

Methods and Instruments for University Performance. The Case of Romania

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Abstract. *Higher education institutions, as change agents in the knowledge economy, are nowadays subject to increasingly competitive structures, legal frameworks, and regional and global dynamics. To keep the pace with the surrounding context, universities bring innovation into discussion by delivering superior value in the teaching process, in research activities as well as in the continuous communication with stakeholders. In order to quantify the progress reached, university performance needs to be timely monitored through methods, instruments, and key performance indicators and lessons learnt must be embodied in future educational practices. Additionally, to develop their potential, it is beneficial for higher education institutions to examine and embed procedures implemented by other similar entities from abroad. Likewise, benchmarking can also produce a valuable output when it is applied by Romanian policymakers and they integrate assessment practices in the current university performance measurement legislation. Given these matters, the paper aims to conduct a comparative analysis with respect to academic performance, to map commonalities and differences between national and international evaluation, and to propose a set of indicators to facilitate the harmonization of national regulations related to university performance. To ensure the achievement of the research objectives, the methodology consists of comparison between the national criteria for evaluation for financing and international criteria for rankings and accreditation. The research findings will provide solutions for leadership of the universities and policy makers in education filed to change the present system and transform it for the future challenges.*

Keywords: higher education, university performance, performance measurement, indicators, Romania.

Introduction

The role that higher education institutions play in the promotion of economic development, social development, and knowledge transfer cannot be overemphasized. In the expanding knowledge economy, universities are more and more evaluated by the extent to which they can deliver high-quality teaching, produce cutting-edge research, and integrate their activities within the wider community (de Paiva et al., 2014; Lozoya-Santos et al., 2019). The European Commission views higher education institutions as drivers of knowledge and innovation, thereby giving impetus to their role in economic and social advancement (Pisár & Varga, 2019). Yet, there is a need for universities to keep abreast of this pace in a fast-changing global landscape in terms of relevance in the delivery of sustained quality performance up to the best international standards.

It becomes an important place of reference in future higher education policy with institutions of national accreditation systems and international rankings measuring performance through various frameworks. Academic output and faculty qualifications, student satisfaction rates, and their employability are a few of the most common metrics used to measure performance. Differences in evaluation criteria make it even more challenging to compare and form an international standard based on the data of different countries.

In Romania, the activity of the higher education institution is also evaluated by ARACIS and the National Council for the Financing of Higher Education (CNFIS), while it is reestablished internationally by the QS World University Rankings and Times Higher Education (THE) Rankings (CNFIS, n.d.; ARACIS, 2024). All these assessments are very important in drawing the strategies of the institution, allocations concerning the funding, and at the same time affecting extremely the recruitment of staff and students.

The most important aspects of the problems faced by the Romanian universities are reflecting national priorities, and meanwhile maintaining an aspect of their international competitiveness. First, the shift toward performance-based funding increased emphasis on research impact and institutional effectiveness (CNFIS, 2023). Second, funding inconsistency within the entire academic system, namely bureaucratic inefficiency, along with some frequent shifts in policy, has also contributed to instability in research governance (Ministry of Education and Research, 2025a). Therefore, these factors needed to be reflected in a more coherent and harmonized evaluation that presents national performance indicators within the international best practices (Boulton, 2011; Millot, 2015).

Most of the international university rankings have been based on criteria like citation impact, faculty-student ratios, and institutional reputation. These metrics do not reflect the unique challenges and priorities that Romanian universities are required to tackle (Perchinunno & Cazzolle, 2020). Therefore, although global benchmarking provides an excellent reference point, there is a strong need for policymakers to be sensitive to regional contexts in structuring evaluation criteria. Adding to these factors, the nature of higher education is changing dynamically, with digital transformation and new research areas such as interdisciplinary studies. Thus, it calls for an evaluation framework that is flexible and dynamic. It is called upon the evaluation of the institution, hence university accreditation. An example in Romania is ARACIS, which, among other such bodies, looks into aspects regarding quality education and general institutional registration (ARACIS, n.d.). There should be a new way of thinking in the accreditation process as everything in higher education is changing, and it should take into account elements like online learning, competency-based education, and ties with the world of trade. It has to necessarily be correlated with the national and international standards required and expected to enhance the performance of the university.

Research funding and institutional support mechanisms are the other driving forces behind the results. When things are balanced and universities have enough money, they can achieve high levels of research output and high places in the world ranking (Frenken et al., 2017). In Romania, in the years of variation in research funds and policy adjustments, this fact delayed those institutions in their regular progress paths. Upgrading the budgetary support mechanism and establishing long-term strategic plans are going to be at the core of the issues through which universities should improve their performance at the national and international levels.

This paper compares and discusses the methods by which universities in Romania and other countries practice the performance evaluation of their institutions. This paper will have detailed insights based on the key performance indicators, assessment methodologies, and funding

mechanisms that may expose gaps in the systems and strategies for improving university evaluation. The paper is divided into the following sections. This first one offers a review of related literature on performance measurement frameworks for universities, followed by a detailed methodology in the subsequent. The results and discussion sections reveal findings from the comparative analysis and indicate what can be done to improve the situation. The concluding part, which ensues then, proffers recommendations to policymakers and leaders within the higher education sector, regarding how to enhance the effectiveness of performance evaluation.

Literature review

The role played by higher education institutions in economic advancement is of paramount importance for current communities and is widely acknowledged by researchers (de Paiva et al., 2014; Lozoya-Santos et al., 2019; Minciu et al., 2023). According to Munteanu and Aldea (2024), the component elements of higher education systems are the educational institutions and the academic and administrative personnel. The European Commission conceptualizes higher education institutions as knowledge and education hubs (Pisár & Varga, 2019), thus holding a powerful mission also expressed through the realization of research activities (del Sordo et al., 2012; Sutanto et al., 2021; Obretin & Cornea, 2023). A report of OECD (2019) notes that universities supply social and cultural added value and help to improve the overall welfare level of the society. As Poenaru et al. (2024) claim, higher education underwent significant progress in light of technological shifts and altered demographic trends. In this spirit, entities from the private sector capitalize on the meaningfulness of scientific knowledge and collaborate with higher education institutions to maximize their competitive advantage (Tseng et al., 2020).

