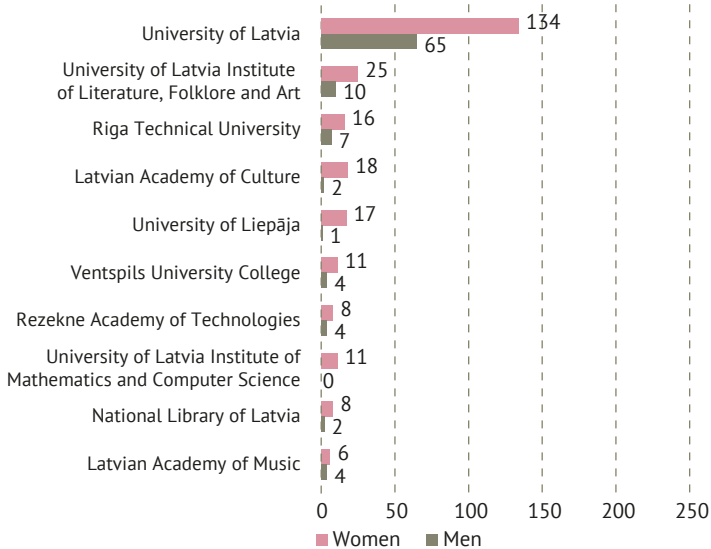


Figure 4.2. Number of **humanities** research staff by gender in research institutions with at least 10 research staff members (approximate data, NZDIS, 2019)

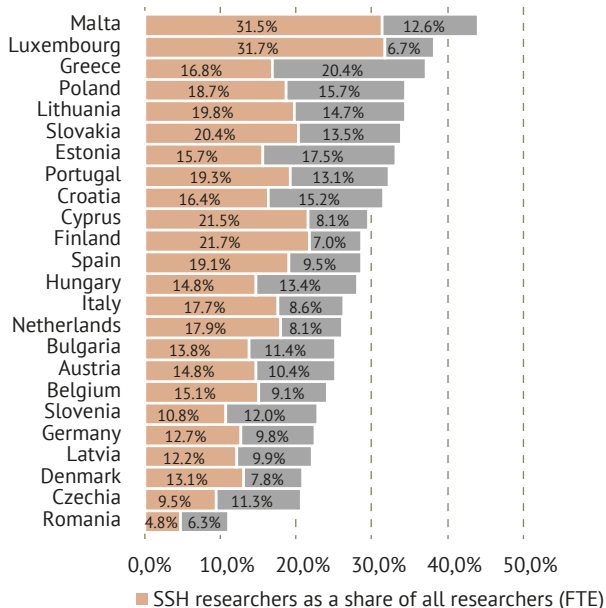


Figure 4.3. Social Science and Humanities researchers as a share of total researchers (FTE) in the Public and Higher Education sector in EU-27 countries (2017). Data for France, Ireland and Sweden are not available

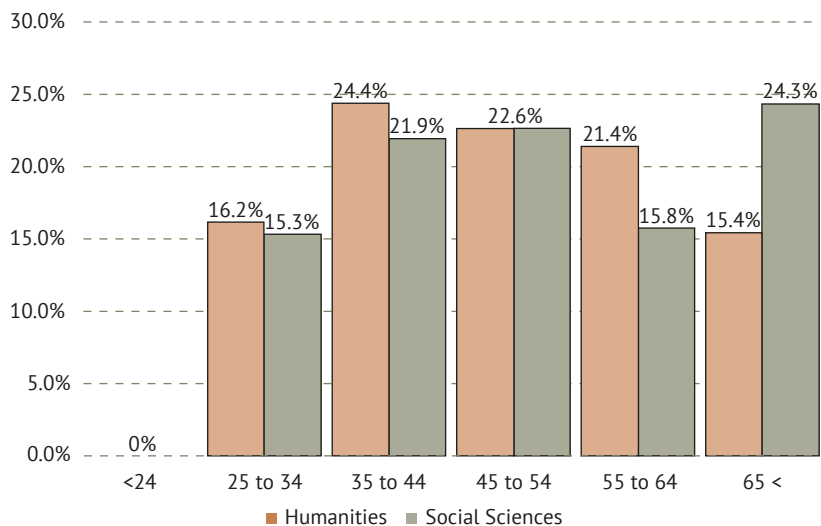


Figure 4.4. Research staff age distribution in social sciences and humanities (approximate data, NZDIS, 2019)

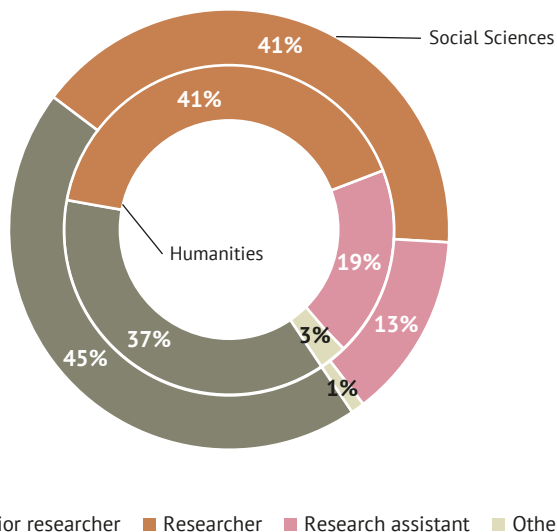


Figure 4.5. Distribution of research staff in social sciences and humanities according to their position (NZDIS, MoES filters, 2019)

4.2. Students

Investing in researcher human capital and an adequate pipeline of young researchers is essential for the sustainability of the R&D system. The overall number of students gaining university and college degrees and qualifications has significantly dropped in Latvia since 2007. A similar trend is noted in SSH, especially in social sciences, which can be primarily explained by the reduction in the state funding of tuition fees. In contrast to other RIS3 areas, there is a weaker correlation between the number of graduates and the number

of early career SSH researchers. That is because SSH students disproportionately choose careers outside academia.

In social sciences and humanities there is a large gap between admitted students and graduates in higher education programmes (see Figure 4.6). In absolute numbers, this disparity is not a large as in the other RIS3 areas, but the gap is widening. The disparity is expected to become smaller, as the competition for nationally-funded tuition rises, and the economy enters a down cycle.

