

Connecting Through Science

Working Paper of the Welfare State Expert Group "Fostering Sustainable and Inclusive Labour Markets in the Baltic Sea Region:

A Life Course Perspective"









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Project in brief

Baltic Science Network (BSN) serves as a forum for higher education, science and research cooperation in the Baltic Sea Region (BSR).

BSN is a policy network gathering relevant transnational, national and regional policy actors from the BSR countries. The Network is a springboard for targeted multilateral activities in the frame of research and innovation excellence, mobility of scientists and expanded participation. These joint activities are modelled with an overall aim to ensure that the BSR remains a hub of cutting-edge scientific solutions with the capacity to exploit the region's full innovation and scientific potential. The activities are modelled as examples of best practice which form basis of the policy recommendations drafted by the Network.

The platform is tailored to provide advice on how to enhance a macro-regional dimension in higher education, science and research cooperation. Recommendations jointly formulated by the Network members address the European, national and regional policy-making levels.

BSN is a flagship of the EU Strategy for the Baltic Sea Region under the Policy Area Education, Research and Employability, as well as one of two cornerstones of the Science, Research and Innovation Agenda of the Council of the Baltic Sea States.

Disclaimer: This Working Paper is based on input from independent experts who are members of the BSN Welfare State Expert Group, as well as the CBSS Secretariat. Contents of the Working Paper do not necessarily reflect the views of the BSN, or participating states represented in the BSN, or international organisations who have either endorsed BSN or are engaged in the BSN. BSN and the CBSS Secretariat cannot be held responsible for any use, which may be made of the information contained herein.

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List of Abbreviations

Baltic TRAM Baltic Transnational Research Access in Macro-Region

BSN Baltic Science Network

CBSS Council of the Baltic Sea States

CESSDA Consortium of European Social Science Data Archives

CWED 1 & CWED 2 Comparative Welfare Entitlements Dataset

Directorate-General for Internal Market, Industry, Entrepreneurship

and SMEs of the European Commission

ELHN European Labour History Network

ESFRI European Strategy Forum on Research Infrastructures

ESPAnet European Network for Social Policy Analysis

ESS European Social Survey

EU European Union

Eurofound

EU LFS European Union Labour Force Survey
EUSBSR EU Strategy for the Baltic Sea Region

European Foundation for the Improvement of Living and Working

Conditions (European Union Agency)

EVS European Values Study

GESIS Leibniz Institut für Sozialwissenschaften

GGP Generations & Gender Programme

InGRID Inclusive Growth Research Infrastructure Diffusion

ISSP International Social Survey Programme
LIS Luxembourg Income Study Database

LP&R network International Network on Leave Policies & Research

LWS Luxembourg Wealth Study Database

MERIL Mapping of the European Research Infrastructure Landscape

MISSOC EU Mutual Information System on Social Protection

OECD Organisation for Economic Co-operation and Development
PA Education EUSBSR Policy Area Education, Research and Employability

PwC PricewaterhouseCoopers
R&D research & development
RI research infrastructure

SHARE Survey of Health, Ageing and Retirement

SOCX OECD Social Expenditure Database

SPIN Social Policy Indicators
WVS World Values Survey

Executive Summary

Baltic Science Network (BSN) Working Paper of the Welfare State Expert Group "Fostering Sustainable and Inclusive Labour Markets in the Baltic Sea Region: A Life Course Perspective" elaborated on the key global, European, transnational and macroregional trends, which affect the public debate, policy measures and research agendas revolving around the welfare state topic.

The Working Paper supports the BSN's commitment to advancing scientific excellence in the welfare state studies field. This publication paves the way in suggesting specific components for the BSN action plans by outlining a set of challenges, analytical concepts and data repositories, which hold most value for future welfare state research in the specific Baltic Sea Region setting. Among the key suggestions for the BSN action plans are such thematic research strands as:

- demographic shifts accompanied by various vulnerabilities of different age groups of the active and non-active population;
- social inequalities of various sorts;
- new skills required in the contemporary and future labour market;
- solidarity of various sorts;
- diversity and nuances of welfare state regimes;
- a sustainable welfare state.

Among the most valuable data repositories for the future Baltic Sea Region-wide research projects on the welfare state (as highlighted by the Expert Group), are the European Social Survey, International Social Survey Programme, the Survey of Health, Ageing and Retirement (SHARE) among others. The prioritisation of certain data repositories is proposed, together with a note that a proper maintenance of high quality and systematic national data inputs remain the key for future research success and the delivery of projects with high scientific value.

In some cases, the research problem at hand might only be adequately addressed with the help of qualitative data and methods. Thus, in future transnational research efforts there should be space for the collection and analysis of comparative qualitative data capable of enriching the knowledge produced on the basis of quantitative survey and administrative data.

Introduction

Welfare state is a term which attracts increasing interest across the Baltic Sea Region. The title of this Working Paper stresses the sustainability and inclusivity aspects of labour markets viewed from a life course perspective; an analytical framework, which aspires to offer a better understanding of an individual through exploring different periods of life. At the centre of such an approach is the analytical statement "how chronological age, relationships, common life transitions, and social change shape people's lives from birth to death" (Hutchison, 2010, p. 8).

In the consecutive parts of the Working Paper, some landscape scoping is presented with a focus on migration trends and their implications on Baltic Sea Region states, researchers' mobility–specific context, as well as the new challenges faced by the welfare states in view of demographic change and Fourth Industrial Revolution and digital transformation. These thematic sections are followed by an elaboration on the Expert Group's suggested way forward in the welfare state research in the Baltic Sea Region, outlining specific challenges and analytical concepts which are of a cross–cutting relevance to multilateral welfare state research, as well as key data sets for future comparative analysis.

Various thematic parts of the Working Paper map not only the trends of immediate relevance to the welfare states across the Baltic Sea Region as identified by researchers, but also seek to outline how these challenges are perceived by policymaking circles and identify responses which have been tailored to mitigate various risks and vulnerabilities faced by people across the macro-region.¹

The term "macro-region" refers to the Baltic Sea Region area and three other areas covered by macro-regional strategies (namely, Danube Region, Alpine Region and Adriatic-Ionian Region) (Etzold, 2018, p. 1; Šime, 2018, p. 10). "A 'Macroregional strategy' is an integrated framework endorsed by the European Council, which may be supported by the European Structural and Investment Funds among others, to address common challenges faced by a defined geographical area relating to Member States and third countries located in the same geographical area which thereby benefit from strengthened cooperation contributing to achievement of economic, social and territorial cohesion" (European Commisson, 2018). "The emergence of macro-regional strategies [...] has been driven by a number of EU countries and regions as a complement to traditional country policies on territorial management. They are designed to tackle common challenges e.g. innovation-driven growth, environment or climate change, using bottom-up approach involving national, regional and local actors"

One such example would be an EU appraisal that "people need to be empowered to harness opportunities over the entire course of their working lives and be able to rely on adequate social safety nets when needed" (European Commission, 2017, p. 1). It is a timely response to the experienced changes in the jobs and skills profile required from the workforce today (DG GROW, 2018, p. 14; OECD, 2017, p. 46), where the earlier identified mindset of 45-year olds being 'too expensive' or 'too old' to retrain (European Political Strategy Centre, 2016, p. 6) seems more than just wasteful, it is an obsolete perspective. This is an encouraging message at times when not just certain parts of society² face a fear of jobless growth,³ structural (Council of the European Union, 2018, p. 2) and technological unemployment or their welfare being harmed by "skill-biased technological change", but the whole spectrum of labour force is warned about the risks of "new "technological unemployment" resulting from rapid automation and robotisation across the economy" (Butter et al., 2014, pp. 62-63, DG GROW, 2018, p. 15; OECD, 68; 2017, 37). Such public fears have been heard by the political leadership of the EU and social partners, declaring that "protecting workers - not protecting work" - is seen as the key (European Commission & Government Offices of Sweden, 2017, p. 5). The Working Paper is designed to build on this interactive practice outlined in the

⁽European Commission, 2016, p. 2). In the Baltic Sea Region setting, it is a common term among the stakeholders of the EU Strategy for the Baltic Sea Region (EUSBSR) and helps to distinguish between references made to the regional level, being of a subnational kind, and transnational cooperation in the specific Baltic Sea Region area.

² As acknowledged by Eurofound, the lack of jobs created by the earlier economic crisis exposed the younger and older generations to particular vulnerabilities in the job market (Eurofound, 2016, p. 2).

³ A concern which is downplayed by the EU experiencing in 2016 (for a third year in a row) solid gains in creation of new jobs, "with an overall net gain for the period 2010–16 of 6.4 million jobs, including a notable rise in "Professional, scientific, technical and other business services" (3.9 million jobs)" (OECD, 2017, p. 42). Moreover, "the decreasing trend of employment in industry has been also reversed. [...] Since 2013 over 1.5 million net new jobs have been created in industry. In manufacturing, jobs have grown at an even higher rate, predominantly in higher–paid engineering, professional and management jobs" (European Commission, 2017, p. 3). However, such positive signs are still counterbalanced by highlighting the World Economic Forum´s estimation that technological developments "will results in the loss of over 5 million jobs in 15 developed and developing economies", while only 2.1 million new jobs will be created for computer engineers and mathematicians (European Union, 2018, p. 2). Likewise, the estimates that "almost 50% of the jobs that exist today will be redundant by 2025, as artificial intelligence continues to transform businesses" (Kiss, 2017, p. 3) are kept on the horizon of the European Parliament.

introduction and highlight existing response measures, which have been already put in place to tackle the already identified challenges.

The Working Paper is prepared as a source for a wider readership interested in learning about the researchers' suggestions for future collaborative research on welfare state matters in the Baltic Sea Region setting. However, the primary purpose of the mapping exercise captured in this publication is to offer Baltic Science Network (BSN) gathered policy–makers and administrators a source of information on those suggested challenges, analytical concepts and data sets, which would best serve the Baltic Sea Region–wide future multilateral research on the welfare state.

Although the BSN Expert Group has worked for a fairly short period of time, it has fully appreciated the BSN interest in drafting action plans which would entail also certain items dedicated to the welfare state in the Baltic Sea Region specific context. The conclusions of this Working Paper are envisaged to serve as a source of inspiration.

