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CONTENTS

Introduction

In 2018 Lenaerts and Smits offered a concise yet at the same time a comprehensive overview of various concepts and measurement approaches on job quality indicators and concluded it by highlighting the need for a standard on job quality indicators (Lenaerts & Smits, 2018). Their analysis was a valuable contribution for a further discussion on how to ensure a more tightly knit collaboration between research and policy circles to deliver tangible solutions to the real-world problems. This paper takes the 2018 InGRID input note as the point of departure for an elaboration on an additional layer of governance less known among some domain-specific scholarly circles but no less relevant for their overall exploratory work of the diversity of steering and consultation mechanisms put in place by the European Union (EU) to promote integrationist dynamics and certain goals enshrined in the EU policies. Hopefully, it will contribute to the overall aspirations to bring science and policy domains closer with a joint awareness on the role played by macro-regional strategies in addressing job quality-related matters.

The multi-level governance grid is taken as the point of departure for introducing the reader to the macro-regional governance level which encompasses four geographically fuzzy areas of Europe where actors are assembled in tailored constellations under the helm of four EU macro-regional strategies. The first part of this paper gives a concise introduction to the macro-regional governance and its thematic strands which are of immediate relevance to the overall debates revolving around the 'Future of Work'.

The second part introduces to the Baltic Science Network - a forum for higher education, science and research cooperation in the Baltic Sea Region. The choice of elaborating on the thinking taking place in the European higher education and research domains can be explained by the observation that the senior management of these sectors has long ago aspired to tailor tertiary education not only for the "immediate needs of society and the labour market but" also found important to "prepare graduates also for possible, even yet unknown, demands of tomorrow and the days to come" (Jařab, 2008, p. 88). Moreover, Baltic Science Network is an interesting case study for exploring what is the contemporary Baltic Sea Region thinking on the requirements of a competitive knowledge economy roughly a decade after the launch of the European Higher Education Area (EHEA) (Carter, Fazey, Geraldo, & Trevitt, 2010, p. 247).

The third part examines the value-added delivered by the exchange of higher education students and staff of higher education institutions with a special focus on how these experiences develop a certain skill-set valued in the contemporary thinking on the Future of Work.

Macro-regional governance

Although coined even earlier (Newman, 2000, p. 900), over the last decade, the literature on **multi-level governance** has gained prominence in the efforts to examine the policy intricacies affecting the EU. It has left a mark also on the

macro-regional governance, which was translated from a political vision into an operational implementation framework in 2009 with the launch of the pioneering EU Strategy for the Baltic Sea Region (EUSBSR). It was followed by the EU Strategy for the Danube Region (EUSDR) in 2010, the EU Strategy for the Adriatic and Ionian Region (EUSAIR) in 2014, concluded with the EU Strategy for the Alpine Region (EUSALP) in 2015 (European Commission, 2019; Šime, 2017, pp. 15-16).

This process of political momentum and a corresponding setting in motion of policy configuration has been accompanied by scholarly reflections. In very broad strokes, the academic perspective has grown from initial conceptual reflections on the preference for 'Europe of Olympic Rings' versus 'Europe of Concentric Circles' (Browning & Joenniemi, 2003, p. 476; Götz, 2016, p. 62), as well as examination of the implementation modalities (Bengtsson, 2009; Rostoks et al., 2010) up to a recognition of macro-regional soft spaces experiencing a certain hardening phase (Gänzle, 2018). The most recent developments result in more detailed and operationally specific approximations of the involved actors and their modes of interaction. This process has been accompanied with an increased awareness that the macro-regional strategy with its coordination mechanisms is not solely a technical modus operandi, but has given an impetus for a creation of a distinct governance layer in between the national and the EU levels (annex I). Bearing in mind Van Langenhove's earlier remarks on the diversity of regionalisms witnessed and analysed in Europe (Van Langenhove, 2013, p. 16), the macro-regional type of regionalism can be seen as the most recent newcomer to this polysemy.

Since a considerable share of macro-regional activities are funded by the financial instruments of the Cohesion Policy, these governance spaces represent an optimal set-up for the recently recommended result-orientation in solving actual problems and more pronounced "focus on longer-term strategic programmes and projects, which involve more planning and greater implementation" (Demertzis & Wolff, 2019, p. 92). The next EU programming period presents a window of opportunity to test this recommendation.

Recently, macro-regional strategies have gained international exposure in Asia. In 2019, students of the Manipal Centre for European Studies of the Manipal Academy of Higher Education in India were introduced to the EUSBSR. Whereas the EUSDR has gained scholarly interest in Thailand (Ngampramuan, 2018). Therefore, this component of EU integration toolbox is benefiting from certain international awareness-building efforts.

Macro-regional approach to the 'Future of Work'

A closer look at the macro-regional circles pre-occupied with various strands of Future of Work shows a more nuanced picture how **collaborative learning** and **imbrication** unfolds in different consultative formats supported by the EU, in other words, the multi-dimensionality of **knowledge communities** (Carter et al., 2010, p. 250). Moreover, the ideal of **nested knowledge communities** is a good one to bear in mind to avoid duplication and unnecessary overlaps of expert

efforts taking place on various governance levels characterising the full vertical spectrum of the EU.