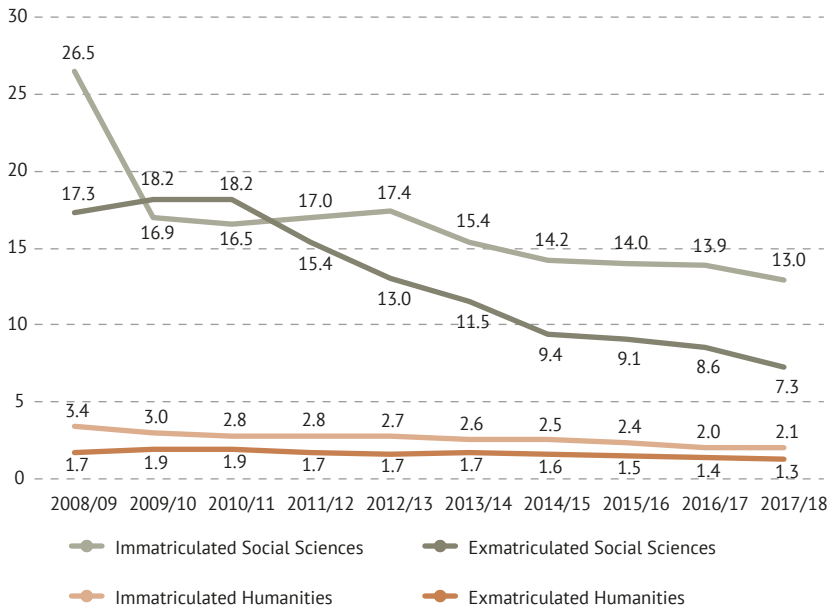


Figure 4.6. Number of social sciences and humanities students over the past 10 years

Table 4.1. Number of study programmes in social sciences and humanities (2017/2018, MK332 classification levels 43–51)

	Psychology	Business and economics	Education science	Sociology and social work	Law	Political science	Social and economic geography
UL	4	16	14	6	7	9	
DU	3	5	14		2	1	1
RSU	2	5	1	4	6	4	
ULiep		2	15				
RTU		25	1				
RTA		6	5		2	1	
BIA	1	5			4	3	
LLU		8	4	3		1	
RISEBA		15					
RIA					12		
TSI		11					
BAT		4			2	2	
LCA		1	2	1			
VUC		4					
BA		8					
LAC							
LAM							
UEC		3				1	
VUAS		4					
AAL							
RARZI							
LNA							
RAI		2					
REA		2					
ISMA		2					
LA							
Total	10	128	56	14	35	22	1

Media and communications	Other social sciences, including interdisciplinary social sciences and military science	History and archaeology	Languages and literature studies	Philosophy, ethics and religion	Music, art and architecture	Other art and humanities, including creative industries studies	Total
4	4	3	22	6	1		96
		3	8		2		39
8	3				2		35
	1		4		6		28
			1			1	28
1	2	1	2		1		21
	1				2		16
							16
1					1		17
							12
							11
2							10
	1			2	1		8
			4				8
							8
					5	1	6
					5		5
							4
							4
					3		3
				3			3
	2						2
							2
							2
							2
				1			1
16	14	7	41	12	29	2	387

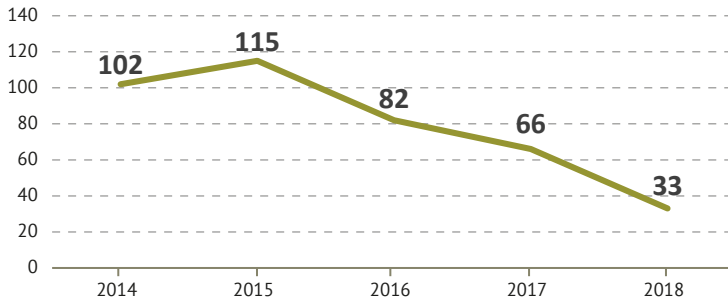


Figure 4.7. Total number of doctoral graduates in social sciences and humanities in 2014–2018

The trend for the number of SSH doctoral level students (see **Figure 4.7**), has been dropping precipitously since 2014, when the EU doctorate studies target scholarship programme ended. The problematic situation with the number of doctoral graduates can be seen in various fields, with a comparatively high number of doctoral graduates in pedagogy, management studies and economics, while relatively few doctoral in law and interdisciplinary fields.

The University of Latvia offers the broadest selection of study programmes in social sciences and humanities. A similar number of programmes is offered by Daugavpils University, Rīga Stradiņš University, University of Liepāja, Riga Technical University (see **Table 4.1**) Most study programmes are in disciplines within business and economics. In 2017/2018, there were a total of 56 doctorate study programmes in SSH, with the University of Latvia offering 18 programmes.

5 Excellence in research

5.1. Research publications in social sciences and humanities

In addition to the amount of funding obtained, publications in academic journals and conference proceedings indexed in Scopus and Web of Science are an important factor in measuring the research activity and excellence in social sciences and humanities. Bibliometric indicators capture information about research activity and serve as a good proxy for academic and other impacts. Unlike the other fields of research, bibliometric indicators for social sciences have weaker correlations with alternative research impact assessments. These correlations are even less pronounced in humanities.¹¹ However, the number of publications and citations are an important indicator

for SSH as well, because it acts as good evidence for integration in the international research environment and the congruence of research topics with the research topics relevant in the world, and offers advantages for obtaining international research funding. Web of Science bibliometric data for 2014–2018 have been used as part of this report to maintain consistency with reports for the other RIS3 areas. SSH publications are indexed more in the WoS database than in Scopus. However, there are significant differences in the number of publications between the two databases (see Figure 5.1). There is roughly the same number of publications in both databases for Humanities.

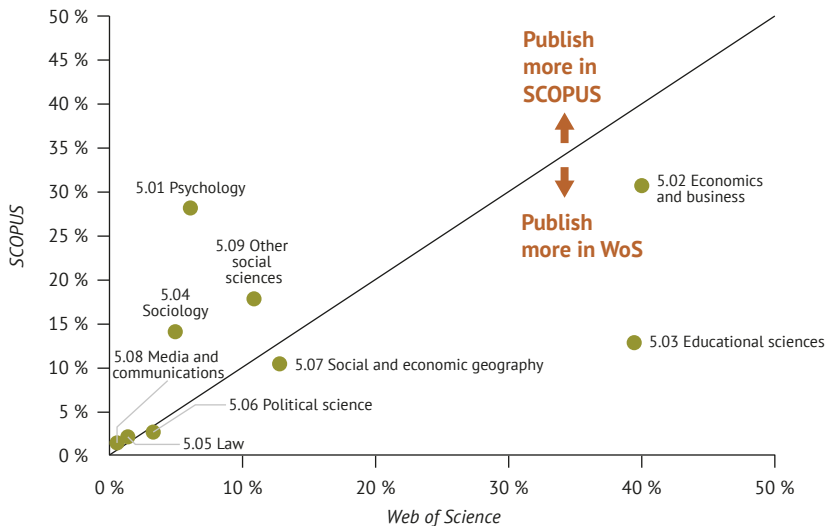


Figure 5.1. Share of Social Sciences publications by field of science in Scopus/Web of Science (2013–2017)

¹¹ Ciolfi, A., Checchi, D., De Fraja, G., Mazzotta, I. and Verzillo, S., 2019. Have You Read This? An Empirical Comparison of the British Ref Peer Review and the Italian Vqr Bibliometric Algorithm.