1. Placing the Expert Group's Work in a Wider Context

Last year in Tallinn, BSN selected the welfare state as one of three areas of scientific excellence for more detailed examination (Baltic Science Network, 2017). Consequently, on the basis of the Council of the Baltic Sea States (CBSS) Secretariat's initiative to co-chair the BSN Welfare State Expert Group and responsiveness of several BSN members, a working group of researchers⁴ with various expertise in welfare state aspects was established in spring 2018. This Working Paper captures the main discussions points of the Welfare State Expert Group and presents a panoply of challenges, analytical concepts and data sources, which are suggested for further consideration when designing BSN action plans for the support of scientific excellence in the Baltic Sea Region. Before elaborating further nuances on the contents of Expert Group's discussions, this chapter provides a brief overview on the format and scope of the Welfare State Expert Group's work.

1.1. Political guidance

The CBSS Secretariat's commitment to facilitate the work on the welfare state follows the guidance expressed during the High-Level Meeting of the Representatives of the Labour Ministries of the CBSS. It defines the need to address joint challenges of common concern, and invites prioritisation of cooperation or experience exchange in the field of labour and employment in the following areas: labour mobility, demographic challenges, knowledge supply, youth employment, migration/integration and involvement into the labour market the groups of vulnerable people, including persons with disabilities (CBSS, 2017). However, this is not the only strand of the CBSS ongoing work which has enriched the overall work of the BSN Welfare State Expert Group.

The BSN Welfare State Expert Group has also benefited from insight in the work of the CBSS Vision Group. One of the members of the BSN Expert Group was also engaged in the gatherings of wise women and men dedicated to crafting suggestions for the future evolution of the CBSS.

The key underlying message delivered by the CBSS Vision Group is noted by the BSN Welfare State Expert Group as being relevant to its work on honing suggestions for

⁴ A full list of assembled experts is available in Annex I.

macro-regional welfare state research. The suggestions captured in this Working Paper are presented along the lines of aspirations to strengthen sustainable development in and of the broader macro-region, ensuring "equal opportunities for people to live the life that they choose to live and secure the same opportunities for future generations" (CBSS Vision Group, 2018, p. 2). This vision is seen in close connection with the aspirations enshrined in the high-level debates on the need to come up with better responses to reduce disparities in Europe in order to shape the future of Europe based on the values of equality and solidarity, thus offering to people a "life probably better than any other continent" (High Level Strategy Group on Industrial Technologies, 2018, p. 11).

Moreover, it is worth noting that the earlier referenced CBSS Declaration on labour issues is endorsed not solely by the representatives of the executive branch of the Baltic Sea Region, but also by the 26th Baltic Sea Parliamentary Conference (Baltic Sea Parliamentary Conference, 2017, p. 1). The consecutive and most recent 27th Baltic Sea Parliamentary Conference notes the executive branch's guidance offered during the High-Level Meeting of the Representatives of the Labour Ministries of the CBSS, stressing the topicality of "new qualifications required for future work patterns, and their linkage to education and the needs of the labour market, life-long learning and comprehensive labour market forecasting and research, including demographic challenges; guarantee equal opportunities for men and women" as part of the overall work agenda of the CBSS/Baltic Sea Labour Forum Coordination Group (Baltic Sea Parliamentary Conference, 2018, pp. 2-3). Thus, the overall work of the BSN Welfare State Expert Group should not be seen solely in the context of the specific Interreg Vb Baltic Sea Region Programme funded project, but also within a wider set of goals and collaborative initiatives overseen by the legislative and executive branches of the Baltic Sea Region.

1.2. Step-by-step approach towards prioritised research strands

To facilitate the overall thinking on what potential the BSN focus on the welfare state holds for the Baltic Sea Region, some scene-setting remarks were provided in the most recent edition of the journal "Latvia's Interests in the EU" (*Latvijas intereses Eiropas Savienībā* – in Latvian), of which Žaneta Ozoliņa, the Latvian member of the CBSS Vision Group, is the scientific editor (Šime & Legzdiņš, 2018, p. 55 – 56). The

article was written with a full awareness that "welfare state" as a term captures a multiplicity of thematic strands.

The Working Paper is prepared in order to present to the readers the mapping exercise undertaken by the BSN Welfare State Expert Group. This intellectual endeavour was structured in two parts. The first part was organised prior to the first meeting of the experts (Annex II) to lay some minimal background for joint engagement. Consequently, the second stage of the mapping exercise was launched on the basis of the rich stock of presentations and exchange of views during the first meeting held on 6 June 2018 in Tallinn (Baltic Science Network, 2018). After the first face-to-face gathering the experts further offered their perspectives which of the discussed challenges, analytical concepts and data sources they would deem to be of greatest importance for further transnational research collaboration in the Baltic Sea Region on the welfare state matters. Results of this survey then paved the way for the second meeting of the Expert Group held on 29 August 2018 in Riga with the draft Working Paper being the key item of consultations. The most recent meeting of the BSN Welfare State Expert Group was held in Stockholm on 28 September 2018, hosted at the premises of the co-chairing institution.

The work of the BSN Welfare State Expert Group took place in a compact setting – lasting approximately seven months (April – October 2018), with three face–to–face meetings funded by the BSN project, and the rest of work structured in a virtually distributed network. The BSN Welfare State Expert Group can be seen as a group of researchers committed to the Baltic Sea Region and its future prosperity who have generously lent *pro bono* their expertise to BSN.

Globalisation has been marked as one of the defining trends affecting the welfare state in the Baltic Sea Region among members of the BSN Welfare State Expert Group. It has been recognised as a pivotal process by the political leadership of the EU (European Commission & Government Offices of Sweden, 2017, pp. 2–3). Nonetheless, globalisation was left out of the thematic scope of this Working Paper, since it did not emerge as a highly prioritised topic in the second scoping survey launched among the Expert Group members.

Furthermore, the Working Paper is written with full awareness that concerns echoed among the general population about their jobs being at risk, research and production relocation, draining of capital and investments housed by the country, loss of national power and traditional cultural traits (High Level Strategy Group on Industrial

Technologies, 2018, p. 20) bear certain resemblances to the overall discourse revolving around the future of welfare state systems in the Baltic Sea Region.

The suggestions put forward in the first stage of mapping the welfare state topicalities were of considerable diversity and richness (Annex II). The prioritised thematic strands, concepts and data sources are presented in the subsequent parts of the Working Paper with full appreciation of the earlier acknowledgements that "the way in which data are collected and reported will shape how problems are perceived, with important implications for the level of support or opposition that different programmes (i.e. policy responses) receive" (Parkhurst, 2017, p. 113). Therefore, the BSN Welfare State Expert Group recognises the potential of the prioritised framings of welfare state related issues in view of the subsequent drafting, approval and implementation phases of the BSN action plans. However, the suggested ways forward in the multilateral research on welfare state in the Baltic Sea Region should not be viewed as restricting other avenues, which might be favoured by scholars. This standpoint is aligned with the importance of ensuring freedom of expression and the assessment that successful innovation must be founded on, among other matters, freedom of academic research (High Level Strategy Group on Industrial Technologies, 2018, p. 37).

The CBSS Secretariat, as the co-chair of the Expert Group, has striven to facilitate the group's discussions; by briefly presenting to the Expert Group the overall BSN work and its sister project Baltic TRAM (also endorsed during the 1st CBSS Science Ministerial), as well as Baltic Sea Labour Forum – another flagship of the Policy Area Education, Research and Employability (PA Education) of the EU Strategy for the Baltic Sea Region (EUSBSR), as well as inviting guest speakers of initiatives, such as the non-governmental organisation "Global Latvians" (official title *Ar pasaules pieredzi Latvijā* – in Latvian)⁵ which have undertaken activities with close thematic proximity to the topics discussed or suggested for discussion within the BSN Welfare State Expert Group.

Likewise, the drafting of this Working Paper has been enriched by a seminar titled "A Labour Market for All: Using Resources of Longer Lives", which was hosted by the CBSS Secretariat in Stockholm on 31 August 2018. There, further insights in the ongoing work of BSR Smart Life – another flagship of the PA Education of the EUSBSR

⁵ Guest presentation during the 2nd BSN Welfare State Expert Group's meeting held on 29 August 2018 in Riga.

- were discussed. Finally, the author of the Working Paper benefited from a training and networking opportunity "Evidence and Policy Summer School - Science, Policy and Demography" organised under the helm of the Austrian Presidency of the Council of the EU.

In addition, the BSN Working Paper serves as the primary output of the BSN Welfare State Expert Group's work, but it is acknowledged not to be the sole CBSS Secretariat's overseen publication dedicated to certain strands of the welfare state. Namely, the BSN Welfare State Expert Group notes the work of the CBSS Project Support Facility–funded project "Ageing Workforce, Social Cohesion and Sustainable Development" as another valuable source of insight for the preparation of the BSN action plans, which has resulted in a discussion paper and a policy brief presented to the relevant stakeholders at the CBSS Secretariat on 28 September 2018 (CBSS Secretariat, 2018).

The work of BSN Welfare State Expert Group also benefits from some of its members being part of the European Network for Social Policy Analysis (ESPAnet), which "is an association of academics involved or interested in the analysis of social policy in Europe" (ESPAnet, 2018). The ESPAnet Baltics – a voluntary network gathering academics and researchers from Estonia, Latvia and Lithuania (Vilnius University, 2018) – has gained specific prominence in the BSN Welfare State Expert Group's discussions, as a valued way of facilitating networking and identification of potential project partners. This subgrouping of ESPAnet is highlighted in the pursuit to strengthen the comparative (cross–country) perspective and allow for a more inclusive representation of all countries, with emphasis on the value of having a representation of all three Baltic states in the future research projects focused on the Baltic Sea Region.

