

# Mapping and Analysis of the Social Science Research System in Serbia

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## Abbreviations

CSO - Civil Society Organisation

ERA - European Research Area

EHEA - European Higher Education Area

GDP - Gross Domestic Product

KONUS - Conference of Universities

OECD - The Organisation for Economic Co-operation and Development

SANU - The Serbian Academy of Sciences and Arts

SSH - Social Sciences and Humanities

SSRS - Social Science Research System

TAIEX - Technical Assistance and Information Exchange Instrument of the European Commission

WEF - World Economic Forum

WoS - Web of Science

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# Executive summary

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The aim of the study is to gain a thorough understanding of the Social Science Research System (SSRS) in Serbia.<sup>1</sup> To that end, the report first outlines the basic parameters of the system by mapping its key stakeholders, analysing their relationships and the different purposes of the relationships. This section shows that the SSRS in Serbia encompasses more than one hundred science-producing and science governance bodies interlinked both formally and informally with a variety of purposes. The first section further analyses how the stakeholders are interlinked through a strategic and normative framework regulating scientific research in the Republic of Serbia. Finally, it outlines different purposes of the SSRS and distinguishes between the declared purposes and those that can be deduced from practice. The declared purpose of scientific activity is to contribute to economic growth and quality of life, development of knowledge as a precondition for the country's international integration, development of academic potential of the population and its infrastructure, protection of world heritage, defence of national identity and national interests, and promotion of researchers' mobility within Serbia and in the European Research Area. The SSRS also has two additional purposes that can be deduced from practices rather than from Serbia's science policy discourse: to maintain social peace within the social science community, and to generate illegitimate personal, corporative and political gains through clientelistic networks.

The second section of the report assesses the performance of the SSRS in Serbia. Notwithstanding outliers and exceptional achievements, the report demonstrates that, overall, the SSRS is significantly lagging behind hard sciences in terms of scientific excellence, is not sufficiently linked to policy making, struggles to shape public debates, and is insufficiently connected with higher education. The number of journal articles published by Serbia's social researchers in international scientific journals indexed in the Web of Science and Scopus is still relatively low. The performance is even lower when it comes to the impact of their publications measured by the number of citations. Furthermore, Serbia's academic journals in Social Sciences and Humanities (SSH), although numerous, are rarely indexed in top international indexing services, and articles published therein are extremely rarely cited in leading international journals. When it comes to societal relevance, Serbia's research in SSH is not sufficiently contributing to evidence-based policy making. Moreover, research in SSH is not adequately linked to higher education. Research institutes play no role in higher education, whereas faculty members are often overloaded with teaching. Finally, despite certain progress that was made since the establishment of the Centre for the Promotion of Science in 2010, social researchers in Serbia are still not provided with sufficient incentives and opportunities to effectively disseminate their insights to wider audiences.

The third section of the report identifies key factors, both enabling and inhibiting, that determine the performance of the SSRS. Despite the challenges and recent backsliding, democratic transition and European integration are creating significant opportunities for the improvement of the SSRS. However, its potentials are gravely inhibited by the lack of political commitment to quality research and education. This has resulted in the higher education in SSH that is not sufficiently geared toward the development of critical thinking skills and is mostly disconnected from research. The lack of political commitment has also led to poor and inadequately distributed social science funding that does not foster excellence, mobility and relevance. Finally, the lack of political commitment has also resulted in poor research governance across the board and a lack of accountability mechanisms. The development of the SSRS has also been stifled by the virtually total absence of mobility of researchers in SSH. Finally, the performance of the SSRS is negatively affected by the prevalent academic culture characterised by separation of education and research, parochialism, outdated modes of science communication, disciplinary fragmentation, informality, culture of non-confrontation, impunity for ethical misconduct and aversion to competition.

In the conclusion, the report summarises key insights of the report and devises a set of recommendations on how to improve the performance of the SSRS. The conclusion identifies three methods of changing

the SSRS. The first is to change the stakeholders. While some changes of this sort are still possible and needed, the historic window of opportunity for such a radical change in Serbia has been closed quite a while ago. The second way to change a system is to change the interconnections between its components. Here, the clientelistic nexus between political and scientific elites needs to be severed, while the intellectual link that connects the SSH research to policy making and higher education must be strengthened. Moreover, regulatory and funding functions of the governing bodies should be institutionally separated. The third method of changing the system is to change its purpose. SSRS should not be used as a form of social welfare, a goal worth pursuing but through other means and policies. The purpose of the SSH should also not be to generate illegitimate personal, corporate or political gain, but solely to create and disseminate knowledge and support social and economic development. To that end, the government should foster academically excellent and socially relevant research in SSH through merit-based peer-reviewed funding and a regulatory framework that will enable excellence, mobility, integrity and accountability.

# 1. Introduction

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Academic research in Social Sciences and Humanities (SSH) in Serbia was devastated in the 1990s as a result of state collapse, war and international sanctions. The regime change in 2000 and the democratic transition that ensued promised to rejuvenate SSH and reinvent their role in the transforming society. Over the past decade, the new science policy of Serbia, articulated in two science strategies (2010 and 2016), involved significant efforts in fostering excellence and international competitiveness of Serbia's academic community and its integration into the European Research Area (ERA). While progress has been noted in hard sciences, Serbia's research in SSH, however, remains a seriously neglected field. Despite numerous policy efforts and formidable achievements by exceptional individuals or groups, Serbia's SSH are still, by and large, an inward-looking field disconnected from the ERA. Serbia's researchers in SSH do not collaborate sufficiently with their colleagues from abroad, publish mostly in domestic outlets, and their mobility is severely restricted even inside the country, let alone internationally. Moreover, Serbia's research in SSH is also often disconnected from its own society. While there is a growing recognition, among researchers and policy makers alike, that research in SSH should be more policy or socially relevant, its contribution to public policies, societal development and higher education remains below its potential.

Why is this so? Previous studies have provided rich insights into various challenges faced by SSH research in Serbia. They attribute the blame for its underperformance to modest and unsustainable financing,<sup>2</sup> absence of proper evaluation and accountability mechanisms,<sup>3</sup> insufficient incentives,<sup>4</sup> outdated journal management practices,<sup>5</sup> lack of opportunities for young scholars,<sup>6</sup> poor mobility,<sup>7</sup> disconnect from policy making,<sup>8</sup> extractive institutions, cronyism and informal networks,<sup>9</sup> and poor science communication.<sup>10</sup> Some critics, mostly those from the field of humanities, have blamed Serbia's science policy for prioritising quantitative evaluation and international journals with high impact factors.<sup>11</sup> Some studies have tackled Serbia's research in the fields of social sciences<sup>12</sup> or humanities comprehensively<sup>13</sup> and made recommendations for their advancement.<sup>14</sup> Nevertheless, the state of Serbia's research in the field of SSH has not been analysed systemically to date, which is the objective of this report.

The starting point of this report is that key factors that are responsible for the current performance of the social research in Serbia are not to be found in the limited achievements of certain individuals or particular institutions. Instead, the basic premise of the report is that inhibiting factors stem from systemic flaws. Building on that, the report has four objectives. The first is to map the SSRS in Serbia. This will include a map of core stakeholders in SSH research and the analysis of their relationship across different institutions and disciplines, as well as the purpose of these relationships. The second objective is to assess the performance of the SSRS in Serbia, both in terms of scientific excellence and its social relevance. Third, the report will identify the enabling and inhibiting factors responsible for the low performance of the SSRS. Finally, the report will devise a set of policy recommendations on how to improve the performance of Serbia's research in SSH.

The research methodology behind this report combines desk and field research. The desk research phase was based on literature review and analysis of primary documents including strategies, laws and regulations governing the SSRS in Serbia, while field research involved semi-structured interviews and focus groups. A total of 20 semi-structured interviews have been conducted with representatives of different stakeholders: universities, institutes, the Government, trade unions, international donors and the civil society. In addition, two focus groups have been organised with members of PERFORM. One was held at the outset of the field work, on 18 December 2017, with the aim of exploring the key issues, while the other took place at the very end of the field work, on 5 March 2018. The purpose of the latter was to validate the insights reached through interviews.

The rest of the report unfolds as follows. The basic parameters of the SSRS in Serbia are mapped and analysed in the next section. Then, its performance in terms of scientific quality and social relevance is assessed by use of available data. The third (and last) section outlines the key factors affecting the performance of the SSRS in Serbia. The underlying causes of the weak performance of the SSRS are summarised and recommendations on how to move forward are provided in the conclusion.

## 2. Social Science Research System in Serbia

Systems can be defined as “an interconnected set of elements that is coherently organised in a way that achieves something”.<sup>15</sup> Any system, therefore, consists of elements, interconnections and a purpose. The underlying assumption of this report is that research in the entire field of SSH can be analysed together because the official science policy discourse construes it as an integral whole.<sup>16</sup> This implies that there is an added value in moving away from reductionist analyses of individual research groups, institutions or entire disciplines. On a bigger scale of analysis, while capturing patterns and flaws in the SSRS one certainly cannot give justice to all the details that might seem crucial from various personal or disciplinary perspectives. However, the advantage of such a “bird’s eye” perspective is the ability to capture “the big picture” on the basis of which the formulation of sound and evidence based social science policies in Serbia will be easier.

To that end, this section begins by mapping the stakeholders involved in the knowledge production, knowledge governance and knowledge dissemination in the SSRS. Then, the section identifies how these stakeholders are interlinked, formally through strategies, laws and regulations, but also informally. Finally, by looking at the stakeholders’ behaviour, the section will identify different purposes of these relationships, either declared in policy discourse or enacted through practices.

### Stakeholders

Stakeholders in the SSRS encompass knowledge producers and governing bodies (Figure 1). The most important stakeholder in the SSRS in Serbia are knowledge producers; according to the Law on Scientific and Research Activity, they include the following: the Serbian Academy of Sciences and Arts (SANU), Matica Srpska, accredited research organisations, PhD students and other organisations.<sup>17</sup> Eight public<sup>18</sup> and ten private universities<sup>19</sup> have been accredited in 2017, and they all cover the field of SSH.<sup>20</sup> Also, 12 and 6 of 83 accredited institutes cover the field of social science and humanities, respectively.<sup>21</sup>

As there is currently no official register of all the researchers in Serbia, it is impossible to learn the exact number of people engaged in SSH research. However, some rough estimates can be made on the basis of available data. In 2016, of the total number of 14,643 researchers employed in Serbia, 13,323 were working on projects financed by the Ministry of Science, Education and Technological Development (hereinafter referred to as: the Ministry).<sup>22</sup> According to a rough estimate, approximately 8,500 were employed by universities, while 4,500 worked in research institutes. In the period from 2011 to 2015, a total of 145 projects and 2,848 researchers in the fields of SSH were funded: 57 projects were in Social Science (1,225 researchers), 34 in History, Archaeology and Ethnology (408 researchers), 27 in Language and Literature (460 researchers) and 27 in Improvement of Decision Making and Affirmation of National Identity (755 researchers).<sup>23</sup> All of them were employees of either research institutes or universities.



While the vast majority of funded researchers work in state-owned universities and institutes, about 7% of them are employed either by private universities or private institutes (e.g. the Economics Institute).<sup>24</sup>

In addition to the above, in the Serbian Academy of Sciences and Arts, which receives a separate funding for its programme, only five of 99 members were from the social sciences and 26 from the humanities (as at February 2018). Also, six of its eight institutes, with a total number of 163 researchers, did research in SSH.<sup>25</sup> Matica Srpska, also with its own separate programme funding, has a Social Science Department whose Board is composed of 22 social scientists.<sup>26</sup> Finally, 37 of 65 accredited higher professional schools also cover the field of SSH. While some of the higher professional schools, such as the Academy of Criminalistic Studies, have quite advanced research capacities, many others mostly engage only in education.

In addition to this core group, a certain number of researchers in SSH also work for NGOs and Government agencies. Over the past decade an increasing number of NGOs have developed research capacities and are currently defining themselves as think-tanks. According to one study from 2016, Serbia has 26 think-tanks that conduct policy research, virtually all of them in SSH.<sup>27</sup> While many engage in research only declaratively, some rank among the best in Eastern Europe.<sup>28</sup> Research capacities within ministries, although still nascent, should not be disregarded either. According to one recent research, out of 18 Government ministries, half of them have a unit mandated to conduct strategic planning and policy analysis. Although most of these units employ between three and six staff members, some have much larger capacities.<sup>29</sup> Nevertheless, it is very difficult to make a precise estimate, as neither clear criteria on who qualifies as a researcher nor a central registry of researchers exist in Serbia.