Latvian researchers publish approximately the same number of publications in Social Sciences as Estonian researchers (see **Figure 5.2**), also on a per head basis¹². In humanities, the quantity of research publications and citations is relatively low in all the countries; however, the number of humanities research publications in Latvia is significantly lower than in the other Baltic states, and in the EU28. A review of the trend in the overall number of SSH publications (see **Figure 5.3**) shows a divergence starting in 2012, as Latvia falls behind the other Baltic states. A significant difference is also observed in the proportion of cited publications (see **Figure 5.4**). Only 22.9% of the Latvian publications in social sciences have been cited at least once. In contrast, 44.3% of publications in Lithuania, and 51.5% in Estonia have been cited at least once. A similar disparity with the other Baltic States exists in the proportion of publications in top 10% journals. Latvia has

a relatively high ratio of SSH publications relative to the total number of research publications (see **Figure 5.5**), which can be explained by the small number of publications overall, and the relatively high number of researchers in SSH.

The Emerging Sources Citation Index (ESCI) is a database of Web of Science journals that indexes high-quality journals that do not meet the criteria of any other WoS Core Collection databases. Both in Latvia and in the rest of the world, this database contains the highest share of journals and publications in social sciences and humanities (see **Figure 5.5**). In 2014–2018, only 0.2% of all social sciences publications were indexed in the ESCI database. This may be explained by the small number of local journals included in this rating. Certain measures may be necessary to include more non-indexed Latvian journals in this database in the future.

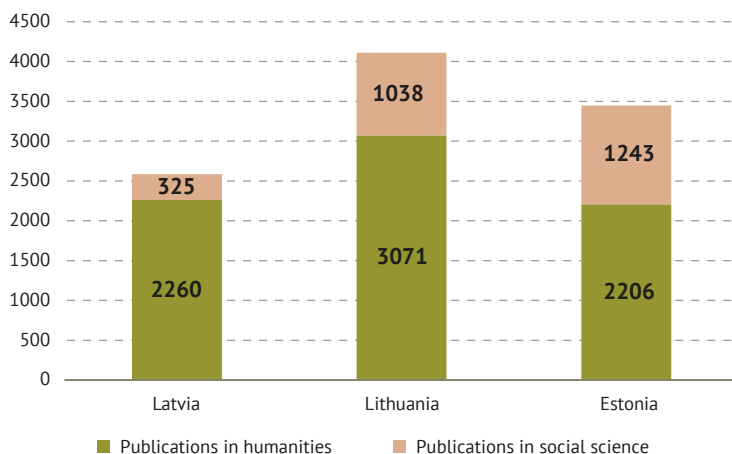


Figure 5.2. Total number of social sciences and humanities publications in the Baltics (Web of Science, 2014–2018)

¹² MoES calculation: 1.81 social science publications in Estonia, and 2.29 in Latvia (Web of Science, 2016–2017) per 1 research professional in the higher education sector (Eurostat, 2016).

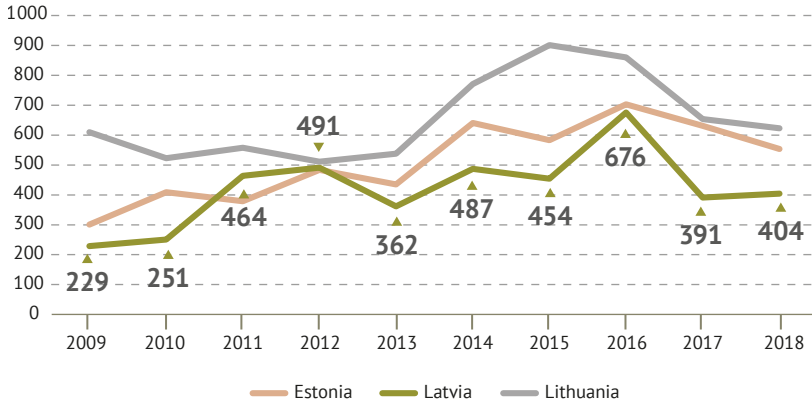


Figure 5.3. Social sciences and humanities publication trends in the Baltics (Web of Science, 2014–2018)

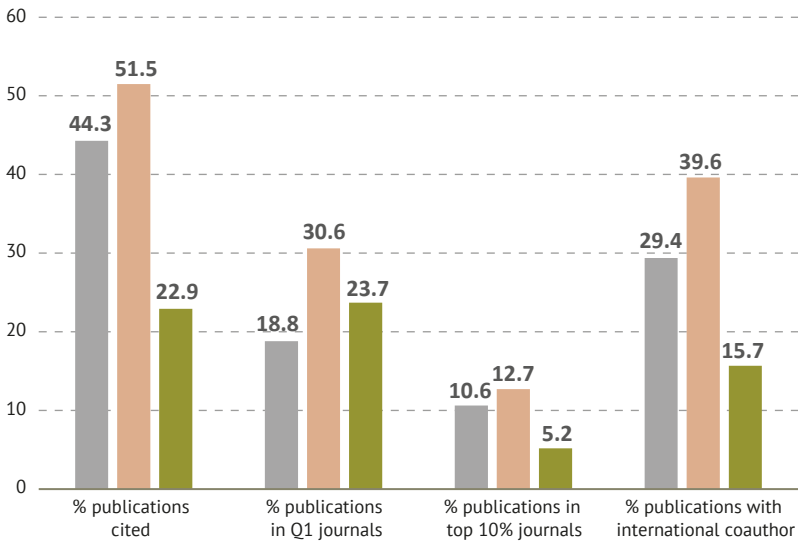


Figure 5.4. Number of research publications in social sciences in the Baltics (Web of Science, 2009–2018)

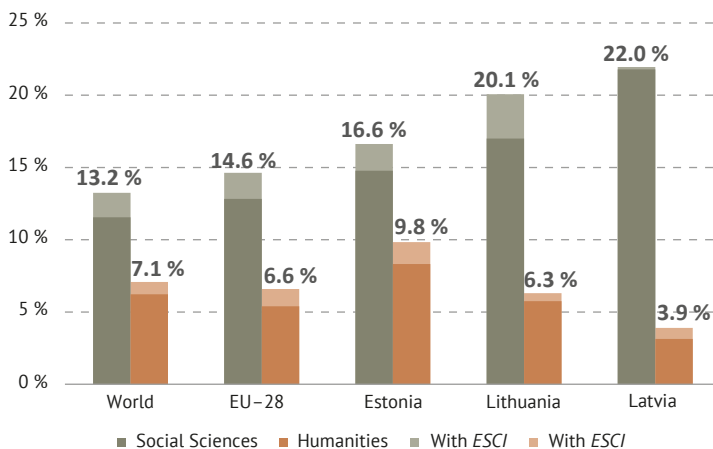


Figure 5.5. Share of research publications in social sciences and humanities, compared to the overall number of research publications in the Baltic states, the EU and the world (Web of Science, 2014–2018)

5.2. Research excellence in social sciences and humanities

Research excellence in SSH is concentrated in the largest research institutions in Latvia. In 2014–2018, researchers at the University of Latvia released 41% of all SSH publications (see Figure 5.6). LLU and ULiep show relatively weak performance in terms of internationalisation (measured by the number of publications with an international co-author). LLU, RTU and Vidzeme University of Applied Sciences have a relatively high number of publications with at least one citation (~30%); however, it is worth noting that almost all research institutions have individual researchers with a very high number of self-citations.¹³

There is an absence of a correlation between excellence and the number of

publications, broken down by subfields (see Figure 5.7). During the reporting period, a large number of publications were released in teaching and education studies (848) and economics (646). There are significant differences among the results of various research institutions by the number of citations and the Category Normalized Citation Impact. LLU and Daugavpils University have good performance in pedagogy and education studies. Multiple research institutions show good results in economics, though UL and RSU fall behind in quality, as the number of their articles with at least once citation does not even exceed 20%. RTU significantly improves the overall performance in management studies, in which Latvia demonstrates a relatively high level of excellence.

