



# EDUCATION, INNOVATION, KNOWLEDGE

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# IMPLEMENTATION OF EU HIGHER EDUCATION PUBLIC FUNDING PRINCIPLES IN THE REPUBLIC OF ARMENIA: ANALYSIS OF OPPORTUNITIES, MECHANISMS AND STRUCTURAL CHALLENGES<sup>1</sup>

*The article examines the advanced experience of financing higher education institutions in EU countries and the possibilities of its application in Armenia. The analysis has shown that the main part of financing of higher education institutions in EU countries is distributed according to clearly defined quantitative criteria, which*

<sup>1</sup> The analysis presented in the article was conducted within the framework of the grant research project "Research on the funding policies, tools and performance indicators of higher education institutions in the European Union countries" funded by the AMBERD Research Center.

*reflect the priorities of state policy and aim to increase the transparency of the distribution of budget allocations, ensure a clear link between funding and results, and promote efficiency and strategic development.*

*In general, the conducted studies show that the introduction of a mixed approach may be more applicable in the Republic of Armenia. Moreover, it is considered expedient to distribute state funding according to three components: base, performance-based funding, promotion of grant activity, and co-financing. For the targeting of the proposed measures and the expected effectiveness, great importance is attached to increasing the share of KPIs in the structure of state funding of higher education institutions, bringing it up to 25-30%. The latter can ensure a gradual reduction in the share of student fees and an increase in budget funding, bringing it to 0.5-0.6 percent of GDP. The effective introduction of a new financing model for higher education institutions in the Republic of Armenia can be observed as a phased process (with preparatory, institutionalization, and full integration stages) aimed at ensuring a modern and stable system of financing higher education institutions within 5-7 years.*

**Keywords:** *higher education funding, core funding, performance-based funding, KPI, grant funding.*

JEL: H52, I22, I28

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**INTRODUCTION.** The development of the higher education system is one of the pillars of the socio-economic progress of any country. In the conditions of a modern knowledge-based economy, the role of universities is not only limited to the provision of educational services, but also includes scientific research and innovation activities, promotion of regional development, and strengthening international cooperation. The effective implementation of these multifaceted missions is possible only with the presence of a stable and fair financing system.

Currently, the higher education system in Armenia faces deep-rooted structural challenges. They are caused by both the lack of state funding and the fragmentation of universities, the weak connection between education and research, and the imperfection of institutional governance. It is also noteworthy that the overwhelming majority of the income of universities in Armenia comes from tuition fees. These problems not only limit the opportunities for improving the quality of education, but also hinder international integration and the development of scientific and research potential.

In this regard, the development and implementation of a new model for financing higher education institutions—based on EU best practices and tailored to the specific context of the Republic of Armenia—is of particular relevance, and this article is devoted to addressing this issue.

The analysis presented in the article is significant not only for the formulation of state policy in the field of higher education financing, but also for higher education institutions themselves, as it contributes to the revision of

institutional development strategies and the introduction of more effective management tools.

**LITERATURE REVIEW.** The development and implementation of effective mechanisms for financing higher education are vital for improving the quality of the education system, research capacity and international competitiveness (Estermann & Claeys-Kulik, 2016).

The literature emphasizes that sustainable development of the higher education sector is possible only when state authorities form a clear and predictable framework for the activities of higher education institutions, which, among other factors, is characterized by sufficient funding and effective quality assurance policies (European Commission, 2020).

The authors view the issue of higher education financing not only as a tool for the internal management of universities, but also as a policy of broad social and economic significance, the effectiveness of which determines the long-term development prospects of the country (OECD, 2020). First, the forms and amounts of financing greatly affect access to education and ensuring social equality: sustainable and inclusive financial models reduce inequality between social strata and ensure the involvement of broad groups in higher education (Pruvot & Estermann, 2022). Second, the effectiveness of financing determines the level of education quality: universities that have predictable and fair financial flows are able to introduce modern curricula, develop research infrastructures and increase international competitiveness (Carney, 2022). Third, effective financing is also seen as an investment in the country's economic growth and human capital development: higher education forms qualified specialists for the labor market, stimulates innovations and the construction of a knowledge-based economy (World Bank, 2017).

