

MODEL OF FEDERAL-REGIONAL RELATIONS IN GOVERNANCE OF HIGHER EDUCATION IN THE RUSSIAN FEDERATION

Models of governance of higher education in large and heterogeneous countries with numerous universities significantly differ from approaches to coordinating universities in unitary states. The research literature still lacks in-depth analysis of these differences. At the same time, achievement of national goals for the higher education's development in federal countries requires an effective model for the distribution of responsibilities between government's federal and regional levels. The paper studies the structure of a model of federal-regional relations in higher education in the Russian Federation. For this purpose, I consider the history and preconditions for shaping the model of federalism in higher education. Additionally, I examine the present balance of federal and regional powers in governance of higher education. The article analyses the structure of federalism in higher education in the Russian Federation in comparison with eight countries characterised by heterogeneous regional higher education systems. The study's results have shown that Russian model of federalism in higher education remains one of the most centralised among comparable countries. Budget and tax policies are the prerogatives of the federal government, as the regions have limited opportunities to influence the development of universities, including restrictions on co-financing the federal universities. The model of governance of higher education in Russia is based on the principle of "pragmatic" federalism. This principle implies that the balance of federal-regional relations should solve specific problems facing the country in general, not individual regions. Based on the analysis, the paper suggests directions for changing the balance of federal-regional relations in higher education. They involve the expansion of the principle of subsidiarity between levels of government, with the preservation of the majority of powers at the federal level. Governance of regional higher education systems should enable concentration of federal and regional resources on certain university programs and development projects.

Keywords: federalism in higher education, centralisation, benchmarks, regional development, the balance of federal and regional relations, authority, "pragmatic" federalism, heterogeneity, coordination, accessibility of education

Introduction

According to UNESCO data, the number of university students worldwide has increased fourfold over the past forty years. The fact that education is becoming a mass phenomenon leads to greater differentiation within national systems of higher education. In this context, approaches that consider national higher education systems as homogeneous assemblages of universities are becoming less and less relevant.

Nowadays, studies focus on examining the models of higher education governance in countries with high levels of socio-economic and cultural heterogeneity among regions. From a management perspective, there is a major difference between the systems with several dozen universities and the systems with hundreds of institutions facing different challenges. The latter is common to federal countries, where achievement of national goals for the education's development depends on the distribution of responsibilities between federal (national) and regional (local) levels of government. In other words, it is necessary to study the models of federalism and their impact on the development of education systems. Various economists and political scientists are increasingly interested in these issues, considering a global trend towards decentralisation in public sector governance [1].

There is great interest in the studies on the balance of federal-regional relations that can be applied to the Russian system, as federalism in education is considered a key factor for improving the quality of the country's education [2]. In this context, it is important to look at the evolution of federal-regional relations in Russian higher education, and assess it in terms of the structures of the current university system. The research hypothesis is that centralised governance of higher education does not result in an increased role of universities in regional development.

This study may be useful for both researchers and practitioners working to improve higher education at regional and national levels. The paper specifically focuses on assessing the link between federalism and aspects of public sector development. The novelty lies in the attempt to identify the development trends of regional higher education related to the two-level model of governance. The research will

supplement the academic literature by clarifying the genesis of governance models in large-scale higher education systems in the era of globalisation, massification, and academic competition.

Theory

At the core of any analysis of federalism in higher education is the question of finding the optimal balance between different levels of government in coordinating university activities [4]. From a historical perspective, there is a variety of identified models of governance of large-scale higher education systems [5]. One of the most common elements is the difference between direct governance of universities by the federal government and coordination as the main function of the regulator. An example of the first approach is the California master plan proposed by C. Kerr in 1960. The key aspect of this plan was that the state administration would unilaterally determine the types of universities, assign them specific goals and required outcomes, and, in general, design a regional system of higher education and the institutional framework for its development. The second approach focuses more on the government's attempts to support existing vectors of the university development, helping them to achieve the goals they set for themselves.

One of the key factors in analysing systems of higher education is the level of centralisation and decentralisation in governance. Mixed models of governance have also emerged, such as "centralised decentralisation" [6]. In this model, local authorities possess a wide array of powers, while also submitting to the centralised coordination regarding a limited set of questions. Another concept, from the work of T. Fumasoli [5], is organizational centrality. This phenomenon describes an organization positioned between contrasting central and peripheral sources of governance, which differ in their decision-making approaches based on political, economic, and cultural factors. All the considered models were congruent with the principle of "multi-level governance"; higher education policy is increasingly leaning towards the multi-level, multi-purpose governance models [7]. A number of researchers have affirmed that management of higher education systems is more effective with taking into account the opinions of key stakeholders, rather than with direct control from regulators [5].

