

Public Management in the Activity of Educational Institutions in the Context of Autonomy of their Work (Under the Conditions of Crises and Covid-19)

Budanova Liana¹, Filyanina Nelya², Nosyk Oksana³, Andriyenko Mykola^{4*}, Slepchenko Anzhela⁵, Zastrozhnikova Irina⁶,

¹National University of Pharmacy, Kharkiv 61000, Ukraine, e-mail: liana@nuph.edu.ua, ORCID identifier: 0000-0002-4840-6224.

²National University of Pharmacy, Faculty for Foreign Citizens' Education, Humanities Department, Kharkiv 61002, Ukraine, e-mail: nelya-filyanina@hotmail.com, ORCID identifier: 0000-0002-7439-1986

³Faculty of Public Management and Administration, Kharkiv Regional Institute of Public Administration of the National Academy of Public Administration attached to the Office of the President of Ukraine, Kharkiv 61001, Ukraine, e-mail: kadri_gu@ukr.net, ORCID identifier: 0000-0002-9114-0118.

⁴Public Administration Department of Interregional Academy of Personnel Management, Kyiv, 03039, Ukraine, e-mail: andnv@ukr.net, ORCID identifier: 0000-0002-9222-4831

⁵Taras Shevchenko National University of Kyiv, Faculty of Law, Department of Environmental Law, City of Kyiv 01033, Ukraine, e-mail: anhelika2003@ukr.net, ORCID identifier: 0000-0002-4050-3310

⁶Dmytro Motornyi Tavria State Agrotechnological University, Department of Public Administration and Law, 18 Melitopol, Zaporizhka region 72312, Ukraine, e-mail: irenazast@gmail.com, ORCID identifier: 0000-0002-9988-5288

Corresponding Author: Andriyenko Mykola

Email: andnv@ukr.net

ABSTRACT

Decentralization of public management in the sphere of tertiary education in developed countries has led to the spread of similar trends in developing countries and countries with economies in transition. The academic paper assesses the effectiveness of forms of decentralization of public management on the basis of statistical analysis of quality indicators of tertiary education system of Hungary, Poland, Romania and Ukraine. As a result, the effectiveness of decentralization has been confirmed, provided that the transformation of public management institutions is ensured. Forms of decentralization determine its effectiveness. Common problems of tertiary education systems have been identified, which have led to the need for decentralization: the need for quality educational services, increasing the level of public access to tertiary education, financial pressure on central budgets. It has been determined that territorial and functional deregulation was aimed mainly at self-financing of tertiary educational institutions, formation of a competitive market of educational services, integration of the private sector into the public one for the development of the quality of state tertiary education. The basic advantages of decentralization have been highlighted in the academic paper, namely: 1) increasing the level of enrollment of the population to tertiary educational institutions due to accessibility; 2) reducing the level of state expenditure on education; 3) improving the quality of state tertiary educational institutions, meeting the requirements of the labor market; 4) actualization of the autonomy of higher educational institutions under the conditions of pandemic of Covid - 19. Three distinct models of decentralization of tertiary education have been identified, namely: territorial decentralization in Poland, asymmetric decentralization with an emphasis on self-financing in Romania, and functional decentralization in Hungary and Ukraine. The basic features of decentralization of the studied countries have been highlighted, namely: flexibility, adaptability of legislation, transformation of public management institutions, deregulation of government functions, change of financing tools with the possibility of attracting funds from private partners (business), expansion of access to educational services, formation of hybrid private-state institutions with corporate status, reduction of financial pressure, supervision and control. The need for decentralization and improvement of its forms within the conditions of a pandemic of Covid-19 has been confirmed.

Keywords: Public administration, public management, decentralization of tertiary education, autonomy of tertiary educational institutions, high participation system, public centralized management, pandemic, Covid - 19.

Correspondence:

Andriyenko Mykola

Public administration department of Interregional Academy of Personnel Management, Kyiv, 03039, Ukraine,

E-mail: andnv@ukr.net, ORCID identifier: 0000-0002-9222-4831

INTRODUCTION

Development of democracy, decentralization of public management on a global scale leads to modernization of governance models of tertiary education system. In this context, the quality of education and the effectiveness of local governments are combined. In developed countries (for instance, Germany, the United States), a decentralized management in the sphere of tertiary education was formed in the 1990s. Herewith the basic problem has been revealed: the need to balance the activities, responsibilities of municipalities, the government, the activities of tertiary educational institutions in the context

of ensuring control, freedom of functioning. (McLendon, M. K., 2003).