¹³ The number of self-citations is not a strictly negative indicator. see. Van Noorden, Richard, and Chawla D. Singh. "Hundreds of extreme self-citing scientists revealed in new database." *Nature* 572, No. 7771 (2019): 578

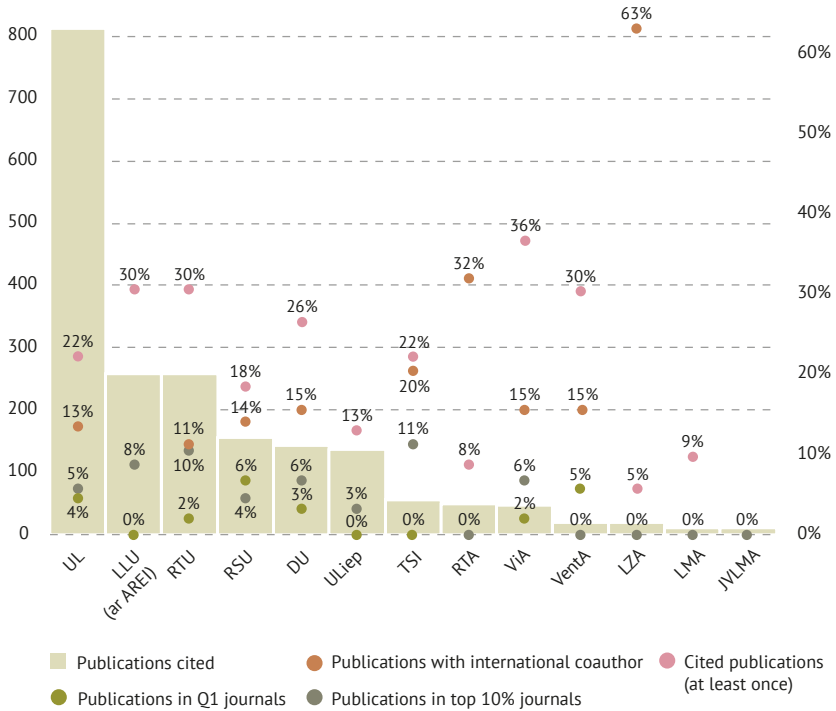


Figure 5.6. SSH publications in the top research institutions (Web of Science, 2014–2018)

Social sciences

Table 5.1. Top 6 WoS-indexed journals and conference proceedings by the number of Latvian researcher **social sciences** articles (Web of Science, 2014–2018).

Scientific journal or collection or articles	Publisher	Number of publications	Citations	Documents cited (%)	Category normalized citation impact	Journal normalized citation impact
NEW CHALLENGES OF ECONOMIC AND BUSINESS DEVELOPMENT – 2017: DIGITAL ECONOMY	UL	62	3	4.84	0.14	0
NEW CHALLENGES OF ECONOMIC AND BUSINESS DEVELOPMENT – 2016	UL	57	13	15.79	0.39	0
SOCIETY, INTEGRATION, EDUCATION, VOL I, 2014	RTA	50	5	10	0.13	0.75
EUROPEAN INTEGRATION STUDIES	Kaunas University of Technology	43	28	39.53	0.13	1.11
SOCIETY, INTEGRATION, EDUCATION, VOL II, 2014	RTA	37	7	13.51	0.25	1.41
RURAL ENVIRONMENT, EDUCATION, PERSONALITY. (REEP)	UL	36	8	19.44	0.64	1.13

Humanities

Table 5.2. Top 5 WoS-indexed journals and conference proceedings by the number of Latvian researcher **social sciences** articles (Web of Science, 2014–2018).

Scientific journal or collection or articles	Publisher	Number of publications	Citations	Documents cited (%)	Category normalized citation impact	Journal normalized citation impact
LANDSCAPE ARCHITECTURE AND ART	LLU	31	8	16.13%	0.45	0.94
SOCIETY, INTEGRATION, EDUCATION, VOL IV	RTA	27	0	0	0	0
JOURNAL OF BALTIC STUDIES	ABS	27	35	59.26%	2.89	1.43
INTERNATIONAL CONFERENCE; MEANING IN TRANSLATION: ILLUSION OF PRECISION, MTIP2016	RTU	19	13	47.37%	0.76	0.40
INTERLITTERARIA	Tartu University	18	6	22.22	0.37	1.40

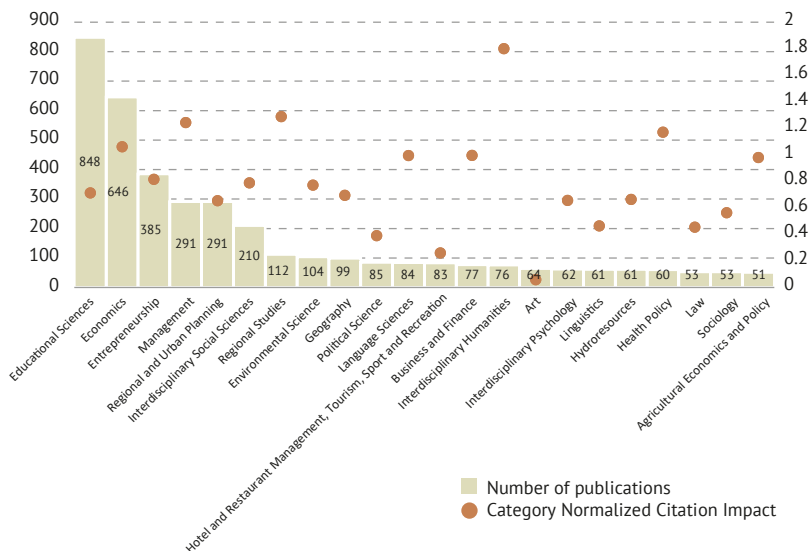


Figure 5.7. Number of publications and Category Normalized Citation Impact in different SSH fields (Web of Science, 2014–2018)

Bibliometric indicators generally accurately reflect the SSH research capacity and quality of research institutions. The University of Latvia is notable for its high research capacity across a broad spectrum of disciplines, producing a large proportion of publications, even in relatively minor and niche topics. UL, LLU, RTU and RSU actively publish in major SSH topics. However, only 1 or 2 universities usually excel within specific areas. Universities should invest in promoting excellence in subfields strategically important for them, thereby enabling research institutions to specialise on the national level. Despite the generally positive trend of an increase

of overall publications, divergences are rapidly emerging with Estonia and Lithuania, which should primarily be solved by increasing the human resources available in fields with international relevance, encouraging researchers with a small number of indexed publications, or no publications, to publish their work, and to include unindexed journals in Scopus/WoS (including ESCI) databases. In humanities, efforts to encourage academic publications must continue, while looking for alternative ways to measure the added value created for society (impact) and the effectiveness of public investment.