In EU countries, university funding models are typically composed of different components. The bulk of public funding is provided to universities in the form of a so-called "block grant", the size of which can be determined in different ways, for example, through negotiations, based on a historically established tradition, using a funding formula, or set within the framework of a performance contract. Moreover, these grant components are often combined: part of the block grant is negotiated, another part can be provided according to a historically established logic, or distributed on the basis of a formula or contract (Bennetot Pruvot et al., 2015).

The performance-based funding (PBF) approach is widely used in EU countries to improve the efficiency and quality of higher education systems. This model contrasts with traditional "input"-based funding and is defined as the allocation of financial resources based on measurable outcomes and performance of higher education institutions (Fadda et al., 2022).

There are two main directions of the PBF approach to public funding of higher education:

1. Formula-based base budget, where a portion of the total budget is distributed according to the weight of measurable results (number of students, number of students graduating on time, employment, publications, etc.).

2. Performance agreements, when the ministry agrees with the university, for example, on 3–4-year goals, and in case of failure to meet the given goal, it withholds the percentage specified in the agreement from the same base budget (Jongbloed et al., 2018).

Although approaches may vary, competitive funding schemes are generally based on the premise that providing more financial support to higher-performing universities incentivizes weaker institutions to change their strategic behavior to meet performance requirements (Herbst, 2020). By this logic, every institution, especially those with limited financial resources, must respond to government regulations to increase its efficiency and secure additional funding (Hagood, 2019).

In general, EU countries can be classified into 4 groups according to the system of KPIs they use.

The first group includes countries such as Austria, Finland and Luxembourg, which base their funding on performance-based contracts with strategic direction and a clear list of KPIs. These countries use indicators such as graduation rates, research output – the number of publications and grants, the number of PhD degrees, and the level of social engagement.

The second group includes Germany, France, the Netherlands and some regions of Spain, which use a mixed funding model – formula-based core funding, supplemented by bonus mechanisms based on KPIs. The formula is calculated based on the number of students, diplomas, credits, and scientific publications.

The third group consists mainly of Central and Eastern European countries: Bulgaria, Slovakia, Latvia, Hungary, where input-based formula funding prevails, and KPIs are used to a limited extent. The indicators used are the number of students and staff, the number of diplomas, and sometimes the employment rate of graduates.

A special group is formed by the United Kingdom and Ireland, where tuition fees and student loans constitute the main source of income for universities. Here, research funding in particular is provided on the basis of KPIs, including indicators of scientific productivity, such as publications, citations, competitive grants, as well as the employment rate of graduates (Jongbloed et al., 2023).

Comparative analysis of these models suggests that funding that provides flexibility and is structured on the basis of strategic dialogue is more conducive to increasing the effectiveness of universities (Matveeva, 2025). On the other hand, overly rigid formulas or systems focused only on quantitative KPIs can narrow the mission of the university, ignoring qualitative, public or inclusive aspects (Dougherty & Natow, 2020; Mizrahi, 2020; Ortagus et al., 2020; Ward

& Ost, 2021). Therefore, the combination of effectiveness and equity is possible only when funding is accompanied by an evaluation system that is comprehensive, contextual and consistent with institutional goals.

The higher education system of Armenia is still based on a traditional, input-based funding model, which deprives universities of the financial incentives necessary for qualitative reforms and international integration. In such conditions, the development of a new model for financing universities is of urgent importance. In this regard, an in-depth study of EU best practices can serve as a valuable guide on the path to implementing systemic reforms.

**RESEARCH METHODOLOGY.** The methodological basis of the article is a comprehensive analysis of the subject of the study - higher education financing methods, tools, performance indicators, principles and categories in EU countries. In order to combine them and reveal common patterns in individual EU countries, the following approaches were used:

- quantitative assessment, which included a comparison of the numerical components of financing models in different countries (share of financing from the state budget, weights of KPIs, participation of student fees, etc.),
- qualitative analysis, within the framework of which the principles of financing policy, the level of institutional autonomy and accountability mechanisms were studied,
- systematic analysis and grouping, which made it possible to classify EU countries according to the approaches used (input-based, output-based and mixed formulas),
- generalization, through which it was possible to compare the features of different models and formulate methodological approaches that are most applicable to Armenia.