Local solutions in the sphere of tertiary education management and decentralized governance were the trends of 1980-1990, which ensured the reorganization of public management (Cave M., Hanney S. and Kogan M., 1991; Frederickson, M.G., 2005). The administrations of educational establishments have been empowered to manage, which has increased administrative efficiency and reduced financial pressure. For example, in the United States, forms of decentralization included: the flexibility of the legal framework, the preservation of governance and

coordination mechanisms, and disaggregation-based governance, formation of hybrid public-private educational institutions with reduction of financial control, preservation of corporate status (McLendon, M. K., 2003). In the 1980s, China formed university-based experimental departments based on the principles of autonomy and market competition (Yang, D., 2012). This ensured the integration of innovative solutions, in particular into work processes and organizational structure based on market mechanisms (Yang, D., 2012). As a consequence, the decentralization of tertiary education took place. Similar trends were spreading in Europe: in 1993, Austria developed a legal framework for deregulation, decentralization of organizational structures, regulation of the assessment of the quality of universities' educational services, and improving the efficiency of tertiary educational institutions (Bast, G., 1995).

Canada has developed a decentralized network of high participation system (HPS), in which municipalities manage tertiary educational institutions and central government is less involved in the development of educational services. This provided a lower level of stratification of tertiary education and a higher level of efficiency (Jones, G. A., 2018).

The outlined tendencies apply to developing countries and in connection with the pandemic Covid - 19 become a topical issue for the further development and operation of higher educational institutions. This leads to an increase in the level of autonomy of tertiary educational institutions, expansion of their powers, coordination of central and local levels of public management, as well as ensures the rationality of governance (Li J., 2018). Studies prove that decentralization has provided a higher quality of education compared to centralized public management due to the possibility for applicants to gain wide access to educational services (Roselló, J., 2017). This tendency will intensify in the future, and decentralization will extend to developing countries (Roselló, J., 2017). The pandemic Covid - 19 is also having a major impact on accelerating the decentralization of higher education management. This keeps current the study of the effectiveness of decentralization and public management in the sphere of tertiary education (Romanenko, Y. O., Chaplay, I. V. 2016). Deregulation of tertiary education is taking place in Ukraine. Therefore, the experience of advanced countries in the development of management models of tertiary education can serve as a conceptual basis for decentralization in Ukraine.

The transition to distance learning through a pandemic even to a greater extent determines the autonomy of higher educational institutions. The time of classes, their types, forms, platforms on which classes are held - everything is chosen independently by each educational institution. Also, the control over the quality of classes, teaching materials is significantly intensified, because it is much easier to control the quality, duration and level of educational services with the help of computer systems. The purpose of this investigation centers around studying and analyzing the features of models of public management of tertiary education system based on the practice of decentralization of developed countries.

Within the framework of the outlined purpose, the following goals have been defined, namely:

1. Statistical analysis of performance indicators in the sphere of tertiary education in order to assess decentralization models.

2. Formation of advantages and disadvantages of decentralization of public management of tertiary education on the example of developed countries.

3. Systematization of decentralization of tertiary education in order to form recommendations to ensure the development of public management.

LITERATURE REVIEW

The growth of the value of decentralization of public management in tertiary education and the provision of benefits for society has been proven in the scientific literature (Bleiklie, I., 2000). Decentralization was a trend in 1980-1990 in developed countries; along with this the outlined process continues to this day (Lee, M. N. N. (2006). Intensification of decentralization is carried out due to globalization and the dissemination of public management experience based on the models of developed countries (Jian Li, & Juan Du, 2016).

Scholars consider centralized public management in the field of tertiary education as a form of government, decentralized - as a way of transformation, redistribution of state participation in the development of tertiary education system (Ferlie, E., Musselin, C. & Andresani, G. 2008).