In addition to research producers, the SSRS also encompasses governing and funding bodies. The most important is the Ministry, as the most significant science funding body in the country. In addition to this, four bodies are particularly relevant for the governance of SSRS. The first is the National Council for Scientific and Technological Development, which is the highest expert and advisory body in the scientific research system in Serbia whose members are appointed by the Government. The second body is the Committee for Accreditation of Scientific Research Organisations, whose members are appointed by the Science Minister. The mandate of the Committee is to conduct accreditation of scientific research organisations and propose regulations in this field. The third is the Committee for Scientific Ranks, whose members are appointed by the National Council. This is the key body responsible for the academic advancement of individual researchers. Finally, the Registry Scientific Boards – key expert bodies whose members are appointed by the Science Minister – are mandated to advise and inform the work of the Ministry and its bodies. Currently, four Registry Scientific Boards cover the SSH and are divided into: 1) History, Archaeology and Ethnology, 2) Language and Literature, 3) Law, Economy and Political Science, and 4) Philosophy, Psychology, Pedagogy and Sociology.

One could also add the Parliament of Serbia, specifically its Committee on Education, Science, Technological Development and Information Society which is responsible for science legislation and science policy making, to the above list of actors involved in science sector governance.<sup>30</sup> Another Government institution responsible for the promotion of science, including the field of SSH, is the Centre for the Promotion of Science mandated to bring science closer to the wider population.<sup>31</sup> On the civil society side, there is also the Union of Employees in Scientific Research Activity.<sup>32</sup> Established within the Confederation of Autonomous Trade Unions, the Union actively participates in social dialogue with the Government of Serbia.<sup>33</sup> Social researchers are also professionally associated through scientific associations established to promote professional standards and interests of their disciplines. Currently there is no official registry of scientific associations in Serbia, but a quick look reveals that some are very active, even publishing their own journals (such as the Serbian Psychological Society), while the impact of many others is less noticeable.<sup>34</sup> Finally, while all the universities coordinate their activities through a Conference of Universities (KONUS),<sup>35</sup> research institutes do so through the Association of Institutes of Serbia.<sup>36</sup>

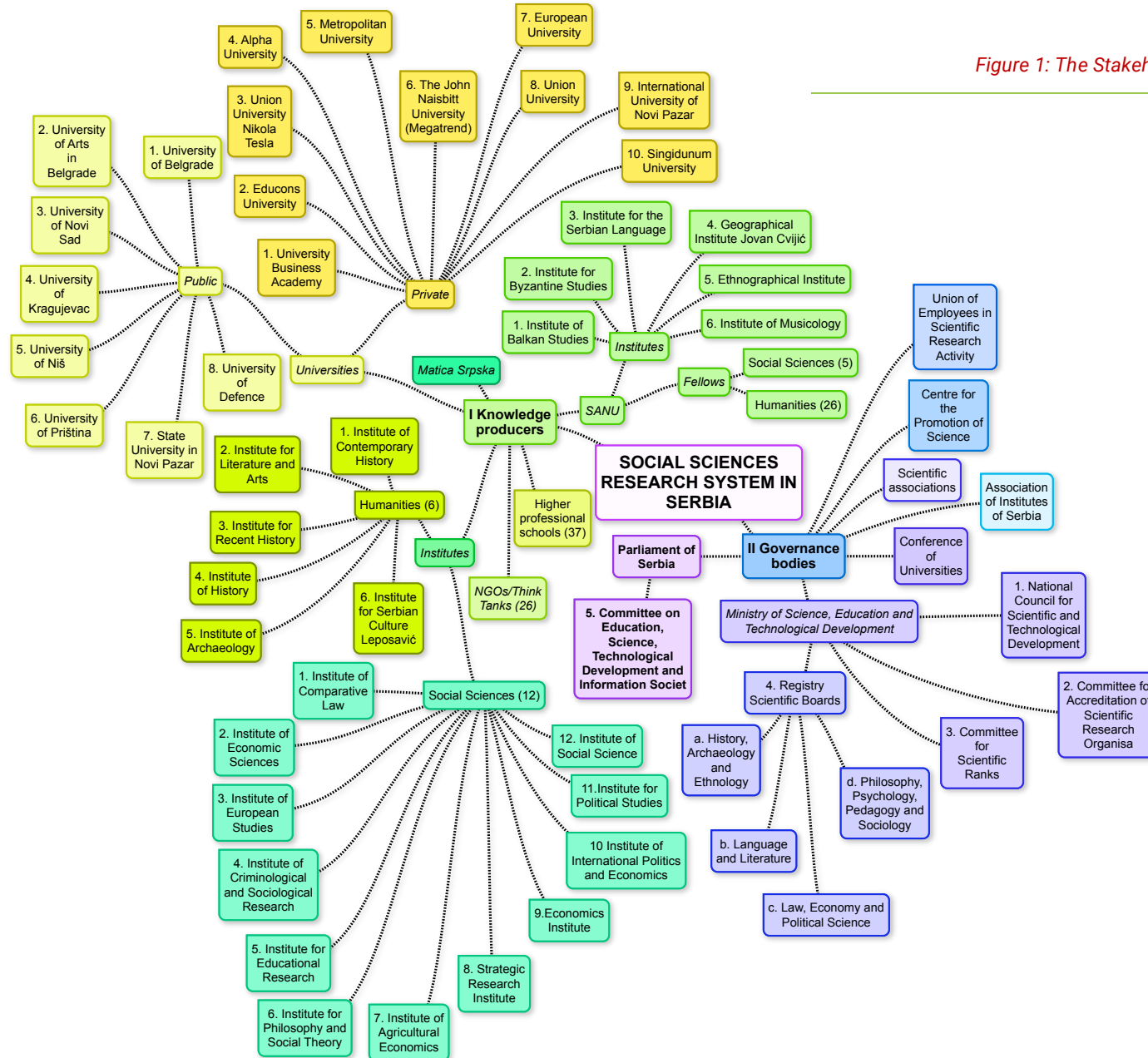


Figure 1: The Stakeholder Map of the SSRS in Serbia

## Relationships

How are all these stakeholders interlinked? The strategic framework for science policy is defined in the Strategy on Scientific and Technological Development of the Republic of Serbia for the Period 2016-2020.<sup>37</sup> It is interesting to note that the Strategy does not treat different fields of science in any great detail. Furthermore, in contrast to most other developed countries, Serbia has separate legal frameworks for science and education.<sup>38</sup> The most important piece of science legislation is the Law on Scientific Research Activity of 2005.<sup>39</sup> The Law recognises SSH as one of five equally important scientific areas of research, along with: science and mathematics, technical sciences, medicine, and bio-technical sciences. In addition to the above, two by-laws are crucial for further regulation of scientific research. The first is the Guideline on Ways, Methods of Evaluation and Quantitative Statement of Scientific Results of Researchers, which governs quantitative performance the researchers are required to accomplish in order to be appointed and promoted.<sup>40</sup> The second is the Guideline for Categorisation and Ranking of Scientific Journals, which sets the criteria for the evaluation and ranking of scientific journals, including the points that researchers can claim for each publication.<sup>41</sup>

While in depth analysis of these by-laws is beyond the scope of this article, it is noteworthy that they both acknowledge specificities of SSH at least to a certain extent.<sup>42</sup> First, in both Guidelines the definition of an international journal depends on the field. This is extremely important, as researchers need to publish in international journals in order to be appointed and promoted. For example, to be considered international, a journal in hard sciences must be indexed in the Web of Science (WoS), the most competitive global citation indexing service developed by Clarivate Analytics (former Thompson Reuters). In SSH, on the other hand, in addition to being indexed in the WoS, a journal also qualifies as international if it is indexed in Scopus provided by Elsevier. The implication of this is that researchers in SSH have a bigger pool of international journals in which they are encouraged to publish their work. Although this might seem unjust, it compensates for the fact that journals in the WoS in the field of SSH are not always interested in publishing Serbia-related topics that preoccupy SSH scholars from Serbia, since hard sciences are more universal and globalised. In addition, when making the case for scientific impact of their research, Serbia-based scholars in the field of SSH can take credit not only for citations made to their work in articles indexed in the above-mentioned lists, but also those made in books – which are very often their preferred mode of scientific communication. Finally, according to the most recent guideline, scholars in SSH can also claim points needed for professional advancement whenever they make a contribution to public policies.

Pursuant to the Law, science is financed on a project basis (Article 98). Such a mode of financing was introduced in the early 2000s when it replaced institutional funding. Between 2000 and 2008, public investment in science remained constantly at approximately 0.3% of GDP.<sup>43</sup> In the period between 2009 and 2013, despite the objective of 0.9% set by the Science Strategy (2010-2015), budget funds intended for research and development varied between 0.36% and 0.46% of GDP.<sup>44</sup> In 2016, this figure stood at 0.39%.<sup>45</sup> This is significantly below the EU average (app. 2%). It is also falling significantly short of the 1.05% target set in the earlier Strategy (2010-2015) to be achieved by 2015, and also below the 0.6% target foreseen by the current Strategy to be achieved by 2020.<sup>46</sup> Project cycles are supposed to last four years. However, the ongoing project cycle, which was meant to last from 2011 to 2015, has lasted much longer due to disagreements on how to proceed with the next one.

The most contentious issue is the way funding is provided. Although the Ministry does not provide institutional research funding, the funds that virtually all the research institutes - who predominantly rely on public funding - receive from the Ministry through the project cycle *de facto* represent institutional funding, as they are obliged to fund their institutional costs through projects. Universities are in a different position as they receive funds from the Government per student, but also charge tuition fees. However, even for them, publically funded research projects are *de facto* institutional funding, as most of the money covers the salaries and non-research costs, while only a fraction is spent on actual research such as field work.<sup>47</sup>

It is precisely for this reason that there has been such a strong resistance especially among those employed at research institutes, against the new call for projects announced by the Ministry on 13 April 2016.<sup>48</sup> The Ministry stated that the call would be more competitive. In the words of one policy maker involved in the preparation of the call, “the idea was to bring the success rate from 100%, as was the case in 2010, down to 75%.”<sup>49</sup> Opponents of the call launched a strong campaign against it by way of media statements, public petitions, official communication, private complaints and public demonstrations.<sup>50</sup> Particularly vocal were the Association of Institutes and the Science Syndicate. As SSH institutes often do not have any other sources of funding, the announced competitive nature of the call implied that institutes whose project proposals fail to succeed under the new call would have to fire researchers, scale down their operations and possibly even close their doors.

In many ways, the call aimed to foster internationally competitive research excellence. As such, it was supported by main academic institutions such as KONUS, major academic figures including the President of SANU, as well as key international institutions such as the World Bank. Nevertheless, as a non-partisan expert, Minister Verbić had very weak political backing within the Government. Opponents of his policy and most importantly some prominent faculty deans and directors of institutes closely linked to the ruling Serbian Progressive Party (*Srpska napredna stranka* - SNS), on the other hand, had strong political leverage. Moreover, the Government of Serbia was in a technical mandate, while SNS had already entered into a campaign mode for the snap parliamentary elections. Under such circumstances, concerted public and political efforts of the opponents to the call eventually convinced the then Prime Minister Aleksandar Vučić to abandon Minister Verbić. On 6 May 2016, the Government of Serbia annulled the call on legal grounds, forcing Verbić to resign.<sup>51</sup>

## Purpose

What is the purpose of the SSRS in Serbia? Declaratively, the purpose of all scientific research in Serbia can be found in the Law. It is: the development of science for the purpose of economic growth and quality of life, development of knowledge as a precondition for the country's international integration, development of academic potential of the population and its infrastructure, protection of world heritage and national identity, and systematic promotion of researchers' mobility within Serbia and in ERA.<sup>52</sup> While these are permanent, declared objectives of all scientific research activity in Serbia, the Strategy further specifies the mid-term objective of the science policy (until 2020): an excellent, internationally competitive and effectively managed science that is fully integrated into ERA and capable of making a strong contribution to the society and economy.<sup>53</sup>

An important purpose of research is also to feed into higher education. Portfolios of education and science are part of the same Ministry and the unity of education and research has been declared as one of the core principles in the Law on Higher Education (Article 4).<sup>54</sup> The Education Strategy, too, states that “higher education based on research is the fundamental precondition for social, economic and cultural progress of the society”.<sup>55</sup> Similarly, the overall objective of the latest Science Strategy is “education of high quality research staff that will be able to use their knowledge and scientific research activities to create new values, design and generate economic and overall social development”.<sup>56</sup> In that respect, according to the policy discourse, the twin objectives of simultaneously integrating Serbia into the ERA and the European Higher Education Area (EHEA) should be seen as complimentary.