Constrained by competitiveness, universities adhere to continuous improvement, defined by result assessment, allowance of excellence (Maric, 2013), and quality assurance (Navas et al., 2020). The work of Achim et al. (2009) claims that a new efficiency-based paradigm must be part of higher education institutions so that they can provide superior productivity. This requirement becomes more heightened in a context of great changes which took place in the institutional and legal framework that governs universities' functioning and the amplification of universities' social and financial accountability (Bana e Costa & Oliveira, 2012). The study of Dima et al. (2024) displays that the recalibration of teaching practices and the educational offering are significant strategic points that can foster the adaptation to industry-scale variations. As a result of these turning points, the business models of universities were redesigned in line with the typology and governance of their actions, leading to a variety of university business models, from research university and entrepreneurial university to the smart university or the university of the future (Seres et al., 2019).

In the present, universities face more monitoring than ever before and due to the great variety of performance measures, the organization manner of academic activities has been profoundly reconfigured (Söderlind & Geschwind, 2019). In the general sense, the word performance refers to an outcome affiliated to the economic or managerial domain that involves organizational competitiveness (Cotelnic, 2022). Acting as knowledge contributors and struggling to be placed on the top of rankings, higher education institutions must run thorough appraisal operations focused on teaching and research performance (Baciu et al., 2010). However, the research of Plummer et al. (2021) warns that universities must also pay attention to their relationships with the community, this being known as their third mission. The appraisal of performance in the case of universities relies on different ground indicators compared to corporations, since for universities it is more appropriate to follow metrics such as global and

regional rankings, research grants, research impact indicators, and the number of graduates (Multan et al., 2023). Due to the focus on key performance indicators, strategy and planning are now emphasis points for universities (Breakwell & Tytherleigh, 2010).

Concerning the performance measures, the work of Cadez et al. (2015) underlines that they have to be coherent with the strategic objectives in order for the strategy to be adequately applied. When it comes to the evaluation of university performance, Anninos (2007) highlights that it imposes setting the legal framework in this sense, designating the entities that carry out the assessment process, and establishing the evaluation systems. As universities have been increasingly exposed to evaluation processes, governmental and private entities have drawn more and more appraisal tools for higher education institutions (Vîiu et al., 2012). The research conducted by Nugraha et al. (2023) acknowledges that performance evaluation in higher education is an essential step and that the educational objectives along with the program design have to be set in accordance with the outcomes of the assessment process.

Higher education institutions that are successfully upgrading their operations do not concentrate solely on education itself but also on persistent research actions (Radushinsky et al., 2024). Research performance is a primary variable that is taken into account when universities' efforts are globally recognized (Mohd Rasdi & Tauhed, 2023) and it defines the decision-making processes, the mission, and the reputation of the university (Maral, 2024). A study performed by Frenken et al. (2017) on the variables shaping the research performance of universities reveals that the size of the university and of the city it is located in, together with the disciplinary profile of the higher education institution determine incongruities in research performance. In the case of business universities' members, White et al. (2012) acknowledge that their research efficiency depends, among other factors, on their academic rank and the disposable research time.

As universities are components of the knowledge economy (Mironiuc et al., 2011), accreditation is a practice that universities need to implement to validate their reputation as well as to provide highly qualitative educational services (Javed & Alenezi, 2023). According to ELQN (n.d.), accreditation is a process through which higher education institutions are assessed by external authorities. This process brings complexity into discussion since the educational quality embodies domain-linked knowledge, cognitive abilities, and emotional and social capabilities (Bardakcı, 2024). Jasim et al. (2025) mention several benefits of accreditation, for instance legitimacy, receipt of assistance from the private sector, defense of rights, and worldwide recognition.

The confirmation of the prestige held by a university is additionally certified by its appearance in university rankings, the educational institution disseminating this information through various communication channels, for instance annual reports (Olçay & Bulu, 2017). As Perchinunno and Cazzolle (2020) reinforce, the role of international rankings is to foster differentiations between universities in connection with particular indicators. According to Boulton (2011), the strategies tackled by universities and their mission statements integrate the wish of the institutions to be well-placed in university rankings. Stakeholders such as students, parents, and governmental bodies can assess the excellence degree of universities based on data contained by the rankings (Madhoun & Hamouda, 2017). Saisana et al. (2011) draw attention to the fact that international university rankings depend on the indicators they comprise and their formulation method, for instance the weighting process. Generally known examples of international university rankings are the Shanghai Academic Ranking of World Universities (ARWU), Times Higher Education (THE) World University Rankings, and Quacquarelli Symonds (QS) World University Rankings (Bridgestock, 2021; Millot, 2015). Focusing specifically on

research efficiency, research (Abramo & D'Angelo, 2015; de Mesnard, 2012) also highlights the SCImago Institutions Rankings and the CWTS Leiden Rankings. Following a bibliometric perspective, Adl (2017) underlines the Matthew effect, according to which 20% of researchers are accountable for 80% of citations and for 60% of the published papers.

Methodology

This paper shall use a comparative and mixed-method approach to evaluate the quality of university performance evaluation in Romania. In particular, this paper will compare the national evaluation frameworks with international standards to pin down the possible indicators that can enable and improve practice for evaluators to carry out their assessments. The methodology, therefore, shall be explicitly constructed and based on evidence. It shall largely utilize a review of documented matters, complemented by statistical information, where available.

The main method of data collection emanates from document analysis concerning university assessment, accreditation, and funding. National reference points are the regulations and reports of institutions such as ARACIS, CNCS, CNFIS, and similarly international reference points emanate from methodologies regarding world university rankings as per QS, ARWU, THE, and SCImago. These documents underpin the ways through which university performance is currently being benchmarked and the degree to which Romanian institutions converge with global best practices. To review the effect on institutional effectiveness, the document also inspects funding allocation models alongside performance indicators from university rankings.