The **Policy Area for Education, Research and Employability** (PA Education) is the thematic strand of the EUSBSR which supports one of the three strategy's major objectives titled "Increase Prosperity". PA Education is the main nodal point for EUSBSR discussions and activities related to the Future of Work. Baltic Science Network is one of five flagships which support the implementation of PA Education goals. As it has been demonstrated by the Working Paper "Fostering Sustainable and Inclusive Labour Markets in the Baltic Sea Region: A Life Course Perspective" (Šime, 2018) prepared by the Welfare State Expert Group which was assembled by the Baltic Science Network, EUSBSR benefits from multi-faceted complementarities and a considerable awareness about various Future of Work-related initiatives launched on various governance levels and what potential or actual impact those have on the Baltic Sea Region-specific thinking on what tailored measures should be adopted for joint activities. When reflecting on complementarities, the Welfare State Expert Group took stock not only of the key databases but also noted the conclusions of the Council of the European Union, research findings produced with the support of the Nordic Council of Ministers, policy-expert recommendations produced by the Council of the Baltic Sea States etc. These nuances are stated to show the potential of pooling expertise among nested knowledge communities if the earlier set orientation on complementarities is adopted.

The EUSDR **Priority Area 9 "Investing in People and Skills"** is the thematic strand with the most pronounced affiliation to the Future of Work. If brain drain is a particular concern in the Baltic Sea Region addressed by the Baltic Science Network, then in the Danube macro-region this phenomenon is of interest and concern to the whole Priority Area 9 paying attention how to create jobs within a close distance to where people live to reap the benefits of the skills investments (European Commission, 2010, p. 69).

The EUSAIR **pillar "Blue Growth"** with a focus on inclusive growth among other matters is contributing to the employment and mobility of labour, thus representing the most pronounced thematic affiliation to the Future of Work (European Commission, 2014, pp. 8, 10). This pillar also is tailored to increase the brain circulation not just in terms of more active researcher mobility but also interaction with businesses to contribute to the development of blue technologies (European Commission, 2014, pp. 7, 9, 11). However, also the thematic pillar "Sustainable Tourism" bears an imprint on the Future of Work affiliated matters in the Adriatic-Ionian area (European Commission, 2014, p. 59). Overall, EUSAIR is still in a nascent phase and has less experience and less resource capacity than its peers (Michalun & Nicita, 2019, pp. 21, 33). Thus, its ability to demonstrate a tangible contribution to the Future of Work might be more limited.

The EUSALP **Action 3 "To improve the adequacy of labour market, education and training in strategic sectors"** which is part of the 1st Thematic Policy Area "Economic Growth and Innovation", its 1st objective "Fair access to job opportunities, building on the high competitiveness of the Region" bears explicit ties to the Future of Work. This strand is tailored also with an attempt to address the challenge of out-migration of skilled labour (European Commission, 2015, p. 17) which stems from territorial imbalances within the area. 'Brain drain',

as a widely used term in other European contexts, is a well-known concept to the strategy's implementers. Brain drain is most severely felt in "remote areas that are already suffering from depopulation" (European Commission, 2015, pp. 17-18). Action 3 is developed with a thematic affiliation to the Agenda for New Skills and Jobs of the EU (European Commission, 2015, p. 20). This is one of the most vivid examples of how a macro-regional approach is crafted in close alignment with the EU policies and goals.

Overall, this compact overview depicts that specific parts of Europe are facing diverse socio-economic challenges and prioritise various means how to address them. However, countries and regions which have joined the macro-regional strategies are far from the only ones which are pre-occupied with the detrimental effects of the outflow of the talent. Just to name one example, the Dutch research outputs are examples of an attempt to understand the causes and effects of these developments (Martinez-Fernandez et al., 2013), as well as experiences of the migrating workforce (Venhorst & Cörvers, 2015).

Similarly to the latest scholarly thinking, the selected macro-regional approaches and their adopted solutions show no propensity towards the 'end of job' sentiment. The new forms of ensuring locally embedded employment or better-suited employment within the confines of the macro-regions are pursued in a 'cult of work' and 'work first' manner (Warhurst & Hunt, 2019, p. 24). It depicts a full awareness of the potential or unfolding "technological and economic shifts" but without naming any specific "technological shocks" (Sager, 2014, p. 572) as the reasons for such trends.

Looking beyond the mere scope of this paper, another area for further enquiry might be what has been the role of the EU's some two decades old chosen focus on the cities and their functional regions as "drivers of a competitive European economy" (Newman, 2000, p. 903). Namely, this is an invitation to reflect whether the chosen approach might have given additional encouragement for the outmigration of the skilled labour force from less centrally located territories of the EU.