Decentralization is characterized by a variety of forms. Functional and territorial features are signs of division, namely: functional decentralization involves the division of powers based on the principle of parallel; territorial decentralization involves the functioning of the Ministry of Higher Education (Campbell, D.F.J., 2003). Public management of tertiary education is effective if synergies and coordination of governing bodies are ensured during the course of decentralization: central, federal governments, municipalities, provinces, cities, schools, etc. At the level of the educational establishment, detailing includes the development of curricula, raising funds, etc. Under the conditions of urgently required distance learning because of Covid - 19 each educational institution had the necessity for developing its own educational materials, types and forms of classes, the choice of platforms on which classes will be conducted. This includes compliance with the licensing conditions of higher authorities, the author's work of educators and organizers of the educational process, the control of the rector and government at various levels - from local, regional to national one.

In the scientific literature, the effectiveness of public management reform in the sphere of tertiary education is considered on the basis of studying the experience of developed countries (the USA, (McLendon, M.K., 2003; Egalite, A.J., Fusarelli, L.D., & Fusarelli, B.C., 2017), Canada (Jones, G.A., 2018), China (Mok, K.H., & Han, X., 2017; Li J., 2018), Korea (Jeong, D.W., Lee, H.J., & Cho, S.K., 2017), the United Kingdom of Great Britain and Northern Ireland, Germany, Finland, Sweden (Channa, A., & Faguet, J. P., 2016; Roselló, J., 2017). The defined list of countries and their experience do not allow to absolutely compare the results of decentralization due to the different history of state formation, the system of higher education and economic, social preconditions. In order to formulate recommendations for the public management of Ukraine in the sphere of tertiary education, it is advisable to study the practice of decentralization of countries with similar social-economic development (Hungary, Poland, and the Czech Republic). Herewith, a number of studies have revealed the weakness, incompleteness and inconsistency

of decentralization of tertiary education (Channa, A., & Faguet, J. P., 2016). At the same time, decentralization provides an increase in technical efficiency (Channa, A., & Faguet, J.P., 2016), a change in public service expenditures (Grisorio, M.J., & Prota, F., 2015), a reduction in public spending on public services (Alonso, J.M., Clifton, J., & Diaz-Fuentes, D., 2015) through the integration of New Public Management concept. The level of decentralization determines inequality in obtaining public services (Laboutková, Š., Bednářová, P., & Valentová, V. H., 2016).

New Public Management (NPM) approach provides for simultaneous decentralization and autonomy of EU tertiary educational institutions and obtaining a budget to finance expenditures. EU educational establishments are endowed with autonomy in curriculum development, research portfolio management, human resources and property and asset portfolio (Jongbloed, B., Kaiser, F., van Vught, F., & Westerheijden, D. F., 2018).

The introduction of distance learning in 2020 in connection with the pandemic Covid - 19 has further to a greater extent mainstreamed the need to use forms of decentralization for an effective learning process for all its participants. At the same time, urgently required temporary transition to distance learning has shown the readiness of educational institutions and government systems for such learning, as well as a number of new opportunities for participants in the learning process.

MATERIALS AND METHODS OF RESEARCH

In this study, we rely on New Public Management concept for the decentralization of tertiary education (Jongbloed, B., Kaiser, F., van Vught, F., & Westerheijden, D. F., 2018) and statistical indicators that confirm the effectiveness of decentralization. For processing of indicators, the correlation analysis of dynamics of a time series of growth of the persons has been used, who have successfully received educational services of tertiary educational institutions within the conditions of decentralization changes.

The indicators of the World Bank of Ukraine, Poland, Hungary and Romania have been chosen for correlation analysis due to the similarity of social-economic development for 1998-2018:

- 1) School enrollment, tertiary (% gross);
- 2) Current education expenditure, tertiary (% of total expenditure in tertiary public institutions);
- 3) Expenditure on tertiary education (% of government expenditure on education);
- 4) Government expenditure per student, tertiary (% of GDP per capita).

Methods of statistical analysis have been used for processing of indicators: descriptive statistics of variables (average, minimum, maximum, standard deviation).