To support the findings from the document analysis, statistical data on performance and funding structures of Romanian universities are included wherever appropriate. This means the assessment of key performance indicators, investigation of trends in national and international rankings, as well as an inspection of financial distribution models at universities. Where possible, a correlation analysis between financial allocation and performance metrics at the university may help explain the relationship that exists between funding and institutional success.

The second layer of analysis would compare the national framework with the commonly adopted international frameworks of evaluations. Such a study would show, with commonalities and differences between them, open shades in Romania's approach to the measurement of university performance. In the end, the paper discusses the possible adjustments needed for the Romanian higher education system so that its actions are acutely aligned with all the other countries' actions. The degree to which the accreditation bodies have evolved and whether the performance-based funding strategies have become effective in motivating Romanian higher education institutions to align more closely with international best practices is also discussed.

The strengths and weaknesses of the Romanian university evaluation system are additionally approached. Key indicators and best practices identified in this study should be able to provide recommendations on how national performance measurement criteria and international standards can be harmonized. It is this set of findings that will most contribute effectively to decisions by policymakers and university leadership to refine the distribution of funds, policy on accreditation, and overall governance of higher education.

Results and discussions

The case of Romania

In Romania, the main executive institution currently managing research is the Ministry of Education and Research (2025a). It should be noted that until December 2024, research was included in another ministry (see Table 1), the Ministry of Research, Innovation and Digitalization (2024).

Table 1. Institutional Roles and Responsibilities in Research Governance

Institution	Main Responsibilities	Recent Changes (2024-2025)
National Council for Scientific Research (CNCS)	Coordinates, finances, monitors, and evaluates scientific research in Romania	Expanded membership, clearer conflict of interest rules, collaboration with the Romanian Academy and CNADTCU
National Commission for the Attestation of University Titles, Diplomas, and Certificates (CNADTCU)	Evaluates doctoral theses, ensures academic integrity, combats plagiarism	Reduced authority over doctoral theses, stronger emphasis on plagiarism prevention
Romanian Agency for Quality Assurance in Higher Education (ARACIS)	Conducts external evaluations of universities and higher education providers	Focuses on institutional capacity, educational effectiveness, and quality management
National Council for the Financing of Higher Education (CNFIS)	Develops principles for funding state universities, allocates public funds	Updated funding criteria focusing on research impact, internationalization, and social equity
National Council for Scientific Research (CNCS)	Coordinates, finances, monitors, and evaluates scientific research in Romania	Expanded membership, clearer conflict of interest rules, collaboration with the Romanian Academy and CNADTCU

Source: Authors' own processing.

On the one hand, it can be argued that it is preferable to have an autonomous structure dedicated to research and innovation that would also assume responsibilities related to accelerating the digital transformation process. On the other hand, given the depth of the connections between the educational and research levels, the option of creating a ministry of education and research can also be considered reasonable. However, the apprehension left over time by representatives of the political decision-making mechanism is that decisions related to the place and role of research in the executive area were based not so much on various strategic considerations as on calculations related to budgetary expenditures. For example, the technocratic cabinet of 2015-2016 and other previous cabinets that promoted a fiscal-budgetary vision of austerity preferred to organize the research component as an annex of the Ministry of Education. In contrast, other cabinets of 2017-2019 and 2021-2024 opted for the separate organization of a research ministry. On the one hand, the prevalence of an accounting perspective over a strategic one has the potential to generate unpredictability in terms of the management of research activity in Romania. On the other hand, the practice of constantly restructuring ministries at the time of changes in government is far from being unusual in European politics (Table 2).

Table 2. Comparative Analysis of National and International Research and Higher Education Systems

Category	National (Romania)	International	Common Aspects
Research Governance	Research governance frequently shifts between ministries, leading to instability.	Most countries have stable, independent research agencies ensuring long-term strategies.	Both emphasize quality assurance, transparency, and evaluation mechanisms.
University Evaluation	ARACIS evaluates universities based on institutional capacity, educational effectiveness, and quality management.	Global rankings (QS, ARWU, THE) focus on research output, citations, and global reputation.	University evaluation includes performance metrics, research impact, and institutional reputation.
Funding Allocation	Funding is subject to government restructuring, often short-term and politically influenced.	International funding models emphasize long-term, performance-based allocation with strategic research funding.	Funding distribution considers research excellence, social equity, and internationalization.
Strategic Priorities	Prioritizes structural reforms, digital transformation, and integration into international standards.	Strong focus on sustainability, global competitiveness, and digitalization in research and education.	Both prioritize research excellence, innovation, and the role of universities in economic development.

Source: Authors' own processing.

One of the actions successfully carried out by the Ministry of Research, Innovation and Digitalization, shortly before its reorganization, was to bring important changes to the functioning of the National Council for Scientific Research (CNCS), by adopting a new Organization and Functioning Regulation. CNCS is a national advisory body with responsibilities in performing harmonization, funding, surveillance, and assessment of scientific research actions in Romania (CNCS, 2025). Furthermore, CNCS is concerned with research quality improvement in Romania and its restructuring in order to enable economic progress at national scale. When establishing standards, criteria, and quality indicators for scientific research, CNCS must collaborate with other entities, such as the Romanian Academy, the National Council of Rectors, or the National Commission for the Attestation of University Titles, Diplomas, and Certificates (CNADTCU) (Edupedu, 2024a).

The National Commission for the Attestation of University Titles, Diplomas, and Certificates (CNADTCU) had, according to the Regulation of organization and operation based on the Education Law of 2011, the attribution to assess plagiarism complaints or other breaches regarding ethics procedures. In addition, the Commission was also liable for the appraisal of the doctoral degree files and the scientific researcher degree files (Edupedu, 2024b). Several changes taking place for CNADTCU through the August 2024 Regulation were represented by the augmentation of the number of members, the establishment of rules for the conflicts of interest, and the minimization of the Commission's duties regarding the appraisal of doctoral theses (Ministry of Research, Innovation and Digitalization, 2023).