The majority of the presented approaches see the state as a unitary subject with a single set of goals and interests. However, managing higher education systems in the large states requires coordinated decision making between various levels of government, as the goals and characteristics of the university development differ across the country. That is why it is necessary to assess the considered models in terms of how effectively they achieve the national education policy goals. Moreover, certain aspects of the multi-level models of higher education governments may cause redundancy, competition, and conflict between the priorities of various regulatory bodies. In the long term, these factors could even lead to bureaucratic and political conflicts [8, 9].

The analysis requires looking at the differences in the models of federalism and the principles that define federal-regional relations. One of the most well-known is the dichotomy between competitive and cooperative federalism. In the theory of competitive federalism [10], the federation and its regions must adapt to changing conditions of governance. This factor creates two types of competition. First, federal and regional governments compete for power. Second, regions compete with each other to attract the best students, instructors, etc. Cooperative federalism, on the other hand, is characterised by a lack of management hierarchy. The relationship between centre and periphery involves coordination and solidarity of governance that emerges between decision-making bodies. Germany, which holds annual conferences of the regional ministers of education, is an example of such approach. It is necessary to take into account these varied principles of federalism while conducting the analysis.

When analysing the specificity of the Russian model of federal-regional relations in higher education, it is impossible to omit the historical context. The path-dependence theory [11] states that the current condition of the object of research depends on its historical development. Thus, this factor is also included in the research methodology.

Data and research methods

To test the hypothesis, it is necessary to analyse the emergence of the current system of governance of higher education in Russia, especially the processes of coordination between national and regional authorities. Additionally, it is essential to assess current trends and patterns in the development of the Russian model of federalism in higher education.

For that purpose, I have reviewed the literature that describes the historical prerequisites for the formation of this model of federalism, and studied the regulatory and fiscal corpus that structures the development of universities. The second stage of the study is an analysis of benchmarks and a review of models of federalism in higher education in other relevant countries. The comparative analysis of the ways in which higher education systems develop in different countries is becoming a popular methodology around the world. For example, the OECD's large-scale research project "Benchmarking Higher Education System Performance" has been active for four years now. Professional associations in higher education are actively using their data internationally. Benchmarking involves comparing the processes or functions in a single professional field, such as higher education, in one country, with analogous functions in another country. The goal of this procedure is to boost the effectiveness of the given processes or functions. In the case of higher education, benchmarking is complicated by the fact that different countries' understanding of what makes effective education policy may differ greatly. In the US education policy, for example, such issues as university attrition rates and college loan debts have significant relevance. For the Russian policymakers, these issues are not important. Therefore, the paper analyses only those aspects of higher education development that are applicable to all the considered countries.

Our benchmark analysis takes into account the results of the study "Higher Education in Federal Countries" [3], which looks at the models of federalism in higher education in nine countries: Australia, Brazil, Germany, India, Canada, China, Mexico, Russia, and the USA. With the exception of China, all these countries are federal states. China was included in the benchmark analysis based on the following selection criteria:

- A high level of heterogeneity of regional development;
- Relatively large-scale system of higher education;
- Distribution of responsibility for coordinating higher education between national and regional levels of government.

The history of federal-regional relations in higher education in the USSR and the Russian Federation

The Soviet phase of the development of federalism in higher education

Central planning and a quasi-corporate principle of development characterised the Soviet approach to organizing higher education. The state acted as both the customer and consumer of the results of educational and scientific activity [12]. A unified system for job placement of graduates and rigidly centralised management became the key pillars of the Soviet higher education.

The Soviet model of governance of higher education featured a relatively weak system of specialisation for universities based on the educational needs of the regional populations [13]. The demands of the national economy determined the priorities of the university development. One of the few communication channels between the regions and universities was the local Communist Party office. University rectors (presidents) belonged to the local party organizations, through which city and regional leaders could influence the university development and change educational programs to meet local needs [12]. The spatial aspect of development of the education system was viewed in terms of its potential for developing the country as a whole, rather than for developing the individual regions [15].