RESULTS AND DISCUSSION OF THE RESEARCH

The development of a market economy and competition has affected all spheres of society, including public services. Tertiary education is a sector of public management that has required quality educational services from developed countries. As a challenge to the need in order to ensure the quality of education, governments in developed countries have decentralized public administration. At the same time, a new challenge has centered around ensuring a balance between decentralization, deregulation of the market of educational services and centralization of public management in the field of tertiary education. This balance aims to ensure equal participation of subjects in the sphere of tertiary education. This implies the availability of

consumers regardless of social-cultural features in educational services, the possibility of receiving quality services and participation in decision-making in public management. New Public Management provides for the satisfaction of these requirements in the context of decentralization and the formation of private public institutions. Another challenge was the expansion of learning opportunities within the conditions of the pandemic Covid - 19. The urgently required transition to distance learning was unusual and new for all participants in the process; however, after a short time it has shown the possibilities of distance learning and expanding consumer access to educational services. Therefore, the development of decentralization processes, which tend to progress, has increased even more.

Let's consider the historical aspects of decentralization processes in European countries

Following the institutional and fiscal decentralization of Poland and Romania in the 1990s, the autonomy of public management was ensured. Poland and Romania are successful examples of decentralization of public management through the division of territories into independent administrative-territorial units, which are vested with the powers of administration in the public sphere (Bilouseac, I., 2015). Poland has evolutionized from an autocracy to a democracy and a state monopoly in the sphere of tertiary education (Leek, J., 2019). Vertical decentralization of decision-making in the sphere of tertiary education took place in Poland: in the financial direction, supervision, curricula (Leek, J., 2019).

After the collapse of the communist system, Poland moved from centralized public management of tertiary education to decentralization. The management of tertiary education was transferred to local governments during 1990-1999; herewith, tertiary educational institutions were decentralized in 1999. Decentralization took place on the basis of changes in the legal framework and the actual transfer of management functions to local governments. However, some scientists claim that these processes are incomplete. This is due to reforms to ensure self-financing of tertiary educational institutions and reducing government expenditures by providing transfers. As in Ukraine, tertiary education was financed through the provision of educational subventions from the central budget, which were included in local government revenues. Decentralization of tertiary education in Poland is based on the transfer of educational tasks to the voivodships, namely: management of libraries, institutions for training and advanced training of teachers, pedagogical colleges, individual educational institutions at the regional level. Through the process of decentralization in Poland, the process of democratization of tertiary education took place on the basis of the territorial principle.

In general, Poland's experience is in line with EU general trends in decentralization of management: the fiscal goal is fundamental in granting autonomy to tertiary educational institutions.

The process of decentralization of education in Poland has had a positive impact on the readiness to provide educational services within the conditions of forced quarantine. Thus, the latest version of the law on higher education in the Republic of Poland indicates about the automation of higher educational institutions. Taking this into consideration, within the conditions of quarantine, each institution was able to independently decide how to implement distance learning in their educational establishments.

Within the conditions of quarantine because of Covid - 19, the Ministry of Education and Science of the Republic of Poland had recommended possible actions for educational institutions; however, specific actions in each institution were chosen directly by the rectors. The rectors also administered the pedagogical system in their institutions. The Ministry of Education and Science has developed a platform on which each educational institution has the opportunity to display its materials and an online collection of Lexoteka textbooks, which is constantly updated. Numerous universities in Poland provide full-fledged educational services in the remote mode. Thus, the decentralization of the education system in Poland in the context of pandemic Covid - 19 adapted to the conditions of distance learning as quickly as possible and minimized the negative impact on students' learning. The decentralization of tertiary education in Romania was influenced by the tendencies of reforms in tertiary education systems of Central and Eastern Europe in the 1989-1990s. The country became open to European integration, which has ensured the balance of reforming tertiary education system over twenty years (Deca, L., 2015). Decentralization of Romania took place on the basis of an assessment of administrative capabilities, characterized by asymmetry, which influenced the effectiveness of public management in tertiary education (Neamțu, B., 2016). At the same time, the governance

structure in the country is two-level with fairly centralized management; local autonomy is limited (Profiroi, C. M., Profiroi, A. G., & Szabo, S. R., 2017). In 2001, on the basis of the National Economic Development Strategic Sketch of Romania, institutional autonomy of tertiary educational institutions was ensured, which provided the development of private tertiary education through investment in infrastructure construction. As a result, competition in the sphere of tertiary education has emerged, and curricula have begun to be developed in response to the development of a competitive education market and labor market needs. This stimulated the development of state tertiary education, as a result of which institutions began to introduce tuition fees, which ensured fiscal decentralization and increased budgets of institutions. However, Romania needs the full integration of private tertiary education into the public sector (Boaja, D. M., Ciurlau, F. C., & Ciurlau, I. A., 2015). As a result, indicators of the effectiveness of decentralization in the sphere of tertiary education confirm the efficiency of reforms: in both Poland and Romania, the level of gross involvement (enrollment) to tertiary educational institutions has increased over the past 20 years to 67,42%, 48,81% with fluctuations in different periods of 11,87% in Poland and 14,12% in Romania (Table 1).