The Romanian Agency for Quality Assurance in Higher Education (ARACIS) has as primary objective the external evaluation of the quality of education in universities and other organizations providing specific higher education programs, operating in our country. The most important goals of the Agency are the following: attesting, based on pre-established quality standards, the capacity of education-providing organizations to meet the expectations of

beneficiaries; contributing to building an institutional culture of quality in the university environment; ensuring the protection of direct beneficiaries of university-level study programs by producing and disseminating systematic, coherent, and credible, publicly accessible information on the quality of education; advancing to the Ministry of Education and Research strategies and policies for the constant improvement of the quality of higher education, in close correlation with the development of pre-university education (ARACIS, n.d.).

In the evaluation of university institutions in Romania (Table 3), ARACIS takes into account three fundamental areas: Institutional capacity, Educational effectiveness, and Quality management. Regarding institutional capacity, elements such as: mission, strategy, and actions; components, organizational structures, and institutional processes; stakeholder involvement; material base and its management; human resources; recruitment procedures; financial resources; digital transformation; data collection, analysis, and use are included in the evaluation.

Educational effectiveness comprises elements such as: the content and relevance of study programs; the consistency of the curriculum with the level of qualification and the targeted competencies; the principles of learning and teaching (student-centeredness); equity; the access to resources and services; the definition and assessment of learning outcomes; the insertion and retention of graduates on the labor market; the admission process; the academic career of students; the recognition and equivalence of studies; the certification of results; internationalization; scientific research is included in the evaluation.

Table 3. Evaluation Criteria for Higher Education Institutions

Evaluation Dimension	Key Criteria
Institutional Capacity	Mission, strategy, organizational structures, stakeholder involvement, financial & human resources, digital transformation, data collection & analysis
Educational Effectiveness	Study programs, curriculum relevance, student-centered learning, equity, resource access, academic career development, graduate employability, research activities
Quality Management	Internal quality assurance strategies, transparency, study program evaluation, faculty assessment, stakeholder involvement, compliance with external evaluations

Source: Authors' own processing adapted from ARACIS (2024).

Quality management includes elements such as: strategies and procedures for quality assurance; the application of these strategies and procedures; the involvement of stakeholders; organizational structures with responsibilities in quality assurance and their functioning; procedures for initiating, monitoring, and periodically reviewing study programs; procedures for introducing new programs; procedures for assessing the quality of personnel; databases; transparency of information of public interest; evaluation and submission of reports; compliance with the obligation of external evaluation (ARACIS, 2024).

The National Council for the Financing of Higher Education (CNFIS) is a national advisory body of the Ministry of Education and Research, which has the objective of generating principles and methods for distributing public funds to state universities in Romania. The structure promotes the continuous growth of quality in the Romanian university system, ensuring equal opportunities for all citizens to study in higher education (CNFIS, n.d.).

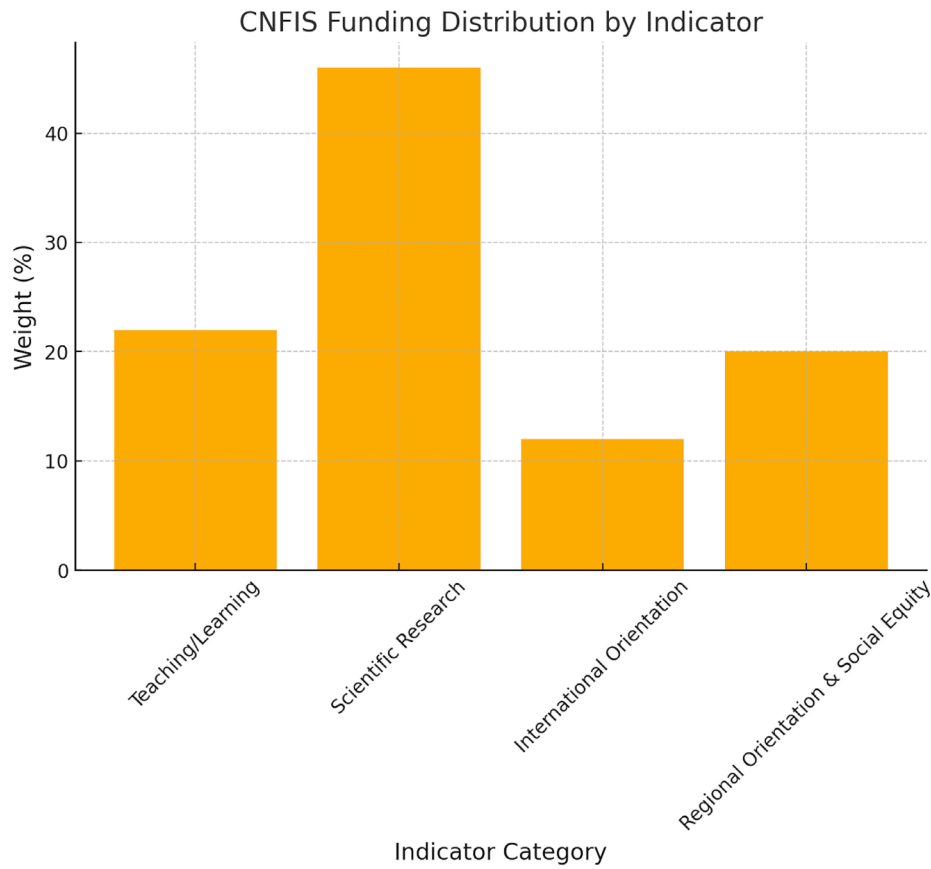


Figure 1. CNFIS Funding Distribution by Indicator

Source: Authors' own processing.

According to the Methodology (see Figure 1) for the allocation of budgetary funds for basic and additional financing of state higher education institutions in Romania, for the year 2024, the classes of quality indicators taken into account are the following (the associated weights are specified in brackets): Teaching/learning (22%); Scientific research/Artistic creation/Sports performance (46%); International orientation (12%); Regional orientation and social equity (20%). Regarding **teaching activity**, the following factors are evaluated: no. students/teaching staff, no. master's students/no. bachelor's students, no. teaching staff aged up to 40 years/no. total teaching staff. Regarding **scientific research**, the following factors are analyzed: the quality of human resources, the impact of scientific activity, the performance of scientific activity, the funds for scientific research. Regarding **international orientation**, the assessment is performed through the following factors: the share of student mobility, the share of foreign students enrolled in study programs. Regarding **regional orientation and social equity**, the following factors are analyzed: the ability to integrate people from socioeconomically disadvantaged backgrounds into educational programs, the contribution of the university institution to the scholarship fund, the internship activity during the undergraduate study cycle, places in student dormitories, and non-reimbursable funds attracted. Almost a third of the total funds related to institutional financing are directed according to the indicators presented in this paragraph (CNFIS, 2023).