Formally, both national ministries and the central USSR authority governed universities. In reality, however, it is impossible to call this a decentralised system of governance. The Socialist model of the government relations dictated that in accordance with the principle of "democratic centralism" [16] all local authorities had to accept the decisions and political agendas of the higher level of government. Regional authorities had control only of the day-to-day operations of universities; in case of any violations, they were obligated to turn to federal agencies. Researchers have noted that under such conditions it was impossible for any local higher education initiative to be supported and implemented [17].

The post-Soviet period

The beginning of the post-Soviet period is characterised by a decrease in the government's role in supporting public institutions. Additionally, there were radical changes in the higher education sector. Universities began to be seen less as a part of a single, nation-wide economic unit. To keep

their operations going, universities were forced to establish closer economic ties to their regions [15]. The disappearance of the national system of job placement also led to increased “regionalisation” of education systems. In these conditions, the Russian higher education system became more heterogeneous [18].

The model of governance of regional higher education systems also transformed. The reformers argued that the key vector of change in the early post-Soviet period would be “decentralisation and democratisation of governance, and the delegation of greater autonomy to universities and their regional associations” [13]. Due to this idea, the federal government became more open to regional initiatives in higher education. The new balance of power between the federation and the regions resulted from separate negotiations and special agreements, which all regions had signed by the end of the 1990s. Many of these agreements included frameworks for developing and implementing regional development programs for higher education, as well as the opportunity for joint funding of university operations.

However, decentralisation in higher education did not facilitate bringing the centres of decision making closer to the consumers. The proposed legislation stated that the regions would provide basic higher education, while the federal government would finance the training of specialists according to the federal needs [19]. However, the academic community viewed these reforms sceptically, fearing that a change in the governing body would not be economically viable [18]. In the end, these reforms failed. Decentralisation did take place on a different education level, when the system of vocational training was moved to the regions.

The current state of federal-regional relations in Russian higher education

The structure and governance hierarchy of the network of higher education institutions

As of 2017, the Russian higher education system includes 500 publicly funded colleges and universities, of which 451 are federally governed. The regions, republics, or municipalities control 49 universities. Only one third of the regions have universities under their jurisdiction (usually, only one university). Figure 1 shows the distribution of universities under regional or municipal control.

The Soviet management strategy of aligning universities with specific industries remains in the current model of coordinating universities. Today, the higher education system includes universities controlled by more than 15 different federal agencies (Table 1).

Table 1

Distribution of state universities by federal agency jurisdiction, 2017

Agency	Number of universities	The share of students (adjusted contingent) out of all public universities, %
Ministry of Education and Science of the RF	248	68,49
Ministry of Agriculture of the RF	54	6,94
Ministry of Culture of the RF	46	1,56
Ministry of Health of the RF	46	9,02
Ministry of Sport of the RF	14	0,90
Other federal executive agencies	43	10,40
Municipalities and regions	49	2,69

A comparison of this data with that of the comparable large countries shows that Russia has a more centralised model of higher education governance (Figure 2). Of the countries analysed, Australia is the only state (besides Russia) that has more universities governed by federal agencies than by local authorities.

Primary strategies for integrating universities with regional authorities considering the economic aspects of the model of federalism

The Russian budget system is set up in such a way that the regions do not receive federal funds for providing higher education. According to the Constitution of the Russian Federation, higher education is categorized as a joint responsibility of the federation and its regions. It means that the regions have the right to spend only their own funds on higher education. Considering that 72 out of 85 regions