The article uses a mixed methodology, combining quantitative and qualitative approaches. Quantitative methods include indicator normalization, weighting, cluster analysis, factor analysis, and comparative statistical evaluation of financing models in EU countries. Qualitative methods include policy analysis, case studies, and comparative institutional review. Systematic and generalization methods are used to classify EU countries by financing approach and extract transferable principles. These tools have made it possible to design a mixed financing system for Armenia based on formula-based modeling, benchmarking, and phased implementation analysis.

In the framework of applying the EU experience to improve institutional funding in the RA higher education system, we initially studied a fairly wide range of countries. Subsequently, as a result of a broader analysis, it was reduced and ultimately includes 5 countries.

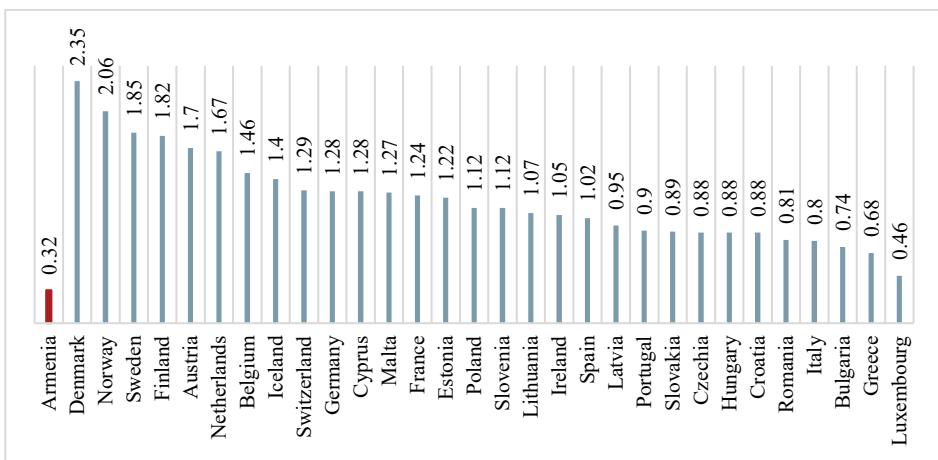
In addition, in terms of localization of the EU experience in Armenia, we were guided by the following criteria in selecting countries suitable for the localization of the EU experience:

1. Transparent and replicable mechanisms: the presence of clear weighting factors, public data, and understandable calculation rules was emphasized.
2. Developed data collection system: centralized registers and KPI platforms that provide sufficient confidence in the calculations.
3. Comparability with individual parameters of the scale of the Republic of Armenia: countries with small or medium-sized economies, whose budgetary constraints are close to Armenian conditions.
4. Balance of autonomy and accountability: universities have significant freedom of management, but are under strict control through a system of performance indicators.
5. International comparability: systems that comply with the standards of the European Higher Education Area (EHEA) and OECD guidelines and recommendations were selected.

The final circle of countries with notable experience for us in implementing these criteria is as follows: Finland, Estonia, Denmark, the Netherlands, Germany.

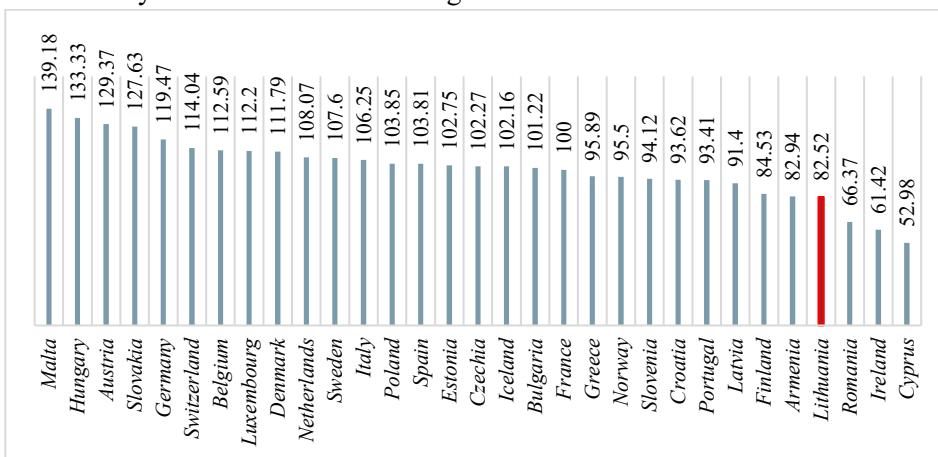
The information basis for the study was formed by separate research and published reports conducted by Armenian and foreign organizations and authors in the field of higher education financing, publications of state statistical bodies of EU countries and public administration bodies participating in the higher education financing process, pan-European analyses and national reports, including publications of the European University Association (EUA) and research conducted with the support of the EU Commission, as well as statistical yearbooks of the Ministry of Education, Science, Culture and Sports of Armenia.