In addition to this, according to the strategic documents, the purpose of scientific research in the field of SSH is also to defend the collective identity and national interests of Serbia. Hence, for example, the earlier Strategy for the period 2010-2015 states that “the role of social sciences and humanities is of vital interest for the protection and strengthening of the Serbian national identity”.<sup>57</sup> Also, the role of SSH is to help the state in its “affirmation on the international scene and defence of its national interests. This especially concerns the peaceful, legal and diplomatic struggle for territorial integrity and sovereignty over Kosovo and Metohija.”<sup>58</sup> The Strategy of 2016 has omitted references to the national interests and Kosovo but kept “the development of cultural, historical and national identity and preservation of the

national heritage (Serbian language, national history, spiritual heritage, etc.).<sup>59</sup> While some scholars accepted such a purpose on the grounds that SSH are “identity sciences” whose central role is to cultivate national identity,<sup>60</sup> others criticised the policy discourse for imposing a monolithic view of collective identity and “identity engineering”.<sup>61</sup>

However, the purposes of any given system are to be deduced not only from policy rhetoric or stated goals but also from behaviour.<sup>62</sup> In this respect, one could add at least two additional purposes of the SSRS in Serbia. The first is to maintain social peace within the social sciences community as a form of social welfare. By providing a stable source of income for virtually all the social researchers employed by state universities and institutes, without asking for much in return, policy makers are appeasing the hard core of Serbia’s intellectual class, hence defusing its potential for anti-Government mobilisation. One Serbian economist depicts Serbia’s publically funded science in the following way: “No one from the Ministry of Education, Science and Technological Development ever inspects anything. That’s actually social policy disguised under the budget line for science”.<sup>63</sup>

The second, equally undeclared purpose of the SSRS is to generate illegitimate personal, corporate and political gains through clientelistic networks and corruptive practices. Hyper production of PhD degrees (880% increase since 2007) without a proper quality control and accountability system serves as an additional source of income for universities, but it is also an instrument of corruption and political influence.<sup>64</sup> Politicians need degrees to boost their public credentials while in office, but also as an alternative career strategy. Teaching at a university is for many of them a desired career plan, either while their parties are in opposition or after they leave the area of politics for good.<sup>65</sup> Widespread anecdotal evidence as well as several prominent cases of dubious degrees obtained by prominent public officials suggest that politicians frequently obtain degrees by offering power, influence and other tangible and intangible values in return.<sup>66</sup> Due to widespread clientelistic networks and non-confrontational culture, several highly publicised cases of plagiarism involving public officials and some of the most respected higher education institutions in Serbia have never been properly investigated, let alone sanctioned. The embarrassingly weak response of universities in these cases shows not only the absence of accountability within the academia and its inability to resist political pressures, but also the fact that there exists a deep corruptive nexus of the SSRS and politics in Serbia.<sup>67</sup>

Now that the basic parameters of the SSRS have been mapped and analysed, the report turns to the assessment of the system’s performance.

# 3. Performance of the Social Science Research System in Serbia

What are the performance results of the SSRS in Serbia? This section will assess this by looking at two indicators of performance spelled out by the Strategy: scientific quality and societal relevance. While the scientific quality concerns peer scholars, societal relevance focuses on external stakeholders including policy makers, civil society organisations (CSOs), business community and wider society, which should all benefit from publically funded research in SSH. Each of the two aspects of performance will be assessed in turn.

## Scientific quality

One of the key performance indicators used to assess scientific quality across the world is the number of articles published annually in journals indexed in major sources of bibliometric data such as the WoS and Scopus.<sup>68</sup> Traditionally, the most important database is the WoS. The performance of Yugoslav social scientists in top international journals in the 1990s has been described as “more than modest”.<sup>69</sup> Once the regime of Slobodan Milošević was ousted, the country embarked on a process of democratic transition. International reintegration and Europeanisation brought about a different set of professional expectations from Serbian scholars, including publication in international journals. However, the number of articles in top international journals produced by Serbian scholars remained low, especially in the field of SSH. For instance, in the period between 2000 and 2003, some 3,000 Serbian researchers in SSH published no more than 30 articles per year in top international journals. This amounted to about 2% of the total number of scientific articles produced in the country.<sup>70</sup>

From 2007 onward, the number of articles in hard sciences quickly increased and caught up with the rest of Eastern Europe. This occurred mostly thanks to the new standards that were adopted by the National Council for Higher Education, while the University of Belgrade, which is responsible for a large proportion of Serbia’s scientific production,<sup>71</sup> adopted new and much stricter guidelines for professional advancement.<sup>72</sup> An important impetus for this quantitative increase was created by the Strategy adopted in 2010.<sup>73</sup> As regards articles published in top academic journals, the performance of Serbian scientists was much better in this project cycle (since 2011) than in the previous (from 2006 to 2010).<sup>74</sup> The progress can be attributed, at least partially, to publications written through “hyper-authorship” (i.e. by a large number of authors) or in predatory journals.<sup>75</sup>

However, despite the above described growth in productivity of the Serbian scientists in general, research in the field of SSH has unfortunately stagnated, at least when judged against this particular criteria. Hence, although the number of articles published by Serbia-based scientists in WoS-indexed journals almost doubled from 2011 to 2016 when compared to the project cycle 2006-2010, the total number of articles in SSH did not change considerably.<sup>76</sup> Serbian social researchers also lag behind when compared to other European countries. In the period from 2005 to 2014, for example, they produced 212 articles that were published in WoS-indexed journals per one million inhabitants. This was slightly below the average achieved by Croatia, Romania and Bulgaria (241) and almost five times fewer than the EU average (1,043).<sup>77</sup> Scholars in the field of humanities are particularly lagging behind, with only 51 articles in WoS-indexed journals per one million inhabitants during the same period. For the sake of comparison, Croatia, Romania and Bulgaria, for example, have twice as many (108), while the old EU member states have six times as many (308).<sup>78</sup>

The performance is even lower when it comes to citation of publications by Serbia’s SSH researchers. It is interesting to note that the overall rise in the number of articles in international journals over the past decade has been followed by a decline in citations. In 1996, for instance, articles from Serbia that appeared in top international journals were cited on average 14 times, while in 2013 the number declined to a mere 1.05.<sup>79</sup> Moreover, while 50% of articles from Serbia were not cited at all in 1996, this number rose to an astounding 78% in 2013.<sup>80</sup> When articles in WoS-indexed journals are taken into consideration, articles published by Serbian medical scientists are cited the most, while those written by social researchers are cited the least.<sup>81</sup> On average, they had 0.61 citations in the period 2005-2014. This is much lower than the average in old EU member states (8.06), but only slightly lower than Croatia, Romania and Bulgaria (0.63). In the field of humanities, scholars from Serbia had on average 0.04 citations per 1,000 inhabitants while their colleagues from Croatia, Romania and Bulgaria achieved 0.06 (articles from old member states had 0.56 citations on average).<sup>82</sup>

According to another ranking, provided by Scopus, the indexing service that covers a much larger number of journals than the WoS, the picture is somewhat better although far from satisfactory.<sup>83</sup> When all subject areas of the sciences are taken into consideration, in the period from 2006 to 2016 Serbia ranked 54<sup>th</sup> in the world and 11<sup>th</sup> in Eastern Europe (out of 234 countries).<sup>84</sup> In social sciences, Serbia is ranked 51<sup>st</sup> in the world and 11<sup>th</sup> in Eastern Europe. However, if one considers the H-index, which measures the impact of only the most cited articles, Serbia’s ranking in social sciences deteriorates to 74<sup>th</sup> in the world and 12<sup>th</sup> in Eastern Europe. Finally, when the total number of citations per published article in social sciences is included into calculation, Serbia’s ranking plummets to 205<sup>th</sup> position in the world and 15<sup>th</sup> in Eastern Europe (see Table 1 for Serbia’s ranking in particular SSH disciplines). All this clearly shows that it is not only the quantity of articles published by Serbia-based researchers in SSH that is low in comparison with other Eastern European countries – their scientific impact is even less remarkable.

*Table 1: Ranking of Serbia’s SSH disciplines according to SCImago Country Ranking, 2006-2016*<sup>85</sup>

DISCIPLINE	RANKING (NO. OF PUBLICATIONS)	RANKING (H-INDEX)	RANKING (CITATIONS PER DOCUMENT)
Communication	35	50	121
Anthropology	41	72	144
Urban Studies	43	71	119
Psychology	43	76	119
Safety Research	44	50	98
Archaeology	46	52	86
Law	48	73	146
Education	49	58	147
Public Administration	56	104	148

DISCIPLINE	RANKING (NO. OF PUBLICATIONS)	RANKING (H-INDEX)	RANKING (CITATIONS PER DOCUMENT)
Economics, Econometrics and Finance	57	87	186
Cultural Studies	58	70	86
Library and Information Sciences	59	43	60
Political Science and International Relations	60	86	151
Social Work	62	101	133
Sociology and Political Science	63	77	116
Geography, Planning and Development	66	94	166
Gender Studies	75	90	25
Demography	86	119	138
Development	103	118	162

Another performance indicator is the quantity and quality of national journals. On the eve of its breakup, Yugoslavia had established SocioFakt, one of the first national citation indexes for social sciences in the world.<sup>86</sup> Building on that, in the early 2000s the Centre for Evaluation in Science (CEON), a Belgrade-based civil society organisation, upgraded it to an all-disciplines national citation index (SCIndex). Moreover, CEON started issuing its own annual bibliometric report. Until the year 2016 the Ministry used the report as the basis for official journal ranking and funding. However, the final decision always depended on the arbitrary decision of the Scientific Registry Boards.

According to the latest bibliometric report (for 2016), issued by the Mathematical Institute of the Serbian Academy of Arts and Sciences issued in 2018, of 547 academic journals published in Serbia 292 are in the field of social sciences and humanities.<sup>87</sup> Although the exact number of scholars working in SSH is difficult to pinpoint, the above number seems exceptionally high. In humanities alone, for instance, the number of researchers is roughly estimated at around 700, while the number of journals in one count was 243.<sup>88</sup> This means that there is approximately one journal per three researchers in this field, which is absurd.

Also, of 23 journals from Serbia that are indexed in the WoS, only three with impact factors are in the field of SSH: two in the Social Science Citation Index (SSCI)<sup>89</sup> and one in the Arts & Humanities Citation Index (AHCJ).<sup>90</sup> Also, of 74 journals from Serbia that are indexed in Scopus, only 12 are from the fields in SSH.<sup>91</sup> In this respect, Serbia is lagging not only behind “the new Member States” from Eastern Europe, but also behind some neighbouring Western Balkan countries. For example, Croatia has 8 journals in SSCI, 12 in



AHCI, and 65 in Scopus, while Slovenia has 7 in SSCI, 6 in AHCI and 35 in Scopus (to see the numbers by discipline, see Table 2).<sup>92</sup>

As regards the number of times the articles published in Serbian journals have been cited, the picture is even gloomier. Of 292 Serbia's SSH academic journals covered by the bibliometric analysis, only 47 contained at least one article published in 2014 and 2015 that was cited in other journals indexed in the WoS in 2016. Those 47 journals were cited on average 1.89 times, while individual articles were cited on average 0.03 times. In addition, over the past decade the number of times that articles published in domestic journals in the field of social sciences were cited in the WoS-indexed journals has improved only marginally, while in humanities there has been no improvement at all in this respect. Meanwhile, the available bibliometric data shows that in the same period Serbia's journals in all other disciplines have made a much more significant progress.<sup>93</sup> Moreover, Serbian journals in the field of SSH contain much fewer international authors and references to international journals than those that cover other fields.<sup>94</sup> All this clearly indicates that Serbia's academic journals in the fields of SSH, although numerous, are inward-looking and producing articles that are extremely rarely cited.