1.3. Prioritised research strands in the context of evidence-based policy literature

Following a common practice (OECD, 2015, p. 14), the experts gathered by BSN are considered to bear the status of independent experts. However, the reference to the

⁶ The 2018 Evidence and Policy Summer School in Laxenburg, Austria is organised by the International Institute for Applied Systems Analysis (IIASA) and the Joint Research Centre (JRC), in collaboration with the International Network for Government Science Advice (INGSA) and the Global Young Academy (GYA) on 5 - 7 September 2018.

institutional affiliation is mentioned on certain occasions of the Expert Group's work, specifically where expertise is housed by the respective institutions and the assembled independent experts work on day-to-day basis, as well as the national research environment in which they operate. As such it must be recognised that these factors bring to bear a certain impact on the views of each expert.⁷

The BSN Welfare State Expert Group's reflections on the research areas, which carry most relevance in the Baltic Sea Region setting, are aimed at offering policy–making circles and research institutions assembled by the BSN, a new perspective on which research areas of the welfare state would benefit from further support for multilateral cooperation in the Baltic Sea Region. It is done with an awareness of the debate, advanced primarily by the evidence–based policy literature on what role science plays or should ideally play in supporting the aspirations of well–informed and balanced decision–making8 for the benefit of society; with consideration of the notable variety

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⁷ This position echoes the earlier reflections on robust science advice and its honest brokers along with the acknowledgement that "production of evidence itself is not values–free and that brokerage must include acknowledgement of inherent biases and limitations that result from how we frame questions and seek knowledge in the first place" (Allen, 2014, p. 8). This judgement is reinforced also in other publications on the subject matter, going one step further with full appreciation of the multitude of dimensions and findings science can offer on the same subject matter, once evaluated from different theoretical points of view and distilled via various methodological approaches (OECD, 2015, p. 20; Slob & Staman, 2012, p. 34). "Scientific community does not speak with a single voice: not because they are not doing their work properly, but because reality gives rise to numerous true stories" (Slob & Staman, 2012, p. 11). Such framing and production of evidence stems not only from individual beliefs and preferred schools of thinking, but also from the institutional practices and guidance provided to the researchers by the institutions they are working for.

⁸ For other insights on the topic it is worth pointing out Scharpf´s earlier published nuanced remarks: "To a greater degree than is otherwise true in the social sciences, policy research aspires to pragmatic usefulness in the sense that it should be able to provide information which (if heeded by policy makers – which is another question altogether) could contribute to the design of effective and feasible policy responses to given societal problems. At the practical end of a continuum, this calls for in–depth analyses of specific policy problems and interaction constellations that may best be done by consultants or by the in–house staffs of ministerial departments and other policy–making organizations, rather than by theory–oriented academic research. At the same time, however, such applied work would greatly benefit from being able to draw on empirically validated theoretical propositions specifying general causal mechanisms affecting the feasibility and effectiveness of policy options" (Scharpf, 2000, p. 764).

of "motivations and operational limitations of both the supply and the demand sides of science advice" (Allen, 2014, p. 10).

The BSN Welfare State Expert Group acknowledges that BSN assembles states with substantial differences in policy legacies, accompanied by varied vulnerabilities (Scharpf, 2000, p. 766), various socio–economic environments and differing roles of social partners⁹ (European Union, 2017, p. 9). Likewise, the BSN Welfare State Expert Group fully appreciates earlier reflections that "countries have different forms of government and different cultural histories of public reason; high–level scientific advice may be provided by individuals, councils or academies, or a combination" (Gluckman, 2014). Therefore, this Working Paper does not aspire to present any suggestions or certain positions about the most optimal science advisory systems specifically for welfare state matters for the countries represented in the BSN. This note should also be viewed in the context that several of the countries, which are represented among the BSN members, have nationally appointed science advisors or scientific advisory bodies.¹⁰

The Working Paper is built on an acknowledgement of the valuable role social scientists play in the public administration and education sectors by offering research insights, which hold a potential to create a better understanding about the nature of crucial social, cultural, ethical and economic challenges (Paunov, Planes–Satorra, & Moriguchi, 2017, pp. 33 – 34). This intellectual endeavour is pursued in a similar fashion as it is done by other CBSS overseen working groups, being largely based on finding a common denominator, transfer and sharing of best practices, as well as

In a somewhat similar fashion, Madelin warns against "the common reductionist notion that scientific evidence can simply be linearly translated into public policies. Instead, scientific evidence must be correctly embedded into the democratic processes by which accountable public policy is made" (Madelin, 2015, p. 27).

⁹ Including alignment with different preferences for a welfare state regime, such as the liberal, social insurance and universal (Lee & Koo, 2016) etc.

¹⁰ Some insights in the domestic debates and considered options are captured in such publications as "Future Directions For Scientific Advice in Europe", shedding more light on Finland (Raivio, 2015) and briefly touching upon Estonia and Denmark (Šucha, Wilkinson, Mair, Ahbe, & Davies, 2015, p. 47). Likewise, certain OECD publications among the examples outline the contemplation among OECD member states dedicated to the institution of a Chief Scientific advisor, as well as notes establish formats of science advice provision, for example, the German Commission of Experts for Research and Innovation (OECD, 2015, pp. 14, 41).

research being utilised in an interactive manner and for enlightenment purposes (Šime, 2018, pp. 6, 9).

This Working Paper does not offer a science advice to BSN or any other entity interested in drawing inspiration from the BSN activities and findings, since such an output would have to present a rigorous analysis of the knowns and the unknowns, which on their own do not "make a policy" (Gluckman, 2014). This is a call for caution before calling this Working Paper science policy recommendations.

BSN Welfare State Expert Group's input should also be viewed in the implicit context of the evolution or established practices of science advisory systems in the Baltic Sea Region countries. While acknowledging that "the pressure on scientists to come up with swift and clear answers for policy–makers" is witnessed now and then across the world (OECD, 2015, p. 11), neither the BSN Welfare State Expert Group faces such a pressure, nor is this Working Paper prepared as a response to a severe lack of scientific input in tackling matters crucial to the overall thematic scope of welfare state. As elaborated upon in the subsequent chapters of this Working Paper, the Member States of the EU and the CBSS have masterfully identified certain challenges, implementation gaps and proposed response measures. However, one of the means how to further advance this promising track record also in the future is an establishment of a complementary support measure for researchers who are devoted to maintaining and further developing the scientific excellence of welfare state studies with a focus on the Baltic Sea Region.

Even in the context of suggested exploration of existing longitudinal data bases (see Chapter Five, "Data Sources for the Welfare State Research"), the pure statistical data housed by these repositories do not represent a "scientific recipe book" of clear-cut statistical patterns and uncontested scientific interpretations of these patterns accompanied with corresponding solutions. Instead, the suggestions presented in this Working Paper regarding the value of certain data repositories should be viewed along the lines of the on-going scholarly efforts to promote potentially good sources for joint analysis.

Consequently, this BSN Expert Group's approved Working Paper by no means should be viewed as suggesting a specific course of action for the transnational policy—making process, since policy makers are better placed to evaluate the wider context, where this document's suggestions should be considered in further multilateral initiatives. Likewise, the BSN Welfare State Expert Group acknowledges that higher

education institutions and networks gathered by BSN would read this Working Paper bearing in mind their core guidelines as the key reference point, be it a university strategy, such as the University of Gdańsk Development Strategy Through 2020 (University of Gdańsk, 2013), or a multilaterally agreed outline, such as the Strategic Plan for the Baltic University Programme (period 2017–2020) (Baltic University Programme, 2016). Thus, the findings and suggestions captured by the Working Paper bear a potential to shape not only national but also, on certain occasions, specific institutional research agendas and engagement in multilateral research initiatives in the upcoming years.

2. Mapping the Horizon: From Global Trends to Baltic Sea Region Developments

The discussions of the BSN Welfare State Expert Group took place at a moment when migration is high on the agenda not solely in the Baltic Sea Region, testified by the BSN published explorative study "Scientific Excellence: Joint Potentials in the Baltic Sea Region" (Musiał & Schumacher, 2018, p. 97), but also internationally.

Once looking beyond the macro-region's borders, the overwhelming topicality of the subject matter is mirrored in a recent strategic analysis published by the International Organization for Migration:

"At a time of heightened concern of migration, and its increasing complexity and growing interlinkages with a multitude of other public policy issues, there is an even stronger case for maintaining the series contribution to understanding migration. However, as the profile of migration has increased, so too has its various manifestations and its increasingly complex processes, including those that are becoming more transnational in nature. It is not hard to comprehend why people may at times feel overwhelmed by what they may read in media on migration, some of which may confound and confuse readers rather than clarify in a balanced way some of the complexities that continue to emerge under the ever-widening umbrella-term of "migration"." (*World Migration Report 2018*, 2017, p. 5)

Thus, gaining a better understanding of migration dynamics (as one of the "processes of debordering" (Polakowski et al., 2018, p. 6)) and its effects on the welfare states housed in the Baltic Sea Region comes to the fore. As highlighted by the European Agenda on migration, "migration flows need to be managed [...]. Research should help improve our capacity to foresee and address the challenges of (legal and irregular) migration and to develop effective policies for integrating migrants in our society and economy." (European Commission, 2017b, p. 13) The BSN Welfare State Expert Group bears in mind that during the 2018–20 time frame migration will be addressed as a pressing challenge not via a specific focus area, but as a common thread running through several thematic areas, in other words, "through an integrated and interdisciplinary approach to issues such as root causes" of migratory patterns (European Commission, 2017b, pp. 15–16).

The outstanding resonance of the subject matter among the general public of the CBSS Member States is mirrored in some of the latest publications produced across the macro-region. Polish researchers offer a panoramic view that "presently all states around the Baltic are faced with a set of structurally similar challenges including the increasing automation of work and ageing populations" (Polakowski et al., 2018, p. 8).

In addition, in the Baltic states these trends are coupled with a shrinking size of the overall population, which has made the focus on increased productivity, including attraction of highly skilled talent even more relevant. For example, Inna Šteinbuka and Mārtiņš Zemītis have brought to wider attention the acknowledgement that Latvia's labour pool is weakened by negative net labour outflows. "The Ministry of Foreign Affairs estimates that, in the last ten years, more than 200 000 people have left Latvia, of which less than 20% have returned."¹¹ An area where both experts see room for improvement to sustain growth is improved "management of human resources (including attraction and retention of talent)" (Šteinbuka & Zemītis, 2018, pp. 152 – 153). Whereas, the Estonian researchers are pointing out that "in the upcoming years, the working age population of Estonia is going to decrease by five to six thousand people per year" (Varblane & Ukrainski, 2017, p. 33). Similar to Latvian experts, the Estonian researchers acknowledge that change in the size of population demands more productive use of the existing labour force and capital.