**RESULTS.** The level of public funding for higher education in the Republic of Armenia continues to lag significantly behind the European average. In particular, while public spending on higher education in the EU countries in 2008–2023 averaged around 0.8% of GDP, in Armenia the average figure did not exceed 0.32% of GDP (Figure 1).



**Figure 1. Public expenditure on higher education in Armenia and EU countries, as a percentage of GDP, 2008-2023<sup>2</sup>**

Moreover, during the observed period, the RA indicator had a negative trend, recording a decline of about 17%. Lithuania, Finland, Latvia, etc. demonstrated similar behavior to our country. On the contrary, in most EU countries, an increase in political priority has been recorded in the higher education sector. The share of higher education expenditures in GDP has increased by more than 10% on average.



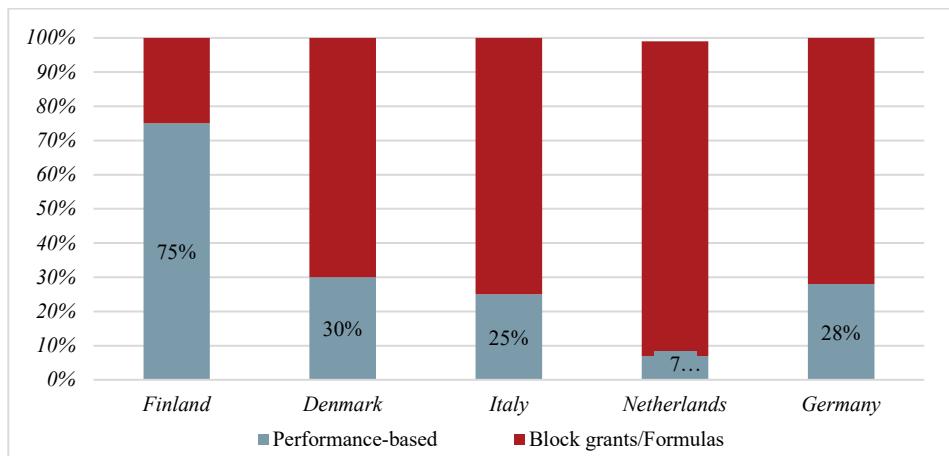
**Figure 2. Index of change in public expenditure on higher education as a percentage of GDP in Armenia and EU countries, 2008-2023, 2008=100<sup>3</sup>**

Currently, the financing structure of RA universities remains heavily focused on student fees: their share exceeds 70 percent, the share of the state budget is 20-25 percent, and 5-10 percent is the share of grants and other sources (Ministry of Education, Science, Culture and Sport of Armenia, 2023).

<sup>2</sup> The chart is based on the authors' calculations. Source: Eurostat Eurostat ([gov\\_10a\\_exp](#)) and Armstat ([Main Indicators of Government Finance by indicators and years. PxWeb](#))

<sup>3</sup> The chart is based on the authors' calculations. Source: Eurostat Eurostat ([gov\\_10a\\_exp](#)) and Armstat ([Main Indicators of Government Finance by indicators and years. PxWeb](#))

This leads to limited access to education, vulnerability of the financial sustainability of universities, and the emergence of problems that hinder the implementation of qualitative reforms.



**Figure 1. Share of performance-based funding in EU universities**

Performance-based funding is widely used in the EU, based on both formulaic approaches and contractual mechanisms. In this system, a certain share of the base budget is distributed based on measurable results, including student graduation rates, graduate employment, research productivity (number of publications and external grants), international student engagement, and other strategic indicators. Furthermore, contractual approaches (performance agreements) allow the state and universities to jointly set medium-term goals and ensure monitoring of their implementation.