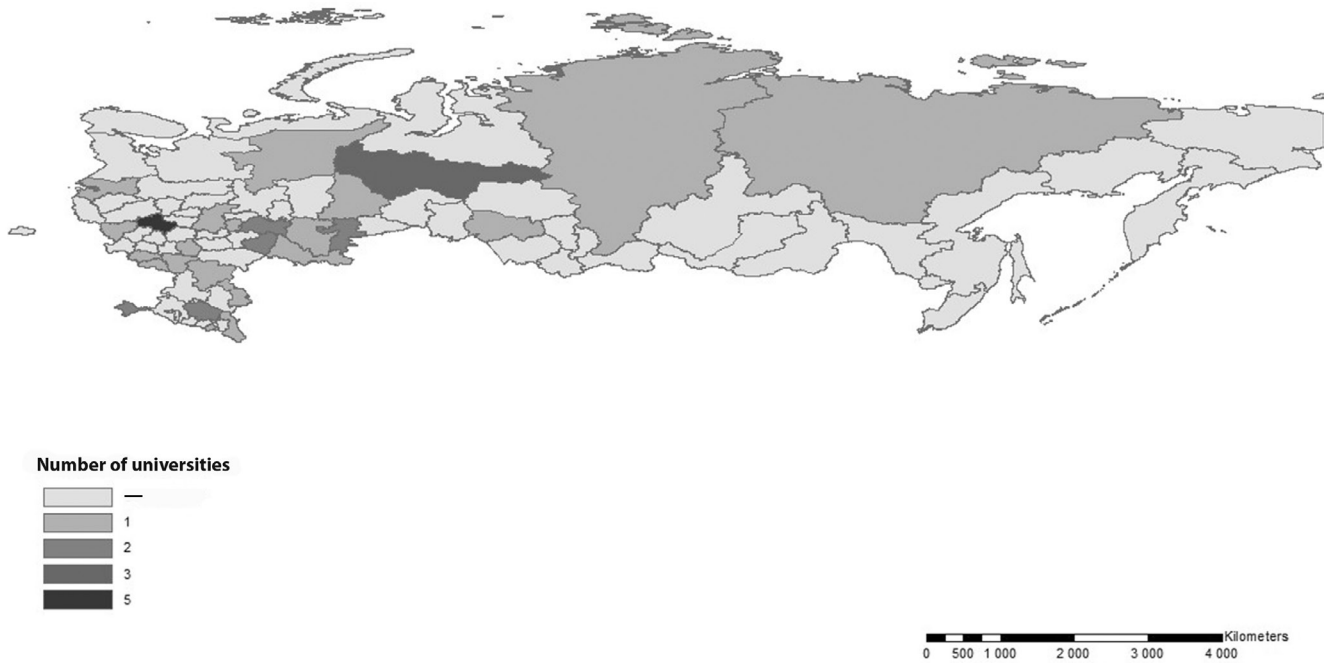


Fig. 1. Distribution of universities under regional or municipal control across the Russian regions, 2017

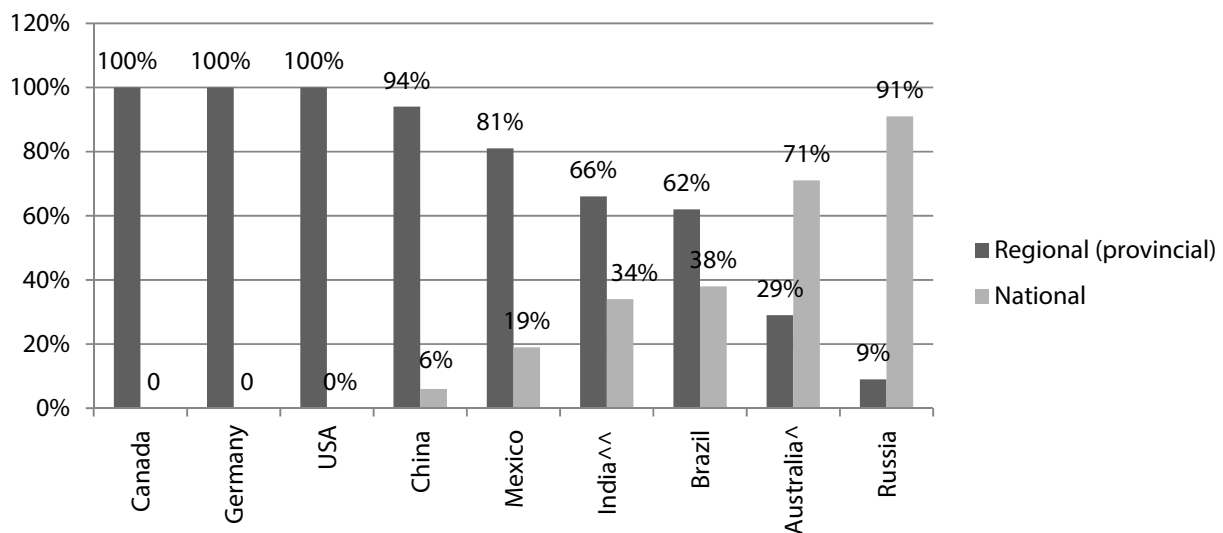


Fig. 2. Distribution of public universities by the level of government control, 2014 [3]