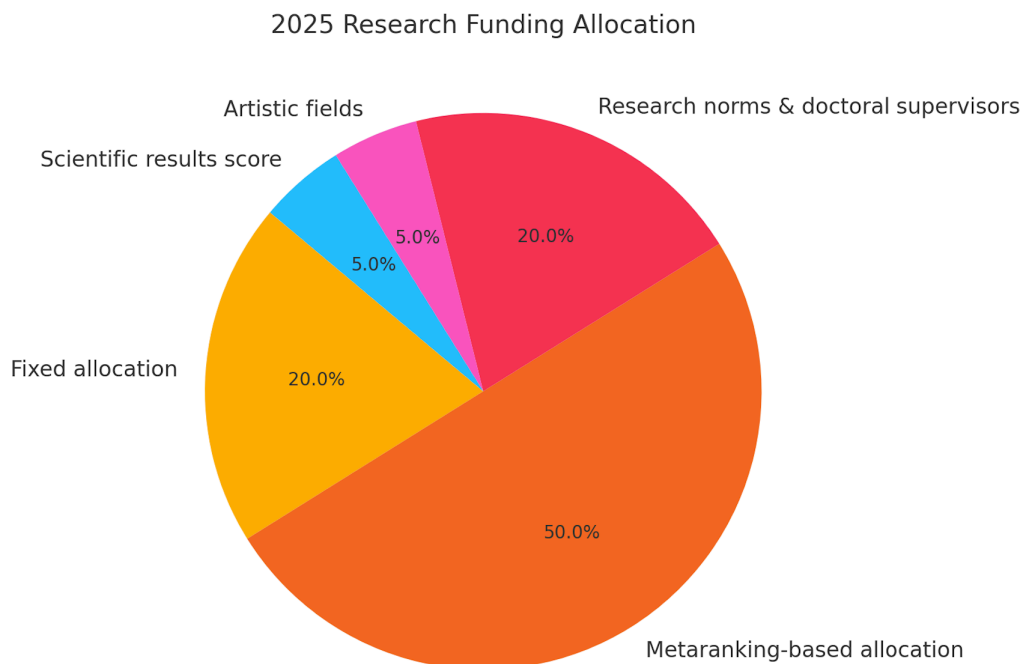


Figure 2. Research Funding Allocation (2025)

Source: Authors' own processing.

According to the Methodology for financing university scientific research within state higher education institutions in 2025, the budget fund for research is 100 million lei (approximately 20 million euros). The amount is distributed as follows (see Figure 2): 20% represents a fixed amount that is equally allocated, while 50% is established in accordance with universities' scores in the metaranking. More specifically, the order delineates that the ranking to which reference is made is the one for 2023, not for 2024, as it has not been published yet. Additionally, it points that a share of 50% is allotted based on universities' scores in the 2023 Metaranking of universities in Romania, 20% is correlated with the number of research norms that are not vacant and the doctoral supervisors, 5% corresponds to programs of study pertaining to artistic domains and a value of 5% is related to the scientific results' scoring (Edupedu, 2025).

In the meta-ranking conducted by the Ministry of Education, the score of universities is represented by an average of the scores obtained in the following rankings: Shanghai Ranking's Academic Ranking of World Universities (ARWU), CWUR World University Rankings, CWTS Leiden Ranking, NTU Ranking - National Taiwan University Performance, QS World University Rankings, SCImago Institutions Ranking, THE World University Rankings, URAP University Ranking by Academic Performance (Ministry of Education and Research, 2025b).



Figure 3. The interdependence between concepts pertaining to institutional performance in higher education

Source: Authors' own processing.

Rankings such as QS World University Rankings, ARWU, or THE World University Rankings mainly take into account aspects relevant to the quality of the educational act and human resources, such as the number of students/professor, the number of citations/teaching staff, the degree of internationalization, the number of published articles or the usefulness for the business environment. It is commendable that in Romania the latest international trends related to the evaluation of the performance of academic institutions are taken into account (Figure 3). On the other hand, it must also be taken into account that the successful adoption of good practice models depends to a large extent on increasing predictability and stability in the legislative field and on improving inter-institutional cooperation. As shown in Figure 3, institutional performance is driven by university performance, which is in turn embedded in academic performance. Foundation success at the university level, measured by research output and the two-way quality of teaching and student outcomes, anchors successful academic performance. This success at the university level when measured against national reporting and evaluation criteria it comprises will immediately affect its financing by a related institution at the national level. At this level, predetermined criteria about funding comprise academic results, achievements as an institution, and strategic goals. The same finds expression again in national reporting systems that periodically evaluate universities to bring out transparency and accountability measures. While these systems influence financing and evaluation at least through periodic checks for transparency and accountability in its systems of universities), international rankings and accreditations function as evaluation tools that enhance the prestige hence the reputation of the institution). Academic evaluation frameworks—national ones—drive institutional performance at their core where funding locks its way both as a consequence within this system.

Conclusion

While Romanian universities are competing in this environment, where accreditation and funding policies are strict, they are nevertheless at a disadvantage due to internal systemic limitations. This is mainly due to the lack of a harmonized system of evaluation. This restraint keeps the institutions away from their global competitors. Results show the need for further adjustment to adopt international benchmarks and incorporate peculiarities that will relate to the specific Romanian conditions. The main evidence from the study above is that its results proved funding mechanisms to be the main drivers of university performance. The trend moving towards output or performance-based funding has sufficiently ensured institutional accountability. The other disparities in the allocation of finances only keep some uncertainty concerning the interested universities. Romanian universities would need to come up with more predictable and sustainable financial support for the purposes of maintaining and comprehensively improving the long-term quality of both research and teaching. A modified funding mechanism that takes research excellence first and other things like faculty development and international collaboration would enhance institutional effectiveness as well.