On the other side of the Baltic Sea, the situation is rather different due to migration playing a key role behind the population growth experienced over the last decade (Hörnström, Hansen, & Roto, 2012, p. 18; Karlsdóttir, Norlén, Rispling, & Randall, 2018, p. 10). The Nordic countries – Sweden and Norway in particular – have experienced a significant growth in the foreign-born population in the capital areas and bigger cities (Hörnström et al., 2012, p. 18; Karlsdóttir et al., 2018, p. 74). It can broadly be assumed that the deterioration of the labour market situation during the economic crisis, which impacted more migrant workers than native-born workers (Eurofound, 2016, p. 16), was a greater issue for the overall Scandinavian labour

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¹¹ A lion's share of the outward migration was triggered by the economic crisis, which is testified by the following figures: "Latvia lost 10 per cent of its active workforce, some 120,000 people, between 2009 and 2011, a total similar to those who had emigrated in the 2000–2008 period and which amounts to roughly a quarter of a million people, 9 per cent of Latvia's 2000 population" (Auers, 2015, p. 191).

market, than the three Baltic states; which in the pre-crisis years did not experience a similar influx of labour force.

However, such diverging trends between the Western and Eastern shores of the Baltic Sea should not provide a misleading impression that some states are more welcoming than others towards people who would like to call either the macro-region as a whole, or a specific country based in the macro-region, their home.

One of the best examples testifying to this spirit emanates from Estonia, where the sustainable development of the country is seen as being closely tied to the government acting "as an insurance policy, where nobody is left without an education, job or basic needs, without regard to their ideas, beliefs and place of origin, as long as the person is a carrier of our culture and language" (Kitt, 2017, p. 49). The Baltic Sea Region is an area in Europe characterised by a readiness to explore the capacities of welfare states to facilitate the integration of newcomers.

In a wider geographical context beyond the Baltic Sea Region, "population projections estimate a loss of more than 19 million people in the EU labour supply between 2023 and 2060" (*World Migration Report 2018*, 2017, p. 73). Thus, the earlier outlined calculations of a decrease of the overall size of population in certain countries of the Baltic Sea Region is not a unique forecast, if the overall European prognosis, recognised also by Eurofound (Eurofound, 2016, p. 11), is taken into consideration. What is important in this situation is that the key advisory circles of European industry experts are addressing the labour market matters (among other industry-related aspects) with full awareness about Europe's relative share of the world population being in decline (High Level Strategy Group on Industrial Technologies, 2018, p. 5). This remark is made acknowledging its impact also on the future industrial development in the Baltic Sea Region, given it is one of the building blocks of the macro-region's prosperity.

3. Promoting Researcher Mobility and Attractive Labour Markets for Highly-Skilled Workers

The CBSS Member States view research and its ties to other domains holistically, with clear interlinks between various domains forming the CBSS long-term priority "Sustainable and Prosperous Region".

Moreover, the CBSS Member States view research cooperation not only as a matter of cross-cutting importance, but also estimate the development of the national research capacities within an international context. In line with these values, Estonian researchers point out that more effort should be made to ensure that the work environment in Estonia, and specifically, the national research and development (R&D) system, should correspond with the expectations of young researchers who are used to working in internationally acclaimed research environments (Koppel, 2017, p. 11; Lukner, 2017, p. 47).

It is a rather timely remark, if acknowledgements of the competitive context of a broader research domain, are taken into consideration. As outlined in the European Strategy Forum for Research Infrastructures´ (ESFRI) setting, each research infrastructure (RI) "is involved in an intellectual competition at national or international level – depending on its ambitions – in which excellence is the main driver. Competition to attract the best top–level users producing prestigious papers, to recruit the best operators, to get the best experimental components, etc. is the major objective of the RI managers aiming to valorise considerable investments made by the public sector" (ESFRI Innovation Working Group, 2018, p. 12). This ESFRI quote is offered also bearing in mind that BSN has chosen to affiliate its thematic strands to the RIs, most notably, through its photon and neutron science expert group, a peer consultative body of the BSN Welfare State Expert Group.

The MERIL (Mapping of the European Research Infrastructure Landscape) publications serve as another source of reference mirroring European aspirations to encourage brain circulation: "an international framework to facilitate the training and mobility of staff at RIs would be highly desirable at all stages of RI's realisation (planning, implementation and operation)" (European Science Foundation, 2013, p. 15). This notion well serves BSN's overall aspirations to explore which targeted support measures should be undertaken, in order to support science excellence via the mobility of researchers.

At first glance such struggles might seem rather odd, especially once recalling the BSN-delivered explorative study (Musiał & Schumacher, 2018), which documented the impressive scope of excellence centres, research and training facilities found in the Baltic Sea Region. So, in view of the suggested complex system optimisation to achieve a combination of "high and widespread productivity with a high level of environmental sustainability" across the European industrial sector (High Level Strategy Group on Industrial Technologies, 2018, p. 27), upskilling the workforce housed in the macro-region might not seem such a challenge after all.

One of the answers to such enduring concerns about the lack of demanded workforce, is that Europe does not profit from all of the brain power it develops. The OECD-obtained data about the global migration of the scientific talent pool, testifies that "over the last 15 years, almost 36,000 more scientific authors left the EU than entered. This can be explained in part by the return mobility of individuals who arrived as students before becoming published scientists" (OECD, 2017, p. 71). The overall outflows of scientists are being witnessed among several CBSS Member States (OECD, 2017, p. 71). While these statistics do not provide a clear-cut picture about the flows of graduates after the completion of the tertiary education stage, it offers one of the potential explanations as to the "brain drain" issue and why the retention of talent has gained certain resonance in the Baltic Sea Region.

As such, the BSN Welfare State Expert Group, as a contributor to the BSN-organised evaluation of the existing mobility tools, highlights the importance of the focus of BSN on mobility in research and higher education structured under the Work Package 4. Since this Working Paper is developed under the BSN Work Package 3 (dedicated to research and innovation excellence), then BSN Welfare State Expert Group defers from further engagement in mobility matters. Instead this Working Paper should be read by the BSN members in view of the forthcoming suggestions of mobility funding instruments prepared by the key actors engaged in the BSN Work Package 4.

Besides the earlier noted statistics on general population trends, the growing support for researchers' mobility should be highlighted, which serves as one of the enduring stimulus to certain migration patterns. Mobility of researchers is also recognised in the Horizon 2020 setting. The Programme 2018–20 explicitly states: "Migration and more broadly the mobility of highly qualified people (including researchers) offer great opportunities to meet challenges faced by the EU (skills shortage, demographic change, etc.)." (European Commission, 2017b, p. 11)

Although researchers' mobility does not constitute a lion's share of the overall labour mobility witnessed in the Baltic Sea Region and Europe, this note is of relevance due to the overall focus of BSN on multilateral research and higher education cooperation for the benefit of scientific excellence produced in the Baltic Sea Region. Moreover, this is an aspect of the labour force worth exploring in light of the macro-region's ability to attract a highly skilled workforce or students interested in obtaining tertiary education to enter this category of labour market.

CBSS Member States such as Germany already have been noted as benefiting from "an emerging European labour market for high-skilled jobs" (Butter et al., 2014, p. 65). To be more specific, while Germany attracts international students in engineering, Finland is a popular upskilling destination due to its offered higher education in information and communication technologies (OECD, 2017, p. 126). These two examples serve as an internationally acknowledged brain gain potential achieved by certain CBSS Member States.

As noted earlier, while certain parts of the Baltic Sea Region demonstrate capability to attract young promising minds ready to obtain new competencies, such recognition should not lull the macro-region into complacency about its capacity to sustain its research performance. The Baltic Sea Region is far from being the only area committed to strengthening its scientific excellence, and the positive impacts such an asset brings to the wider society.

The European Parliament's think tank has used a rather pronounced language to describe some of the developments affecting the pool of human resources housed by Europe. A strong statement on the "global war for talent" was announced just four years ago in the context of labour force employment and retention in the Key Enabling Technologies 'sectors triggered by the worldwide competition (Butter et al., 2014, p. 68). More recently a similar message was echoed also by industrial sector experts referring to "the global race for talent", whereby one of the causes stems from the increasing difficulty of the business sector to find employees with adequate skills (High Level Strategy Group on Industrial Technologies, 2018, p. 15). The quest for well–trained potential employees has also emerged as one of the issues characterising the wide spectrum of topics captured by the welfare state as an umbrella term.

4. Labour Market Changes in the Context of the Fourth Industrial Revolution and Digital Transformation

Life-long learning and continuous investment in training is another trend which increases in importance due to the acceleration of technological development and industrial transformation (Butter et al., 2014, p. 66; European Commission, 2017, pp. 6–7; OECD, 2017, p. 110), as well as ageing workforce (Hörnström, Hansen, & Roto, 2012, p. 10), slowing growth in labour productivity and efforts to tackle inequality¹² and job polarisation (High Level Strategy Group on Industrial Technologies, 2018, pp. 19, 41).

Most recent OECD findings also unveil intergenerational differences in problem-solving skills.¹³ These issues need proactive solutions and are only resolved when addressed by various governance levels. Better integration of certain groups in the

¹² Acceptance of rising inequalities coupled with more individual and less state responsibility for welfare, falls in income and job insecurity have been identified as some of the trends characterising the three Baltic states, which were unleashed along the earlier implemented transition to the market economy (Auers, 2015, pp. 193–194).

While women in certain parts of the Baltic Sea Region acquire higher education levels than their male peers, even in the Nordic setting, which is characterised by an overall global leadership in closing the gender gap (World Economic Forum, 2017, p. 8), such qualifications don't necessarily translate to an equal pay scenario (Hörnström et al., 2012, p. 10).

Last but not least, health is a domain of inequalities gaining prominence along the aging of society (Hörnström et al., 2012, p. 24).