*Table 2: Serbia's academic journals, February 2018*

FIELD	ACADEMIC JOURNALS IN SERBIA	INDEXED IN WOS (SSCI & AHCI)	INDEXED IN SCIMAGO/SCOPUS
All scientific fields	547	23	70
Journals in Social Science and Humanities	292	3	10
Interdisciplinary Social Science	14	0	0
Philosophy and Theology	10	0	1
Sociology and Demography	9	0	2
Psychology, Pedagogy Andragogy and Special Education	25	1	2
Law and Political Science	40	0	0
Economy and Organisational Science	39	1	3
Sport	8	0	0
History, Archeology and Ethnology	74	1	1
Language and Literature	73	0	1

While the above discussed quantitative indicators suggest a very low quality of research in SSH, they should not be taken at face value. To begin with, deficiencies of using journal metrics to assess science have been widely documented.<sup>95</sup> Ultimately, impact factors reflect – if anything – the impact of journals and not that of individual articles, let alone their quality. Moreover, previous research has shown that judging the quality of SSH performance solely on the basis of articles published in WoS-indexed journals is particularly problematic.<sup>96</sup> In contrast to natural sciences, SSH in general, and some of its disciplines such as law or linguistics in particular, have a substantially different publication behaviour. As opposed

to natural or technical sciences, this includes writing for national instead of international audiences, publications in national languages instead of English (most WoS-indexed journals are published in English); single author instead of multiple authors publications; preference for books rather than articles; citation of older sources rather than focusing on newer ones (impact factors are solely based on recent citations, usually from last two to five years); and a greater share of publications intended for non-scientific audiences such as policy papers or dictionaries. Finally, just because articles of Serbia's SSH have not been cited much does not mean that they are necessarily of poor quality – it means only that other scientists have not found them very useful for their own research. Increasingly aware of all these limitations, academic communities from Serbia<sup>97</sup> and across the world<sup>98</sup> have made calls to reconsider evaluating research performance based on quantitative bibliometric indicators. That is why, in addition to the standard bibliometric methods used for science, performance of SSH should be evaluated by including a broader range of indicators that goes beyond journal articles indexed in WoS or Scopus.

One such indicator is the quality and quantity of other types of publications such as books. Like in most other countries, Serbian social scholars publish their best work not in articles but in books. However, according to the available data, only a small fraction of such books are published by prestigious international publishers. Instead, the vast majority of books written by Serbia's SSH researchers are published by national publishers where the criteria are usually much lower and proper quality often does not exist.<sup>99</sup> During the period between 2011 and 2014, for example, Serbia-based social researchers published only 43 books that fall under the category of "internationally excellent" (M11) out of around 6,200 books that were published in total. The most frequent type of publication in this period (8,348) was by far a chapter in a book with quality that is recognised nationally (M44 and M45).

## Societal Relevance

The second aspect that can be used to evaluate the performance of any SSRS is its social relevance. To begin with, this encompasses the contribution of social research to evidence-based policy making. To support evidence-based policy making, the Government of Serbia established the Public Policy Secretariat in 2014. Over time, it also showed the ambition of acting as an interface between the SSRS and policy making. Furthermore, according to the well-known global ranking of think tanks published annually by the University of Pennsylvania, there are a few world-class non-governmental policy research organisations in Serbia: the Belgrade Centre for Security Policy, the European Policy Centre and the Economics Institute, ranked as 14<sup>th</sup>, 27<sup>th</sup> and 52<sup>nd</sup> (respectively) in Central and Eastern Europe in 2017.<sup>100</sup> According to the SCImago ranking of the 1,207 best government research institutions in the world, Serbia's SANU made it to the list and was ranked 803<sup>rd</sup>.<sup>101</sup>

Despite these relatively positive indications, Serbia's scholars and policy makers seem to share the impression that science-policy collaboration should be significantly improved. Even when such collaboration does exist, it is perceived as sporadic, partial and largely depending on personal connections.<sup>102</sup> From the policy makers' point of view, researchers in SSH need to adapt to policy priorities and start producing policy-relevant knowledge. In the words of one state official: "Social sciences have never been more needed, but their usefulness is almost zero."<sup>103</sup> Another official, closely involved in the EU membership negotiations, stated that "Social sciences are in a very bad state [...] we need academic knowledge that will be applied in the negotiation process, but we don't have it so we have to induce it."<sup>104</sup> From the point of view of policy makers, most research in SSH is irrelevant, inward-looking, inaccessible and poorly communicated.

This impression of a policy-academic disconnect is equally shared by Serbia's researchers in the field of SSH. Approximately 60% of them have never been invited to present their research results before either a formal (57.7%) or informal gathering of decision makers (58.5%), conduct a policy-relevant empirical research (59.9%), or participate in the drafting (61.5%), monitoring or evaluation (68.3%) of public policies.<sup>105</sup> However, from the point of view of the researchers, at least some of the blame should be attributed to policy makers, who have not created sufficient systemic incentives for scholars to engage

in public policies. Some argue that the purpose of their research should not be to serve policy makers and solve their problems, but to critically engage with them, educate the wider public and contribute to the cultural heritage of society.<sup>106</sup> Instead of getting too close to policy makers and thus compromising their “intellectual independence”,<sup>107</sup> it is believed that SSH researchers should keep a “dissident spirit” and question contemporary dogmas and political power.<sup>108</sup>

Another way to evaluate social relevance of any SSRS is to assess its links with higher education. The performance of the SSRS in Serbia in this respect, however, also seems to be far from satisfactory. In 2012, the University of Belgrade managed to secure a place on the Shanghai List of top 500 universities in the world and has even improved its position over the years.<sup>109</sup> This indicator, however, says nothing or very little of the quality of research-driven education at the University of Belgrade, especially given the fact that SSH have not contributed much to this positive trend. The improved rank of the University of Belgrade has been achieved almost exclusively as a result of the improved performance of hard scientists or, to be more precise, the increased number of articles they published in top international WoS-indexed scientific journals mentioned earlier.<sup>110</sup> As the performance of scholars in SSH has not improved much in this respect over the past decade, the improved ranking on the Shanghai list should not be taken as an indicator of the improved quality of education in this field.

One of the declared policy goals in Serbia is to bring science and education not only closer to each other, but also to integrate them into the ERA and the EHEA. In reality, however, scientific research and higher education in Serbia are still separate worlds. According to one research, only 1.25% of students ever participated in research projects, while the EU average is 2.9%.<sup>111</sup> In the words of one interviewee from the Petnica Research Centre: “A vast majority of students complete their undergraduate studies without knowing anything about their professors’ research activities”.<sup>112</sup> Also, to participate in post-graduate teaching and mentoring, research institutes need to partner with universities. As the latter are reluctant to surrender their lucrative monopoly on teaching by entering into such partnerships, enormous synergistic potentials between scientific research, on the one hand, and higher education on the other, are left unharnessed.<sup>113</sup>

While there are no detailed empirical studies that assess the quality of post-graduate education in SSH at Serbia’s universities, anecdotal evidence indicates very poor preparation for internationally competitive scientific performance. There are currently no doctoral programmes, and very few international doctoral and post-doctoral students. Furthermore, there is much room for improvement in post-graduate methodological instruction, while quantitative education is particularly missing. As one professor from the University of Belgrade put it, “Mathematical education in social sciences is extremely poor. Everyone is only doing qualitative methods, but I wonder how well they are doing them and whether they can actually conduct content or discourse analysis properly. [...] There is a lot of posing and very little practical knowledge”.<sup>114</sup>

In addition to educating students, SSH should also benefit the wider public by helping to better understand societal challenges. Despite the establishment of the Centre for the Promotion of Science in 2010, which is a step in the right direction, social researchers in Serbia still do not have sufficient incentive to leave “the ivory tower” and effectively disseminate their insights to wider audiences.<sup>115</sup> Part of the blame for the results of Serbia’s social researchers not being more accessible to the wider public should be attributed to the media. They rarely (if ever) specialise their journalists to cover research in the field of SSH. Also, when covering a story, newsrooms have little time and no resources to conduct in-depth research that would draw on relevant scholarly research. Often perceived as the best-known talking heads, social researchers or so-called “political analysts” are thus usually called to comment in the media based on very shallow ideological profiling rather than research expertise.<sup>116</sup> Dissemination is better in the sphere of social media and online communication, which is used by an increasing number of younger scholars and think-tankers in Serbia to share their research results.<sup>117</sup> However, this is still in infancy and has a limited reach in comparison to the situation in the West.<sup>118</sup>

Another reason why there is much room for the improvement of research-driven higher education in Serbia is the fact that Serbia's universities have a student-academic staff ratio that is among the highest in Europe (23.8 students per one member of academic staff in 2015).<sup>119</sup> This is the result of a perverted political economy of higher education in which faculties receive public funding per student, thus creating incentives for the faculties to increase the number of students, which results in higher acceptance rates and a lower quality of teaching. High student-academic staff ratio causes faculty members to be overloaded with teaching obligations, leaving them little time for research. In private universities and higher professional schools, teaching is the lecturers' predominant task.<sup>120</sup> According to the World Economic Forum (WEF) Competitiveness Index for 2015-2016, Serbia is ranked 47<sup>th</sup> in the world (out of 137 countries) for its Quality of Scientific Research Institutions and 93<sup>rd</sup> for the Quality of the Education System. All this strongly suggests that recent quantitative improvement in the research performance has yet to spill over to SSH and trickle down into higher education.<sup>121</sup>

Finally, research in the field of SSH could also be evaluated on the basis of its contribution to innovations and economic growth. While it is hard to make an assessment in this domain with any degree of precision, the available data suggests that the results are below satisfactory. According to the WEF Competitiveness Index, Serbia is ranked 117<sup>th</sup> country in the world for its capacity for innovation, 107<sup>th</sup> for the companies' spending on R&D, and 95<sup>th</sup> for university-industry collaboration in R&D.<sup>122</sup> The business sector employs only 1.21% of all the researchers in Serbia.<sup>123</sup> Also, in February 2018, two of 125 registered innovative organisations operated in the field of social innovations, but neither has been accredited to conduct research.<sup>124</sup> There is obviously an enormous potential for improvement in this domain as technological innovations always require social innovations, which have not been sufficiently addressed by SSH researchers.

# 4. Key Factors Responsible for the Performance of the Social Science Research System in Serbia

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In this section, the report will identify key factors that either *enable* or *inhibit* the performance of the SSRS in Serbia. Against such a backdrop, the report will devise recommendations to the policy and scientific community on how to empower enablers and weaken inhibitors to the benefit of SSH research in Serbia.

First, Serbia has a **long tradition** of SSH research. Serbia's Belgrade University dates back to 1808 and has a long history of academic journals, some of them the longest running in the world. While the solid foundation of scientific research had been laid before the World Wars, research in SSH has continued to thrive in Communist Yugoslavia. Although the ideological grip of the Communist Party severely constrained the freedom of expression and pluralism required for healthy SSH research, some important achievements in the field of Marxist social thought were made during this period. This peaked in the 1960s and 1970s thanks to the internationally renowned Praxis School of Marxism. During this period, Serbia also developed its research infrastructure including a great number of research institutions and journals in the field of SSH. Most of them still exist today in one form or another. The long tradition of SSH research, however, also comes with ossified structures and deeply rooted practices, not all of which – as pointed out earlier – are conducive to excellent research.

Closely related to this is another enabling factor: the relatively decent quality of Serbia's **research infrastructure** in the field of SSH. Currently, in addition to Matica Srpska and SANU (encompassing six SSH institutes), Serbia has eight public and 10 private universities as well as 18 research institutes (12 in social sciences and six in humanities) and at least two dozen mostly foreign-funded non-governmental think-tanks that all conduct research in SSH. Most of these institutions have decent infrastructure at their disposal, including top-notch and centrally located office space, experienced staff and libraries. According to the Law on Scientific Research Activity all research institutions that "achieve exceptional and internationally recognised scientific and expert results in a certain scientific discipline" can apply for the status of Centre of Exceptional Values. However, out of 16 accredited Centres of Exceptional Values, only one is doing research in SSH (the Laboratory of Bioarcheology, Faculty of Philosophy of the University of Belgrade).<sup>125</sup>

Since 2000, Serbia has been on the path of **democratisation**. This process is far from linear and has, in many ways, experienced a backslide in recent years.<sup>126</sup> It has nevertheless created new opportunities for researchers in SSH to reinvent their role in the society. Having existed for quite a while as mere instruments of policy, which was their designated role both under the Communist and early post-Communist nationalist rules, social researchers in today's Serbia are offered a greater number of avenues to keep their intellectual autonomy and shape public debates and policies. This, unfortunately, still remains largely a missed opportunity. The European integration of Serbia, along with the adoption of the EU rules and norms, also enables Serbia's researchers in SSH to integrate into the ERA. This creates new opportunities for additional funds and international networking and collaboration. Serbia's human and

cultural potential, the pace of technological change, and the change of generations all act as factors enabling the performance of the SSRS.

