

UDC 351:37.014.543:378

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## MECHANISMS OF HIGHER EDUCATION FUNDING: THE EUROPEAN EXPERIENCE

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### МЕХАНІЗМИ ФІНАНСУВАННЯ ВИЩОЇ ОСВІТИ: ЄВРОПЕЙСЬКИЙ ДОСВІД

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### МЕХАНИЗМЫ ФИНАНСИРОВАНИЯ ВЫСШЕГО ОБРАЗОВАНИЯ: ЕВРОПЕЙСКИЙ ОПЫТ

*This article provides an understanding of the national education funding trends across Europe and the possibilities of their usage in Ukrainian public policy in the sphere of higher education. The article highlights such issues as the public funding of higher education institutions based on their performance; public authorities' grants for specific higher educational projects; accountability for the public funding. The following main characteristics of the public funding of higher education institutions in Europe have been identified in this article: funding formulas allocated on public funds; performance indicators based on students' results; public funding in accordance with a performance contract; public funds for research.*

**Key words:** higher education; public policy; public funding; public expenditure; funding models; funding formulas; performance contract.

*Стаття дає розуміння національних тенденцій фінансування освіти в Європі та можливостей їх використання в державній політиці у сфері вищої освіти України. У статті підкреслюється таке питання, як державне фінансування вищих навчальних закладів на основі їх ефективності; державні гранти для конкретних проектів в галузі вищої освіти; підвітність за державне фінансування. Визначено такі основні характеристики державного фінансування вищих навчальних закладів Європи: формули фінансування, виділені на державні кошти; показники ефективності, засновані на результатах студентів; державне фінансування відповідно до виконання контракту; державні кошти для досліджень.*

**Ключові слова:** вища освіта; державна політика; державне фінансування; державні витрати; моделі фінансування; формули фінансування; контракт на виконання робіт.

*Статья даёт понимание национальных тенденций финансирования образования в Европе и возможностей их использования в государственной политике в сфере высшего образования Украины. В статье подчеркивается такой вопрос, как государственное финансирование высших учебных заведений на основе их эффективности; государственные гранты для конкретных проектов в области высшего образования; подотчетность за государственное финансирование. Определены следующие основные характеристики государственного финансирования высших учебных заведений Европы: формулы финансирования, выделенные на государственные средства; показатели эффективности, основанные на результатах учащихся; государственное финансирование в соответствии с контрактом исполнения; государственные средства для исследований.*

**Ключевые слова:** высшее образование; государственная политика; государственное финансирование; государственные расходы; модели финансирования; формулы финансирования; контракт на выполнение работ.

**Problem statement.** Educational policy is closely related to the economic and social national policies. Looking for the appropriate education policy model is aimed at the formation of the strategy of countries' development. The issue of the funding is one of the key ones in the developing of educational strategy. It includes three important components: quality (correlation funding-result-quality), access (social justice) and efficiency (balance between profit and expenses). Nowadays Ukrainian sphere of higher education exists in the conditions of a lack of sufficient funding. The experience of European countries in the implementing of the efficiency funding models could be important base for the improvement of the national education policy of Ukraine.

**Last research and publications analysis.** The scientific works of Ukrainian scholars are devoted to the theoretical and practical analysis of approaches to higher education funding in Ukraine, in particular by V. Andrushchenko, V. Bazylevych, V. Beskyd, T. Bogolib, B. Grishnova, E. Libanova, V. Lugovy, K. Korsak, T. Obolenska and others. Foreign analytical studies conducted by the European Observatory for Public Finances and the Eurydice Network, as well as by J. Salmi and S. Vincent-Lankrina, contribute to the analysis of international experience in higher education funding in the EU.