^{13 &}quot;Across all countries, younger workers exhibit better problem-solving skills than older workers. Intergenerational differences are often higher for women than men." (OECD, 2017, p. 106) Thus, providing older generations with such essential soft skills as problem-solving, leadership, adaptability, creativity and innovation and the so-called "entrepreneurial competences" is relevant for a continuous and successful engagement in the labour force (DG GROW, 2018, p. 15; International Labour Organization, 2017, p. 11) and can be obtained outside formal education structures (European Commission & Government Offices of Sweden, 2017, p. 3). However, in contrast to older generations, certain parts of the European youth face a challenge of receiving an education poorly aligned with the skills required by employers, where "graduates of arts and social sciences experience higher rates of mismatch and over-education" related to the deficiency in certain parts of the education sector being "slow to adapt to changing demands for entry-level qualifications in the labour market" (Kilhoffer, Beblavý, & Lenaerts, 2018, p. 2). Thus, the EU approach in stressing the need to provide young generations with "relevant skills" and "best education and training" comes as an encouraging message (European Commission & Government Offices of Sweden, 2017, p. 3; European Union, 2017, p. 6).

labour market, especially young professionals, older workers and women, is seen as one of the ways to respond to the demographic shifts and address the shrinking workforce (Eurofound, 2016, p. 14; European Political Strategy Centre, 2016, p. 6). The European Commission acknowledges that "increased productivity depends on investment, innovation, education and skilled labour force" (European Commission, 2017, p. 1).

Taking into account some of the earlier examples in this Working Paper, the BSN Welfare State Expert Group recognises a close link between the sustainability of welfare states housed by the Baltic Sea Region, and the constant need to develop targeted approaches in order to benefit from the housed talent pool. As such the Group offers suggestions for tailored interventions beyond such generalised suggestions, as focus on equipping the future labour force with T-shaped skills (European Political Strategy Centre, 2016, p. 9).

Likewise, BSN Welfare State Expert Group notes the discussions on the "future of work" facilitated by the International Labour Organization have resulted in reflections on the potential benefits a reduced speed of automation might deliver in terms of offering people more time to adjust to the new realities of the labour market and the work environment (International Labour Organization, 2017, p. 6).¹⁴ The urgency of the matter, and feasibility of this suggested approach in the Baltic Sea Region–specific setting remains to be clarified during the consecutive research steps.

The Working Paper is being drafted with consideration for the trends affecting the EU, where younger generations are facing considerable challenges in joining the labour market¹⁵: "The employment of younger workers has stagnated over the last decade. In 2016, 6.3 million young people aged 15–24 were not in employment, education or training. Intergenerational fairness is becoming a real concern. Without further action, there may be a detrimental impact on output growth, competitiveness, the sustainability of welfare systems, future generations' pension entitlements, their access to healthcare and their future welfare" (European Commission, 2017a). In the

¹⁴ It is worth pointing out that among the areas being rather immune to the loss of jobs due to automation are child care, care for elderly, social work and mental care (European Political Strategy Centre, 2016, p. 5).

¹⁵ Youth labour market outsiderness (YLMO) is a term used to capture both the struggles of young people in finding a job, as well as facing a higher likeliness of being employed in precarious jobs (Kilhoffer, Beblavý, & Lenaerts, 2018, p. 8) or jobs with lower employment security, if compared to other age groups (Eurofound, 2016, p. 11).

Baltic Sea Region context, this trend translates as unemployment in general, and youth unemployment in particular, remaining as some of the challenges in view of successful implementation of Sustainable Development Goal 8 "Decent Work and Economic Growth". The macro-regional governance setting has been suggested as one of the appropriate environments to address the issue (Beyersdorff and Lanthén, 2018, pp. 20–21), of which BSN is an integral part.

However, when it comes to the integration of older workers in the job market, several CBSS Member States excel internationally with their excellent performance. The Golden Age Index prepared by PriceWaterhouseCoopers (PwC), highlights Iceland as an international leader (Wood, 2018), as well as Sweden and Estonia as some of the best performing countries in increasing the employment rates of older workers (PwC, 2018, p. 3). BSN Welfare State Expert Group notes this promising track record as a good basis for further work towards developing effective measures to support lifelong learning and sustained engagement in the active labour force throughout various stages of life.

5. Data Sources for the Welfare State Research

The researchers assembled in the consultative forum of BSN stress the importance of RIs¹⁶ for effective scientific cooperation. The compressed timespan of the Welfare State Expert Group's work does not offer room for a more nuanced debate on the role of RIs in developing an innovation ecosystem across Europe. The potential role that distributed RIs could play in this regard (ESFRI Innovation Working Group, 2018, p. 17) is also left outside of the Working Paper's scope.

Nevertheless, the Expert Group notes the presence of social sciences repositories and data bases as an essential precondition for fruitful scientific cooperation. Among the data sets most valued by the BSN Welfare State Expert Group and prioritised for future joint multilateral research engagements are:

- a) Scientific microdata surveys on living conditions, well-being, attitudes, labour market, socio-demographic statistics: European Social Survey (ESS), Survey of Health, Ageing and Retirement in Europe (SHARE), International Social Survey Programme (ISSP), Eurobarometer; European Values Study (EVS), World Values Survey (WVS), Generations & Gender Programme (GGP) etc. The longitudinal and comparative nature of some of these databases allows cross-national investigation of the impact of policies on society with respect to different sociodemographic groups;
- b) Data on policies and institutions, e.g., **EU Mutual Information System on Social Protection** (MISSOC), **Social Policy Indicators** (SPIN), **Comparative Welfare Entitlements Dataset** (CWED 1 & CWED 2) are essential sources of comparative welfare analyses, especially when linked with individual survey data. Therefore, the participation in these initiatives are essential. Many of those databases are

¹⁶ The understanding of RIs emanates from the MERIL-offered definition: "a European Research Infrastructure is a facility or (virtual) platform that provides the scientific community with resources and services to conduct top-level research in their respective fields. These research infrastructures can be single-sited or distributed or an e-infrastructure and can be part of a national or international network of facilities, or of interconnected scientific instrument networks. The infrastructure should furthermore:

Offer top quality scientific and technological performance that is recognised as being of 'more-than-national relevance';

Offer access to scientific users from Europe and beyond through a transparent selection process and the basis of excellence;

[•] Have stable and effective management" (European Science Foundation, 2013, pp. 10-11).

organised and maintained via scientific cooperation networks such as **European Labour History Network** (ELHN) coordinated by the Swiss Social Archives (MERIL, n.d.), **International Network on Leave Policies & Research** (LP&R network) etc.:

- c) Social scientists benefit greatly also from surveys organised by EU statistics offered by Eurostat on income and living conditions (through EU SILC) and the labour force (available via EU LFS) and their modified versions like EUROMOD, Luxembourg Income Study (LIS) Database and the Luxembourg Wealth Study (LWS) Database etc.:
- d) National social science archives are the forerunners of open data initiatives in social sciences and should be promoted as data quality centres and repositories of national surveys.

The BSN Welfare State Expert Group also acknowledges existing social science data archives aggregating data from various research projects as **GESIS** – **Leibniz Institut für Sozialwissenschaften** and **Consortium of European Social Science Data Archives** (CESSDA). The BSN Welfare State Expert Group also recognises the value of the **OECD Social Expenditure Database** (SOCX), which offers data on public social expenditure, as well as labour statistics offered by the International Labour Organization.

Moreover, among the distributed RIs specifically highlighted by the BSN experts, is the Horizon 2020 funded InGRID portal offering relevant data for further exploration on the factors behind "social in/exclusion, vulnerability-at-work and related social and labour market policies" (InGRID, n.d.).

The added value of the highlighted data sources for welfare state research is inseparable from the responsibility of the states, to guarantee a systematic collection and regular updating of these sources, as well as making them available for scientific collaboration. The first priority should be to ensure sufficient quality input for the existing EU level repositories and aim at exploiting the full potential of already established sources, rather than proposing the creation of new monitoring programmes.

The sources of data listed above are mainly of a quantitative nature. In some cases, the research problem at hand might only be adequately addressed with the help of qualitative data and methods (e.g., using in-depth interviews, focus groups, or participant observation). Often quantitative and qualitative data complement rather than replace each other. Thus, in future transnational research efforts there should

be space for the collection and analysis of comparative qualitative data capable of enriching the knowledge produced on the basis of quantitative survey and administrative data.

Finally, the readers are reminded of earlier conclusions drawn during the 2014 conference "Science Advice to Governments" that "formal channels of science advice are appropriate for longer-term data gathering, analysis and reflection and thus suited for protracted and complex issues" (Allen, 2014, p. 6). While the BSN Welfare State Expert Group does not dispute that the challenges faced by the welfare states across the Baltic Sea Region might be characterised by facing protracted and complex issues, the duration of the Expert Group's work and its setup does not mirror a formal science advisory committee, which would be needed to oversee a longer-term data gathering exercise. Therefore, the BSN Welfare State Expert Group does not judge itself to be well placed to identify with an overwhelming certainty those detailed issues to be addressed during the forthcoming research projects. Instead BSN Welfare State Expert Group prefers to highlight the importance of the availability of proper data sets. Accessible and high-quality data are an inherent component of the overall successful implementation of the forthcoming macro-regional research collaboration projects, especially those where the focus would be on the research advancement and scientific value.

6. Conclusions and Recommendations For Further Action

Exploration of welfare state research with a focus on the Baltic Sea Region is concluded with a list of prioritised challenges and analytical concepts, as well as suggested data repositories which would serve well interests of the macro-regional research specialised in welfare studies.

6.1. Challenges and Analytical Concepts

The BSN Welfare State Expert Group concludes its work by suggesting a further exploration of a number of **challenges and analytical concepts** during future multilateral research focussing on the welfare state in the specific setting of the Baltic Sea Region:

a) Demographic shifts accompanied by various vulnerabilities of different age groups of the active and non-active population. Although the demographic situation in the Baltic Sea Region countries vary, all countries are characterised by four major challenges: an ageing population, diminishing share of young people of the general population, immigrant flows, and a gender imbalance in various age groups.

Firstly, population ageing is driven by increasing life expectancy and low fertility, resulting in considerable consequences on the age dependency ratio, which calls for better approaches in integrating older generations in the active labour force. Some CBSS Member States present an exemplary track record in integrating 50+ aged workers into the labour market. Good practices adopted by these countries are worth examining in greater detail to offer some inspiration for other countries seeking effective policy responses for retention of older age groups in the active labour force.