**Table 1**  
*The share of performance-based funding of universities in EU countries<sup>4</sup>*

Share	EU countries
None (0%)	Belgium
Low (1-14%)	Ireland
Moderate (15-59%)	Poland Austria Italy Netherlands Slovenia Czech Republic Lithuania Estonia Spain
High (60-100%)	Denmark Bulgaria Finland

These instruments simultaneously serve two important purposes: first, they ensure predictability and stability of funding, and second, they create long-term incentives for qualitative reforms. As a result, EU universities not only have higher financial sustainability, but are also encouraged to develop innovative programs, strengthen international cooperation, and ensure effective inclusion of students in the labor market.

<sup>4</sup> Jongbloed B. et al. Final report of the study on the state and effectiveness of national funding systems of higher education to support the European universities initiative. Volume I. – Directorate General for Education, Youth, Sport and Culture, 2023, p. 11, <https://data.europa.eu/doi/10.2766/885757>

The use of performance-based funding instruments in Armenia is very limited. Funding is mainly distributed through linear budgeting without clear KPIs and a contractual system, which is based mainly on quantitative input and output indicators, such as the number of students, graduates and lecturers. Qualitative measures - graduate skills, student satisfaction, compliance with labor market requirements - are almost not included. This leads to the fact that universities are deprived of the long-term financial incentives necessary for qualitative reforms.

Another important issue is the transparency of resource allocation, which is a key component of the effectiveness of higher education financing. The EU has developed a system where information on financial flows and results is available not only to state institutions, but also to society. Many countries have open data portals and public dashboards that ensure a high level of accountability and public oversight. For example, in Finland, the Vipunen platform provides comprehensive data on the activities of universities, financial indicators and labor market forecasts. In Estonia, the HaridusSilm dashboard allows to track key KPIs in education and science, including the number of graduates, financial flows and student mobility. In Norway, the DBH system is a public database that includes detailed information on the finances and results of universities, creating a high standard of transparency.

Another important tool for ensuring transparency is student involvement. In some EU countries, student councils have the authority to discuss and agree on budgetary decisions. In the Netherlands, for example, under the Higher Education and Research Act (WHW), student bodies participate not only in budget formation but also in quality assurance agreements, which obliges universities to be open and accountable in their financial policies.

In Armenia, such tools are not sufficiently developed. Both financial data and performance indicators remain largely closed to the public, and student participation is limited to a consultative role. This leads to a situation where public oversight is weak and the effectiveness of resource use is difficult to assess. Therefore, the development of transparency and accountability mechanisms can become an important condition for increasing trust and efficiency in the higher education sector.

Thus, the institutional funding system of HEIs in the RA needs improvement. Taking into account the advanced experience of the EU, the new funding system should be based on the following principles:

1. Efficiency: part of the funding should depend on KPIs.
2. Differentiation: different HEIs use different KPI systems, taking into account their possible different missions (for example, in the case of regional HEIs - employment promotion, in the case of research HEIs - publications, etc.).
3. Transparency: funding indicators, HEI ratings and, in general, any arbitrary indicator affecting the amount of funding should be public.

4. Flexibility: the system should take into account demographic, economic and other changes.

5. Proportion of beneficiaries: employers and students are included in the processes of evaluating the HEI and distributing funding.

The improvement of institutional funding in the RA higher education system is based on the experience of the following countries:

**1. Finland.** Funding is quite balanced and clearly separated according to educational, research, and strategic goals: 42%, 34%, 24%, respectively (Pruvot & Estermann, 2022).

This approach can be applicable to Armenia, as it allows higher education institutions to imagine in advance, to understand what share each of the areas of activity has in the result-based financing. In some other countries (for example, Sweden, Norway), the share of state funding is very high and thus significant budgetary resources are allocated to the higher education sector, which will be especially difficult for Armenia to implement in the short term.

**2. Estonia:** There is a separate KPI fund, the funds of which are distributed proportionally among universities in accordance with their KPI scores (Jongbloed et al., 2023). The approach of centralized data collection through the EHIS system is also applicable to us.

The Estonian approach, in general, allows to minimize subjectivity in resource allocation, making it more transparent and automated.