Undoubtedly, the briefly outlined strands of each of the four macro-regional strategies are far from having an exclusive relevance to the Future of Work thematic scope. Since complementarities and horizontal interlinks are encouraged among various components of the strategies, then the extended scope of thematic relevance is an obvious result. However, the overall length of this research paper is rather compact and allows dwelling into the details of a flagship of the pioneering EUSBSR. Hopefully, the elaboration on the Baltic Science Network will spark an interest among a wider set of macro-regional actors to embark on a more in-depth comparative examination of the relevant strands of all four strategies in a separate research project. It would be of great value to the overall development of expert-level and scholarly awareness on the commonalities and differences how macro-regional strategies help to address area-specific challenges while keeping the overarching goals of such efforts closely aligned with the EU policies and their milestones.

Moreover, keeping a thematic focus on research, as well as youth and early-stage researchers' mobility as domains relevant in understanding how well equipped Europeans are to face the emerging trends of the evolving job market

is suggested due to earlier acknowledgements that these are among the areas which have “clear pan-European implications” and should receive more financial resources (Demertzis & Wolff, 2019, pp. 93, 151-152). This angle also helps to depart from the earlier wave of pessimism about the Future of Work which was witnessed among policymakers and business commentators who offered their assessments on the societal implications of digitalisation and robotisation (Šime, 2018, p. 6; Warhurst & Hunt, 2019, p. 6). Instead, the chosen research angle encourages towards a further examination whether the future high-skilled jobs will require a mixture of vocational and liberal education to equip an individual with a competitive set of skills (Warhurst & Hunt, 2019, p. 32).

Baltic Science Network

As CEPS has recently pointed out, the last decade saw a doubling of intra-EU mobility (Akgüç, Baiocco, Beblavý, & Kilhoffer, 2019, p. 6). The flows of people put in action by the ever more pronounced mechanisms supporting the European Single Market, as well as the EHEA and the European Research Area (ERA) (CHE Consult, 2014, p. 62) beg for multilaterally coordinated actions and promotion of an awareness that the life course of a talented and skilled European is gradually becoming less and less similar to the one which has characterised the career path of her or his parents and grandparents. It is not an exceptional deviation from the norm. It is the contemporary reality shaped by the EU policies which have been put in action over the last two decades and which have been supported by the findings that whatever the cycle of the student who is willing to pursue study exchange, such experience is valued by the employers and contributes to the individual’s competitiveness in the overall job market, especially due to the acquired transversal skills and social, intercultural competencies (Carter et al., 2010, p. 247; CHE Consult, 2014, pp. 62, 69). The strictly national perspective on these processes is too narrow, especially when it comes to relatively compact populations housed across the shores of the Baltic Sea Region. If ‘value chains’ (discussed in the literature of industrial policies and innovation) often span across several countries, even continents, so do the ‘**brain chains**’ (Friesen & Collins, 2017). The term ‘brain chains’ refers to the observed migration of highly-skilled from one place to another which results in gaps in sending regions, which then are filled by migrants from third countries (Friesen & Collins, 2017, p. 327).

Baltic Science Network (PA Education flagship) focuses on researcher mobility in the Baltic Sea Region. In close alignment with the latest thinking of the European Commission (Directorate-General for Research and Innovation, 2019, p. 13), it develops solutions to promote ‘**brain circulation**’ as a countermeasure to the overall Westward ‘brain drain’ echoed in the research agendas across Europe (Bertrand-Cloodt, Cörvers, & Heijke, 2017; Donlevy, van Driel, & Hoareau McGrath, 2019, p. 7; Golovics, 2019; Mungiu-Pippidi, 2019). In such a manner the Baltic Science Network adopts an outward-looking perspective on processes affecting its talent pool and takes into account wider migratory routes which span beyond the Baltic Sea Region.

Baltic Science Network is not preoccupied with each intricacy of the general talent retention mechanisms put in place on the Eastern shores of the Baltic Sea. However, earlier reflections on the subject matter (Ienciu & Ienciu, 2015, p. 288) are not neglected by researchers following the latest developments of the flagship, such as the author of this paper.

Instead, Baltic Science Network seeks to facilitate the international encounters of researchers and academics in a manner which would not result in a loss of human capital housed by the higher education and research institutions located on the Eastern shores of the Baltic Sea. In this overall intellectual attempt, a crucial point is a departure from a dichotomous perspective of a sending and receiving country. Instead, the overall Baltic Science Network thinking tends to gravitate more towards the '**evolutionary approach**' "that conceives human capital as inherently networked (as opposed to the mainstream stock-like approach); as an open and evolving complex system" (Cañibano, Vértesy, & Vezzulli, 2017, p. 13). Although incoming/outgoing ratio of students of each national setting is part of the overall EHEA assessment (European Commission/EACEA/Eurydice, 2018, pp. 256-262) and has been subject of a Baltic Sea Region-specific examination (focused on researchers) captured in the report "International Mobility of Researchers in the Baltic Sea Region" (Schumacher, 2016) commissioned by the Baltic Science Network during its earlier implementation stages, it is not the overall focus of the flagship. The Baltic Science Network has taken a transnational approach and addresses the need to offer more international stepping stones to the researchers in the Baltic Sea Region and immersive networking experiences to build more solid macro-regional collaborative ties well-placed to boost the overall excellence of science.