Secondly, young people are facing considerable struggles in joining the active labour force for various reasons distinctively different from those faced by the older generations. Research on the Baltic Sea Region specific challenges faced by the two (youngest and oldest) labour force groups hold a value in offering insight for policy makers interested in understanding the root causes and addressing the remaining challenges. Moreover, to find potentially promising solutions to future solutions, it is useful to think of the current generation's children and young people as the elderly of tomorrow. This explains why the sub-title of this working paper refers

to a "life course perspective". In light of recent reforms to social protection systems, what should young people do today to ensure that they will have an adequate income when they reach retirement? How can they increase the likelihood of remaining employable for as many years as possible and what can welfare states do to support them?

b) Social inequalities of various sorts (such as income, education, employment and health) are also suggested for further exploration among researchers interested in the specific dynamics of the Baltic Sea Region. The mapping exercise performed during the preparation of this Working Paper clearly outlines that among the Baltic Sea Region countries, the causes of emerging inequalities are diverse. They stem from different socio–economic changes affecting these countries during the recent history, as well as various results of the policies applied in response to the earlier faced issues. In the wake of the economic crisis, a better integration of migrant workers in the labour force remains a matter for further consideration, examination and action.

Furthermore, women face particular challenges on the labour market. They constitute a group that is more prone to non-standard, part-time employment and a potential entrenchment in the role as primary family caregiver. Thus, research on the socio-economic implications of dual-earner/dual-carer model is another matter which is worth exploring in further detail. Likewise, the exploration of cultural stereotypes and gendered perceptions of certain science and technology domains might provide insights in the progress and potential shortfalls of policy responses tailored to address the factors potentially limiting female engagement in the labour force.

c) New skills are required in the contemporary and future labour market related to changes in the production in the wake of the Fourth Industrial Revolution and digital transformation. New manufacturing technologies – such as 3D printing, robotisation and automation of a number of production stages – combined with digitalisation and evolution of global value chains, will considerably alter the future job market and the skill–set required from the labour force. Research on the niche competencies, which should be most urgently introduced in the life–long learning courses tailored to respond the initial stages of the Fourth Industrial Revolution and digital transformation, might help to address not only the focus of the industrial sector on increased productivity but would also offer mitigatory

responses to the vulnerabilities faced by certain parts of the labour force. Such research focus would correspond to some of the latest prioritised issues among the policy-makers.

- **d) Solidarity** of various sorts, such as between social classes, generations, various countries, regions within countries, local areas and communalities need to be addressed and enhanced. Solidarity gains prominence along the overall concerns raised across the Baltic Sea Region about various sorts of inequalities;
- e) Welfare state regimes should be explored in terms of differences between the roles and responsibilities allocated to different actors. Better understanding of various notions of the role of state, market, community, family and individual among states of the Baltic Sea Region is seen as a highly important aspect for future research;
- f) A sustainable welfare state via exploration of notions of eco-social or green welfare state and greater emphasis on green/low carbon/circular economy. Moreover, the concept bears a potential to enrich the overall research findings feeding into the debate around the implementation of the CBSS Baltic 2030 Action Plan.

The future research on the welfare state matters in the Baltic Sea Region setting should pay attention to explaining the notions captured by the discourses revolving around various terms (such as the life course and life transitions approach, sustainable work, lifecycle approach, future of work etc.), as well as to educate the reader on the nuances beyond the brief remarks offered in this Working Paper.

6.2. Data sets

Data acquisition for empirical research should be grounded in the existing data bases and their systematic updating with required high-quality inputs. BSN Welfare State Expert Group recognises that each of the data repositories named in the earlier passages of the Working Paper holds a certain (and often unique) value for empirical explorations, among which the most valued data sets for future examination of the welfare state development trends are the following:

a) **Public social expenditure** is available for exploration via Eurostat and OECD Social Expenditure Database;

- b) Living conditions and labour force statistics may be explored via Eurostat, the data acquired by OECD and International Labour Organization;
- c) **Public attitudes and behavioural surveys** may be accessed via sources such as European Social Survey (ESS), International Social Survey Programme (ISSP), Eurobarometer, as well as Survey of Health, Ageing and Retirement in Europe (SHARE).

The sources of data listed above are mainly of a quantitative nature. In some cases, the research problem at hand might only be adequately addressed with the help of qualitative data and methods. Thus, in future transnational research efforts there should be space for the collection and analysis of comparative qualitative data capable of enriching the knowledge produced on the basis of quantitative survey and administrative data.

For more nuanced indications of the exact data repositories of particular relevance to exploring living conditions, well-being, attitudes, labour market, socio-demographic statistics, data on policies and institutions, social inclusion and/or exclusion, and vulnerability at work, the reader of this Working Paper is invited to turn a few pages back and review the listing offered in the Chapter Five "Data Sources for the Welfare State Research".

The suggested approach to data sources during upcoming research projects supported by BSN action plans would not only exploit the full potential of the existing data sets, but also facilitate integration of all three Baltic states (Estonia, Latvia and Lithuania) in the international researcher community and its activities. Such a focus on better integration of researchers from the three Baltic states in the transnational and international research landscape, should be viewed in the context of the need to develop and maintain appropriate research capacities required for welfare studies, including sufficient capacity to deliver the required data to be included in established international comparative surveys.

The BSN Welfare State Expert Group recognises that a good number of challenges and analytical concepts suggested for multilateral research in the Baltic Sea Region setting, are in line with the policy initiatives and their support measures launched fairly recently by the EU on the occasions of the **Social Summit for Fair Jobs and Growth** held on 17 November 2017 in Gothenburg. Therefore, the BSN Welfare State Expert Group sees the suggested research strands as providing good grounds for exploring

how the initiatives and support measures 17 aligned with the goals set out in the **European Pillar of Social Rights** will resonate among the population in various aspects.

The recently introduced social policy measures will require evaluation of their impact, exploration of the success factors of the good practices and further suggestions on the required adjustments of future support measures, if any. Multilateral research cooperation projects are the suggested means on how to perform such analysis. The research agenda captured in the concluding part of this Working Paper is well placed to address such upcoming needs for thorough and multifaceted scholarly analysis, serving as a basis for evidence–informed welfare state policies addressing the intricacies of the future of work.

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¹⁷ A concise listing of these measures is offered in the paragraph eight of the Council Conclusions adopted under the auspices of the Bulgarian Presidency of the Council of the EU (Council of the European Union, 2018, p. 4).

Annex I

Members of the Baltic Science Network Welfare State Expert Group

Name & Surname	Role in the Baltic Science Network or the Welfare State Expert Group
Daria Akhutina	Representing the co-chairing institution of the BSN Welfare State Expert Group, CBSS Secretariat
Zane Šime	Representing the co-chairing institution of the BSN Welfare State Expert Group, CBSS Secretariat
Mi Ah Schøyen	Chair of the BSN Welfare State Expert Group
Mare Ainsaar	Estonian expert to the BSN Welfare State Expert Group
Ave Roots	Substitute to the Estonian expert to the BSN Welfare State Expert Group ¹⁸
Sofia Rekord	Russian expert to the BSN Welfare State Expert Group
Jurijs Ņikišins	Latvian expert to the BSN Welfare State Expert Group
Līga Rasnača	Substitute to the Latvian expert to the BSN Welfare State Expert Group ¹⁹
Kazimierz Musiał	Polish expert to the BSN Welfare State Expert Group
Włodzimierz Anioł	Substitute to the Polish expert to the BSN Welfare State Expert Group ²⁰
Tobias Etzold	Baltic University Programme nominated expert to the BSN Welfare State Expert Group
Eckhardt Bode	Substitute to Christine Bertram, Ministry of Education, Science and Cultural Affairs of the Land of Schleswig-Holstein nominated expert to the BSN Welfare State Expert Group ²¹

¹⁸ Engagement during the first Expert Group meeting in Tallinn on 6 June 2018.

¹⁹ Engagement during the first Expert Group meeting in Tallinn on 6 June 2018.

²⁰ Engagement during the first Expert Group meeting in Tallinn on 6 June 2018.

²¹ Engagement during the second Expert Group meeting in Riga on 29 August 2018.

Annex II

The Results of the First Expert Survey on the Key Topics of Relevance to the Welfare State Research in the Baltic Sea Region Setting²²

Estonia

Mare Ainsaar, Senior Research Fellow in Sociology and Social Policy, Institute of Social Sciences of the University of Tartu

The particularity of the Baltic states is the importance of demography and population related challengers in future. From the broad range of different population related issues, the following are suggested for a more detailed examination:

- migration (both emigration, immigration issues and the most effective approaches to integrate immigrants (to labour market);
- children and family and family-wellbeing policies (related to work and family life reconciliation).

Suggested topic for a more thorough examination: study the sources of societal trust and cooperation on a society level.

Ringa Raudla, Professor of Public Finance and Governance, Ragnar Nurkse Department of Innovation and Governance, Tallinn University of Technology

Suggested topic: developments in the pension system. There have been considerable reforms of the pension systems, including the creation of the second pillar and the changes of the first pillar (including the indexation formula and the connection between current contributions and future pensions). The sustainability of the reforms and implications for the future still need to be assessed more systematically.

Latvia

Jurijs Ņikišins, Researcher at the Faculty of Social Sciences of the University of Latvia nominated by the Latvian Ministry of Education and Science

²² The Baltic Science Network gathered experts, are considered to bear the status of an independent expert. However, the reference to the institutional affiliation is mentioned, whereby the expertise housed by respective institutions, and where the assembled independent experts work on day-to-day basis, is recognised to bear a certain impact on the views of the respondent.

Demographic challenges. The Baltic Sea Region is comprised by both growing countries and nations in decline, including the three Baltic countries having the poorest prognosis. Demography is a factor directly influencing labour market, sustainable and harmonious development of regions, as well as securing the appropriate welfare level, especially for those experiencing economic hardship.

Demographic or population decline can be defined easily and straightforwardly as any great reduction in a human population such as long-term demographic trends (e.g. due to fertility-mortality ratio, migration, or other factors).

Germany

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Suggested topic: How to best enhance workers' labour market resilience in the digital age?