6 Research collaboration

6.1. Collaboration on the national level

Researchers in social sciences and humanities actively collaborate with researchers from other research institutions through State Research Programmes and other joint projects.

Unfortunately bibliometric data show that this rarely results in national-scale cross-institutional joint publications. There is comparatively good collaboration among UL and LLU researchers (see **Figure 6.1**).

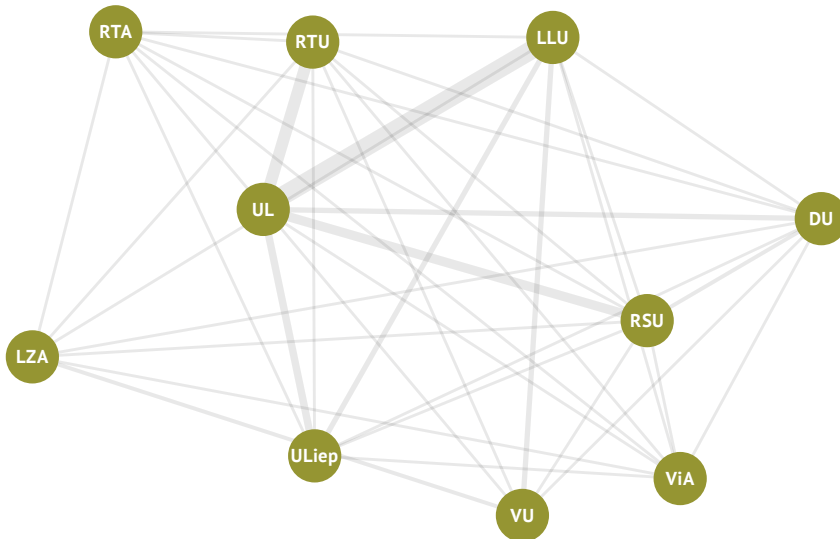


Figure 6.1. Joint publications in social sciences and humanities by Latvian research institutions (Web of Science, 2014–2018)

6.2. International cooperation

The number of publications with an international co-author is one of the primary indicators for international cooperation. In social science and humanities, it is relatively low throughout the world. In Latvia, the

proportion of SSH articles with an international co-author is lower than in any of the other RIS3 areas, except for smart energy engineering, and significantly lower than the EU28 average in these fields. Internationally,

Latvian SSH researchers collaborate with their colleagues from the United Kingdom and Lithuania, with 61 joint publications indexed for each of the countries during the reporting period (see Figure 6.2). Active cooperation takes place with Germany, Estonia, Poland, Russia and the USA.

An analysis of countries with the most active collaborations shows that joint publications with UK researchers have high citation metrics, with 73.1% being cited at least once, and 47.7% published in Q1 journals. Even after the United Kingdom's departure from the European Union, researchers and MoES must work harder to promote scientific collaboration with diaspora researchers.

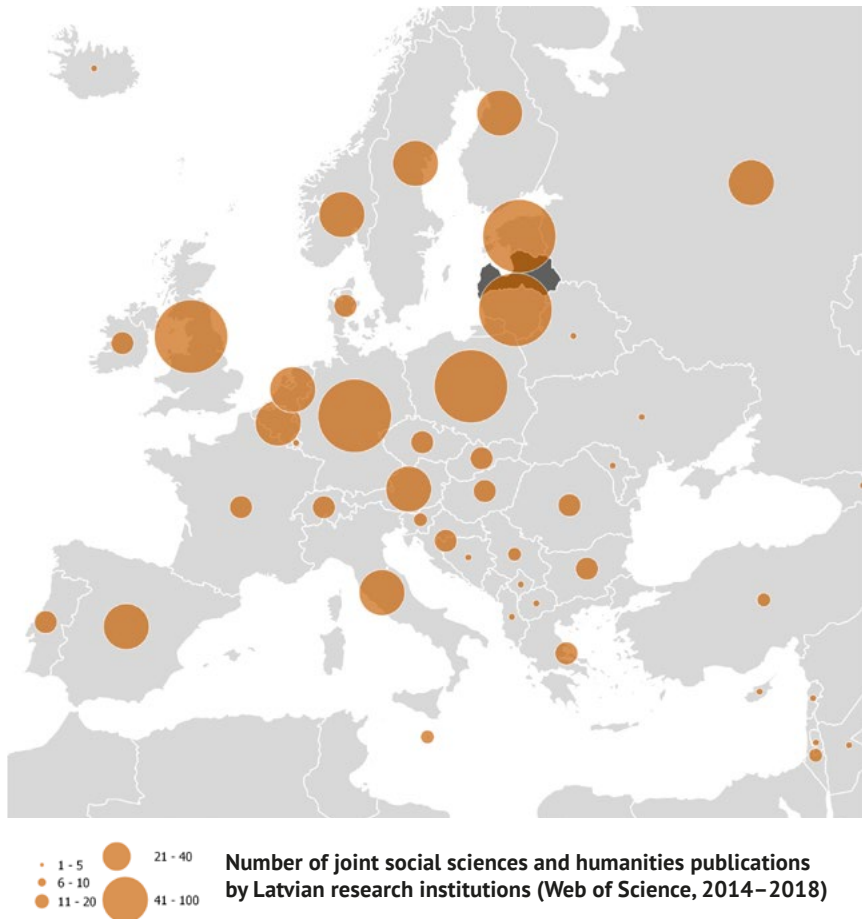


Figure 6.2.

6.3. Activities within the Horizon 2020 framework programme

Within the Horizon 2020 framework programme, social sciences and humanities research is primarily funded through Societal Challenge 6 (SC6): "Europe in a changing world – Inclusive, innovative and reflective societies". SSH researchers can also apply for "horizontal" funding in other programmes. SSH researchers can also apply for funding from excellence pillar programmes (ERC, MSCA). Latvia's achievements in SC6 are

comparatively good, with 2.07 million euros (0.31% of the total funding available through the programme) awarded to 14 projects. Of the 14 SC6 projects, 9 are research projects with a total EC funding of 1.67 million euros awarded to Latvian partners (see Figure 6.3). The University of Latvia applied for the highest number of projects that passed the SC6 threshold (13), followed by DU, RSU, RTU (4 projects each), and LAC (3 projects).