Table 1. School enrollment, tertiary (% gross), 1998-2018

| Country | 1998 | 2010 | 2016 | 2017 | 2018 | Average value | Mini mum | Maxi mum | Standard devia tion |
|---------|-------|-------|-------|-------|-------|---------------|----------|----------|---------------------|
| Hungary | 30,09 | 63,72 | 48,04 | 48,50 | 48,27 | 53,22 | 30,09 | 68,28 | 11,87 |
| Poland | 39,20 | 74,76 | 67,00 | 67,83 | 67,42 | 63,74 | 39,20 | 74,76 | 9,77 |
| Romania | 18,79 | 64,00 | 48,24 | 49,38 | 48,81 | 45,55 | 18,79 | 68,59 | 14,12 |
| Ukraine | 45,34 | 80,18 | 82,04 | 81,73 | 81,89 | 71,34 | 45,34 | 82,67 | 13,66 |

For comparison, in Ukraine, the decentralization of public management began in 2014, however enrollment indicator to tertiary educational institutions exceeded the values of Poland and Romania: in 1998 it was 45,34%, in 2018 – 81,89% with a deviation of 13,66%. This confirms the fact that social-cultural and historical preconditions determine the quality of tertiary education and its accessibility to the population.

Analyzing the ratings of Ukrainian universities, it can be stated that the highest places are occupied by universities with a high level of autonomy, which is based on the principles declared in international documents in the sphere of tertiary education. The introduction of quarantine in Ukraine had an extremely strong impact on the quality of the educational process. Most tertiary educational institutions hadn't been ready for such training, however, they adapted very quickly. However, in general, the process of decentralization of education in Ukraine should be improved to meet the requirements of current trends in the society and education (Iatsyshyn, A. V. 2020).

In Hungary, the decentralization of education began in 1990 under the influence of social-economic transformations. The role of the central government has

declined in favor of a “three-tier” system of local government management and institutional development. In Hungary, centralized management is carried out by the Ministry of Education; however regional government bodies (county, capital city, municipal government) provide support to tertiary educational institutions and operate in six areas that define autonomy (Arató, N., & Lavicza, Z., 2015).

Until recently, Hungary's systems of tertiary education were considered as the most decentralized, however teachers' protests in 2015 against underfunding, inefficient local government management, and low wages pose new challenges in the context of the need to ensure a high level of decentralization (Timmer, A. D., 2018).

Decentralization of tertiary education in the studied countries did not reduce current expenditures on tertiary education (Table 2). During 1998-2018, current education expenditures remain stable at the level of 85-95% of total expenditures in tertiary educational institutions in the public sector. This means that institutions spend funds on current funding, and therefore investing in infrastructure development for improving the quality of educational services can be a new challenge.

Table 2. Current education expenditure, tertiary (% of total expenditure in tertiary public institutions), 1998-2018

| Country | 1998 | 2010 | 2016 | 2017 | 2018 | Average value | Minimum | Maximum | Standard deviation |
|---------|-------|-------|-------|-------|-------|---------------|---------|---------|--------------------|
| Hungary | 88,44 | 88,56 | 83,49 | 86,68 | 85,09 | 86,98 | 82,24 | 92,69 | 3,00 |
| Poland | 84,69 | 80,59 | 91,61 | 87,47 | 89,54 | 86,64 | 78,16 | 96,67 | 5,20 |
| Romania | 89,11 | 85,68 | 93,13 | 93,72 | 93,42 | 86,36 | 67,60 | 94,31 | 7,39 |
| Ukraine | 98,74 | 96,28 | 91,12 | 94,03 | 92,58 | 94,41 | 83,22 | 98,74 | 4,62 |

Herewith, the share of public spending on tertiary education in Hungary decreased from 19,56% to 15,64%, in Ukraine - from 32,16% to 27,72%, in Poland on the contrary it increased - from 22,40% to 23,45 %, in Romania it also increased - from 22,40% to 23,13%. Such dynamics can be explained by a number of reasons, in particular, by the structure of government expenditures.