In such a manner Baltic Science Network follows the logic of supporting '**transnational social spaces**' as "sustained concatenation of [...] cross-border ties and practices" (Faist, Fauser, & Reisenauer, 2013) irrespective of the length of stay outside of the country or region of origin. Besides the Baltic Science Network commissioned studies, the earlier findings of the impact of Erasmus offered opportunities attest to the enduring value and ripple effects of facilitated encounters between higher education institutions. Among the academic staff with an Erasmus mobility experience, "more than 80% [...] agreed that the Erasmus programme, in particular, improved relationships with peers abroad and facilitated international collaboration agreements. This collaboration involved multilateral Erasmus projects or networks (81%), the initiation of research projects (77%) or participation in research projects (73%)." (CHE Consult, 2014, p. 146) In the Baltic Sea Region context, Erasmus programme has been especially persuasive in the case of higher education institutions based in Finland to convince about the value of collaborating more with the partners in Europe (CHE Consult, 2014, p. 187).

The positive acknowledgements are sustained also during the more recent stages, namely, the Erasmus+ implementation: "The most frequently reported impacts are the introduction of more international perspectives into the curriculum, the development and teaching of modules with partners from other countries, the use of learning in multidisciplinary groups and teaching making use of material from open educational resources, such as massive open online courses" (CHE Consult, 2019, p. 174). Thus, Erasmus and Erasmus+ delivered value-added should be kept as an inspiring point of reference for the future

analysis of the impact expected from the Baltic Science Network facilitated researcher mobility to be implemented during the extension phase titled “BSN_powerhouse”.

Becker in his seminal work published in 1975 pointed out the enduring topicality of studying various aspects of human capital (Becker, 1975). This assessment is proven valid by some recently launched reports on student and researcher mobility (Cañibano et al., 2017; CHE Consult, 2019). The distinct advantage of Baltic Science Network as a macro-regional, as opposed to a European forum, is that it is well placed to offer engaged parties a better insight into the interpenetration between the nationally housed human capitals (Ó Rian, 2013, 611). By closer adherence to the earlier briefly explained evolutionary approach Baltic Science Network departs from a mere win-lose approach embodied by the dichotomy of a perspective looking at sending and receiving countries, regions or institutions. Instead, via evolutionary approach-type of logic Baltic Science Network adopts a pragmatic solution, especially towards the 2nd and 3rd cycle students and researchers based on the Eastern shores of the Baltic Sea Region who via mobility to the Western shore are exposed not only to the expertise housed in another thematically relevant competence centre, but, as the data offered in the European Higher Education Area in 2018: Bologna Process Implementation Report demonstrates (annex II), also gain access to a higher education systems which support students with distinctively bigger investments.

A macro-regional perspective on the researcher mobility is the much-needed change of perspective to explore the brain chains evolving as a result of the framework conditions put in place via the EHEA, the ERA and the European Single Market (Parey & Waldinger, 2011). However, it does not preclude countries and regions from an examination of contemporary pull and push factors which are putting in motion the academic migratory routes. Instead, these factors are suggested as an area of more urgent relevance for the analysis of the strengths and weaknesses of each of the national and regional socio-economic contexts (Apsīte-Beriņa, 2019; Börzel & Langbein, 2019, 948) and the overall attractiveness of specific science ecosystems and their offered research careers (Directorate-General for Research and Innovation, 2019, p. 8).

Baltic Science Network is implemented in a telling time when the European Commission acknowledges that the implementation of ERA is slowing down and “major disparities still exist between countries, or are growing in part” (Directorate-General for Research and Innovation, 2019, p. 4). Likewise, the European Commission has encouraged to “increase the effectiveness of research infrastructures in Europe” through “better exchange of information on the actual infrastructure capacity, funding priorities and strategies – both across countries/regions and between research organisations” (Directorate-General for Research and Innovation, 2019, p. 8). Baltic Science Network assembles countries which are facing the identified divide in ERA progress and focuses on a geographical area which houses several notable landmarks of the European Strategy Forum on Research Infrastructures. Therefore, Baltic Science Network holds the potential to give tangible support in mitigating the shortfalls identified by the European Commission. It succeeded to provide its initial contribution in addressing the quoted challenges via both expert-level discussions during partner meetings, as well as public debates with a comprehensive representation of actors shaping the research landscape in the Baltic Sea Region and Europe

on such occasions as the conference “The Baltic Sea Region – A Science Powerhouse” held on 26 November 2018 in Brussels.

Consequently, the approach adopted by the Baltic Science Network can have a significant role in giving an additional support to the sharing excellence pillar proposed under Horizon Europe to support certain “national and regional capacities to absorb and benefit from excellent research and innovation” (Demertzis & Wolff, 2019, p. 245) during the next EU programming period.

Coming back to the initially stated key InGRID reference source, the Baltic Science Network should be also kept in mind as an interesting case study for a combination of ‘**bureaucratic organisational structure**’ and ‘**flexible regime**’ summarised by Lenaerts and Smits (2018, p. 6). Namely, this macro-regional initiative itself is a flexible regime whose earlier convened three expert groups (photon and neutron science, life sciences and the welfare state) are the best examples of interdisciplinary teams working in an independent manner and parallel. The majority of the members of the Baltic Science Network are national or regional ministries, agencies or universities which fall under the category of a bureaucratic organisational structure. Thus, the Baltic Science Network, as an EUSBSR flagship, should be also highlighted as an insightful example of a successful test case how both typologies of the organisational structure are being combined in the latest experimentalist approaches launched by the EU, thus putting at test not only the compatibility of both models but also offering involved staff members an exposure to these two working environments and a chance to test their versatility in this institutional constellation.