The other notable observation that can be made concerning the institutional strategies is that they are increasingly under the influence of the international universities' rankings. While QS and THE rankings serve the important mission of providing a relative benchmark, however, they typically do not emphasize those metrics that can fully demonstrate the strengths of Romanian universities.

Therefore, the national route makers should strike a good balance between their priorities and those of the international evaluative mechanisms. A more flexible and comprehensive assessment framework would enable Romanian universities to demonstrate their comparative advantages over and beyond what is usually allocated within the scope of traditional rankings. The accreditation processes emerged also as one of the fundamental factors in the assessment of the university. National regulatory bodies, including ARACIS, and other authorities have proposed very strict standards to ensure the quality of teaching, which must now be updated according to some new requirements induced by the appearance of the digital era, pronounced interdisciplinarity, and collaboration with the corporate world. To put the Romanian universities on a more flexible and advanced platform in the battle for the upcoming challenges, an innovative educational model should henceforward be taken into account as an element of the accreditation process.

This study also gives some emphasis to the need for developing a culture of continuous improvement within the university. Institutional leadership should take the initiative in being involved in strategic planning, informed with measurements from performance indicators and stakeholder feedback—and from what the best global institutions are practicing. One of the efforts universities can undertake is investing more in faculty development programs while increasing collaboration on research to enable international influence to happen through expanded partnerships.

This research proves definitively that the universities should team up very well with the politicians and the financing organizations. In their collaborative capacity, they should be charged with creating policies that will advance innovation, research excellence, and, at the same time, help the students become successful. Strengthening the ties between Romanian higher education institutions will improve its reputation in the global environment and make its contribution to the knowledge economy more effective. So, to further advance Romania's high education system, it is just necessary that the gap that currently exists between national and international standards when

evaluating universities be bridged. Through a much more integrated assessment mechanism, stable financial support, accelerated reform of the accreditation process, and effective dealings with internationalization, Romanian universities will become much stronger competitors and substantial contributors to the development of academic and societal aspects.

References

- Abramo, G., & D'Angelo, C.A. (2015). Evaluating university research: Same performance indicator, different rankings. *Journal of Informetrics*, 9(3), 514-525. <https://doi.org/10.1016/j.joi.2015.04.002>.
- Achim, M.I., Căbulea, L., Popa, M., & Mihalache, S.-Ș. (2009). On the role of benchmarking in the higher education quality assessment. *Annales Universitatis Apulensis Series Oeconomica*, 11(2), 850-857.
- Adl, S.M. (2017). The essence of university research ranking and bibliometrics. *Rhizosphere*, 4, 75-81. <https://doi.org/10.1016/j.rhisph.2017.07.003>.
- Anninos, L.N. (2007). *University Performance Evaluation Approaches: The Case of Ranking Systems*. Retrieved from <https://ep.liu.se/ecp/026/111/ecp0726111.pdf>.
- ARACIS (2024). *Decision no. 962/2024 on the approval of the Methodology for the external evaluation of the quality of education in higher education, ARACIS*. Retrieved from https://www.aracis.ro/wp-content/uploads/2024/08/HG-962_2024-Metodologia-ARACIS.pdf. Accessed in March 2025.
- ARACIS (n.d.). *Romanian Agency for Quality Assurance in Higher Education, ARACIS*. Retrieved from <https://www.aracis.ro/>. Accessed in March 2025.
- Baciu, L.L., Bunda, N.R., Iacobuta, A., & Asandului, M. (2010). Motivation and performance in higher education systems. The case of Romanian universities. *Metalurgia International*, 15(2), 67-72.
- Bana e Costa, C.A., & Oliveira, M.D. (2012). A multicriteria decision analysis model for faculty evaluation. *Omega*, 40(4), 424-436. <https://doi.org/10.1016/j.omega.2011.08.006>.
- Bardakcı, S. (2024). Unveiling Scholarly Insights: Quality Assurance in Open and Distance Education. *International Review of Research in Open and Distributed Learning*, 25(4), 19-37.
- Boulton, G. (2011). University Rankings: Diversity, Excellence and the European Initiative. *Procedia Social and Behavioral Sciences*, 13, 74-82. <https://doi.org/10.1016/j.sbspro.2011.03.006>.
- Breakwell, G.M., & Tytherleigh, M.Y. (2010). University leaders and university performance in the United Kingdom: is it 'who' leads, or 'where' they lead that matters most?. *Higher Education*, 60(5), 491-506. <https://doi.org/10.1007/s10734-010-9311-0>.
- Bridgestock, L. (2021). *World University Ranking Methodologies Compared*. Retrieved from <https://www.topuniversities.com/university-rankings-articles/world-university-rankings/world-university-ranking-methodologies-compared>.
- Cadez, S., Dimovski, V., & Groff, M.Z. (2015). Research, teaching and performance evaluation in academia: the salience of quality. *Studies in Higher Education*, 42(8), 1455-1473. <https://doi.org/10.1080/03075079.2015.1104659>.
- CNCS (2025). *National Council of Scientific Research*. Retrieved from <https://www.cncs-nrc.ro/>. Accessed in March 2025.
- CNFIS (2023). *METHODOLOGY for allocating budgetary funds for basic financing and additional financing of state higher education institutions in Romania, for the year 2024*,