In a number of other countries studied by us (e.g. Latvia, Lithuania, etc.), the data system and the link between funding and KPIs are less developed compared to Estonia. In addition, the Estonian model is more documented and tested.

**3. Denmark:** In our approach, the "Taximeter model" (Teixeira et al., 2022) is remarkable for base financing.

We are particularly interested in the calculation of basic funding based on the rate per student (BaseRate x StudTotal), also taking into account the coefficients corresponding to the specificities of the regions or universities. The basis of the applicability of this approach is simplicity, manageability and the possibility of supporting regional or narrowly specialized universities.

A similar approach is also used in some Eastern European countries, but they lack the stable legal basis of the model, which has been used in Denmark for decades and is quite well institutionalized.

**4. Netherlands:** The funding model of universities is designed to reflect not only the results of education and research, but also the wider impact of universities on society, the international scientific and educational field and regional development (Koekkoek et al., 2024). This idea is expressed in three main components:

- Social component – Universities are encouraged to ensure access to education and equal opportunities for all students. In the funding

system, this is reflected in indicators of student graduation rates and the inclusion of socially vulnerable groups.

- International component – Dutch universities are also assessed for their international competitiveness. The involvement of foreign students, international research collaborations, participation in European grant programs and the international impact of scientific publications play an important role in the calculation of funding.
- Regional component – The role of universities in local/regional development is also important in the Netherlands. This component is manifested by promoting cooperation between universities and the regional economy, educational programs aimed at the needs of the local labor market, and involvement in community initiatives.

In our approach, the idea of using a social, international, regional general component in the formula for calculating university funding, which describes partnerships with employers, regional projects, and international cooperation, can be applied from the experience of the Netherlands. It should be noted that social or regional components are also found in models of other countries. For example, this approach is used in France and Italy, where, however, the social dimension of funding is more centralized and inert, while in the Netherlands this component is more flexible and targeted.

**5. Germany.** The country uses a “mixed model” of higher education funding. This model consists of formula-based funding supplemented by bonus mechanisms based on key performance indicators.

The German university funding model is characterized by a high level of institutional autonomy combined with strict reporting requirements. Universities are given wide freedom to manage their financial resources, develop curricula, and set research priorities. This autonomy is intended to foster strategic thinking, competitiveness, and the quality of educational and research services.

At the same time, universities are required to operate within a framework of performance-based accountability. A significant part of public funding is tied to KPIs and measurable results, and performance agreements are also common, through which universities and federal or regional authorities agree on medium-term goals. Failure to meet these goals can lead to funding cuts or reallocation of funds (Jongbloed et al., 2018).

In our view, an important practical outcome of the German model may be the formation of a workable system in the long term that provides universities with great freedom in the allocation of funds, combined with transparent evaluation mechanisms.

There are also successful examples of an effective balance between institutional autonomy and accountability in other countries. For instance, in the United Kingdom, this balance has been achieved; however, in this and many other cases, the system relies heavily on high tuition fees and revenue from

international students, which is difficult to implement under the current conditions in Armenia and entails significant risk.

As a result of incorporating the experience of the EU countries under consideration, the following model approach to financing higher education institutions in Armenia is proposed:

General idea:

The financing of each higher education institution has 3 main components:

**B – block grants**, covering fixed costs (utilities, infrastructure, salaries)

**P – performance-based funding (PBF)**, which is distributed depending on the results recorded in terms of performance indicators (KPI).

**G – grant component.**

The total amount of funding (F) of a higher education institution is calculated by the following formula:

$$F = B + P + G$$

#### **Calculation of base funding (B)**

Base funding can be calculated based on the number of students, proportionally to it, also applying an adjustment factor for the regional university (for the purpose of some equalization of conditions).

$$B = \text{BaseRate} \times \text{StudTotal} \times K_{region}$$

where:

**BaseRate** – is a fixed amount of funding per student (drams/year), which is set by the Ministry of Education, Science, Culture and Sport of Armenia or the Government,

**StudTotal** – is the total number of students at the university,

**$K_{region}$**  – is the adjustment coefficient set for regional universities (for a university located in Yerevan it is equal to 1, for universities in regions not adjacent to Yerevan it is greater than 1).