Soft skills

The InGRID Winter School 2020 “Four Dimensions of the Future of Work” as one of the discussion topics has prioritised soft skills. The literature on the subject matter shows that the experts are still reflecting on the best novel approaches how to enhance soft skills to increase the competitiveness of individuals in the future job market and cannot give certain answers what type of knowledge prowess will be required (Donlevy et al., 2019, p. 12). Therefore, the academic setting is among those promising environments which already offer trusted and highly valued means to hone these types of skills among interested students and teaching and administrative staff working at the higher education institutions. Namely, the earlier section of the article already indicated that mobility can be an excellent way how to experience another cultural or intercultural environment and hone skills relevant to successfully operate in a foreign or international context. Both students who had taken part in mobility and employers have confirmed that among top three most valued skills on the job market were soft skills acquired during a study exchange programme (CHE Consult, 2014, p. 95).

Staff of the higher education institutions involved in Erasmus actions attached great importance to the offered opportunity of developing their social competencies via mobility (CHE Consult, 2014, p. 184) despite the fact that the non-mobile peers saw such period away from the home institution as a mere dedication of time to a hobby (CHE Consult, 2014, p. 175). The most recent

Erasmus+ assessment proves the enduring value of the programme: “Erasmus+ staff participants – in particular those working in Southern and Eastern Europe – also report greater improvement in their transversal and social skills than participants in other mobility programmes. Those gains are slightly higher for non-teaching staff.” (CHE Consult, 2019, p. 184) Perhaps these appraisals might render the Erasmus programme a good case study for the Future of Work researchers on transferability of good practices to other sectors of the labour market such as internships funded by other EU financial instruments, for example, by the European Social Fund.

These findings grow in importance in the context of the EU having overall limited evidence on “the relationship between non-cognitive skills and educational and job performance” (Arregui-Pabollet et al., 2019, p. 31).[1] However, among currently known trends should be indicated that individuals with a strong set of non-cognitive skills and moderate to advanced use of ICT are the ones most likely to acquire a high-paying job characterised by non-routine tasks (Arregui-Pabollet et al., 2019, p. 33). The wage premium earned for masterful employment of non-cognitive skills has gained importance (Arregui-Pabollet et al., 2019, p. 40; Donlevy et al., 2019, p. 8), which is of special importance to young graduates who as workers aged 25-34 have experienced a fall in earnings if compared to the employees with upper secondary education (Arregui-Pabollet et al., 2019, p. 46). Irrespective of the attained level of higher education, experts advise forward-looking professionals to seek new ways of “fulfilment outside stable employment” (Donlevy et al., 2019, p. 7). This suggestion is a good point of reference in terms of departing from the future career prospects within a narrowly defined job description and its subsequent seniority stages. It is an encouragement towards adopting an approach of constant engagement in multi-dimensional individual growth to ensure the ability to smoothly juggle various professional portfolios. Erasmus student mobility might be considered as the nascent phase when an ambitious individual can test out these capacities by mastering various subjects in different academic and cultural settings.

Conclusions

The overall discourses revolving around the Future of Work might entail a considerable share of new terms. Nevertheless, in the macro-regional setting, it is explicitly or implicitly tied to the references to a phenomenon with a decades’ long history. ‘Brain drain’ is a term which best captures this observation. It was coined in 1950s by the British Royal Society to refer to the unidirectional transatlantic routes on which embarked a considerable share of European scientists to pursue the next stages of their careers in Northern America (Faist, Fauser, & Reisenauer, 2013, p. 80; Friesen & Collins, 2017, p. 325; Ienciu & Ienciu, 2015, p. 283). This research paper offered a brief outline how Baltic Science Network, a EUSBSR flagship, follows the evolution of the scholarly thinking on the overall migration of highly skilled workforce with a particular focus

[1] “Non-cognitive skills refer among other to: open-mindedness, openness to learn and to change, flexibility, curiosity, innovation, creativity, entrepreneurship, resilience, planning/organisation, responsibility, persistence, teamwork, communication, initiative, sociability, empathy, collaboration, emotional control and positivity.” (Arregui-Pabollet et al., 2019, p. 31)

on academic staff and early-stage researchers with more alignment to the conceptual notions of ‘brain chains’ and ‘evolutionary approach’ seen from a distinctively transnational perspective. It remains to be explored whether the ‘brain chains’ logic has any potential to be of relevance in untangling the currents affecting areas governed by other macro-regional strategies.

Due to the recent global exposure of the two longest implemented strategies, the macro-regional frameworks are boosting their potential to become reference points for further discussion about particularities of transnational job markets and jointly adopted approaches to tackle certain commonly faced challenges.

The experience of the oldest macro-regional strategy – the EUSBSR – demonstrates that complementarities and full appreciation of the potential which nested knowledge communities can bring are crucial to building the critical mass of efforts in tackling jointly faced complex challenges.