Digital technologies have been, and will be challenging workers' labour market resilience, notably their job security and earnings prospects. The digital transformation may not only aggravate income and labour market polarisation, fuelled by income losses and increasing technological unemployment. It may also aggravate social and political polarisation, fuelled by increasing sentiments of social disintegration and disempowerment of those who feel left behind. Detailed research is warranted on:

- (i) the types of skills that will gain in importance in the digital age,
- (ii) the extent to which workers whose jobs are threatened by digital technologies need re-skilling,
- (iii) how employers and public education and training programs may enhance workers' labour market resilience.

Internationally comparative studies may additionally identify best practices in labour market institutions and those labour market policies conducive to enhancing workers' labour market resilience.

Recent studies analyse the detailed labour market consequences of digitalisation theoretically and empirically.²³ However, by conceptualising skills in the traditional, rather simplistic way – namely in terms of educational attainment – these studies provide insufficient guidance for policies that enhance workers' labour market resilience. They need to be extended by including several skill components to account for the fact that digitalisation further reduces the scope of skills that only humans can supply. They should, in particular, put more emphasis on the variety of the so–called "soft", non–cognitive skills. These skills are shaped by the personalities of individuals and influence their actions and interactions.²⁴ They include characteristics such as self–confidence, curiosity, motivation, judgement and empathy and influence the ability to communicate, work in teams, provide leadership and follow social norms, among others.

Poland

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Due to the demographic challenges (longer life-expectancy, declining birth rate) it is suggested to take a closer look at and develop better strategies for the ageing population, their quality of life and their re-integration in the economic cycles. Possible discussion of "silver economy" and examples of best practice can be seen in Nordregio publication: NordRegio 2012 How to Meet Demographic Changes: A Handbook of Inspiration and Actions in Nordic Municipalities and Regions (Hörnström et al., 2012). An efficient tackling of this issue may result in alleviating the problem of youth unemployment since more and more people will be needed in the care and rehabilitation sector.

Another welfare society issue in the BSR that needs a region-wide attention, is that of labour mobility. The regulation of the minimal conditions and standards that should be provided, and supporting of the regional labour exchange office could be an ambitious but potentially commonly acceptable agenda.

https://www.sciencedirect.com/science/article/pii/B9780444534446000018

²³ e.g., Acemoglu and Restrepo, 2017, www.nber.org/papers/w24196; Acemoglu and Autor, 2011, https://www.sciencedirect.com/science/article/pii/S0169721811024105

²⁴ see e.g. Almlund et al., 2011,

Russia

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Specific topic of the welfare state studies to be elaborated in further research in the Baltic Sea Region (BSR) context: Creation and development of *cross-border*, *cross-sectoral ecosystems* linking business, science and education in the Baltic Sea Region, providing balance between sustainability and dynamism of the Baltic Sea states, developing more secure local labour markets. Special focus should be made on the Foresight practices for ecosystems development. In this focus it is also important to incorporate growing industrial and innovative potential of the Russian North–West (North–West Federal District) into trans–border business ecosystems in the BSR, which could revitaise mature businesses of the BSR states. These topics fully match the priority goal of multi–stakeholder partnerships and an inclusive approach to economic growth of the BSR.

Baltic University Programme

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In order to be really able to achieve concrete results on the regional level, all future discussions on current and future challenges for the welfare state (demography, migration etc.) and related developments should be carefully and firmly embedded within the existing structures of regional cooperation around the Baltic Sea. Deriving from this, how could, and should regional cooperation (going beyond the mere, although useful but sometimes insufficient exchange of experiences and best practices in which member states often seem keen not to give away any national responsibilities) in this sensitive field concretely look like? What has to be done on the national level, what could be done on the regional level?

CBSS Secretariat

1. **Future work,** new qualifications required in this regard, getting better linkage between education (both formal and informal) and labour market's needs, which closely relates to the importance of the comprehensive labour market forecasting and research, including demographic challenges.

- 2. **Labour mobility,** the transformation from "brain drain" to "brain circulation" the movement of skills and talent that is advantageous to national economies and to the entire competitiveness and welfare of the Baltic Sea Region.
- 3. Sustainable working life throughout the whole lifetime ageing labour force, mutual knowledge transfer between younger and older professionals; lifelong learning as an effective tool.
- 4. To take into consideration the outcomes from the Study on "Increasing the Labour Force Participation of Older People in the Baltic Sea States: Challenges and Chances, that will be carried out in the framework of the CBSS-supported project "Ageing Workforce, Social Cohesion and Sustainable Development Political Challenges within the Baltic Sea Region" with interim results discussed on 20 June 2018 and to be finalised at the beginning of September.

Bibliography

- Allen, K. (2014). Science Advice to Governments Conference. Systhesis Report.

 Auckland. Retrieved from http://www.pmcsa.org.nz/wpcontent/uploads/Synthesis-Report_Science-Advice-to-Governments_August2014.pdf
- Auers, D. (2015). Economic, Social and Welfare Issues. In *Comparative politics and government of the Baltic states: Estonia, Latvia and Lithuania in the 21st century* (pp. 154–194). New York: Palgrave Macmillan.
- Baltic Science Network. (2017). BSN Rests Committed to Spreading Excellence.

 Retrieved January 15, 2018, from http://www.balticscience.org/index.php/news-and-press-releases/bsn-press-releases/67baltic-science-network-rests-committed-to-spreading-excellence
- Baltic Science Network. (2018). Welfare State Expert Group Meets in Tallinn.

 Retrieved August 2, 2018, from http://www.balticscience.org/index.php/news-and-press-releases/bsn-press-releases/94welfare-state-expert-group-meets-in-tallinn
- Baltic Sea Parliamentary Conference. Conference Resolution Adopted by the 26th Baltic Sea Parliamentary Conference (2017). Hamburg: Baltic Sea Parliamentary Conference. Retrieved from http://www.bspc.net/wp-content/uploads/2017/09/final-version4adopted.pdf
- Baltic Sea Parliamentary Conference. Conference Resolution adopted by the 27th Baltic Sea Parliamentary Conference (2018). Retrieved from http://www.bspc.net/res-27-bspc-final/
- Baltic University Programme. Strategic Plan for the Baltic University Programme: Period 2017 2020 (2016). International Programme Board. Retrieved from http://www2.balticuniv.uu.se/bup-3/index.php/public/about-us/strategic-plan/file?download=1
- Beyersdorff, S., & Lanthén, E. (2018). *Baltic 2030: Bumps on the Road to 2030*. Copenhagen & Stockholm. Retrieved from http://www.cbss.org/wp-content/uploads/2018/06/WEB_Baltic-2030_Bumps-on-the-Road_FINAL.pdf
- Butter, M., Fischer, N., Gijsbers, G., de Heide, M., van der Zee, F., & Hartmann, C. (2014). *Horizon 2020: Key Enabling Technologies (KETs), Booster for European Leadership in the Manufacturing Sector*. Brussels. Retrieved from http://www.europarl.europa.eu/RegData/etudes/STUD/2014/536282/IPOL_ST U(2014)536282_EN.pdf
- CBSS. CBSS Ministries of Labour Declaration (2017). Berlin: CBSS. Retrieved from http://www.cbss.org/cbss-labour-ministers-meeting-take-place-berlin-15-june-2017/
- CBSS Secretariat. (2017). Realizing the Vision: The Baltic 2030 Action Plan. Retrieved

- from http://www.cbss.org/wp-content/uploads/2017/06/Baltic-2030-AP-Final-approved-by-the-CBSS-Foreign-Ministers-20.06.2017.pdf
- CBSS Secretariat. (2018). Balticness Light. CBSS Secretariat. Retrieved from https://mailchi.mp/cf7f99bb3f84/balticness-light-newsletter-june-2018
- CBSS Vision Group. (2018). *Vision for the Baltic Sea Region beyond 2020: Report by the Council of the Baltic Sea States Vision Group*. Retrieved from http://www.cbss.org/wp-content/uploads/2018/06/Vision-Group-Report.pdf
- Council of the European Union. Future of Work: a Lifecycle Approach Draft Council Conclusions (2018). Brussels: Council of the European Union. Retrieved from http://data.consilium.europa.eu/doc/document/ST-10057-2018-INIT/en/pdf
- DG GROW. (2018). *European Industry Day 2018: Summary of the Discussions*. Brussels. Retrieved from http://www.earto.eu/news/detail/article/european-industry-day-2018-summary-report.html
- ESFRI Innovation Working Group. (2018). *Innovation-oriented cooperation of Research Infrastructures*. (J. Moulin, Ed.) (ESFRI Scripta, Vol. III). Dipartimento di Fisica Università degli Studi di Milano. Retrieved from https://www.esfri.eu/latest-esfri-news/esfri-scripta-volume-iii-now-published-innovation-oriented-cooperation-research
- ESPAnet. (2018). About Espanet. Retrieved September 17, 2018, from https://blogg.hioa.no/espanet/
- Etzold, T. (2018). *Participation as an Added Value of Macro-regions*. Berlin. *SWP Comment 2018/C 06*, January 2018. Retrieved from https://www.swp-berlin.org/en/publication/macro-regional-cooperation-in-europe/
- Eurofound. (2016). Sustainable work throughout the life course: National policies and strategies. Luxembourg: Publications Office of the European Union. https://www.eurofound.europa.eu/publications/report/2016/working-conditions-labour-market/sustainable-work-throughout-the-life-course-national-policies-and-strategies
- European Commission. (2016). Report on the implementation of EU macro-regional strategies. {SWD(2016) 443 final} COM(2016) 805 final Retrieved September 6, 2017, from http://ec.europa.eu/regional_policy/en/information/publications/reports/2016
 - /report-on-the-implementation-of-eu-macro-regional-strategies
- European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions and the European Investment Bank: Annual Growth Survey 2018 (2017). Brussels: European Commission. COM(2017) 690 final Retrieved from https://publications.europa.eu/en/publication-detail/-/publication/a30be227-d13b-11e7-a5b9-01aa75ed71a1/language-en
- European Commission. (2017b). Horizon 2020 Work Programme 2018 2020 1.