Unfortunately, there are four major factors that inhibit the SSRS in Serbia. The first involves **negative tendencies in the wider socio-political context**. SSH are globally going through a difficult period, not only because of the austerity measures that followed the global financial crisis but also as a result of a deeper and longer lasting crisis of self-confidence.<sup>127</sup> In the “post-truth” era, fragmented public sphere in combination with rising populism leads to a decrease of public trust in science and expertise.<sup>128</sup> Moreover, the process of democratisation in Serbia was not only stalled in recent years, but has also started to backslide. State capture by political parties and clientelistic networks has stifled democracy and SSH have suffered the consequences as well. Much like the rest of the society, the SSRS is permeated by informal decision making. One social scientist deplored the situation in the following words: “Our institute has a representative in one of the Registry Scientific Boards, but we never have any influence on policies or even receive proper information about them. Instead of in institutions, science policy making takes place within the informal networks of top political appointees.”<sup>129</sup> Another case in point was the fate of policies introduced by former Minister Verbić and his team, only to be undermined by an informal network of politically influential scholars, mostly from the field of SSH.

The second major factor that negatively impacts the SSRS in Serbia is the **lack of political commitment** to quality research and education. Since the year 2000, decision makers in charge of science and education have had either other policy priorities, lacked strong political backing, or had poor understanding of the role of SSH in the society. The lack of political commitment resulted in low and inadequate funding of research, weak oversight of the research sector, poor incentives for excellent science and ethical behaviour of researchers, and the absence of continuity, persistence and clarity of purpose in science policies. The lack of political commitment has also resulted in insufficient capacities and competencies in the science governance structures. The same applies to higher education policies, including the current accreditation system and higher education funding, none of which are fostering research excellence and accountability.

The absence of political commitment has also led to inadequate science funding. Serbia’s investments in science remain low, in both relative and absolute terms. Moreover, most of the investments are spent on salaries, and funding is received by virtually any research organisation that applies. As a result, much of the SSH research is desk-based, with few empirical or field studies. Instead of fostering excellent and socially relevant science, one of the purposes of science funding has been to ensure (buy) social peace, which in and of itself happens to be a goal that is worthy of pursuing when this is done through other means, such as the welfare policy. Also, in contrast to hard sciences, the SSRS has not benefited from other sources of investment. The Innovation Fund, for example, has not funded any innovative enterprises with contribution of SSH research. The only alternative although insufficiently used source of funding available to scholars in SSH are foreign research funds such as the EU’s Horizon 2020 programme or various multilateral or bilateral support to CSOs.

Poor science funding has been accompanied by weak incentives to achieve excellence. For over a decade, science policy has prioritised quantity over the quality of research performance.<sup>130</sup> This has led to the hyper-production of publications of dubious quality that are all too often disconnected from academic or public debates, policy making or higher education, and whose sole purpose is to help the career advancement of their authors. Despite some efforts to incentivise excellence over the past decade, Serbia’s science policy has not properly addressed specific challenges faced by SSH. In particular, journal articles have been given top priority, while the quality of other publications that are especially relevant for SSH such as books has been neglected.

Over the years, the Government has struggled to build sufficient capacities and sound criteria to evaluate science, particularly in the field of SSH. A good case in point is the weak capacity of the Ministry to evaluate SSH research and the almost complete absence of social scientists from its top echelons. The last categorisation of researchers was conducted in 2010, using very dubious criteria, and researchers

have been paid accordingly ever since. While the Government is currently trying to complete the Central Registry of Researchers, there is no clarity on what grounds researchers will be evaluated and categorised, and by whom, in the next project cycle which has been long overdue.<sup>131</sup> Another problem is the criteria that are used to evaluate science. As mentioned above, in the past years priority has been given to the number of journal publications produced by researchers while their quality or impact have been completely ignored. Furthermore, the evaluation focused exclusively on individual researchers, instead of also evaluating research groups or institutions.

Another result of the systematic neglect of SSH by the Government is the science/policy gap. Researchers lack systemic incentives to conduct projects that are considered relevant from the point of view of policy makers. In fact, the weak offer of policy-relevant scholarships is caused, at least in part, by the simple fact that there is very little demand for it. Evidence-based policy making is still in its infancy in Serbia and most decision makers have yet to discover its potential. The science/policy gap is compounded by a high degree of mutual distrust. Many researchers in the field of SSH often worry that policy relevant scholarship might taint their public image and compromise their independence. Decision makers, on the other hand, are not always at ease working with scientists, whom they often perceive as strong minded and detached from political and social realities.

The third major factor inhibiting the performance of the SSRS in Serbia is the extremely **limited mobility** of researchers, both within the country and internationally. This problem is particularly critical at universities, as research institutes do not offer post-graduate education and have to recruit, at least their entry level research staff, from among recent university graduates. University lecturers usually complete their entire higher education within one faculty. Having spent many years in the capacity of teaching assistants, handpicked by their supervisors and often unpaid for years, they obtain their PhDs, acquire a permanent position, and stay in the same department until the end of their careers. Mobility across different research institutions is even more limited, while the presence of foreign scholars at Serbia's SSH research and higher education institutions is almost non-existent.

Weak mobility means limited competition and the absence of a proper job market for researchers, all of which is certainly not fostering a positive selection among them. As one professor employed at the University of Belgrade put it, "Mobility and a job market in SSH do not exist at all. Almost none of the job competitions are in fact truly open, as they almost include photographs of people for whom they were created".<sup>132</sup> At universities, for example, competitions for permanent positions are formally open, and there are no formal constraints for external candidates to apply. In reality, however, job openings are virtually always created for internal candidates. Although they are advertised in the Official Gazette of the Republic of Serbia, outside candidates rarely apply as competitions are widely believed to be rigged and are considered a waste of time. Once employed, scholars rarely move to a different institution even within the same city, let alone in a different one (opportunities outside Belgrade are extremely scarce anyway). The prospect of continuing their careers abroad is even slimmer, which is something that particularly affects researchers in the field of SSH and is caused by the fact that their publications, written predominantly in the Serbian language and appearing in domestic journals, render them practically unappointable abroad.

The fourth major factor that causes problems that have been listed in this report is the **academic culture** that pervades many institutions of the SSRS in Serbia. It is characterised by a separation of education and research, parochialism, outdated science communication, disciplinary fragmentation, informality, culture of non-confrontation and aversion to competition. The origins of such a culture stem partially from decades-long authoritarian political systems that existed prior to 2000. Both in the Communist era and the early post-Communist period, hard sciences were to a degree left to their own devices. Meanwhile, the SSH remained under the strong ideological grip of the ruling elites. With a few exceptions, this stifled the development of critical edge and intellectual independence, which are both needed for any meaningful progress in SSH research. The fragmentation of SSH, as well as the disconnection between research and education, partly originate also from authoritarian policies aimed to defuse the disruptive

potential of scholars by detaching them from both the students and each other.<sup>133</sup> Personal contacts were more important than professional ethos and academic merit, while public criticism was usually associated with political campaign or personal assault.

In many institutions, all this resulted in the entrenchment of an academic culture that constrains the development of merit-based professional ethos. Deeply rooted at the level of both practices and shared ideas, many of these cultural traits militate SSH researchers in Serbia to resist the requirements of internationalisation, mobility, excellence, policy and social relevance, transparency, competition, innovation, multi-disciplinarity, research-driven teaching and accountability. Universities have very weak ethical committees that rarely, if ever, screen research projects in SSH for ethical issues. Moreover, the culture of non-confrontation has created a virtual impunity even for the gravest breaches of ethical misconduct. Due to its insularity and parochialism, many in Serbia's SSH are missing great opportunities for international collaboration. While hard sciences increasingly obtain additional funding from foreign sources and through international collaborations, Serbia-based researchers in SSH insufficiently cooperate with their colleagues from abroad and struggle to obtain internationally competitive funds for their research. For example, out of 172 projects funded through Horizon 2020 in which Serbian institutions took part, fewer than 10% are estimated to be in SSH.<sup>134</sup>

In sum, the SSRS in Serbia has an extensive infrastructure and a long-standing tradition. Democratic transition, European integration and change of generations have created new opportunities for Serbia's researchers in SSH. However, social research in Serbia is still inward-looking and continuing to punch way below its weight in terms of scientific excellence, is not sufficiently linked to either policy making or higher education, and struggles to shape public debates. Funding for social research is insufficient and, instead of aiming at the merit-based fostering of scientific excellence, is distributed with the purpose of maintaining the social welfare of researchers. Overall, there is much room for improvement in how research in Serbia in the field of SSH is financed, produced, evaluated, governed, disseminated and used.



# 5. Conclusions and Recommendations

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Despite some progress that was made in the recent years, there is still a lot to be desired when it comes to Serbia's research in SSH. Scientific results in this field are still insular, inaccessible, mostly focusing on quantity instead of quality, disconnected from policy making and large sections of society, and insufficiently linked to higher education. The underlying causes for this could be found in the wider socio-political context, which has not been helpful in the recent years. However, one of the key causes of the weak performance has been insufficient political commitment to quality education and research. This has resulted in the weakness of research-driven education, inadequate funding of research, insufficient incentives for excellence, ineffective science governance, absence of accountability, science-policy gap and science-politics nexus. Another underlying cause of the poor performance of SSH in Serbia is the almost total absence of mobility of researchers, both within the country and internationally. Finally, the last underlying cause of the underwhelming results has been the academic culture characterised by separation of education and research, parochialism, disciplinary fragmentation, informality, culture of non-confrontation, impunity for ethical misconduct and aversion to competition.

How can the loop of stagnation be stopped, the systems' potentials unlocked, and the virtuous circle jumpstarted? According to Meadows, there are three ways of changing the system.<sup>135</sup> The first is to change its components. Changing certain parts of the system is needed and possible, including the creation of the Science Fund, merging some research institutes or creating new ones. However, the historic window of opportunity for a radical change – similar to that which existed in some Eastern European states following the collapse of Communism – was missed a long time ago. Eighteen years after the regime change, there seems to be very little energy left in the society for any radical overhaul. Ultimately, the natural process of generational change will bring new people. However, to expect that this alone would bring about systemic changes, including those in the academic culture is unrealistic.

The second way to change a system is to change the interconnections between its components. In this respect, there is much room for a systemic improvement of the SSRS. To begin with, the clientelistic nexus between political and academic elites needs to be severed, while the intellectual link that connects the SSH research to policy making and higher education must be strengthened. Through its policies and funding, the Government of Serbia is well positioned to make some important changes. One of them is to institutionally separate its own regulatory and funding functions, through the creation of an autonomous body that would administer state research funds. Also, science funding needs to begin to reward excellence, and foster mobility and multi-disciplinarity. University's autonomy and its internal organisation should not be used as a shield against accountability and a pretext for fragmentation of SSH into isolated disciplinary groups that neither cooperate nor compete with each other.

Finally, the third way of changing the system is to change its purpose. The purpose of the SSH should not be to maintain social peace, which in and of itself is a goal worth pursuing when this is done through other means. The purpose of SSH research should be the production and dissemination of knowledge. To that end, Government funding should aim to foster scientific excellence that will drive the society forward by way of research-driven higher education, evidenced-informed policy making and knowledge-based economy. This will require a shift from the current model based on the funding of all the submitted projects, usually lacking internal coherence and common purpose, to a merit-based system where researchers will compete for funding more strenuously, but will also cooperate with each other more in order to reach a set of clearly defined research objectives. This shift has a potential to set into motion a

change in academic culture; however, it first requires a new social contract between the researchers, the state and the tax payers.