are federally subsidized¹, they have no incentive to actively participate, financially or otherwise, in university activities. Furthermore, the presence of a university that is funded exclusively by the federal budget is economically advantageous for regional governments. They benefit from having a university funded by another level of government on their territory [20]. Regional budgets contribute just 3.8 % of the total public spending on higher education, while the other 96.2 % comes from the federal budget. Regional governments tend to view universities as a means of attracting additional federal investment to their regions [14]. It is striking that in more than 70 % of cases, regional strategic documents for socio-economic development do not have a single section devoted to developing higher education. Furthermore, 80 % of regional governments do not have departments responsible for coordinating higher education development.

In these conditions, the number of channels by which the regions can influence the development of universities is fairly limited [14]:

- The right to approve the enrolment numbers that universities submit to federal executive authorities;
- The right of regional governors to approve decisions on hiring rectors;

¹ Distribution of subsidies to balance budgets of the constituent entities of the Russian Federation for 2017. Retrieved from: https://www.minfin.ru/common/upload/library/2016/12/main/FFPR_2017-2019.pdf (Date of access: 15.02.2019).

- Financial support for universities (in rare cases);
- Participation of regional representatives in supervisory boards at universities;
- Training students in specific fields and commissioning research and development projects.

However, such practices are quite rare, as 65 % of public universities totally lack funding from regional and municipal sources. Only 11 public universities under federal control get more than 5 % of their funding from the regions or municipalities.

- The regions have the right to participate in designing development programs for universities and support their implementation;

- The region’s economic position is taken into account when as part of the monitoring of university activities.

We expect this list to continue to grow. The incentives are clear: as Zhurakovskiy notes [21], regionalisation brings universities closer to the educational needs of their respective regions. Practices of strengthening of the regionalisation of higher education are beginning to emerge more often. In Tomsk Oblast, for example, regional authorities spearheaded the creation of the Tomsk Consortium of Universities and Scientific Organizations, aimed at combining the efforts of institutions and increasing the effectiveness of education, research, and innovation in the region. In Tatarstan, the Kazan Open University of Talents 2.0 developed a regional program called “Strategic talent management in the Republic of Tatarstan for 2015–2020.” This project involves a wide range of cooperative measures among the region’s universities. Tyumen Oblast has tended towards coordinating the structure of educational offerings. In the Tyumen initiative, the regional universities signed an agreement of specialisation. Beginning in 2016, the various areas or “profiles” of educational services were distributed among the universities based on a system of applications for federal funding.

Given the described situation, the current model of federal-regional relations in Russian higher education can be seen as an example of pragmatic federalism, a term first applied to Australia’s federal system. Pragmatic federalism [22] is based the principle stating that the balance of federal-regional relations should solve specific problems facing the country in general, not individual regions. The Russian model of federalism, which follows the principles of pragmatic federalism, aims at achieving three national goals [23]: preserve national unity (social, economic, political, etc.), create the conditions for overall regional development, and provide targeted support for development in specific areas of the country.

The model of pragmatic federalism is also applicable to the higher education sector. In the Russian model of governance, regional differentiation is basically absent when it comes to questions of higher education development. With few exceptions, federal governance is directed towards either achieving national higher education goals (such as accessibility and quality) or coordinating the development of universities (rather than regional education systems). The goal of providing access to education may be the best example for illustrating the principle of pragmatic federalism. Current federal policy sets an annual budget allocation of no less than 800 federally funded scholarships per 10,000 citizens aged 17–30. This figure is calculated for the entire higher education system. This fact means that in reality, in the majority of the Russian Federation regions there is a deviation from the federal standard by more than 10 % due to the compensatory effect of added scholarships provided to a small number of regions (Moscow, St. Petersburg, Tomsk Oblast, etc.) [24]. This leads to increasing inequality between regions in terms of their ability to provide education.

Results of the analysis of federal-regional relations in governance of higher education in the Russian Federation

The set of countries we looked at in the comparative analysis is characterised by a high level of variation in the principles by which power is divided between national and local levels in governance of higher education. In the USA, for example, the states use different models of university governance, such as governing boards, coordinating bodies, etc. In Canada, there is no national ministry that deals with higher education, and all issues are solved on a local level. Germany has implemented a model for creating new universities, which are financed jointly by the federation and the regions [3].