- CNFIS. Retrieved from https://www.cnfis.ro/wp-content/uploads/2024/02/OM_6901-2023-FI-FB-FS.pdf. Accessed in March 2025.
- CNFIS (n.d.). *National Council for Higher Education Financing, CNFIS*. Retrieved from <https://www.cnfis.ro/>. Accessed in March 2025.
- Cotelnic, A. (2022). University Performance: How We Define It And How We Measure It. *Eastern European Journal for Regional Studies (EEJRS)*, 8(1), 21-29. <https://doi.org/10.53486/2537-6179.8-1.02>.
- de Mesnard, L. (2012). On some flaws of university rankings: The example of the SCImago report. *The Journal of Socio-Economics*, 41(5), 495-499. <https://doi.org/10.1016/j.socec.2012.04.011>.
- de Paiva, R.C.V., Barbosa, F.V., Goncalves, R.G., & Costa, D. de Melo (2014). Private Higher Education: A Study of Financial Performance in nine Higher Education Institutions. *Revista Gestao & Tecnologia-Journal of Management and Technology*, 14(1), 68-99.
- del Sordo, C., Orelli, R.L., Padovani, E., & Gardini, S., (2012). Assessing global performance in universities: an application of balanced scorecard. In Baskan, G.A., Ozdamli, F., Kanbul, S., Ozcan, D. (Eds.). *4th World Conference on Educational Sciences (WCES-2012)*, 46, pp. 4793-4797. <https://doi.org/10.1016/j.sbspro.2012.06.336>.
- Dima, A.M., Argatu, R., & Rădoi, M. (2024). Performance evaluation in higher education – a comparative approach. *Proceedings of the International Conference on Business Excellence*, 18(1), 2453-2471. <https://doi.org/10.2478/picbe-2024-0207>.
- Edupedu (2024a). *The Scientific Research Council has new responsibilities, but less to say regarding quality standards in the field, through the new Operating Regulation / More members, more precise rules regarding conflict of interest*, Edupedu , 11 September 2024. Retrieved from <https://www.edupedu.ro/consiliul-cercetarii-stiintifice-are-atributii-noi-dar-mai-putine-de-spus-in-privinta-standardelor-de-calitate-in-domeniul-prin-noul-regulament-de-functionare-mai-multi-membri-reguli-mai-precise-p/>. Accessed in March 2025.
- Edupedu (2024b). *The measures in the law that dilute the authority of the CNATDCU in the case of doctorates, implemented through the new Regulation on the functioning of the forum responsible for attesting university titles – project / The Council will propose a National Guide on the writing of doctoral theses in six months*, Edupedu , 22 July 2024. Retrieved from <https://www.edupedu.ro/masurile-din-lege-care-dilueaza-autoritatea-cnatdcu-in-cazul-doctoratelor-puse-in-aplicare-prin-noul-regulament-de-functionare-a-forul-responsabil-cu-atestarea-titlurilor-universitare-proiect/>. Accessed in March 2025.
- Edupedu (2025). *Methodology for financing research in universities – adopted for the second year by the Ministry of Education before the publication of the University Metaranking, used as a reference for the distribution of these funds / The Order invokes two different metarankings in the substantiation of the order and in the calculations*, Edupedu, February 17, 2025. Retrieved from <https://www.edupedu.ro/metodologia-privind-finantarea-cercetarii-in-universitati-adoptata-pentru-al-doilea-an-de-ministerul-educatiei-inaintea-publicarii-metarankingului-universitarii-folosit-pentru-repartizarea-acestor-fo/>. Accessed in March 2025.
- ELQN (n.d.). *The Significance of Accreditation for Universities*. Retrieved from <https://elqn.org/the-significance-of-accreditation-for-universities/>.

- Frenken, K., Heimeriks, G.J., & Hoekman, J. (2017). What drives university research performance? An analysis using the CWTS Leiden Ranking data. *Journal of Informetrics*, 11(3), 859-872. <https://doi.org/10.1016/j.joi.2017.06.006>.
- Jasim, H.J. (2025). Academic Accreditation and Ways of Applying It in Universities (Review article). *Czech Journal of Multidisciplinary Innovations*, 1-11.
- Javed, Y., & Alenezi, M. (2023). A Case Study on Sustainable Quality Assurance in Higher Education. *Sustainability*, 15(10), Article 8136. <https://doi.org/10.3390/su15108136>.
- Lozoya-Santos, J. de J., Guajardo-Leal, B.E., Vargas-Martínez, A., Molina-Gaytán, I.E., Román-Flores, A., Ramirez-Mendoza, R., & Morales-Menendez, R. (2019). Knowledge Generation in Higher Education Institutions. In Ashmawy, A.K., Schreiter, S. (Eds.). *Proceedings of 2019 IEEE Global Engineering Education Conference (EDUCON)*, pp. 628-633.
- Madhoun, I., & Hamouda, A.M. (2017). Academic characteristics of universities in the world university rankings. *INTED2017: 11th International Technology, Education and Development Conference*, 3715-3722. <https://doi.org/10.21125/inted.2017.0905>.
- Maral, M. (2024). Research performance of higher education institutions in Türkiye: 1980–2022. *Scientometrics*, 129, 4771-4793. <https://doi.org/10.1007/s11192-024-05097-x>.
- Maric, I. (2013). Stakeholder Analysis of Higher Education Institutions. *Interdisciplinary Description of Complex Systems*, 11(2), 217-226.
- Millot, B. (2015). International rankings: Universities vs. higher education systems. *International Journal of Educational Development*, 40, 156-165. <https://doi.org/10.1016/j.ijedudev.2014.10.004>.
- Minciú, M., Dobrea, R.C., Prioteasa, A., & Moncea, M. (2023). Students' Perceptions of the Changes Specific to the VUCA World: Online and Traditional Teaching System. *Proceedings of the 6th International Conference on Economics and Social Sciences*, 11-22. <https://doi.org/10.2478/9788367405546-002>.
- Ministry of Research, Innovation and Digitalization (2023). *Law no. 195/2023 regarding the statute of research and development personnel*.
- Ministry of Education and Research (2025a). *Ministry of Education and Research*. Retrieved from <https://www.edu.ro/>. Accessed in March 2025.
- Ministry of Education and Research (2025b). *Methodology for carrying out the national metaranking exercise, Ministry of Education and Research*, February 12, 2025. Retrieved from https://www.edu.ro/sites/default/files/fisiere%20articole/OM_3249-2025.pdf.
- Ministry of Research, Innovation and Digitalization (2024). *Ministry of Research, Innovation and Digitalization*. Retrieved from <https://www.mcid.gov.ro/>. Accessed in March 2025.
- Mironiuc, M., Robu, I.-B., Carp, M., & Robu, M.-A. (2011). Strategic Instruments for University Performance Evaluation in the Context of the Economy Based on Knowledge. *Journal of e-Learning and Higher Education*, Article 514815. <https://doi.org/10.5171/2011.514815>.
- Mohd Rasdi, R., & Tauhed, S.Z. (2023). Predictors of Academics' Research Performance and The Significance of Engaging in Work Activities. *International Journal of Academic Research in Business & Social Sciences*, 13(12), 4613-4626. <https://doi.org/10.6007/IJARBS/v13-i12/20349>.
- Multan, E., Wójcik-Augustyniak, M., Sobotka, B., & Bis, J. (2023). Application of Performance and Efficiency Indicators in Measuring the Level of Success of Public Universities in Poland. *MDPI*, 15(18), 1-21. <https://doi.org/10.3390/su151813673>.