#### **Calculation of performance-based financing (P)**

In the initial version, three blocks or groups of KPIs can be considered: education, science, social and international investment. The blocks of KPIs can be built according to the logic of the systematic integration of the following general indicators:

##### **Block 1. Educational indicators**

- Number of students and progress
- Graduate employment within 6-12 months after graduation
- Share of students participating in international mobility programs
- Degree of student satisfaction with educational services

##### **Block 2. Scientific and innovation indicators**

- Number of scientific publications
- Citation index of publications
- Volume of external research grants
- Share of students involved in research programs.

### Block 3. Social and international investment indicators

- Share of educational programs implemented in cooperation with employers
- Volume of services provided within the framework of public or regional projects /social, cultural, environmental initiatives/.
- International partnership: joint programs with foreign universities, etc.
- Institutional stability: stability of the financial model, availability of a strategic plan, etc.

The following weighting proportions can be set for the KPI blocks:

1. Educational block: 40 percent
2. Scientific or research block: 40 percent
3. Social and international investment block: 20 percent.

Accordingly, the following formula can be used for results-based funding:

$$P = P_{total} \times (0.4 \times E + 0.4 \times R + 0.2 \times S) / P_{TotalScore}$$

where:

$P_{total}$  – is the total amount of funds allocated for performance indicators (it can initially be up to 20% of the total budget of universities, then, as a result of the implementation of the mechanism, it can be increased to 30% within 3-5 years),

$E$  – is the overall assessment of educational KPIs,

$R$  – is a general assessment of research, scientific KPIs,

$S$  – is a general assessment of social, international, and regional factors (interaction with business, regional projects, international cooperation, etc.),

$P_{TotalScore}$  – is the sum of the overall score calculated across all universities' KPIs.

Each indicator within the block is normalized in the range [0;1]. The generalization of indicators is carried out using weights reflecting their relative importance. Weights can be set based on the priorities and objectives set in the higher education sector of the Republic of Armenia, in an expert manner, and also using factor analysis tools.

In essence, the logic of performance-based funding is as follows:

- The overall score for the university's KPIs is calculated.
- The overall score of the university is divided by the total score of all universities to determine the university's share of the total.
- The total amount allocated for performance-based funding is multiplied by the relative size of the university's overall KPI score (divided by the total score of all universities).

The described formulaic approach has a number of advantages:

- **Transparency:** each university understands that increasing KPIs provides more funding.

- **Flexibility:** the weighting coefficients of the KPI blocks or the share of the higher education budget allocated based on performance (15%, 20% or 30%) can be changed based on the priorities and targets of educational policy.
- **Adaptability:** adjustment factors can be introduced based on the specifics of the university.

### **Calculation of the grant component ( $G$ )**

The grant component is calculated as the sum of two subcomponents:

$$G = G_{\text{match funding}} + G_{\text{incentive}}$$

where:

$G_{\text{match funding}}$  - is the co-financing component of the grant. It shows how much co-financing the state provides based on the total volume of grants won by the university,

$G_{\text{incentive}}$  – based on the volume and quality of grants won by the university (according to sources, problems to be solved, etc.), a general assessment of grant activity is calculated, based on which the share of the university from the grant incentive fund allocated by the state is determined.

**CONCLUSIONS.** Comparing the approaches to financing higher education institutions in the Republic of Armenia and the EU, the following key issues can be identified:

- Too high dependence on tuition fees: in the event of a decrease in student flows (demographics, migration), the sustainability of higher education institutions is vulnerable.
- Funding weakly linked to performance: As a rule, simple and predictable KPIs (graduation, employment, research quality, external grants, inclusiveness) are not implemented.
- Education and research are sometimes financed in different ways: scientific funding is often organized through separate competitions, which does not create an integrated motivation for the “university - research ecosystem”.
- Linear budgeting and low institutional flexibility: restrictions on the transfer of existing funds, irregular distribution of capital expenditures.
- The problem of outcome measurements and data quality: The lack of uniform, established standards complicates fair comparison and targeted funding.
- Low close connection with sectoral, regional demand and the labor market.
- Small university system, duplication of specializations, dispersion of resources, which leads to increased unit costs and fluctuations in quality, especially in the international environment.