Depending on the degree of local independence in governance of higher education, it is possible to identify the following groups:

- A high degree of local independence (Canada, the USA, Germany);
- The national government plays a greater role (Australia, India);

Characteristics of the case study models of federal-regional relations in higher education

Country	Powers and obligations at the federal (national) level	Powers and obligation at the regional (local) level
Australia	Basic support for the university system (including funding); Accreditation and standards for all universities	Formal powers: regulation of land use, facilities, student housing, etc.; Ability to intervene in financial management standards; Lead role in supporting colleges
Brazil	Basic support for some universities; Establishment of the national policy standards of higher education; Appointment of rectors of the federal university (by the President); Funding of Research and Development (R&D)	Basic support for some universities; Assessment of the local institutions and their programs; Appointment of rectors of the public universities
Canada	Funding of R&D; Provision of financial aid to students; Provision of access to education for various ethnic groups; Internationalisation issues	Basic support for universities; General accountability issues (quality control and standards are delegated to institutions); Regulation of tuition for students from a home region
China	Establishment of the national education policy; Basic support for elite research universities; Distribution of key resources (for research funding, student aid, enrolment quotas and admission rates, placement of talented students in different institutions); Accreditation of four-year colleges; Key appointments of heads of universities	Basic support for some universities; Accreditation of three-year colleges
Germany	Internationalisation issues; Special federal programs (promoting research, student aid, the Exzellenzinitiative program, the personnel development program); Creation of laws regulating enrolment, degree granting, emergency faculty contracts, etc. Design of the higher education system jointly with regions	Creation, management and maintenance of colleges and universities; Provision of quality education; Approval of study programs; Approval of senior officials; Design of the higher education system jointly with the federal government
India	Establishment of the university standards; Basic support for the "national" universities and other institutions deemed to be of national importance by the parliament; Provision of quality education; Coordination of national scholarships and the academic job market	Basic support for the local universities; Basic support for colleges
Mexico	Basic support for the universities controlled by the country; Provision of additional grants to strategic areas of higher education development, such as technical institutes and scientific research; Control over university budgets; Control over study programs in technical and pedagogical areas; University accreditation	Basic support for the universities controlled by the local government; Approval of the appointment of high-level personnel at universities

The end Table on next page

Country	Powers and obligations at the federal (national) level	Powers and obligation at the regional (local) level
Russia	General design and coordination of the national education policy; Basic support for the federally controlled universities (education, R&D, internationalisation, etc.); Accreditation, licensing, quality control; Appointment of university rectors; Development and implementation of the education standards	Basic support for the regionally controlled universities; Approval of quotas for federally funded scholarships; In some cases, regional authorities contract with federal universities to train additional students and conduct R&D in order to achieve the regional development goals; Approval of rector appointments; Participation of regional representatives in supervisory boards at universities
United States	Funding and coordination of university research programs and student aid programs; Regulation of financial reporting and student loans	Basic support for universities; General education development policy and management (through governing boards or coordinating councils)

— Significant political dependence on the national level (China, Mexico, Brazil);

— A low degree of local independence (Russian Federation).

Additionally, the principles of cooperation of different authorities in governing university networks significantly differ. In Russia and China, communication between different federal agencies is dominant. Cooperation among regions is the defining aspect of the German and Canadian models. At the same time, communication between federal and regional levels is prominent in the German and Brazilian systems.

A more detailed analysis of the models of federal-regional relations is presented in Table 2, based on the 2018 study “Higher Education in Federal Countries” [3]. The criteria for our benchmark analysis of power distribution between levels of government are:

- Principles for distributing financial responsibilities;
- Principles for making personnel decisions;
- Principles for creating strategic development policies for higher education;
- Principles for monitoring the quality of higher education;
- Other formal powers of national and local authorities in university governance.

This comparative case study shows that, paradoxically, a high level of centralisation does not increase the impact of universities on regional development. Moreover, it does not cause levelling of efficiency metrics of the basic education such as accessibility of higher education. Centralisation does not lead to regional heterogeneity and equality [3].

Conclusion

The study has shown that the Russian model of federalism in higher education remains one of the most centralised among comparable countries. For Russia today, it is imperative to find the balance of federal-regional relations that can facilitate the balanced development of all regional higher education systems. The evolution of federal education models is an important practice around the world, as countries face the challenges of global competition and the massification of education. The examples of Australia, China, Germany, and other countries show that the balance of federal-regional powers should be updated taking into account both national and regional development.