The macro-regional strategies allow exploring potential responses for mitigating the more widespread trends within a context-specific or tailored fashion. The Future of Work comes with opportunities and threats to various parts of the EU. The efforts of such multilateral initiatives as the EUSBSR show that the macro-regional coordination structure holds a potential of acting as a sounding board and a safety net which helps to counter the negative imbalances with targeted responses.

This paper delivers an extended panoramic overview of the knowledge-building blocks characterising the overall EU discourses contributing to the Future of Work and suggests for scholars of soft and transversal skills to tap into the existing pool of knowledge acquired on the subject matter in the studies dedicated to the academic mobility.

References list

Akgüç, M., Baiocco, S., Beblavý, M., & Kilhoffer, Z. (2019), "Labour Market and Social Policy", Policy Priorities for 2019-2024, No. 4, CEPS, Brussels, October (https://www.ceps.eu/ceps-publications/labour-market-and-social-policy/).

Apsīte-Beriņa, E. (2019), Diasporas jaunieši - sabiedrības atjaunotnes potenciāls [The Youth of Diaspora - the Regeneration Potential of a Society], in J. Krūmiņš & Z. Krišjāne (eds), *Tautas ataudze Latvijā un sabiedrības atjaunošanās izaicinājumi* [Reproduction of a Nation in Latvia and the Challenges of Society's Regeneration], Rīga [Riga]: Latvijas Universtitātes Akadēmiskais apgāds [The University of Latvia Press], pp. 237–242 (https://www.apgads.lu.lv/fileadmin/user_upload/lu_portal/apgads/PDF/Tautas_ataudze/talsai_23_Berina.pdf).

Arregui-Pabollet, E., Bacigalupo, M., Biagi, F., Cabrera Giráldez, M., Caena, F., Castaño, J., … Vuorikari, R. (2019), "The Changing Nature of Work and Worker in the Digital Era", I. González Vázquez, S. Milasi, S. Carretero Gómez, J. Napierała, N. Robledo Bottcher, K. Jonkers, & X. Goenaga (eds), Publications Office of the European Union, Luxembourg (https://doi.org/10.2760/679150).

Becker, G. S. (1975), Summary and Conclusions, in *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, Second Edition*, New York: Columbia University Press, pp. 231–237 (https://www.nber.org/chapters/c3739.pdf).

Bengtsson, R. (2009), "An EU Strategy for the Baltic Sea Region: Good Intentions Meet Complex Challenges", European Policy Analysis, No. 9, Swedish Institute for European Policy Studies (SIEPS), Stockholm, September (http://sieps.hemsida.eu/sites/default/files/562-2009_9epa.pdf).

Bertrand-Cloodt, D., Cörvers, F., & Heijke, H. (2017), "Ability, academic climate, and going abroad for work or pursuing a PhD", CESifo Economic Studies, Vol. 63, No. 1 (https://academic.oup.com/cesifo/article/63/1/119/2670041).

Börzel, T. A., & Langbein, J. (2019), Core – periphery disparities in Europe: is there a link between political and economic divergence? *West European Politics*, Vol. 42, No. 5, pp. 941–964 (https://doi.org/10.1080/01402382.2018.1558534).

Browning, C. S., & Joenniemi, P. (2003), The European Union's two dimensions: The Eastern and the Northern. *Security Dialogue*, Vol. 34, No. 4, pp. 463–478 (https://doi.org/10.1177/0967010603344006).

Cañibano, C., Vértesy, D., & Vezzulli, A. (2017), "An inquiry into the return mobility of scientific researchers in Europe", JRC Technical Report, No. EUR 28600 EN. Publications Office of the European Union, Luxembourg (https://doi.org/10.2760/54633).

Carter, S., Fazey, J., Geraldo, J. L. G., & Trevitt, C. (2010), The doctorate of the Bologna Process third cycle: Mapping the dimensions and impact of the European Higher Education Area, *Journal of Research in International Education*, Vol. 9, No. 3, pp. 245–258 (https://doi.org/10.1177/1475240910379383).

CHE Consult (2014), "The Erasmus Impact Study: Effects of mobility on the skills and employability of students and the internationalisation of higher education

institutions", U. Brandenburg, (ed), Publications Office of the European Union, Luxembourg (https://doi.org/10.2766/75468).

CHE Consult (2019), "Erasmus + Higher Education Impact Study", Publications Office of the European Union, Luxembourg (https://doi.org/10.2766/184038).

Demertzis, M., & Wolff, G. (eds) (2019), "Braver, Greener, Fairer: Memos to the EU leadership 2019-2024", Bruegel, Brussels, September (https://bruegel.org/memo2019/).

Directorate-General for Research and Innovation. European Research Area Progress Report 2018: Report from the Commission to the Council and the European Parliament (2019), Publications Office of the European Union, Luxembourg (https://doi.org/10.2777/118067).

Donlevy, V., van Driel, B., & Hoareau McGrath, C. (2019), "Education as Self-Fulfillment and Self-Satisfaction", JRC Technical Report, No. 2019/06, European Commission, Seville (https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/education-self-fulfilment-and-self-satisfaction).