This is a tall order and the question remains as to the point from which to start. In other words, to use the language of system analysis, where are the “leverage points—places in the system where a small change could lead to a large shift in behavior”?<sup>136</sup> The first leverage point would be to appoint team within the Ministry with a good understanding of SSH and strong political backing. This should be accompanied by capacity building and governance reform in the SSRS. The Ministry should explore alternative forms of evaluation that will prioritise quality over quantity. Instead of hyper-producing articles that have little scientific or societal impact, researchers should be provided with incentives that will encourage them to produce fewer publications of better quality, including high quality books that make a real difference. Quality-oriented evaluation requires stronger reliance on situated judgment of expert panels rather than on bibliometric and quantitative indicators alone. To avoid creating additional room for cronyism, evaluation should be fully transparent, involving international peer-reviewers of unquestioned credibility in the field. The language barrier can be overcome by relying on international peer-reviewers from the academic diaspora who understand the Serbian language. To build its own capacities for this and other challenging tasks, the Ministry could request, through the Technical Assistance and Information Exchange Instrument of the European Commission (TAIEX), that the EU send a peer review mission. The goal of the mission would be to conduct an in-depth analysis of the current social science governance structures and propose context-adjusted reforms in line with local needs and best international practices.

Another leverage point would be the next cycle of both research funding and accreditation of university programmes. Research funding should be made more competitive, better focused and more selective. Projects that involve cross disciplinary and cross border collaboration should be prioritised over mono-institutional and mono-disciplinary projects. The Government should also encourage, whenever possible, projects that involve collaboration between SSH researchers, businesses, civil society and public administration. Also, instead of funding blanket projects with poor focus and weak ambition, the Ministry should favour ambitious projects with a clearer focus. Funding should be more inclusive and open to private universities, public professional schools and non-governmental think-tanks. In line with the standards that exist in the ERA, each project should have clearly delineated and interconnected work packages, tasks, deliverables, milestones and dissemination strategies. Each project should also be screened for ethical issues and evaluated by peer-reviewers, including those from other countries.

As regards funding of academic journals, in the next project cycle a smaller number of professionally managed journals should be encouraged and given full support to be included on the most prestigious citation index databases. The government should foster competition in the private publishing market and financially support the creation of reputable “university presses” capable of raising the standards of scholarly book production in Serbia. The Government should also encourage the development of enterprises specialising in social innovation. It could also create incentives for businesses to collaborate with SSH researchers and invest resources in SSH research through tax stimulations.

The third leverage point is the next accreditation of universities, which should be better linked to research. In other words, universities that are receiving funds from the budget should be encouraged to make a direct link between their research projects and educational programs. To that end, they should be systemically encouraged to partner up with research institutes and foster multidisciplinary educational programmes between different faculties. Post-graduate studies and doctoral programmes should strengthen their methodology courses and increase the mobility of students and lecturers alike.

Another leverage point could be the reliance on sizeable academic diaspora to foster change in SSRS. In 2016, Serbia was ranked as 137<sup>th</sup> country (of 138) in the world for its “capacity to retain talent”.<sup>137</sup> More than 500,000 people have left Serbia since the early 1990s; many of them were young and highly educated. According to some estimates, this includes around 5,000 PhD students and approximately the same number of accomplished PhDs.<sup>138</sup> Many of them would like to either return to Serbia or at least professionally engage more closely with Serbia-based researchers, provided there are right incentives

and opportunities. The Ministry is best positioned to work out various “brain gain” programmes that would encourage their employment in Serbia or engagement as researchers, reviewers or consultants. Universities should also eliminate obstacles and create incentives for faculties to recruit international academic staff as well as returnees from academic diaspora.

The final leverage point, where a small change could re-boot the entire system, would be to identify “clusters of excellence”, i.e. communities of social researchers scattered across the SSRS in Serbia that outperform in terms of scientific excellence and social relevance, and support them both financially and institutionally. This could be achieved by establishing more Centres of Exceptional Values in the field of SSH and by introducing prestigious national research awards for exceptional projects similar to the grants of the European Research Council. These “clusters of excellence” stimulated within particular institutions could then be connected with their counterparts in other institutions to promote cutting edge multidisciplinary research, deepen collaboration between the disciplines and institutions in Serbia’s SSH, and raise their international standing. In time, these networks of excellence can be expected to spread research culture to their own institutions, thus creating a tide that might provide all the ‘boats’ with smoother sailing.

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<sup>2</sup> Marija Veličković and Mihajlo Djukić, “Finansiranje istraživanja”, pp. 83-91 in Ivan Stošić, Bojana Radovanović and Mihajlo Đukić (eds.), *Istraživanja u oblasti društvenih nauka u Srbiji: Pregled stanja, karakteristični problemi i preporuke* (drugo izdanje), Institut ekonomskih nauka, Beograd, 2016.

<sup>3</sup> Pero Šipka, “Nauka u Srbiji: u susret evaluativnoj državi”, Centar za evaluaciju u obrazovanju i nauci, Elektronski radni dokumenti, 01/01, Beograd.

<sup>4</sup> Dušan Pavlović and Branko Urošević, “Pitanja vrednovanja naučnih rezultata”, pp. 94-121 in Stošić, Radovanović and Đukić (eds.) *Istraživanja u oblasti društvenih nauka u Srbiji*, 2016.

<sup>5</sup> Pero Šipka, “Metodi vrednovanja naučnih časopisa - upotreba i zloupotreba”, in: Ljiljana Vučković-Dekić (ed.), *Vrednovanje nauke i naučnika*, Monografije naučnih skupova AMN SLD, 5 (1) pp. 9-30, Kragujevac: Fakultet medicinskih nauka i Beograd: Akademija medicinskih nauka Srpskog lekarskog društva, 2014; Milica Ševkušić, Zorica Janković, and Aleksandra Kužet, “Open Access Journals in Serbia: Policies and Practices”, National Library of Serbia, Belgrade, 2017.

<sup>6</sup> Dubravka Valić-Nedeljković and Marko Kmezić, “Položaj mladih istraživača u Srbiji 2012”. pp. 121-134, in Ivan Stošić, Bojana Radovanović and Mihajlo Đukić (eds.), *Istraživanja u oblasti društvenih nauka u Srbiji*, 2016.

<sup>7</sup> Predrag Cvetičanin and Milica Petrović, “Kapaciteti, prakse i problemi naučno istraživačke zajednice u Srbiji”. pp. 16-80, in Stošić, Radovanović and Đukić, (eds), *Istraživanja u oblasti društvenih nauka u Srbiji*, 2016.

<sup>8</sup> Jelena Žarković-Rakić, Dejan Stanković, Igor Bandović and Mihajlo Đukić, *Implementacija naučnih rezultata u oblasti društvenih nauka u procesima kreiranja javnih politika u Srbiji*, Institut ekonomskih nauka, Beograd, 2016.

<sup>9</sup> Jean-Michel Rousseau, Ursula Koenig and Arthur Zimmermann, Systemic Analysis and Definition of Entry Points and Intervention Strategies in the Social Science and Research Sectors (SSRS) of Albania and Serbia, Organization, Development, Culture and Politics (ODCP), January 2013.

<sup>10</sup> Florian Bieber, Blerjana Bino, Marko Kmezić, Irena Myzeqari, Aleksandar Pavlović and Tara Tepavac, *Understanding Current Practices of Science Communication in Serbia and Albania: Recommendations for Enhancing Effectiveness*, Research Report Final Draft, PERFORM (unpublished document) 2017.

<sup>11</sup> Ivan Kovačević, “Odnos države prema humanističkim naukama u Srbiji početkom XXI veka: Citatometrija kao pokušaj ubistva srpske antropologije”, *Etnoantropološki problemi* 3 (2) 2008, pp. 27-43; Ivan Kovačević, “O čurkama, pilićima i citatnim indeksima”. *Antropologija* 8, 2009, pp. 9-31; Ivana Bašić and Aleksandra Pavićević, “Između politike, istorije i ideologija: humanistika u okrilju kargo kulta”, pp. 99-155, in Jovan Čirić and Luka Breneselović (eds.) *Zbornik za percepciju naučnog rada i poznavanje rekvizita njegove ocene*, Institut za uporedno pravo, Beograd, 2017; Ivan Kovačević, and Miloš Milenković. “Članak vredniji od knjige?! Razaranje interpretativnog suvereniteta srpskog društva.” *Etnoantropološki problemi* 8 (4) 2013, pp. 899-925; Miloš Milenković, “O brojanju i merenju (drugih) ljudi (za novac).”, *Etnološko-antropološke sveske*, 13(2), 2009, pp. 33-52; Gavrilović, Ljiljana. “Domaća antropologija na stranim jezicima ili: Dobrovoljna (auto) kolonizacija.” *Antropologija* 8, 2009, pp. 53-68. Ivan Kovačević “Lažne dileme srpskih društveno-humanističkih nauka.” *Antropologija* 13 (3) (2013) pp. 163-175.

<sup>12</sup> Aleksandar Kostić (ur), *Nauka: stanje, strategija, perspektive*, Zbornik radova sa naučnog skupa održanog 5. i 6. juna 2015. godine, Srpska akademija nauka i umetnosti, Beograd, 2016; Cvetičanin and Petrović, “Kapaciteti, prakse i problemi naučno istraživačke zajednice u Srbiji; Pavlović and Urošević, “Pitanja vrednovanja naučnih rezultata”; Goran Bašić, “Društvene nauke u dvadeset prvom veku”, pp. 1-23, in Goran Bašić and Mirjana Rašević (ed), *Ukalupljivanje ili prekočenje granica: društvene nauke u savremenom dobu*, Institut društvenih nauka, Beograd, 2017.

<sup>13</sup> Pero Šipka, “Internacionalizacija i evaluacija kao izazovi srpske humanistike”, in Aleksandar Kostić (ed.), *Nauka: stanje, strategija, perspektive*, 2016, pp. 309-329; Bašić and Pavićević, *Između politike, istorije i ideologija*.

<sup>14</sup> Regional Research Promotion Programme, “An Overview of Current Situation, Main Challenges and Policy Recommendations for Improving Social Science Research in Serbia”, Swiss Agency for Development and Cooperation, Belgrade, 2013.

<sup>15</sup> Donella H. Meadows, *Thinking in Systems: A Primer*, Earthscan: London 2009, p. 11.

<sup>16</sup> In Serbia, the 16 areas in the field of social sciences and humanities are: Library Science, Museology and Archival Science; Economics; History and Archaeology; Cultural Studies and Communication; Business and Management; Pedagogy; Political Science; Legal Studies; Psychology; Sociology; Special Education and Rehabilitation; Theology; Physical Education and Sport; Philosophy; Philology; and Arts. Source: Pravilnik o naučnim, umetničkim, odnosno stručnim oblastima u okviru obrazovno-naučnih odnosno obrazovno-umetničkih polja, Službeni glasnik RS 30/2007, 112/2008 i 72/2009.

<sup>17</sup> *Zakon o naučno istraživačkoj delatnosti*, Službeni glasnik RS, br. 110/2005, 50/2006 - ispr., 18/2010 i 112/2015.

<sup>18</sup> University of Belgrade, University of Arts in Belgrade, University of Novi Sad, University of Kragujevac, University of Niš, University of Priština, State University in Novi Pazar and University of Defence.

<sup>19</sup> Singidunum University, John Naisbitt University, Educons University, University Business Academy, Metropolitan University, Union University, Union University Nikola Tesla, Alpha University, European University and International University of Novi Pazar.

<sup>20</sup> Komisija za akreditaciju i proveru kvaliteta, Vodič kroz akreditovane visokoškolske ustanove i studijske programe u Republici Srbiji, 13. oktobar 2017. Available at:

[https://prijemni.infostud.com/files/static\\_pages/static\\_pages\\_2/Vodic-za-studente-13.10.2017.pdf](https://prijemni.infostud.com/files/static_pages/static_pages_2/Vodic-za-studente-13.10.2017.pdf) (accessed on 16 February 2018).