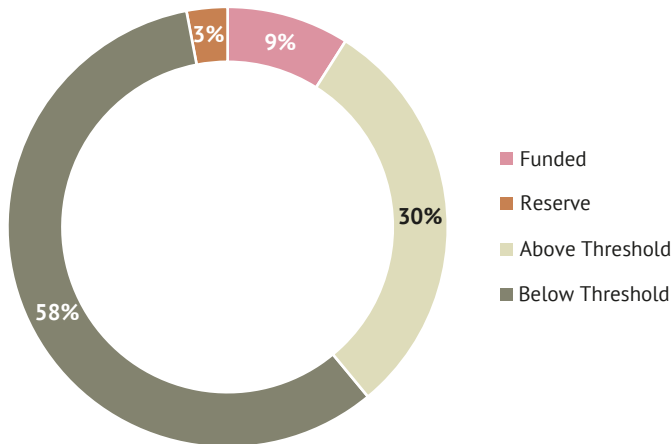


Figure 6.3. Horizon 2020 SC6 projects by funding status, 2014 to 24 July 2019

In addition to the SC6 projects, Latvia's SSH researchers actively engage in the "Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy" SC3 programme, in LEIT and other programmes. According to the MoES estimates, SSH research projects have received 6.9 million euros as part of the

Horizon 2020 programme, not including the coordination and support activities (CSA) and ERA-NET Cofund projects. 42% of the 389 project submitted have passed the threshold (see Figure 6.4). The institutions that have demonstrated the most success in obtaining funding and completing their projects are the University of Latvia, SIA LETA and BSC.

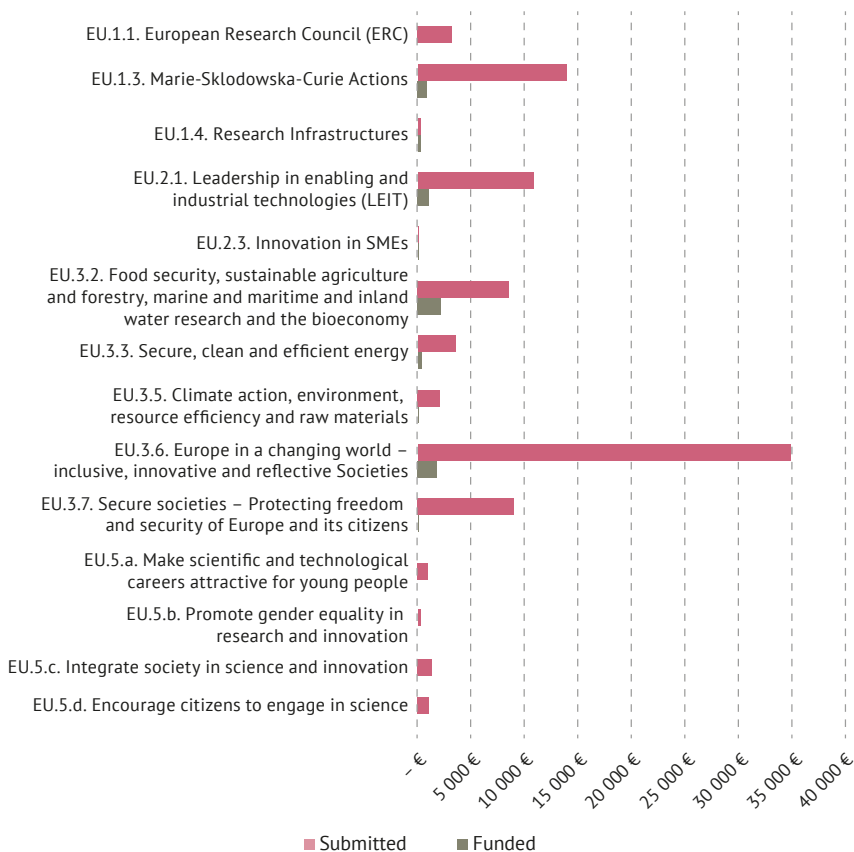


Figure 6.4. SSH projects submitted and funded across all Horizon 2020 programmes¹⁴ between 2014 and 24 July 2019 (in thousands of euros)

¹⁴ MoES calculations, individually marking SSH projects according to their programme, name and submitter.

Table 6.1. Funding awarded, number of SSH projects and their success rate across all Horizon 2020 programmes

Organisation	Funding awarded	Submitted	Funded
<i>LETA</i>	€ 1,166,250.00	3	1
<i>UNIVERSITY OF LATVIA</i>	€ 1,127,233.28	55	6
<i>BALTIC STUDIES CENTRE FOUNDATION</i>	€ 798,056.25	9	3
<i>RIGA MUNICIPAL AGENCY "RIGA ENERGY AGENCY"</i>	€ 393,468.75	3	1
<i>DAUGAVPILS UNIVERSITY</i>	€ 386,641.25	10	2
<i>FARMERS' PARLIAMENT (ZSA)</i>	€ 380,001.25	3	3
<i>RĪGA STRADIŅŠ UNIVERSITY</i>	€ 353,938.00	7	2
<i>BALTIC OPEN SOLUTIONS CENTER</i>	€ 324,463.75	5	2
<i>STOCKHOLM SCHOOL OF ECONOMICS IN RIGA SIA</i>	€ 296,312.50	3	1
<i>SIA DATORZINIBU CENTRS</i>	€ 230,068.44	3	1
<i>MINISTRY OF ENVIRONMENTAL PROTECTION AND REGIONAL DEVELOPMENT</i>	€ 206,250.00	2	1
<i>LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES</i>	€ 172,708.75	6	1
<i>LATVIAN ACADEMY OF CULTURE</i>	€ 161,862.50	6	1
<i>BALTIC ENVIRONMENTAL FORUM</i>	€ 151,175.00	3	1
<i>LATVIAN CENTRE OF TECHNOLOGY FOUNDATION (LTC)</i>	€ 119,723.75	5	3
<i>RIGA CITY COUNCIL</i>	€ 107,960.00	5	1
<i>TUKUMS MUNICIPAL COUNCIL</i>	€ 107,500.00	2	1
<i>VIDZEME PLANNING REGION</i>	€ 86,187.50	10	1
<i>SIA SUNGIS</i>	€ 71,428.75	1	1
<i>INSTITUTE OF AGRICULTURAL RESOURCES AND ECONOMICS</i>	€ 68,562.50	2	1
<i>STATE JOINT-STOCK COMPANY (VAS) LATVIJAS JURAS ADMINISTRACIJA (MARITIME ADMINISTRATION OF LATVIA)</i>	€ 57,628.75	1	1
<i>INSTITUTE OF BIOLOGY OF THE UNIVERSITY OF LATVIA</i>	€ 55,537.50	2	2
<i>LATVIAN RURAL FORUM (LLF)</i>	€ 53,687.50	1	1
<i>LATGALIAN STUDENT CENTRE</i>	€ 27,000.00	1	1

Table 6.2. Horizon 2020 SC6 projects funded in Latvia (as of 24 July 2019)