- Munteanu, A.-M., & Aldea, A. (2024). Teaching ITC in European Universities: A Non-Parametric Efficiency Approach. *Proceedings of the 7th International Conference on Economics and Social Sciences*, 723-731. <https://doi.org/10.24818/icess/2024/065>.
- Navas, L.P., Montes, F., Abolghasem, S., Salas, R.J., Toloo, M., & Zarama, R. (2020). Colombian higher education institutions evaluation. *Socio-Economic Planning Sciences*, 71, Article 100801. <https://doi.org/10.1016/j.seps.2020.100801>.
- Nugraha, N., Prasetyo, Y.T., Sugiharti, H., Lhutfi, I., Widyaningsih, A., Triantoro, A., Ong, A.K.S., Young, M.N., Persada, S.F., Putra, R.A.K., & Nadlifatin, R. (2023). Quality Assurance in Higher Educational Institutions: Empirical Evidence in Indonesia. *SAGE Open*, 1-12. <https://doi.org/10.1177/21582440231203060>.
- Obretin, A.M., & Cornea, A.-A. (2023). Academic Admission Process: An IoT-based Indoor Location Case Study. *Proceedings of the 6th International Conference on Economics and Social Sciences*, 803-819. <https://doi.org/10.24789788367405546-074>.
- OECD (2019). *Benchmarking Higher Education System Performance*. Retrieved from <https://www.anc.edu.ro/wp-content/uploads/2021/04/BenchmarkingHigherEducationSystemPerformance.pdf>.
- Olcay, G.A., & Bulu, M. (2017). Is measuring the knowledge creation of universities possible?: A review of university rankings. *Technological Forecasting and Social Change*, 123, 153-160. <https://doi.org/10.1016/j.techfore.2016.03.029>.
- Perchinunno, P., & Cazzolle, M. (2020). A clustering approach for classifying universities in a world sustainability ranking. *Environmental Impact Assessment Review*, 85, Article 106471. <https://doi.org/10.1016/j.eiar.2020.106471>.
- Pisár, P., & Varga, M. (2019). Public Support for Higher Education Institutions from EU Structural Funds and its Evaluation: Case Study of Slovakia. *The NISPAcee Journal of Public Administration and Policy*, XI(2), 103-127. <https://doi.org/10.2478/nispa-2018-0015>.
- Plummer, R., Witkowski, S., Smits, A., & Dale, G. (2021). The issue of performance in Higher education institution - Community partnerships: A Canadian perspective. *Journal of Higher Education Policy and Management*, 43(5), 537-556. <https://doi.org/10.1080/1360080X.2020.1858386>.
- Poenaru, L.-F., Popescu, D., HornoIU, R.-I., & Lanfranchi, G. (2024). Professors versus Students: An Introductory Bibliometric Review of AI Acceptance in Higher Education's Specialisations of Tertiary Sector. *Proceedings of the 7th International Conference on Economics and Social Sciences*, 326-335. <https://doi.org/10.24818/ICESS/2024/033>.
- Radushinsky, D.A., Zamyatin, E.O., Radushinskaya, A.I., Sytko, I.I., & Smirnova, E.E. (2024). The Performance and Qualitative Evaluation of Scientific Work at Research Universities: A Focus on the Types of University and Research. *Sustainability*, 16(18), Article 8180. <https://doi.org/10.3390/su16188180>.
- Saisana, M., d'Hombres, B., & Saltelli, A. (2011). Rickety numbers: Volatility of university rankings and policy implications. *Research Policy*, 40(1), 165-177. <https://doi.org/10.1016/j.respol.2010.09.003>.
- Seres, L., Pavlicevic, V., Tumbas, P., Matkovic, P., & Maric, M. (2019). A Performance Indicators of University-Industry Collaboration. In Chova, L.G., Martinez, A.L., Torres, I.C. (Eds.). *EDULEARN19: 11th International Conference on Education and New Learning Technologies*, pp. 9664-9672.

- Söderlind, J., & Geschwind, L. (2019). Making sense of academic work: the influence of performance measurement in Swedish universities. *Policy Reviews in Higher Education*, 3(1), 75-93. <https://doi.org/10.1080/23322969.2018.1564354>.
- Sutanto, S., Christy, A.Y., & Sandi, D.K. (2021). Creative University: A Definition and Activities Management Based on the Completion of Key Performance Indicator (KPI). *Journal of Technology Management & Innovation*, 16(3), 13-20. <https://doi.org/10.4067/S0718-27242021000300013>.
- Tseng, F.-C., Huang, M.-H., & Chen, D.-Z. (2020). Factors of university-industry collaboration affecting university innovation performance. *Journal of Technology Transfer*, 45(2), 560-577. <https://doi.org/10.1007/s10961-018-9656-6>.
- Vîiu, G.-A., Vlăsceanu, M., & Miroiu, A. (2012). Ranking Political Science Departments: The Case of Romania. *Quality Assurance Review for Higher Education*, 4(2), 79-97.
- White, C. S., James, K., Burke, L. A., & Allen, R. S. (2012). What makes a "research star"? Factors influencing the research productivity of business faculty. *International Journal of Productivity and Performance Management*, 61(6), 584-602. <https://doi.org/10.1108/17410401211249175>.