**Allocation of previously unsettled parts of the main issue.** Investment in education is a priority area in the context of EU Development Strategy 2020. Investing of education, training and lifelong learning supports the development of human capital by the expanding of employment opportunities and promotes economic growth. The issue of funding is a key one in the development of educational strategies. It combines three important aspects such as quality (ratio of financing result and quality), access (social justice for those who pays for education, and who benefits from it) and effectiveness (balance between income and expenditure). Nowadays governments of EU countries provide higher education institutions with a greater autonomy in budget execution. As educational policy is closely related to the economic national policy looking for the appropriate education policy model is aimed at the formation of the strategy of countries' development. Ukrainian higher education exists in the conditions of a lack of sufficient funding. The experience of European countries in the implementing of the efficiency funding models could be important base for the improvement of the national education policy of Ukraine.

**The aim of the article.** The main purpose of this work is to provide an understanding of the national education funding trends across Europe and their possibilities of the usage in Ukrainian public policy in the sphere of higher education.

**The main part of the article.** Modernisation of higher education in Ukraine aimed at its forthcoming to the European standards demands the sufficient investment. Higher education plays the key role in the modernisation of economic because of the potential to provide the human progress by the powerful complex country's development. Development of higher education as the investment in the increasing of the quality of human capital is one of the conditions of economic growth. The state has the decisive role in this process. The possibilities of public impact on the educational sphere are wider and more efficient comparing with the others institutions. Such impact is in the usage of the complex of the mechanisms. One of them is the financial one.

There is a tendency towards deregulation and more autonomy for higher education institutions (HEIs) regarding institutional policies and, in particular, the management of institutional budgets. In the majority of countries HEIs traditionally operate with a high degree of autonomy, including in financial issues. European universities were granted full autonomy in the management of their financial resources. Nowadays the greater institutional autonomy has been resulted in a considerable increase in HEIs' responsibility for institutional policies and closer involvement by students and staff in the institutional governance. Although the majority of European national policies encourage higher education institutions (HEIs) to raise the private sources of funding, direct public funding continues to represent a major part of the higher education budget [1].

Notes by J. Salmi are particularly valuable in the context of our study. He mentioned, that as their direct involvement in the funding and provision of tertiary education diminishes, countries rely less on the traditional state control model to impose reforms. Instead, they bring about change by guiding tertiary education institutions with a coherent policy framework, an enabling regulatory environment, and appropriate financial incentives. While no blueprint exists for all countries, a common prerequisite may be a clear vision for the long-term development of a comprehensive, diversified, and well articulated tertiary education system. The second important dimension of government intervention is the creation of a regulatory environment that encourages innovations at the level of individual institutions as well as private-sector initiatives to expand access to tertiary education. Key dimensions of regulation are the rules for establishment of new institutions (private and virtual), quality assurance mechanisms, financial controls on public institutions, and intellectual property rights legislation. In a lifelong learning perspective, student mobility can be encouraged by open systems based on the recognition of relevant prior experience, degree equivalencies, credit transfer, tuition-exchange schemes, access to national scholarships and student loans, as well as a comprehensive qualifications framework. The

third modality of state intervention involves the funding mechanisms and financial incentives applied to steer tertiary education institutions toward quality, efficiency, and equity goals. These include allocation formulas linking resources to measures of institutional performance, encouragement of resource mobilization by institutions, competitive funds for investments in quality improvement, and student financial aid [2, p. 2–3].

Authorities are highly interested in optimising the balance between the financial resources they invest in higher education and the outcomes of the sphere. They establish funding mechanisms aimed at linking results allocated of the future public funding. This is usually possible through the budget negotiations between HEIs and the relevant Ministry, as well as by using the funding formula that include performance indicators. The peculiarities of such policies in the selected European countries are in the table.

Table

*Establishment of the funding policies based on the results*

Country	Year of establishment	Policy's scope
Romania	2008	The policy is included in long-term strategy for the development of higher education
France	2006	The law on public finances reinforced the links between higher education funding and results based on objectives and indicators
Finland	the mid of 1990s	Institutional objectives and the resources needed to achieve them are determined in negotiations between the Ministry of Education and each HEI
UK	2008	Funding to support the research infrastructure is distributed selectively, informed by assessment of research quality
Norway	1990	The government's priority is to further refine funding arrangements for HEIs and is geared towards rewarding achievements and results while safeguarding important but vulnerable academic areas and activities

Governments encourage the development of closer relations between HEIs and society. Policy measures in this area are aimed at the promotion of the scientific results. However, the link between research and national economic (including specific regional needs) is a priority. The European authorities promote co-financing and the creation of the partnerships "HEIs-research institutes-regional authorities-business". Moreover, in some countries (Estonia, France, Italy, Portugal, Finland and Sweden) they provide financial and other mechanisms to support such cooperation [3, p. 10].