European Commission/EACEA/Eurydice (2018), The European Higher Education Area in 2018: Bologna Process Implementation Report. The European Higher Education Area, Publications Office of the European Union, Luxembourg (https://doi.org/10.1007/978-3-319-20877-0).

European Commission. Action Plan Accompanying Document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions. European Strategy for the Danube Region, Commission Staff Working Document (2010), European Commission, Brussels (https://danube-region.eu/download/actionplaneusdr/?wpdmdl=624&refresh=5d5fe169b896a1566564713).

European Commission. Action Plan. Accompanying the Document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Concerning the European Union Strategy for the Adriatic and Ioni, Commission Staff Working Document (2014), European Commission, Brussels (https://www.adriatic-ionian.eu/library/).

European Commission. Action Plan. Accompanying the Document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Concerning the European Union Strategy for the Alpine Region, Commission Staff Working Document (2015), European Commission, Brussels (https://www.alpine-region.eu/sites/default/files/uploads/page/24/attachments/eusalpactionplan28072015.pdf).

European Commission. (2019), Macro-Regional Strategies. (https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/).

Faist, T., Fauser, M., & Reisenauer, E. (2013), *Transnational Migration*, Cambridge: Polity Press.

Friesen, W., & Collins, F. L. (2017), Brain chains: managing and mediating knowledge migration, *Migration and Development*, Vol. 6, No. 3, pp. 323–342

(https://doi.org/10.1080/21632324.2016.1168107).

Gänzle, S. (2018), 'Experimental Union' and Baltic Sea cooperation: the case of the European Union's Strategy for the Baltic Sea Region (EUSBSR), *Regional Studies, Regional Science*, Vol. 5, No. 1, pp. 339–352 (https://doi.org/10.1080/21681376.2018.1532315).

Golovics, J. (2019), "Addressing the EU's East-West Brain Drain: Why a Tax Solution Would Be in Vain", New Perspectives, Vol. 27, No. 2, Institute of International Relations Prague, Prague, pp. 63–85 (https://perspectives.iir.cz/download/02-2019-4-jozsef-golovics-addressing-the-eus-east-west-brain-drain-why-a-tax-solution-would-be-in-vain/).

Götz, N. (2016), The Case of the Baltic Sea Area: Spatial Politics & Fuzzy Regionalism. *Baltic Worlds*, Vol. IX, No. 3, Centre for Baltic and East European Studies, Södertörn University, Huddinge, October, pp. 54–67 (http://balticworlds.com/spatial-politics-fuzzy-regionalism/).

Ienciu, N. M., & Ienciu, I. (2015), Brain drain in Central and Eastern Europe: new insights on the role of public policy. *Southeast European and Black Sea Studies*, Vol. 15, No. 3, pp. 281–299 (https://doi.org/10.1080/14683857.2015.1050799).

Jařab, J. (2008), Reforming systems and institutions of higher learning: Towards the creation of a European and global higher education area, *Education, Citizenship and Social Justice*, Vol. 3, No. 1, pp. 85–96 (https://doi.org/10.1177/1746197907086720).

Lenaerts, K., & Smits, I. (2018), "Input Note on Normative Standards for Job Quality Indicators: Tensions between academic research and policymaking on job quality", No. MS120. InGRID-2 project, Leuven, December (https://zenodo.org/record/2551193#.XbQrZpIzbIV).

Martinez-Fernandez, C., Weyman, T., Cörvers, F., van Dijk, J., Edzes, A., de Grip, A., … van Wissen, L. (2013), "Demographic Change in the Netherlands: Strategies for Resilient Labour Markets", OECD Local Economic and Employment Development (LEED) Working Papers No. 2013/13, OECD, Paris, October (https://www.oecd-ilibrary.org/industry-and-services/demographic-change-in-the-netherlands_5k3xnhvzhmxn-en).

Michalun, M.-V., & Nicita, A. (2019), "Multi-Level Governance and Cross-Sector Practices Supporting EUSAIR. Synthesis Report", OECD, Paris, July (http://www.oecd.org/cfe/regional-policy/OECD EUSAIR Synthesis Report_FINAL_MAY 2019.pdf).

Mungiu-Pippidi, A. (2019), "Romania: Study Enemies of Trust", *Nature*, Vol. 569, pp. 483–484 (https://www.nature.com/magazine-assets/d41586-019-01569-w/d41586-019-01569-w.pdf).

Newman, P. (2000), Changing Patterns of Regional Governance in the EU, *Urban Studies*, Vol. 37, No. 5–6, pp. 895–908 (https://journals.sagepub.com/doi/pdf/10.1080/00420980050011145?casa_token=SkUVZMFw55sAAAAA:FjuN0NIEljxU_ywkQOMFnX2gM6GNaCgv2UF6JIFkXIjfMJvcrvtH3gGBTcdo5YNswquqZF-6-96A).

Ngampramuan, S. (2018), Evaluating the EUSDR's contribution to sub-regional integration processes, *Australian and New Zealand Journal of European Studies*, Vol. 10, No. 2, pp. 33–48 (https://cesaa.org.au/_content/uploads/2018/12/Anzjes_10_2_2018-

Ngampramuan-4.pdf).