Organisation	Project name	Project type	EC funding for the Latvian partner
STATE JOINT-STOCK COMPANY (VAS) LATVIJAS JURAS ADMINISTRACIJA	<i>The Once Only Principle Project</i>	IA	€ 57,629
DAUGAVPILS UNIVERSITY	<i>Cultural Heritage and Identities of Europe's Future</i>	RIA	€ 313,500
RĪGA STRADIŅŠ UNIVERSITY	<i>IN THE BALKANS</i>	RIA	€ 306,625
STOCKHOLM SCHOOL OF ECONOMICS IN RIGA SIA	<i>Developing Inclusive & Sustainable Creative Economies</i>	RIA	€ 296,313
MINISTRY OF ENVIRONMENTAL PROTECTION AND REGIONAL DEVELOPMENT	<i>Empowering Citizens to TrAnsform European PubLic Administrations</i>	RIA	€ 206,250
LATVIAN ACADEMY OF CULTURE	<i>Critical Heritage: performing and representing identities in Europe</i>	RIA	€ 161,863
UNIVERSITY OF LATVIA	<i>Youth mobility: maximising opportunities for individuals, labour markets and regions in Europe</i>	RIA	€ 154,000
UNIVERSITY OF LATVIA	<i>Empowering Citizens to TrAnsform European PubLic Administrations</i>	RIA	€ 127,500
RĪGA STRADIŅŠ UNIVERSITY	<i>Rebuilding an Inclusive, Value-based Europe of Solidarity and Trust through Social Investments</i>	RIA	€ 47,313
LATVIAN INSTITUTE OF INTERNATIONAL AFFAIRS	<i>Strengthening and Energizing EU-Central Asia relations</i>	CSA	€ 100,438

Organisation	Project name	Project type	EC funding for the Latvian partner
STARPTAUTISKA LIETISKAS OPTIKAS BIEDRIBA	<i>Transnational network of National Contact Points (NCPs) of Societal Challenge 6 "Europe in a changing world – inclusive, innovative and reflective Societies" (SC6)</i>	CSA	77,719 €
VALSTS IZGLITIBAS ATTISTIBAS AGENTURA	<i>ERA-NET Cofund Smart Urban Futures</i>	ERA-NET-Cofund	77,540 €
LATVIJAS ZINATNU AKADEMIJA	<i>HERA Joint Research Programme Uses of the Past</i>	ERA-NET-Cofund	75,653 €
VALSTS IZGLITIBAS ATTISTIBAS AGENTURA	<i>HERA Joint Research Programme European Public Space, Culture and Integration</i>	ERA-NET-Cofund	72,600 €

7

Challenges in social sciences and humanities

Various challenges must be overcome on the national level to develop the Social Sciences and Humanities RIS3 area. More focus is needed to achieve and demonstrate the **research impact** of publicly funded research to target groups (society, policy-makers, etc.). This includes actively disseminating research results to decision-makers and fostering close relations with policymakers. **Funding gaps between projects must be reduced** when planning research programmes, especially in humanities and Latvian studies. The discussion about the balance of **Latvian and English language publications** must continue. This issue is particularly relevant for Latvian studies (which is a part of humanities), a discipline that needs more nuanced solutions than simply requiring a large quantity of well-cited publications in English language journals. SSH performance within the Horizon 2020 framework programme is good in terms of the number of projects; however, it falls behind in the amount of funding obtained. In order to tackle this challenge, in the new framework programme research institutions **must apply to coordinate projects**, not only participate as project partners. Latvia's top universities with SSH study programmes and a research capacity are well-developed given the current funding

levels. However, more **focus is needed** on thematic groups with the highest potential, and a more strategic approach for selecting which projects to apply for in line with the strategic directions of the research institutions.

European and global trends create new challenges for SSH researchers in Latvia. The blurring of disciplines and the accompanying shift towards more interdisciplinary research creates a necessity to participate in research projects of other fields, and to provide **a meaningful horizontal contribution** to the project. The international demand for **specific skills and knowledge** is growing; this includes familiarity with qualitative and quantitative research methods, statistics, ethics, law, etc. There is a notable trend towards **more openness and digitisation in science**. Digital resources and infrastructures must be adjusted to support the skills of researchers, especially in working with research data, and support mechanisms must be planned for attaining such skills. In the context of the smart specialisation strategy, it is necessary to **more clearly identify the thematic niches**, in which SSH research reinforces other RIS3 areas and supports the achievement of the objectives of RIS3.

8

Research institutions

University of Latvia (UL) conducts research within a broad range of topics, with the priorities including climate change and sustainable use of natural resources; public health; quality of life and national sustainability; critical thinking; innovations; globalisation and competitiveness; Latvian studies; diaspora studies and intercultural communication; humans, technologies and quality of education.

Latvia University of Life Sciences and Technologies (LLU) is a leading research institution in the field of bioeconomics in Latvia, conducting interdisciplinary research in SSH topics such as: the economics of sustainable development of biological resource industries; bioeconomics and circular economy; smart and sustainable development of specific areas and regions; production process efficiency and business competitiveness; professional education and career support for sustainable societal development.

Riga Technical University (RTU) conducts research in the fields of environment and energy, urban development, ICT, transport, materials, processes and technologies, as well as security and defence. SSH research takes place on an interdisciplinary basis, with a specialisation in economic and business research related to technology. There is also research in the fields of technical translation and e-learning technology.

Riga Stradiņš University (RSU) engages in research in fields such as public health, occupational safety and environmental health, business and economics, political sciences, law, bioethics, communication

studies and anthropology. Interdisciplinary research with the involvement of SSH fields is also carried out in medicine.

As part of its "Education studies" and "Regional, literature and art studies" priority domains,

Daugavpils University (DU) conducts research in economics, sociology, social psychology, political science and law, in social and public human safety, education (sustainable education, teaching theory, teaching in specific disciplines, lifelong education), and humanities (literature studies, linguistics, history, culture studies, youth studies).

University of Liepāja (ULiep) carries out research in education (child-focused education, culture of cooperation in education, quality and sustainability of education), in arts and humanities (language, literature and art within the Kurzeme cultural space and the overall Baltic and Nordic context; digital media and network art studies, languages and learning languages in a multicultural environment), in economics and management studies (regional development of innovative economy and business, circular economy).

Latvian Academy of Culture (LKA) researches theory of culture, cultural sociology, history and theory of art and history, practical and theoretical topics in theatre and cinema, cultural management, creative industries, intercultural communication, semiotics, philosophy and other related fields.

Art Academy of Latvia (LMA) carries out research in art history, design and creative industries.

Vidzeme University of Applied Sciences (ViA) conducts SSH research in the subfields of sustainable economy, society of knowledge and communication ecosystems; there is interdisciplinary collaboration with the subfields of smart technologies and sociotechnical system modelling.

Rezekne Academy of Technologies (RTA) conducts research in a number of priority fields: business and economics (including bioeconomics and cyclical economics); civil defence, rights and safety; art and humanities (including regional studies, creative and cultural industry, Latgalian language, preservation and transformation of traditions and culture); education, including special-needs and inclusive education; social welfare and rehabilitation technologies; human safety, society of knowledge and information.