The block grant is divided between the categories of expenditure of the institution. In Belgium, Ireland, France, Lithuania, Hungary, Poland and Slovenia, institutions receive block grants and they must spend them in compliance with the budget headings submitted to the funding body. In France, HEIs must submit the budget proposal to the authority. HEIs in Poland have to submit their proposed financial activities to the Ministry of Finance but there is no institutionalised authority for their approval. In Hungary, institutions have to send an annual draft budget proposal to the supervisor. The supervisor may initiate amendments, if he considers that the proposal does not allow the institution to achieve its basic goals. The block grants are intended to cover learning process and operational expenditure. In rare cases, staff salaries may be covered. In half of the countries, block grants may fund research expenditure. The block grants do not constitute the only source of public funding. In all countries, HEIs receive public funding for specific purposes, such as national programmes, social purposes, particular research, etc. [4, p. 48].

Funding formulas promote the increasing of the transparency of public funding. It helps to avoid potential political pressures. Almost everywhere, funding formulas rely on input criteria, which refer to the institutional activity [4]. Institutional activities may be estimated according to the resources (number of staff and students, staff salaries, campuses and buildings, etc.) available to HEIs. In many cases, the funding formulas also include performance criteria, which are related to the outputs achieved by an institution over a previous period. In the funding formulas,

the input-related criteria depend on countries. The most commonly used criterion is the number of students registered during the previous or current year. Characteristics other than those relating to the number of students, which may sometimes guarantee certain stability in the allocation model, are considered much less frequently. They include, for example, variables associated with the cost of college (Finland), the area of buildings (France), number of employees (Greece, France, Poland - public institutions – and Portugal) and criteria related to educational provision (France and Slovakia), etc. [4, p. 52].

Approximately half of the countries use performance indicators which focus on student success rates. The most common performance indicators for teaching activities focus on student success rates that are measured through the number of graduates. Indicators in the Czech Republic, Italy and Austria have special importance to compliance with the standard period of time needed to complete courses. Some countries use other indicators related to student success rates (in addition to the number of graduates for some countries). In Denmark, Austria and Liechtenstein, the number of students who pass their exams is considered. The number of credits earned by students is considered in Sweden and Norway. In the United Kingdom, the number of students registered is not considered in the funding formula; only those students who complete their year of study. The number is weighted according to field and type of study. For institutional performance, Italy and the Netherlands consider the failure rate at the end of the first year and the number of students who abandon their studies, respectively [5].

The mechanisms of public funding for higher education in Europe represent levers through which central governments pursue their strategic objectives in the sector. The usage of funding formula is very widespread. Various aspects of these models are discussed. Funding formula based on the number of students may act as a drive to rationalize the usage of resources. According to Salmi and Hauptman, “when the costs per student are based on the average costs at the national level or on the normative costs established by considering various parameters that are used to calculate the cost of research, it should be in an ideal situation, rather than what they really are” [6, p. 60]. The funding formula based on the number of students enrolled makes institutions vulnerable to fluctuations in student enrolment, which inevitably has a direct impact on their revenue. Some basic institutional costs cannot be reduced from one year to the next. In order to deal with this situation, institutions may adapt the types of programme offered to match students’ preferences in order to attract more students [7]. Although this strategy may guarantee that the courses correspond to the short-term needs of society in terms of education, it may also lead to a limited diversity of courses and the disappearance of certain important but less popular academic disciplines. In light of this, funding formulas could include incentives to preserve vulnerable academic disciplines.