Ó Rian, S. (2013), Human Capital Formation Regimes: States, Markets, and Human Capital in an Era of Globalization, in A. Burton-Jones & J.-C. Spender (eds), *The Oxford Handbook of Human Capital,* pp. 588–617. Oxford: Oxford University Press (https://doi.org/10.1093/oxfordhb/9780199532162.001.0001).

Parey, M., & Waldinger, F. (2011), Studying Abroad and the Effect on International Labour Market Mobility: Evidence from the Introduction of Erasmus, *The Economic Journal*, Vol. 121, No. 551, pp. 194–222.

Rostoks, T., Reinholde, I., Ozoliņa, Ž., Bāra, D., Vanags, A., Karnītis, E., … Grumolte, I. (2010), *EU Strategy for the Baltic Sea Region: A Year After and Beyond*, Ž. Ozoliņa, I. Reinholde, & T. Rostoks, (eds), Rīga [Riga]: Zinātne [Science].

Sager, A. (2014), Reframing the brain drain, *Critical Review of International Social and Political Philosophy*, Vol. 17, No. 5, pp. 560–579 (https://doi.org/10.1080/13698230.2014.919061).

Schumacher, T. (2016), "International Mobility of Researchers in the Baltic Sea Region", Baltic Science Network (http://www.baltic-science.org/old/index.php/publications/17-international-mobility-of-researchers-in-the-baltic-sea-region).

Šime, Z. (2017), "Multi-Level Governance of Innovation and Smart Specialisation", Baltic TRAM (http://s3platform.jrc.ec.europa.eu/-/multi-level-governance-of-innovation-and-smart-specialisation?inheritRedirect=true&redirect=%2Fs3-in-baltic-sea-region).

Šime, Z. (2018), "Working Paper of the Welfare State Expert Group “Fostering Sustainable and Inclusive Labour Markets in the Baltic Sea Region: A Life Course Perspective”", Baltic Science Network (http://www.baltic-science.org/old/index.php/publications/103-challenges-and-barriers-to-research-cooperation-in-the-baltic-sea-region-15).

Van Langenhove, L. (2013), Why We Need to “Unpack” Regions to Compare Them More Effectively?, in L. Fioramonti (ed), *Regionalism in a Changing World: Comparative Perspectives in the New Global Order* (1st ed., pp. 16–29). Routledge.

Venhorst, V., & Cörvers, F. (2015), "Entry into working life: Internal migration and the job match quality of higher-educated graduates", GSBE Research Memoranda No. 009, Maastricht, March (https://doi.org/10.1111/jors.12347).

Warhurst, C., & Hunt, W. (2019), "The Digitalisation of Future Work and Employment. Possible impact and policy responses", JRC Technical Report, No. 2019/05, European Commission, Seville (https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digitalisation-future-work-and-employment-possible-impact-and-policy-responses).

Annexes

Annex I: Full spectrum of governance layers of the multi-level governance (Šime, 2017, p. 6)

Annex II: EHEA statistics on annual public and private expenditure per full-time equivalent student (European Commission/EACEA/Eurydice, 2018, pp. 37-38)

Figure 1.12: Annual public and private expenditure on public and private tertiary education institutions, per full-time equivalent student in PPS, 2008, 2011 and 2014

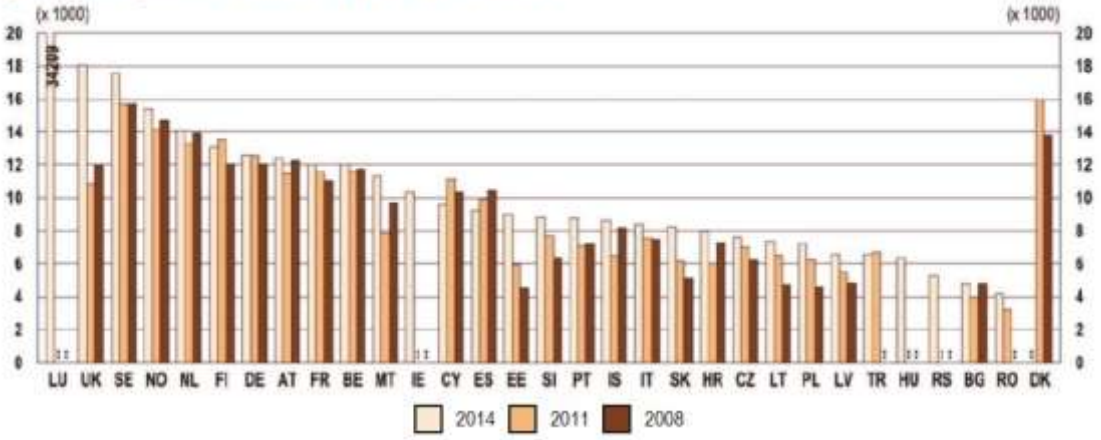

Figure 1.13: Annual public expenditure on public and private tertiary education institutions, per full-time equivalent student in euro, 2014