National Library of Latvia (LNB) publishes collections of research articles, and conducts research in library science, bibliography and book studies, Latvian studies, national identity, information and cognitive studies.

Stockholm School of Economics in Riga (SSE Riga) engages in research in fields such as economics, finance, business, demographics, migration and other fields, working on the Baltic Shadow Economy Index. The institution publishes the Baltic Journal of Economics in conjunction with BICEPS.

Baltic Studies Centre (BSC) researches the social, economic and regional aspects of bioeconomy, including the topics of coastline economy, regional dimensions of bioeconomy, sustainable rural and regional development and agrifood systems. BSC is the leading research institution that engages in Horizon 2020 projects (SALSA, SUFISA, PLAID, AGRILINK, ROBUST, DESIRA, INHABIT) in Latvia.

RISEBA University of Applied Sciences conducts research in economics, financial

markets, institutional operation and management, innovative business practices (including education and digitisation of businesses), business modelling, value in innovations and real options theory, strategic human resources management, psychology and supervision, audio-visual media and digital arts, advertising and public relations, urban design and the urban environment.

Ventspils University of Applied Sciences advances research in the fields of business, innovation, regional economics, financial mathematical modelling, as well as applied linguistics, comparative linguistics and translation studies.

Latvian Academy of Sciences (LZA) – the Department of Humanities and Social Sciences organises expert conferences, preparing and publishing reports on the basis of expert opinions and theoretical research; the department publishes the "Latvijas Zinātņu akadēmijas Vēstis, A daļa: humanitārās un sociālās zinātnes" journal ("Latvian Academy of Sciences News, Section A: Humanities and Social Sciences"). The LZA Agriculture and Forestry Department participates in international studies on rural development.

Baltic International Centre for Economic Policy Studies (BICEPS) conducts research in the fields of economics and political science, specialising in tax/benefit micro-simulations, informal economy analysis, business economics, macroeconomics and demographics. The institution publishes the Baltic Journal of Economics in conjunction with SSE Riga.

BA School of Business and Finance researches business and finance, specialising in financial services and compliance, sustainability and efficiency, as well as cybersecurity management. The institution publishes the Journal of Business Management in conjunction with RISEBA.

Turība University Business Technology Institute conducts applied research and consults in various fields, primarily in business administration and tourism.

University of Latvia Institute of Literature, Folklore and Art (ILFA) engages in international research in the fields of Latvian literature, intangible cultural heritage, theatre, music and cinema. The institute develops innovative digital resources (garamantas.lv, iesaisties.lv) and works on interdisciplinary projects in digital and environmental humanities, and in gender, narrative and autobiographical studies. The institute publishes the *Letonica* humanities research journal.

University of Latvia Institute of Mathematics and Computer Science conducts national and international research in the interdisciplinary fields of language technology and computational linguistics. The institute develops and maintains major resources and tools (including infrastructure) pertaining to the Latvian language, such as corpora, dictionaries, thesauruses etc.). The institute is the national coordinator of the CLARIN ERIC research infrastructure.

Institute of Economics of the Latvian Academy of Sciences researches the fields of business and tourism, conducts market analyses and scientific research in economics and other social sciences, including interdisciplinary fields; the institute provides scientific consulting concerning the socioeconomic development processes ongoing in the country, its regions and organisations; the institute develops recommendations for developing and implementing economic policy; the institute fosters the commercialisation of inventions and the collaboration between researchers and companies; it also develops and manages EU and other international projects, and organises the annual LZA International Economic Forum.

Latvian Academy of Music (LAM) conducts research in systematic and historical musicology, ethnomusicology, and artistic studies. The academy carries out international and interdisciplinary projects in musicology, neuropsychology and psychology, music education, anthropology of music and computer science. LAM also issues the "Mūzikas akadēmijas raksti" ("Academic Articles on Music") journal.

LLU Institute of Agricultural Resources and Economics (IARE) conducts research in bioeconomics and sustainable rural development, including the economic growth of biological resource industries (farming, food production, fish processing and other sectors), and improvements in the efficiency of production processes, implementation of innovations and competitiveness of business. The institution carries out data monitoring and socioeconomic assessments of the development of rural areas.

Institute for Environmental Solutions foundation (IES) is a research institution that specialises in interdisciplinary fields, with research in bioeconomy, space, sustainable development, cultural heritage and other fields.

European Research Institute for Economics and Technology (ERIET) works in the fields of smart energy engineering and smart materials, primarily providing business services. The institute develops the capacity of social sciences in the construction sector.

Baltic International Academy (BIA) conducts research and organises conferences in business, innovation policy and other fields. Actively collaborates with researchers in Ukraine, Russia, Belarus, Uzbekistan.

Latvian Maritime Academy Research Institute (LMARI) conducts research in maritime fields. The institute works on various interdisciplinary SSH fields: maritime history and human resource management in maritime affairs,

development of maritime education and teaching, efficiency of maritime processes, shipping quality, safety and security.

Centre for Security and Strategic Research (CSSR) is a research institute of the National Defence Academy of Latvia, which engages in academic research in the field of security and research, including strategy, hybrid war, future warfare, influence, psychological and information operations, deterrence, comprehensive national defence, patriotism and public participation. CSSR collaborates with NATO bodies and research institutions of NATO member states, and organises talks by leading international experts as well as international conferences.

Latvian Christian Academy Interdisciplinary Research Institute (IRI) conducts interdisciplinary research in social work, ecotheology, intercultural dialogue, translation of patristic literature and other fields.

Latvian Academy of Sciences Baltic Strategic Research Centre (BSRC) engages in research in the fields pertaining to security and Latvia's recent history,

organising research conferences, discussions, workshops, and publishing research.

Latvian Academy of Sport Education (LASE) conducts research in the field of sport education.

Shamir Association conducts research in the field of Jewish national identity, cultural and historical heritage; researches and engages in educational activities pertaining to the topic of the Holocaust.

SIA "Biznesa kompetences centrs" ("Business Competence Centre") conducts research within a broad range of social sciences and humanities, arranging international practical research conferences in the fields of business competence, marketing in trade, and the business environment. The institution publishes research monographs, the "Baltic Journal of Business Environment" and "Baltic Journal of Marketing" magazines, and develops innovative product technologies and methods for developing business competence and intellectual capital in higher education.

Institutions not included in the Registry of Scientific Institutions

PROVIDUS think-tank researches migration and integration, political parties and public administration, measures against corruption, approaches to promote social businesses and reduce social inequality, as well as public participation.

Bank of Latvia conducts research in macroeconomics and related fields on the national and Eurozone levels, developing research methods in economics.

NATO Strategic Communications Centre of Excellence (NATO StratCom) is an

international, NATO-accredited military organisation. The centre engages in research projects and training in the field of strategic communication.

SIA EPC (Economic Forecasting Centre) acts as the national participant for Latvia in the labour market, working conditions and social dialogue research conducted by the Dublin Foundation, and fulfils research commissions on a wide variety of topics in economics.

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