Table 3. Expenditure on tertiary education (% of government expenditure on education), 1998-2018

| Country | 1998 | 2010 | 2016 | 2017 | 2018 | Average value | Minimum | Maximum | Standard deviation |
|---------|-------|-------|-------|-------|-------|---------------|---------|---------|--------------------|
| Hungary | 19,56 | 20,11 | 16,08 | 15,21 | 15,64 | 19,22 | 14,33 | 23,39 | 2,41 |
| Poland | 22,40 | 22,77 | 22,84 | 24,06 | 23,45 | 21,08 | 14,46 | 25,28 | 3,02 |
| Romania | 22,40 | 28,47 | 23,78 | 22,47 | 23,13 | 23,79 | 19,71 | 28,47 | 2,82 |
| Ukraine | 32,16 | 31,96 | 30,46 | 24,99 | 27,72 | 31,24 | 24,99 | 34,40 | 2,02 |

Government expenditures per student in the sphere of tertiary education have generally declined: in Hungary from 34,72% of GDP per capita to 24,37%; in Poland - from 36,00% to 26,09%; in Romania - from 30,02% to 25,59%; in Ukraine - from 36,68% to 36,50% (Table 4). This means, in particular, that the economic growth of Poland and Romania is connected with expenditures on tertiary education: these countries provide economic growth,

which could lead to a reduction in indicators while increasing the level of enrollment of applicants to tertiary educational institutions (Table 1). On the other hand, in Ukraine, with weak economic growth and a high level of enrollment to tertiary educational institutions, the highest levels of expenditure per student are observed (at the level of 36% for 20 years).

Table 4. Government expenditure per student, tertiary (% of GDP per capita), 1998-2018

| Country | 1998 | 2010 | 2016 | 2017 | 2018 | Average value | Minimum | Maximum | Standard deviation |
|---------|-------|-------|-------|-------|-------|---------------|---------|---------|--------------------|
| Hungary | 34,72 | 24,66 | 25,41 | 23,33 | 24,37 | 26,64 | 21,16 | 34,72 | 4,34 |
| Poland | 36,00 | 20,44 | 25,41 | 26,77 | 26,09 | 22,25 | 16,43 | 36,00 | 4,73 |
| Romania | 30,02 | 20,16 | 26,10 | 25,08 | 25,59 | 24,54 | 19,27 | 32,42 | 3,64 |
| Ukraine | 36,68 | 35,99 | 38,54 | 34,47 | 36,50 | 36,71 | 30,55 | 43,85 | 3,44 |

Ensuring fiscal decentralization and the development of a competitive market for educational services in the countries has led to a reduction in public expenditures on tertiary education, expenditures per student with the development of private financing and the private sector of educational services.

There are different opinions concerning the role of public decentralized management of tertiary education in the scientific literature (Bleiklie, I., Høstaker, R., Vabø, A., 2000; Callon M., Lascoumes P., Barthe Y., 2001). The Organization for Economic Co-operation and Development notes that "transition and decentralization of decision-making in various sectors of public management, where tertiary institutions are no exception, stronger and more effective practices of institutional management and governance are needed" (1998).

The studied experience of reforming public management of tertiary education proves both the advantages and disadvantages of decentralization. The quality indicators of tertiary education system of Romania and Poland prove efficiency, despite the incompleteness of the process.

While decentralization is ineffective in Ukraine, public expenditures continue to rise and tertiary education is available to 82% of the population. This means that the institutional capacity of public management decentralization determines its effectiveness: if governance institutions are transformed into independent governing bodies, decentralization provides the results of tertiary education transformation. The experience of Poland and Romania proves this thesis, where the development of institutional capacity has determined the development of the quality of educational services, increasing the level of public involvement in tertiary education. Herewith, the practice of decentralization of Ukraine is ineffective due to the lack of institutional changes.

Therefore, in Ukraine it is necessary to improve the mechanisms of decentralization as a global effective trend in the sphere of tertiary education, and due to the unusual conditions of learning during the quarantine period, as well as to expand opportunities for education.