<sup>21</sup> Institutes in the field of social sciences are: Institute of Comparative Law, Institute of Criminological and Sociological Research, Institute for Political Studies, Institute of European Studies, Institute for Educational Research, Institute for Philosophy and Social Theory, Institute of International Politics and Economics, Institute of Agricultural Economics, Economics Institute, Strategic Research Institute, Institute of Economic Sciences and Institute of Social Science. Institutes in the field of humanities are: Institute for Literature and Arts, Institute of Contemporary History, Institute for Recent History, Institute of History, Institute of Archaeology and Institute for Serbian Culture Leposavić. Source: Republika Srbija, Ministarstvo prosvete, nauke i tehnološkog razvoja, *Spisak akreditovanih instituta*, Februar 2016. Available at: <http://www.kombeg.org.rs/Slike/CeTranIRazvojTehnologija/2016/Februar/Akreditovani-instituti.pdf> (accessed on 16 February 2018).

<sup>22</sup> Dondur, "Pregled stanja nauke u Srbiji", p. 22 in Kostić (ed.), *Nauka*, p.24.

<sup>23</sup> Kostić (ed.), *Nauka*, pp. 235-309.

<sup>24</sup> Interview no. 18, 8 February 2018.

<sup>25</sup> Institute of Balkan Studies, Institute for Byzantine Studies, Institute for the Serbian Language, Geographical Institute Jovan Cvijić (the Social Geography Department), Ethnographical Institute and Institute of Musicology.

<sup>26</sup> Matica Srpska, Department of Social Sciences: <http://www.maticasrpska.org.rs/en/category/naucna-odeljenja/odeljenje-za-drustvene-nauke/> (accessed on 16 February 2018).

<sup>27</sup> These are: 1. European Policy Centre, 2. Belgrade Centre for Security Policy, 3. Institute for Territorial Economic Development, 4. Centre for Euro-Atlantic Studies, 5. ISAC Fund, 6. Policy Center, 7. Center for Liberal-Democratic Studies, 8. Centre for Social Policy, 9. Centre for Education Policy, 10. Public Policy Institute, 11. Palgo Centre, 12. Centre for International Relations and Sustainable Development, 13. Centre for Applied European Studies, 14. Public Policy Research Centre, 15. SeConS Development Initiative Group, 16. Centre for Contemporary Policy, 17. Centre for Foreign Policy, 18. Centre for Development of Syndicalism, 19. Western Balkans Institute, 20. Transparency Serbia, 21. Centre for the Development of International Cooperation, 22. Belgrade Open School, 23. Group 484, 24. Public Policy Analysis Group, 25. Libek - Libertarian Club, 26. European Movement. The list was compiled by Aleksandar Bogdanović for the purpose of the research published in Aleksandar Bogdanović, "Think-tank organizacije u Srbiji: u potrazi za uticajem", Policy brief 1/2016, Istraživački forum, Evropski pokret, 2016. Available at: <http://www.emins.org/uploads/useruploads/forum-it/08-PB-Think-tank-NETSRB.pdf> (accessed on 16 February 2018).

<sup>28</sup> James G. McGann, *2016 Global Go To Think Tank Index Report*, The University of Pennsylvania, Philadelphia, 2017. Available at: [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1011&context=think\\_tanks](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1011&context=think_tanks) (accessed on 16 February 2018).

<sup>29</sup> Thus, for example, the Sector for Macroeconomic Research of the Ministry of Finance has 19 civil servants, while the Bureau for Strategic Planning of the Ministry of Interior has 9. Source: Marko Pešić, Draft study on the use of science in policy making, Perform, unpublished document, 2018.

<sup>30</sup> National Assembly of the Republic of Serbia, Committee on Education, Science, Technological Development and the Information Society, Available at: <http://www.parlament.gov.rs/activities/national-assembly/working-bodies/committees,-sub-committees,-working-groups.2373.html> (accessed on 16 February 2018).

<sup>31</sup> Centar za promociju nauke, "O centru", Available at: <http://www.cpn.rs/o-centru/?lang=en> (accessed on 16 February 2018).

<sup>32</sup> Sindikat nauke "O nama", Available at: [http://www.sindikata-nauke.org.rs/o\\_nama.html](http://www.sindikata-nauke.org.rs/o_nama.html) (accessed on 16 February 2018).

<sup>33</sup> Confederation of Autonomous Trade Unions of Serbia, "About us" Available at: [http://www.sindikata.rs/ENG/about\\_us.html](http://www.sindikata.rs/ENG/about_us.html) (accessed on 16 February 2018).

<sup>34</sup> Društvo psihologa Srbije, "About us" Available at: <http://dps.org.rs/about-us-aps> (accessed on 16 February 2018).

<sup>35</sup> Konferencija univerziteta Srbije, "Konus" Available at: <http://www.konus.ac.rs/nadleznost.html> (accessed on 16 February 2018).

<sup>36</sup> Association of Institutes, "history" Available at: <http://www.zis.ac.rs/index.php/en/about-us/history> (accessed on 16 February 2018).

<sup>37</sup> Ministry of Education, Science and Technological Development of Republic of Serbia, Research for Innovation: Strategy on Scientific and Technological Development of the Republic of Serbia for the Period 2016-2020. Belgrade, 2016. Available at: <http://www.mpn.gov.rs/wp-content/uploads/2015/08/Strategija-ingleski-jezik.pdf> (accessed on 16 February 2018).

<sup>38</sup> Bašić, "Društvene nauke u dvadeset prvom veku", p. 13.

<sup>39</sup> *Zakon o naučno istraživačkoj delatnosti*. The law has been amended several times and most recently in 2015. The work on a new law has started in the early 2018.

<sup>40</sup> Pravilnik o postupku, načinu vrednovanja i kvantitativnom iskazivanju naučnoistraživačkih rezultata istraživača, Official Gazette of the Republic of Serbia, No 24/2016 and 21/2017, Available at: <http://www.mpn.gov.rs/wp-content/uploads/2017/03/Pravilnik-2017-preciscen-tekst.pdf> (accessed on 16 February 2018).

<sup>41</sup> Pravilnik o kategorizaciji i rangiranju naučnih časopisa, Official Gazette of the Republic of Serbia, No 110/05, 50/06 and 18/10 и 112/15. Available at: <http://www.mpn.gov.rs/wp-content/uploads/2015/09/kategorizacija-%C4%8Dasopisa.pdf> (accessed on 16 February 2018).

<sup>42</sup> Some scholars argue that the specificities of SSH are so pronounced that they should not be quantitatively evaluated at all. See: Milenković "O brojanju i merenju (drugih) ljudi (za novac)."

<sup>43</sup> Republika Srbija, Strategija naučnog i tehnološkog razvoja Republike Srbije za period 2015 do 2015. godine, 25 februar 2010. p.3

<sup>44</sup> Research for Innovation, p. 34.

<sup>45</sup> Bašić, "Društvene nauke u dvadeset prvom veku", p. 13.

<sup>46</sup> Research for Innovation, p. 26.

<sup>47</sup> Interview No. 11, 25 January 2018.

<sup>48</sup> Akt o vrednovanju, izboru, finansiranju i praćenju projekata iz osnovnih istraživanja i osnovnih usmerenih istraživanja za period od 2016 do 2020 godine.

<sup>49</sup> Interview No.3, 16 January 2018.

<sup>50</sup> The most vocal opposition came from the Faculty of Philosophy and various social science research institutes who complained that the new regulation, which gives the biggest weight to American-based list of journals (WoS/JCR) will "americanise" science in Serbia. See: Sandra Gucijan, Institut SANU protiv Amerikanizacije srpske nauke, Politika, 22 February 2016. Available at: <http://www.politika.rs/sr/clanak/349723/Institut-SANU-protiv-amerikanizacije-srpske-nauke>. (Accessed on 16 February 2018). There was also a petition signed by almost 500 scholars who made the case that standard bibliometric evaluation based on WoS does not recognise specificities of their disciplines. See: Peticija istraživača iz oblasti društveno-humanističkih nauka, undated. Available at: [https://www.peticije24.com/peticija\\_istraivaa\\_iz\\_oblasti\\_drutveno-humanistikih\\_nauka](https://www.peticije24.com/peticija_istraivaa_iz_oblasti_drutveno-humanistikih_nauka) (accessed on 16 February 2018).

<sup>51</sup> The legal ground was found in the fact that the National Council for Scientific and Technological Development was not consulted prior to the call as foreseen by the law. Moreover, both the type of the document given in its title (Ser. "Akt") and its proposed immediate entry into force conflicted with the Serbian legal system, even though the previous call from 2011 had the exact same characteristics. See: Republic of Serbia, "Analiza kombinovanog modela finansiranja", undated and unpublished document, p. 3.

<sup>52</sup> *Zakon o naučno-istraživačkoj delatnosti*.

<sup>53</sup> Research for Innovation.

<sup>54</sup> *Zakon o visokom obrazovanju*, Sl. Glasnik RS, br. 76/2005, 100/2007, autentično tumačenje, 97/2008, 44/2010 i 93/2012.

<sup>55</sup> Strategija razvoja obrazovanja u Srbiji do 2020. godine, Sl. glasnik RS, br. 107/2012. p. 92.

<sup>56</sup> Research for Innovation, p. 8.

<sup>57</sup> Strategija naučnog i tehnološkog razvoja Republike Srbije za period od 2010 do 2015, p. 35.

<sup>58</sup> Ibid.

<sup>59</sup> Research for Innovation, p. 9.

<sup>60</sup> Milenković, "O brojanju i merenju (drugih) ljudi (za novac)", 33.

<sup>61</sup> Bašić and Pavičević, "Između politike, istorije i ideologija: humanistika u okrilju kargo kulta", p. 106.

<sup>62</sup> Meadows, *Thinking in Systems*, p. 14.

<sup>63</sup> Interview No. 9, 23 January 2017.

<sup>64</sup> Adam Santovac, "U poslednjoj deceniji broj doktora nauka porastao za 880%", N1, 12 December 2017. Available at: <http://rs.n1info.com/a334477/Vesti/Vesti/U-poslednjoj-deceniji-broj-doktora-nauka-porastao-za-880-odsto.html> (accessed on 16 February 2018).