- Low diversification of funding sources.
- Weak level of development of mechanisms ensuring transparency of resource allocation.

In this regard, based on the EU experience, the implementation of the following changes is important for improving the institutional financing system of higher education institutions in the Republic of Armenia:

1. Under the auspices of the RA Ministry of Education, Science, Culture and Sport to form an Armenian system of KPIs with annual publication of the results of the evaluation of higher education institutions.
2. To integrate a performance-based financing component into the state financing system of higher education institutions, bringing its share to 25-30 percent over the next 5-7 years.
3. To develop special mechanisms for clusters. These can be targeted strategic transfers aimed at deepening regional development and scientific cooperation.
4. To create an Armenian alternative to the HESA system: it has been designed to regularly collect, process and publish baseline information on university graduates, their employment, scientific activity and other information necessary for calculating performance indicators.
5. To expand the active participation of employers and students in quality improvement and funding distribution mechanisms.
6. To attract international funding through KPI-oriented projects.

The study of the experience of reforming the institutional financing system of higher education institutions in EU countries demonstrates the fact that the effective introduction of a new model of financing of higher education institutions in the Republic of Armenia can be observed as a result of a phased process, covering a period of 5-7 years. Thus, the process of introducing the new model can be presented in the form of the following three consecutive stages:

#### ***Phase 1. Preparatory (2026-2027)***

The main tasks of this phase are the formation of the institutional framework for the new model, data collection, and the introduction of a pilot system of KPIs. The necessary measures are:

- Creation of an Armenian Center for Monitoring Higher Education Institutions (similar to the British HESA structure)
- Formation of a national system of KPIs with three blocks: education, science and research, and social context
- Launch of a pilot project of Performance-Based Financing (PBF): 3-4 higher education institutions are selected to participate in the distribution of an additional 10 percent of funding based on KPIs

- Creation of an Armenian data portal: annual publications of statistics necessary for the assessment of performance indicators (employment, publications, participation in international projects, etc.)
- Attraction of technical assistance from international financial and educational institutions and initiatives.

At this stage, the share of KPIs in the structure of university funding may be 5-10 percent. It is important to consider the possibility of increasing state funding of universities from 0.2 percent to 0.3 percent of GDP at this stage.

### ***Stage 2: Institutionalization (2028-2029)***

At this stage, it is necessary to:

- Include all state universities in the KPI system
- Expand the system of indicators used for KPIs, including, for example, graduate employment, scientific publications and citation indices, student mobility participation, etc.
- Form cluster KPIs for universities according to the focus and problems of universities
- Introduce a mixed financing model with the following proportions:
  - ✓ 60 percent - block financing
  - ✓ 20 percent - performance-based financing according to KPIs
  - ✓ 20 percent - grants.

The **60/20/20 financing model** is designed to balance **stability, performance, and innovation** in Armenia's higher education system.

The 60/20/20 mixed financing model is justified by international practice and the need to balance stability with incentives. A 60% block funding share ensures financial predictability for universities, while 20% performance-based funding aligns with global evidence that 10–25% is the optimal range for motivating quality improvement without creating excessive risk. The remaining 20% allocated through competitive grants promotes innovation and excellence. This proportion reflects both Armenia's current system readiness and widely used models in OECD and EU countries, making the proposed structure realistic, balanced, and sustainable.

The share of KPIs in the financing structure can reach 15-20%, and state financing of the university system in an optimistic scenario reaches 0.4% of GDP.

### ***Phase 3. Full integration of the new system (2030-2032)***

The main task of this phase is to form a sustainable system of financing of higher education institutions, comparable to the best practices of the EU. The key measures are:

- Introduction of the KPI system at all levels of higher education
- Introduction of the regional and social component of KPIs
- Integration of KPIs with the accreditation and strategic planning of higher education institutions

- Creation of conditions for the financial independence of higher education institutions
- Linking Armenian KPIs with the indicators of the European Higher Education Area (EHEA)
- Formation and development of Endowment funds in large higher education institutions.

For the targeting and expected effectiveness of the described measures, it is important to increase the share of KPIs in the structure of state financing of higher education institutions to 25-30%, and to increase the volume of budgetary financing of higher education institutions to 0.5-0.6% of GDP, approaching the level of the Baltic countries.

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