- General Introduction (European Commission Decision C(2017)77124 of 27 October 2017). European Commission. Retrieved from https://ec.europa.eu/research/participants/portal/desktop/en/funding/referen ce_docs.html#h2020-work-programmes-2018-20
- European Commission. Investing in a smart, innovative and sustainable Industry A renewed EU Industrial Policy Strategy (2017). Brussels: European Commission. COM/2017/0479 final Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017DC0479
- European Commission, & Government Offices of Sweden. (2017). *Concluding Report Social Summit for Fair Jobs and Growth*. Retrieved from
 https://www.government.se/4933fd/contentassets/70800fb59e6c43829c115c
 a73fb94b6e/concluding-report-gothenburg-summit.pdf
- European Commission. (2018). Macro-Regional Strategies. Retrieved September 24, 2018, from http://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/
- European Political Strategy Centre. (2016). The Future of Work Skills and Resilience for a World of Change. *EPSC Strategic Notes*, (Issue 13). Retrieved from http://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_13.pdf
- European Science Foundation. (2013). *Research Infrastructures in the European Research Area*. Strasbourg. Retrieved from https://portal.meril.eu/meril/downloads/mof_research_infrastructures.pdf
- European Union. (2017). European Pillar of Social Rights. Publications Office of the European Union. http://doi.org/10.2792/95934
- European Union. (2018). High-Level Conference "Future of Work: A Lifecycle Approach" Concept Note. Retrieved from https://eu2018bg.bg/en/events/301
- Gluckman, P. (2014). Policy: The art of science advice to government. *Nature*, *507*, 163–165. http://doi.org/10.1038/507163a
- High Level Strategy Group on Industrial Technologies. (2018). *Re-finding Industry Defining Innovation*. Brussels. http://doi.org/10.2777/927953
- Hörnström, L., Hansen, K. G., & Roto, J. (2012). *Att möta demografiska förändringar*. Retrieved from https://www.diva-portal.org/smash/get/diva2:700342/FULLTEXT01.pdf
- Hutchison, E. D. (2010). A Life Course Perspective. In E. D. Hutchison (Ed.),

 Dimensions of Human Behavior: The Changing Life Course (4th ed., pp. 1-38).

 Sage Publications. Retrieved from

 https://www.sagepub.com/sites/default/files/upmbinaries/36521_CLC_Chapter1.pdf
- InGRID. (n.d.). InGRID: About. Retrieved August 20, 2018, from http://www.inclusivegrowth.eu/about

- International Labour Organization. (2017). *The Future of Work We Want: A global dialogue*. Retrieved from https://www.ilo.org/global/topics/future-of-work/dialogue/WCMS_570282/lang--en/index.htm
- Karlsdóttir, A., Norlén, G., Rispling, L., & Randall, L. (Eds.). (2018). *State of the Nordic Region 2018: Immigration and Integration Edition*. Copenhagen: Nordic Council of Ministers. Retrieved from https://nordicwelfare.org/publikationer/state-of-the-nordic-region-2018-immigration-and-integration-edition-2/
- Kilhoffer, Z., Beblavý, M., & Lenaerts, K. (2018). *Blame it on my youth! Policy recommendations for re-evaluating and reducing youth unemployment* (Research Report: Thinking ahead for Europe No. 2018/01). Brussels. Retrieved from https://www.ceps.eu/publications/blame-it-my-youth-policy-recommendations-re-evaluating-and-reducing-youth-unemployment
- Kiss, M. (2017). *The Future of Work in the EU* (Briefing No. PE 599.426). Retrieved from http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2017)599426
- Kitt, R. (2017). The importance and impact of research on society. In K. Raudvere (Ed.), *Estonian Research 2016* (pp. 49–50). Estonian Research Council. Retrieved from http://www.etag.ee/wp-content/uploads/2015/12/TA_teaduskogumik_ENG_veeb.pdf
- Koppel, A. (2017). Research and Development Expenditure: An Investment in the Future. In K. Raudvere (Ed.), *Estonian Research 2016* (pp. 11–18). Estonian Research Council. Retrieved from http://www.etag.ee/wp-content/uploads/2015/12/TA_teaduskogumik_ENG_veeb.pdf
- Lee, C.-S., & Koo, I.-H. (2016). The Welfare States and Poverty. In D. Brady & L. M. Burton (Eds.), *The Oxford Handbook on the Social Science of Poverty*. New York: Oxford University Press. http://doi.org/10.1093/oxfordhb/9780199914050.013.32 Abstract
 - ukner H (2017) The Younger Congration and Careers in Pessarch In K. Pa
- Lukner, H. (2017). The Younger Generation and Careers in Research. In K. Raudvere (Ed.), *Estonian Research 2016* (pp. 46-47). Estonian Research Council. Retrieved from http://www.etag.ee/en/estonian-research-2016-now-available-english/
- Madelin, R. (2015). Science as a fuel of the public policy machine. In J. Wildson & R. Doubleday (Eds.), *Future Directions For Scientific Advice in Europe* (pp. 26-32). Cambridge: Centre for Science and Policy. Retrieved from http://www.csap.cam.ac.uk/projects/future-directions-scientific-advice-europe/
- MERIL. (n.d.). European Labour History Network. Retrieved May 24, 2018, from https://portal.meril.eu/meril/view/organisationUnits/136610
- Musiał, K., & Schumacher, T. (2018). Scientific Excellence: Joint Potentials in the

- Baltic Sea Region an explorative study. Baltic Science Network. Retrieved from http://www.baltic-science.org/index.php/downloads/public/bsn-publications/207-scientific-excellence-joint-potentials-in-the-baltic-sea-region-an-explorative-study
- OECD. (2015). *Scientific Advice for Policy Making. OECD Science, Technology and Industry Policy Papers No. 21*. Paris. http://doi.org/10.1787/5js33l1jcpwb-en
- OECD. (2017). *OECD Science, Technology and Industry Scoreboard 2017: The digital transformation*. Paris: OECD Publishing. https://doi.org/10.1787/20725345
- Parkhurst, J. O. (2017). *The politics of evidence: from evidence-based policy to the good governance of evidence*. London: Routledge. Retrieved from https://www.taylorfrancis.com/books/9781317380870
- Paunov, C., Planes-Satorra, S., & Moriguchi, T. (2017). What Role for Social Sciences in Innovation? Scientific Disciplines Contribute To Different Industries. OECD Science, Technology and Innovation Papers, (No. 45). Paris. https://doi.org/10.1787/8a306011-en
- Polakowski, M., Sendhardt, B., & Szelewa, D. (Eds.). (2018). *The Future of the Welfare State in the Baltic Sea Region. International Social Security Review.* Warsaw: Friedrich-Ebert-Stiftung & International Centre for Research and Analysis. Retrieved from http://library.fes.de/pdf-files/bueros/warschau/14095.pdf
- PwC. (2018). PwC Golden Age Index: Unlocking a potential \$3.5 trillion prize from longer working lives. Retrieved from https://www.pwc.co.uk/economicservices/golden-age/golden-age-index-2018-final-sanitised.pdf
- Raivio, K. (2015). Lessons from Finland. In J. Wilsdon & R. Doubleday (Eds.), *Future Directions For Scientific Advice in Europe* (pp. 90-96). Cambridge: Centre for Science and Policy. Retrieved from http://www.csap.cam.ac.uk/projects/future-directions-scientific-advice-europe/
- Scharpf, F. W. (2000). Institutions in Comparative Policy Research. *Comparative Political Studies*, *33*(6-7), 762-790. http://doi.org/10.1177/001041400003300604
- Slob, M., & Staman, J. (2012). *Policy and the evidence beast A Dutch study of the expectations and practices in the area of evidence–based policy*. Den Haag:

 Rathenau Instituut. Retrieved from https://www.bvekennis.nl/Bibliotheek/12–0229.pdf
- Šime, Z. (2018). Council of the Baltic Sea States: The Role of a Sustainable and Prosperous Region in Bringing Science Diplomacy Forward (EL-CSID Working Paper No. 19). Brussels. Retrieved from https://docs.wixstatic.com/ugd/7dd3ca_6f7f6a0617764ae2a6f57922e3de0f29 .pdf
- Šime, Z., & Legzdiņš, M. (2018). Research and Higher Education Cooperation in the Baltic Sea Region. *Latvijas Intereses Eiropas Savienībā*, (2018/1), 45-65.

- Retrieved from
- https://www.mfa.gov.lv/images/ES/Sabiedribas_Informesana_ES_jaut/ES_2018_1_netam.pdf
- Šteinbuka, I., & Zemītis, M. (2018). How Can Latvia Harness Globalisation? In A. Rozenberga, I. Šteinbuka, & Ž. Ozoliņa (Eds.), *Europe After 100 Before* (pp. 134-155). Rīga: Zinātne. Retrieved from https://ec.europa.eu/latvia/sites/latvia/files/publikacija_europe._after_100_before_gala_versija.pdf
- Šucha, V., Wilkinson, D., Mair, D., Ahbe, M., & Davies, S. (2015). The In-House Science Service: The Evolving Role of the Joint Research Centre. In *Future Directions For Scientific Advice in Europe* (pp. 42-51). Cambridge: Centre for Science and Policy. Retrieved from http://www.csap.cam.ac.uk/media/uploads/files/1/future-directions-for-scientific-advice-in-europe-v10.pdf
- University of Gdańsk. The University of Gdańsk Development Strategy Through 2020 (2013). University of Gdańsk. Retrieved from https://en.ug.edu.pl/university/ug_mission_and_strategy
- Varblane, U., & Ukrainski, K. (2017). Research, development and productivity compared to internationality. In K. Raudvere (Ed.), *Estonian Research 2016* (pp. 33-43). Estonian Research Council. Retrieved from http://www.etag.ee/en/estonian-research-2016-now-available-english/
- Vilnius University. (2018). ESPAnet Baltics is established and invites new members to join! Retrieved September 17, 2018, from https://www.vu.lt/en/news/4143-espanet-baltics-is-established-and-invites-new-members-to-join
- Wood, J. (2018). These countries are gaining the most by employing older workers. Retrieved September 17, 2018, from https://www.weforum.org/agenda/2018/08/older-workers-employment-oecd-economies/

World Migration Report 2018. (2017). Geneva. Retrieved from https://www.iom.int/wmr/world-migration-report-2018