The benefits of decentralising government services for increasing the overall effectiveness of the public sector have been shown in international studies. The cases analysed in this paper confirm these findings. However, a sudden attempt to transform the model of governance of higher education in Russia, such as transferring a portion of universities to the regional level as was done in China, may lead to very negative consequences for the whole system. Such a move would place serious new demands on regions to meet the needs of universities, both in terms of funding and competencies. An alternative approach might be a softer one, focused on shifting the balance of federal-regional relations, strengthening the principle of subsidiarity between levels of government, while also keeping

the control at the federal level. Regional higher education systems should evolve according to a logic that lets them concentrate federal and regional resources on specific university programs and projects. In this regard, it is necessary to:

1. Acknowledge the need to create development models for regional higher education systems in accordance with the demographic and social situations in each region, the nature of the regional economy and the role that universities play in it. International examples of regions implementing a policy of specialisation among their universities are applicable here. It is also crucial to take into account the specificities of each regional system, such as the presence of universities with special status, industry-specific colleges, etc.

2. Develop tools for managing the growth of regional higher education systems. In this regard, it is necessary to take into account not only the state of the higher education sector, but coordination between scientific organizations, industrial clusters, and other innovation platforms in the region. Furthermore, the tools used to support the university development should be tailored to fit the heterogeneity of regional education systems. A differentiated approach should be applied to monitoring and assessment of the outcomes of university activities. For example, different minimum scores on the Unified State Exam should be required in different regions of the country.

3. Reform federal and regional regulations in order to remove the barriers for the regions to participate in the university development.

It is essential to create the conditions that would allow the elaboration of strategic documents for the development of regional systems of higher education in each constituent entity of the Russian Federation, taking into account the specificities of each territory's development. It is relevant to develop a regulatory framework that will let universities take advantage of the regional innovation infrastructure, or even transfer it to universities. This framework should also provide the opportunity for funding universities from both regional budgets and the budgets of industry-oriented government programs. To accomplish this goal, the current scope of regional legislation for supporting the university development should be expanded.

Acknowledgements

I would like to thank I. Froumin (Head of Institute of Education, National Research University "Higher School of Economics"), M. Carnoy (Professor of Stanford University), and S. Marginson (Professor of Oxford University) for their assistance in discussing the article's idea and content.

References

1. De Figueiredo, R. J. P. & Weingast, B. R. (2002). Pathologies of Federalism, Russian Style: Political Institutions and Economic Transition. Retrieved from: <http://faculty.haas.berkeley.edu/rui/mpfrussia.pdf> (Date of access: 15.02.2019).
2. Dneprov, E. D. (2011). *Noveyshaya politicheskaya istoriya rossiyskogo obrazovaniya: opyt i uroki* [The modern political history of Russian education: experience and lessons]. Moscow: Marios, 456. (In Russ.)
3. Carnoy, M., Froumin, I., Leshukov O. & Marginson S. (Eds.). (2018). *Higher Education in Federal Countries: A Comparative Study*. London: Sage, 478. DOI: <http://dx.doi.org/10.4135/9789353280734>.
4. Brown, D., Cazalis, P. & Jasmin, G. (Eds.). (1992). *Higher Education in Federal Systems: Proceedings of an international colloquium held at Queen's University*. Ottawa: Renouf Publishing, 250.
5. Fumasoli, T. (2015). Multi-level governance in higher education research. In: J. Huisman, H. de Boer, D. Dill, M. Souto-Otero (Eds.), *Handbook of Higher Education Policy and Governance* (pp. 76–94). Palgrave Macmillan. DOI: 10.1007/978-1-137-45617-5.
6. Mok, Ka-Ho. (2013). Centralization and decentralization: educational reforms and changing governance in Chinese societies. *CERC Studies in Comparative Education*, 13, 230. DOI: 10.1007/978-94-007-0956-0.
7. Chou, M.-H., Jungblut, J., Ravinet, P. & Vukasovic, M. (2017). Higher education governance and policy: an introduction to multi-issue, multi-level and multi-actor dynamics. *Policy and Society*, 36(1), 1–15. DOI: 10.1080/14494035.2017.1287999.
8. Braun, D. (2008). Organising the political coordination of knowledge and innovation policies. *Science and Public Policy*, 35(4), 227–239.
9. Peters, B. G. (2015). *Pursuing horizontal management: the politics of public sector coordination*. Kansas: University Press of Kansas, 256. DOI: 10.1111/gove.12238.
10. Breton, A. (1996). *Competitive Governments: An Economic Theory of Politics and Public Finance*. Cambridge, 385.
11. Liebowitz, S. & Margolis, S. (2000). Path Dependence. In: B. Bouckaert, G. de Geest (Eds.), *Encyclopedia of Law and Economics* (pp. 981–998). Ghent: Edward Elgar and the University of Ghent.
12. Kuzminov, Ya. I., Semyonov, D. S. & Froumin, I. D. (2013). *Struktura vuzovskoy seti: ot sovetского k rossiyskomu «master-planu»* [University Network Structure: From the Soviet to the Russian "Master Plan"]. *Voprosy obrazovaniya* [Educational studies], 4, 8–63., DOI: 10.17323/1814-9545-2013-4-8-69 (In Russ.)
13. Kinelev, V. G. (1993). *Regionalnaya politika v oblasti vysshego obrazovaniya: kakoy ey byt?* [Regional higher education policy: how should it be?]. *Vysshee Obrazovanie v Rossii*, 4, 14–24. (In Russ.)