- <sup>65</sup> Thus, for instance, the Megatrend University employed 18 high officials from Slobodan Milošević's Socialist Party of Serbia after they were ousted from power in October 2000." Mica Megatrend: Napustio sam Srbiju i SPS", Mondo, 11 September 2014. Available at: <http://mondo.rs/a726571/Info/Drustvo/Mica-Megatrend-Napustio-sam-Srbiju-i-SPS.html> (accessed on 22 March 2018).
- <sup>66</sup> "Srbija u raljama fantomskih diploma", DW, 7 April 2015, Available at <http://www.dw.com/sr/srbija-u-raljama-fantomskih-diploma/a-19170867> (accessed on 22 March 2018).
- <sup>67</sup> "Getting a PhD in Serbia has Never Been Easier: The Case of Minister of Internal Affairs Nebojša Stefanović", *Balkanist*, 1 June 2014. Available at: <https://balkanist.net/getting-a-phd-in-serbia-has-never-been-easier-the-case-of-minister-of-internal-affairs-nebojsa-stefanovic/> (accessed on 16 February 2018).
- <sup>68</sup> Archambault, Éric, David Campbell, Yves Gingras and Vincent Larivière "Comparing Bibliometric Statistics Obtained from the Web of Science and Scopus." *Journal of the Association for Information Science and Technology* 60(7) 2009, pp. 1320-1326.
- <sup>69</sup> Šipka, "Nauka u Srbiji", p. 8.
- <sup>70</sup> Tibor Sabo, "Nauka u Srbiji i okruženju i njeno finansiranje u periodu od 2000. do 2014. godine" p. 68. u Kostić (ed.), *Nauka*.
- <sup>71</sup> In 2015, 63% of all articles published in WoS-indexed journals by Serbian scholars belonged to the faculty members of the University of Belgrade. Vladimir Bumbaširević, "Odnos nauke i visokog obrazovanja", p. 120 u Kostić, *Nauka*.
- <sup>72</sup> Kostić (ed.), *Nauka*, p. 198.
- <sup>73</sup> Strategija naučnog i tehnološkog razvoja Republike Srbije za period od 2010 do 2015, p. 6.
- <sup>74</sup> Dondur, "Pregled stanja nauke u Srbiji", p. 22 u Kostić (ed.), *Nauka*.
- <sup>75</sup> Šipka, "Deset godina naglog rasta srpske produkcije" p. 49. Following a public scandal created by the Sokal-style hoax article published by three Serbian scholars in the then WoS-indexed Romanian Journal *Metallurgia International*, the overall scientific production of Serbia started to decline.<sup>75</sup> In 2016, Serbian scientists published 6,979 articles in WoS-indexed journals. Republika Srbija, Nacionalni savet za naučni i tehnološki razvoj, *Izveštaj o stanju u nauci u 2016. godini, sa predlozima i sugestijama za narednu godinu*, Beograd, 8. decembar 2017, p.4.
- <sup>76</sup> Research for Innovation, p.32
- <sup>77</sup> Šipka, "Internacionalizacija i evaluacija kao izazovi srpske humanistike", p.312.
- <sup>78</sup> Ibid, p.311.
- <sup>79</sup> Kostić (ed.), *Nauka*, p. 200.
- <sup>80</sup> Ibid, p. 200.
- <sup>81</sup> Šipka, "Deset godina naglog rasta srpske produkcije" p. 55.
- <sup>82</sup> Ibid, p. 312.
- <sup>83</sup> SJR, Scimago Journal and Country Rank, Available at: <http://www.scimagojr.com/countryrank.php> (accessed on 16 February 2018).
- <sup>84</sup> The term "country" here refers to the location of institutions to which authors of papers are explicitly affiliated in the article.
- <sup>85</sup> *Psychology and Economy, Econometrics and Finance* are treated as two separate categories from the rest of social sciences in the Scopus/SCLImago categorisation.
- <sup>86</sup> Pero Šipka and Biljana Kosanović, "SocioFakt - Jugoslovenska baza za društvene činjeničke nauke", u Petar Kostić (ed.) *Merenje u Psihologiji, IKSI i Centar za primenjenu psihologiju*, 1996, p. 85-95
- <sup>87</sup> "Elementi godišnjeg izveštaja o časopisima", Matematički institut SANU, internal document, 2018.
- <sup>88</sup> Šipka, 2016, 313.
- <sup>89</sup> *Panoeconomicus* and *Psihologija*.
- <sup>90</sup> Zograf
- <sup>91</sup> They are: *Economic Annals, International Journal of Cognitive Research in Science, Engineering and Education, Journal of Philosophy ARHE, Panoeconomicus, Politikologija religije, Psihologija, Serbian Journal of Management, Sociologija, Stanovništvo, Zbornik Instituta za Pedagogika Istraživanja* and *Zograf*. Izvor: Kobson, referisani časopisi, Available at: [http://kobson.nb.rs/nauka\\_u\\_srbiji/referisani\\_casopisi.23.html](http://kobson.nb.rs/nauka_u_srbiji/referisani_casopisi.23.html) (accessed on 16 February 2018).
- <sup>92</sup> Clarivate, AHCI list, Available at: [http://mjl.clarivate.com/publist\\_ah.pdf](http://mjl.clarivate.com/publist_ah.pdf) (accessed on 16 February 2018). SSCI list, Available at: [http://mjl.clarivate.com/publist\\_ssci.pdf](http://mjl.clarivate.com/publist_ssci.pdf) (accessed on 16 February 2018). Figures for Croatian and Slovenian journals indexed in Scopus are taken from Bieber et. al *Understanding Current Practices of Science Communication in Serbia and Albania*, p.52.
- <sup>93</sup> Šipka, "Internacionalizacija i evaluacija kao izazovi srpske humanistike", p. 317.
- <sup>94</sup> Ibid, p. 314.
- <sup>95</sup> Vanclay. "Impact factor".
- <sup>96</sup> Nederhof, "Bibliometric monitoring of research performance in the social sciences and the humanities."
- <sup>97</sup> Peticija istraživača iz oblasti društveno-humanističkih nauka.
- <sup>98</sup> San Francisco Declaration on Research Assessment, Available at: <http://www.ascb.org/files/SFDeclarationFINAL.pdf> (accessed on 16 February 2018); The Leiden Manifesto, Available at: <http://www.leidenmanifesto.org/> (accessed on 16 February 2018); Statement by three national academies (Académie des Sciences, Leopoldina and Royal Society) on good practice in the evaluation of researchers and research programmes. Available at: <https://royalsociety.org/~media/policy/Publications/2017/08-12-2017-royal-society-leopoldina-and-academie-des-sciences-call-for-more-support-for-research-evaluators.pdf> (accessed on 16 February 2018).
- <sup>99</sup> Kostić (ed.), *Nauka*, p. 298-299.
- <sup>100</sup> James G. McGann, 2017 *Global Go to Think Tank Index Report*, The University of Pennsylvania, Philadelphia, 2017. Available at: [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think\\_tanks](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think_tanks) (accessed on 16 February 2018).
- <sup>101</sup> SCLImago Institutions Ranking, Available at: <http://www.scimagojr.com/rankings.php?sector=Higher%20educ>. (accessed on 16 February 2018).
- <sup>102</sup> Rakić, et al, Implementacija naučnih rezultata u oblasti društvenih nauka u procesima kreiranja javnih politika u Srbiji, pp. 44-57.
- <sup>103</sup> Interview No. 3, 16 January 2018.
- <sup>104</sup> Interview No. 10, 24 January 2018.
- <sup>105</sup> Rakić, et al, Implementacija naučnih rezultata u oblasti društvenih nauka u procesima kreiranja javnih politika u Srbiji, p. 49.
- <sup>106</sup> Interview No. 19, 13 February 2018.
- <sup>107</sup> Perform, *Collaboration of Social Scientists and Policy Makers-An Evidence Informed Approach to Policy Making*, 2016. p.3 Available at: [http://www.perform.network/upload/resources/documents/1484041313551\\_PPS%20Intervention%20Brief\\_FINAL.pdf](http://www.perform.network/upload/resources/documents/1484041313551_PPS%20Intervention%20Brief_FINAL.pdf) (accessed on 16 February 2018).
- <sup>108</sup> Tibor Varady, "How (and Why) to Keep a Dissident Spirit in Spite of 'Transition'?", *Hungarian Review*, March 2017.
- <sup>109</sup> In 2018, the University of Belgrade's position at the University of Academic Ranking of World Universities (i.e. The Shanghai List) deteriorated slightly from the low-end of the third quintile (201-300) to the upper-end of fourth quintile (301-400). Available at: <http://www.shanghairanking.com/World-University-Rankings/University-of-Belgrade.html> (accessed on 20 October 2018).
- <sup>110</sup> "Univerzitet u Beogradu među 300 najboljih na Šangajskoj listi, evo ko je najzaslužniji za to", *Blic*, 15 August 2017, Available at: <https://www.blic.rs/najbolji-ostaju/univerzitet-u-beogradu-medju-300-najboljih-na-sangajskoj-listi-evo-ko-je/0d0trsv> (accessed on 16 February 2018).
- <sup>111</sup> Vujačić et. al. Overview of Higher Education and Research Systems in the Western Balkans, p. 25.
- <sup>112</sup> Interview No. 20, 14 February 2018.
- <sup>113</sup> Interviews No. 14, 1 February 2018.
- <sup>114</sup> Interview No. 11, 25 January 2018.
- <sup>115</sup> Bieber et. al *Understanding Current Practices of Science Communication in Serbia and Albania*, p. 63
- <sup>116</sup> Interview No. 20, 14 February 2018.
- <sup>117</sup> One example is the Monitoring of Social Situation (MONS) platform launched jointly by Foundation for the Advancement of Economics (FREN) and SeConS Development Initiative Group. Available at: [www.mons.rs](http://www.mons.rs) (accessed on 22 March 2018).
- <sup>118</sup> Bieber et. al *Understanding Current Practices of Science Communication in Serbia and Albania*, p. 66
- <sup>119</sup> EUROSTAT, Student-academic staff ratios in tertiary education, 2015. Available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Student-academic\\_staff\\_ratios\\_in\\_tertiary\\_education\\_2015\\_\(number\\_of\\_students\\_per\\_member\\_of\\_academic\\_staff\)\\_YB17.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Student-academic_staff_ratios_in_tertiary_education_2015_(number_of_students_per_member_of_academic_staff)_YB17.png) (accessed on 16 February 2018).

- <sup>120</sup> Ilija Vujačić, Snežana Đorđević, Maja Kovačević and Ivana Šunderić, *Overview of Higher Education and Research Systems in the Western Balkans*, p. 23 Country Report Serbia, The Knowledge Base for Higher Education and Research in the Western Balkans, 2013. Available at: [http://www.herdata.org/public/HE\\_and\\_Research\\_in\\_Serbia\\_FINAL\\_-2.pdf](http://www.herdata.org/public/HE_and_Research_in_Serbia_FINAL_-2.pdf) (accessed on 16 February 2018).
- <sup>121</sup> World Economic Forum, *Serbia: Global Competitiveness Index 2017-2018 Edition*, Available at: <http://reports.weforum.org/global-competitiveness-index-2017-2018/countryeconomy-profiles/#economy=SRB> (accessed on 16 February 2018).
- <sup>122</sup> <http://reports.weforum.org/global-competitiveness-index-2017-2018/countryeconomy-profiles/#economy=SRB>
- <sup>123</sup> Vujačić et. al. Overview of Higher Education and Research Systems in the Western Balkans, p. 24.
- <sup>124</sup> Ministarstvo prosvete, nauke i tehnološkog razvoja, *Registar inovacione delatnosti*, Available at: <http://www.mpn.gov.rs/tehnoloski-razvoj-2/inovaciona-delatnost/registar-inovacione-delatnosti/> (accessed on 16 February 2018).
- <sup>125</sup> Republika Srbija, Ministarstvo prosvete, nauke i tehnološkog razvoja, Spisak akreditovanih centara izuzetnih vrednosti, Available at: <http://www.mpn.gov.rs/wp-content/uploads/2015/08/Akreditovani-centri-izuzetnih-vrednosti-2.pdf> (accessed on 16 February 2018).
- <sup>126</sup> Balkans in Europe Policy Advisory Group, *The Crisis of Democracy in the Western Balkans. Authoritarianism and EU Stabilitocracy*, Available at: <http://www.biepag.eu/wp-content/uploads/2017/03/BIEPAG-The-Crisis-of-Democracy-in-the-Western-Balkans.-Authoritarianism-and-EU-Stabilitocracy-web.pdf> (accessed on 1 April 2018).
- <sup>127</sup> Ziyad Marar, "The Self-confidence crisis in Social Research", *Times Higher Education*, Available at: <https://www.timeshighereducation.com/news/the-self-confidence-crisis-in-social-research/409089.article> (accessed on 16 February 2018).
- <sup>128</sup> Massimiano Bucchi, "Credibility, expertise and the challenges of science communication 2.0", *Public Understanding of Science* 2017, 26(8), pp. 890–893.
- <sup>129</sup> Interview No. 9, 23 January 2018.
- <sup>130</sup> Šipka, "Deset godina naglog rasta srpske produkcije", p. 57.
- <sup>131</sup> *Registar Istraživača Srbije*, Available at: <https://ris.mpn.gov.rs/> (accessed on 16 February 2018).
- <sup>132</sup> Interview No. 14, 1 February 2018.
- <sup>133</sup> The most glaring case in point was the fate of the intellectuals associated to the Praxis School organised around the Korčula summer school and internationally acclaimed Praxis journal. After being labelled as the instigators of the 1968 student demonstrations, they were moved from teaching to research at the Centre for Philosophy and Social Theory (today IFDT) while the state stopped funding both the summer school and the journal. Institut za filozofiju i društvenu teoriju, "Istorija i razvoj instituta", Available at: <http://www.institfdt.bg.ac.rs/istorija-razvoj/> (accessed on 16 February 2018).
- <sup>134</sup> Goran Bašić, "Društvene nauke u dvadeset prvom veku", p. 14.
- <sup>135</sup> Donella H. Meadows, *Thinking in Systems*, p. 16.
- <sup>136</sup> Donella H. Meadows, *Thinking in Systems*, p. 145.
- <sup>137</sup> "Youth are deserting Balkan countries", DW, 23 December 2016, Available at: <http://www.dw.com/en/youth-are-deserting-balkan-countries/a-36891266> (accessed on 1 April 2018).
- <sup>138</sup> "Pametni odlaze zbog golog života", *Večernje novosti*, 28 February 2013. Available at: <http://www.novosti.rs/vesti/naslovna/drustvo/aktuelno.290.html:422089-Pametni-odlaze-zbog-golog-zivota> (accessed on 1 April 2018).