CONCLUSIONS

The present study, in general, confirms the effectiveness of decentralization provided that the transformation of public management institutions is ensured. Deregulation has been taking place both territorially and functionally since 1990-1999 and is mainly aimed at self-financing of tertiary educational institutions, the formation of a competitive market for educational services, the integration of the private sector into the public sector for the development of state tertiary education. Among the basic advantages of decentralization, one can note an increase in the level of enrollment of the population to tertiary educational institutions due to accessibility, a reduction in the level of public expenditures on education, an increase in the quality level of state tertiary educational institutions, and meeting the needs of the labor market. The introduction of quarantine restrictions due to the pandemic Covid - 19 also shows the necessity of university autonomy in order to provide the educational services of good quality. Models of decentralization in Ukraine, Poland, Hungary and Romania differ from each other: territorial decentralization is being developed in Poland, asymmetric decentralization with an emphasis on self-financing is observed in Romania, and functional decentralization is noted in Hungary and Ukraine due to the need to develop the quality of educational services. The basic features of decentralization include: the development of flexible adaptive legislation, transformation of public management institutions and deregulation of government functions, change of financing tools with the possibility of attracting funds from private partners (business), expanding access to educational services, forming hybrid private-public institutions with corporate status, reducing financial pressure, supervision and control. All of the above mentioned is to a great extent relevant through the pandemic Covid - 19; therefore, the processes of decentralization are inevitable and effective in response to the challenges in the modern society.

REFERENCES

1. Alonso, J. M., Clifton, J., & Díaz-Fuentes, D. (2015). Did new public management matter? An empirical analysis of the outsourcing and decentralization effects on public sector size. *Public Management Review*, 17(5), 643-660.
2. Andresani, G. and Ferlie, E. (2006). Studying Governance within the British Public Sector and Without: Theoretical and Methodological Issues, *Public Management Review*, 8(3): 415- 432.
3. Arató, N., & Lavicza, Z. (2015). The Hungarian education system in transition: Shifting towards decentralization. In *Do Teachers Wish to Be Agents of Change?* (pp. 133-149). Brill Sense.
4. Bilouseac, I. (2015). Poland-European Model of Decentralization Reform. *European Journal of Law and Public Administration*, (3), 17-24.
5. Boaja, D. M., Ciurlau, F. C., & Ciurlau, I. A. (2015). Financing and decentralization-mayor coordinates in education reform in Romania. *Knowledge Horizons. Economics*, 7(1), 137.
6. Campbell, D.F.J. (2003). The Evaluation of University Research in the United Kingdom and the Netherlands, Germany and Austria, in Shapira P. and Kuhlmann S. (eds.): *Learning from Science and Technology Policy Evaluation*, Cheltenham (UK) and Northampton (USA), Edward Elgar Publishing, pp. 98-131.
7. Cave M., Hanney S. and Kogan M. (1991). *The Use of Performance Indicators in Higher Education. A critical Analysis of Developing Practices*, London, Kingsley Publishers.
8. Channa, A., & Faguet, J. P. (2016). Decentralization of health and education in developing countries: a quality-adjusted review of the empirical literature. *The World Bank Research Observer*, 31(2), 199-241.
9. Deca, L. (2015). International norms in the reform of Romanian higher education: A discursive analysis. *European Journal of Higher Education*, 5(1), 34-48.
10. Egalite, A. J., Fusarelli, L. D., & Fusarelli, B. C. (2017). Will decentralization affect educational inequity? The every student succeeds act. *Educational Administration Quarterly*, 53(5), 757-781.
11. Ferlie, E., Musselin, C. & Andresani, G. (2008). The steering of higher education systems: a public management perspective. *High Educ*, 56, 325 <https://doi.org/10.1007/s10734-008-9125-5>.
12. Frederickson, M.G. (2005). Whatever Happened to Public Administration? Governance, overnance Everywhere, in (eds) Ferlie, E., Lynn, L. and Pollitt, C. 'The Oxford Handbook of Public Management' Oxford: Oxford University Press.
13. Grisorio, M. J., & Prota, F. (2015). The impact of fiscal decentralization on the composition of public expenditure: panel data evidence from Italy. *Regional Studies*, 49(12), 1941-1956.
14. Iatsyshyn, A. V., Kovach, V. O., Romanenko, Y. O., Deinega, I. I., Iatsyshyn, A. V., Popov, O. O. Lytvynova, S. H. (2020). Application of augmented reality technologies for preparation of specialists of new technological era. Paper presented at the *CEUR Workshop Proceedings*, 2547, 181-200.
15. Jeong, D. W., Lee, H. J., & Cho, S. K. (2017). Education decentralization, school resources, and student outcomes in Korea. *International Journal of Educational Development*, 53, 12-27.
16. Jian Li, & Juan Du. (2016). Globalization and Decentralization Forces in China's Higher Education Administration and Management Reform (1953-2015): A Neo-institutional Analysis. *US-China Education Review B*, 6(1). doi:10.17265/2161-6248/2016.01.001.
17. Jones, G. A. (2018). Decentralization, Provincial Systems, and the Challenge of Equity: High Participation Higher Education in Canada. *High Participation Systems of Higher Education*, 203-226. doi:10.1093/oso/9780198828877.003.0008.
18. Jongbloed, B., Kaiser, F., van Vught, F., & Westerheijden, D. F. (2018). Performance agreements in higher education: A new approach to higher education funding. In *European higher education area: The impact of past and future policies* (pp. 671-687). Springer, Cham.
19. Laboutková, Š., Bednářová, P., & Valentová, V. H. (2016). Economic inequalities and the level of decentralization in European countries: cluster analysis. *Comparative Economic Research*, 19(4), 27-46.
20. Lee, M. N. N. (2006). Centralised decentralization in Malaysian education. *Educational Decentralization*, 149-158. doi:10.1007/978-1-4020-4358-1_10.