14. Froumin, I. & Leshukov, O. (2015). National-Regional Relationships in Federal Higher Education Systems: The case of Russian Federation. *Higher education forum Hiroshima University*, 12, 77–94. DOI: 10.15027/37330.
15. Katrovskiy, A. P. (2003). *Territorialnaya organizatsiya vysshey shkoly Rossii* [Territorial organization of higher education in Russia]. Smolensk: Oikumena, 200. (In Russ.)
16. Commission of the Central Committee of the Communist Party of the Soviet Union. *History of the Communist Party of the Soviet Union (Bolsheviks) Short Course*. (1939). New York: International Publishers, 364.
17. Kuhns, K. (2011). *Globalization of knowledge and its impact on higher education reform in transitioning states: the case of Russia*. Dissertation, School of education, Stanford University.
18. Bain, O. (2003). *University Autonomy in the Russian Federation since Perestroika*. New York: RoutledgeFalmer, 240. DOI: <https://doi.org/10.1017/S0018268000038760>.
19. Jones, A. (1994). The Educational Legacy of the Soviet Period. In: A. Jones, *Education and Society in the New Russia* (pp. 3–23). Armonk, New York: M. E. Sharpe.
20. Leshukov, O. V. & Borisova, L. V. (2014). *Vysshie uchebnye zavedeniya v sotsialno-ekonomicheskom prostranstve* [Approaches to assessment of the higher education system impact on social and economic development of a city (through the example of case of Moscow)]. *Vysshee obrazovanie segodnya* [Higher education today], 12, 34–40. (In Russ.)
21. Zhurakovskiy, V. M. (1995). *Pravo na samostoyatel'nost'* [The right for independence]. *Vysshee Obrazovanie v Rossii*, 2, 21–30. (In Russ.)
22. Hollander, R. & Patapan, H. (2007). Pragmatic Federalism: Australian Federalism from Hawke to Howard. *Australian Journal of Public Administration*, 66(3), 280–297. DOI: 10.1111/j.1467-8500.2007.00542.x.
23. Froumin, I. & Leshukov, O. (2018). The Russian Federation: Pragmatic Centralism in a Large and Heterogeneous Country. In: M. Carnoy, I. Froumin, O. Leshukov, S. Marginson (Eds.), *Higher Education in Federal Countries: A Comparative Study* (pp. 354–407). London: Sage. DOI: <http://dx.doi.org/10.4135/9789353280734.n9>.
24. Gabdrakhmanov, N., Nikiforova, N. & Leshukov, O. (2019). «Ot Volgi do Eniseya...»: obrazovatel'naya migratsiya molodezhi v Rossii [“From Volga to Yenisei...”: educational migration of youth in Russia]. *Sovremennaya analitika obrazovaniya* [Modern education analytics], 5(26), 48. (In Russ.)

Author

Oleg Valerievich Leshukov — Deputy Head of the Laboratory for University Development, Institute of Education, National Research University “Higher School of Economics”; Scopus Author ID: 57190431219; ORCID: <http://orcid.org/0000-0003-0379-8209> (16/10, Potapovsky Lane, Moscow, 101000, Russian Federation; e-mail: oleshukov@hse.ru).