According to the signed below there are the recommendations to improve higher education public funding:

- Public authorities, as the universities’ first and main funder, have a special responsibility in ensuring that their higher education system is financially sustainable over the long term. This includes providing a stable regulatory and financial framework for universities to fulfil their missions. It also means taking into consideration the possible long-term impact on universities of changes brought to funding modalities.

- Diversifying income sources is a way for universities to mitigate risks but this cannot replace nor compensate for declining public funding.

- Targeted funding mechanisms should not determine significant parts of the public funding received by universities; it should be preferably used for additional funding made available to institutions.

- Simplification should be a guiding principle for public funding mechanisms. The overall objective should be to strike the right balance between accountability and institutional autonomy and thus keep reporting duties to the necessary minimum in order not to create additional layers of bureaucracy taking up resources from universities.

- The inclusion of a “performance” dimension in funding formulae should be done and designed in full consultation with the sector to ensure the fitness for purpose of the selected criteria.
- The development of performance agreements with specific targets should be a joint process between universities and public authorities. This also applies to the selection of criteria used to measure the progress towards such targets, in order to ensure coherence with the university’s strategy and institutional profile.
- Public authorities are responsible for designing the “public funding mix” suitable for their system; however, a guiding principle should be simplification, in order to avoid overly burdensome and costly processes.
- Limiting the number of indicators may enable universities to focus and deliver better results.
- Attention should be paid to the challenges linked to the measurement of the indicators and the related need for generation of data.
- The extent to which it is in the universities’ capacity to act upon the selected criteria is an important matter to consider, in order to create the appropriate incentives. Where it appears that the universities’ influence is limited, a performance agreement without direct impact on funding might be more appropriate.
- Monitoring processes should be set up in order to fully assess the impact of the funding mechanisms on institutions, including possible unintended consequences and provide the possibility for adaptation.
- Mergers are only one of the concentration and collaboration phenomena occurring in higher education. There is a whole range of concentration measures currently being experimented in Europe, including university consortia and strategic partnerships [8].
- Both mergers and concentration measures can be highly complex processes for which institutions need to receive adequate support.
- Public authorities tend to engineer such processes with a view to restructuring the higher education landscape.
- Although financial reasons are among the important drivers of concentration processes, they should not be the only motivation for such processes. Universities’ strategic objectives linked to their core activities should be the main focus of collaboration and concentration measures.
- Large-scale, system-shaping initiatives focusing on excellence remain the exception, although when resources are available, public authorities quite commonly set up funding schemes fostering the emergence of specific “excellence” clusters.
- When designing these schemes attention should be paid to the overall funding flows and the potential restructuring effects on the system.
- The capacity of universities to act strategically to increase cost efficiency depends at least partly on their degree of institutional autonomy and on their organisational structure.
- Policies aiming at enhancing competition in the sector can undermine collaboration processes seeking to achieve efficiencies.
- Economies of scale created by sector-level approaches should be balanced against the need for keeping a certain amount of flexibility in the system.
- Cost transparency helps to create awareness around the use of resources in the institution and helps to generate data for benchmarking in the sector. Public authorities have many steering levers at their disposal to shape their higher education systems. It should, however, be kept in mind that measures such as performance-based funding, mergers and concentration measures as well as excellence schemes can also have unintended consequences at system as well as institutional level. In the coming months, EUA will release specific reports dedicated to each of the measures considered in the study and further explore their impact on higher education institutions [9, p. 17–18].

**Conclusions and recommendations.** Nowadays public funding of higher education is the dominative mechanism in majority of countries. There is a wide range of private sources for higher education funding. The task of HEIs is to investigate the potential ways of private

funding. The task of the national policy is to find a balance between the optimisation of the expenditures on higher education sphere and the obtaining of long-term benefits. Autonomy of financial management is a key aspect in higher education governance for Ukraine. Public funds allocated for the specific research projects in connection with the national purposes exist as a form of management by objectives. At European level, there is rarely a strong correlation between a liberal policy in the field of diversification of financing by the private sector and the development of a range of incentives in this area.

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