21. Leek, J. (2019). Decentralization policies concerning leadership of parents and students in school councils in Poland. From autocracy to democracy within the state monopoly. *International Journal of Leadership in Education*, 1-18.
22. Li J. (2018) Globalization and Decentralization Forces in Chinese Higher Education. In: *Conceptualizing Soft Power of Higher Education. Perspectives on Rethinking and Reforming Education*. Springer, Singapore, 91-111, DOI https://doi.org/10.1007/978-981-13-0641-9_5.
23. McLendon, M. K. (2003). Setting the Governmental Agenda for State Decentralization of Higher Education. *The Journal of Higher Education*, 74(5), 479-515. doi:10.1353/jhe.2003.0038
24. Mok, K. H., & Han, X. (2017). Higher education governance and policy in China: managing decentralization and transnationalism. *Policy and Society*, 36(1), 34-48.
25. Neamțu, B. (2016). Asymmetric decentralization in Romania: Lost opportunity. *Modelling the New Europe. An On-line Journal*, (20), 47-79.
26. Profiroiu, C. M., Profiroiu, A. G., & Szabo, S. R. (2017). The Decentralization Process in Romania. In *The Palgrave Handbook of Decentralisation in Europe* (pp. 353-387). Palgrave Macmillan, Cham.
27. Romanenko, Y. O., & Chaplay, I. V. (2016). Marketing communication system within public administration mechanisms. *Actual Problems of Economics*, 178(4), 69-78.
28. Roselló, J. (2017). Does Decentralization in the Provision of Higher Education Increase Quality of Education? *Revista Hacienda Pública Española*, 220(1), 13-55. doi:10.7866/hpe-rpe.17.1.1
29. The World Bank (2020). Current education expenditure, tertiary (% of total expenditure in tertiary public institutions). Available at: <https://data.worldbank.org/indicator/SE.XPD.CTER.ZS>
30. The World Bank (2020). Expenditure on tertiary education (% of government expenditure on education). Available at: <https://data.worldbank.org/indicator/SE.XPD.TERT.ZS>
31. The World Bank (2020). Government expenditure per student, tertiary (% of GDP per capita). Available at: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS>.
32. The World Bank (2020). School enrollment, tertiary (% gross). Available at: <https://data.worldbank.org/indicator/SE.TER.ENRR>.
33. Timmer, A. D. (2018). 5. Decentralization, centralization and minority education in Hungary. *Another Way: Decentralization, Democratization and the Global Politics of Community-Based Schooling*, 65.
34. Yang, D., (2012). Decentralization, marketization and organizational change in higher education. University of Hong Kong, Pokfulam, Hong Kong SAR. doi:10.5353/th_b4832992.