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# Financial aspects of education quality assurance in Latvia

#### Abstract

The article analyzes the financial aspects of ensuring the quality of higher education, the relevance of which is due to the increasing importance of higher education in the development of countries in the modern conditions. The importance of ensuring and maintaining the quality of higher education for each country is proven. On the basis of historical and comparative research methods, a consistent process of formation of the quality assurance system of higher education in Latvia was characterized. The complexity of the problem of improving the quality of education, which is ensured not only by accreditation system, but also financial aspects, is confirmed: increase of financial autonomy of higher educational establishments, expansion of resource base, increase of financing volumes. The features of the financing mechanism of institutions of higher education are revealed, the strengths and weaknesses of the system of financing higher education of Latvia in comparison with European countries are analyzed. The positive experience of European and other countries in the formation of effective financing mechanisms that can influence the quality of higher education is presented. The analysis allowed to determine the perspective directions of development of the Latvian system of higher education in the conditions of the modern global environment and to formulate proposals for improving the mechanisms of its financing. The necessity of improvement of the Latvian practice in the direction of strengthening of stimulating character, further diversification of sources and formation of the practice of financing, oriented on efficiency is proved. Special attention is needed to increase the amount of funding and to bring its indicators to average European indicators, increasing attention to financing research through domestic resources (public, private, business, etc.).

### Keywords

higher education, quality of higher education, financing mechanism, financial autonomy

### 1 Statement of the problem

Dynamic changes in educational practice under the influence of a large number of factors require new approaches, the development of existing tools, and the search for an optimal model for the correlation of state and market regulatory mechanisms. In

the transition to the knowledge economy, the role of education in shaping the technological, intellectual and economic potential of the country's development is increasing.

Providing quality education in the context of global challenges becomes a competitive advantage of the national education system of the country, thus contributing to the competitiveness of the national economy. Ensuring or guaranteeing the quality of education, serving as a very important goal in educational policy, is a rather difficult task, even for the highly developed countries of the world.

On the one hand, the realization of this task depends on the control system, penetrating practically all management functions (planning, organization, coordination, control, financing, etc.). The quality of education is largely determined by the amount of funding and, generally speaking, the financial regulation policy. First of all, the quality of educational services depends on the availability of material, information, training, technology base and staffing. However, other important points are related to university management, its corporate culture and, of course, the existence of autonomy in policy implementation.

# 2 Latest scientific progress and publications review

The problems of financing education and its role in ensuring the quality of education are relevant for contemporary economic science and practice. In particular, in the works of F.Althbach, L. Antonyuk, V. Bazylevych, G. Becker, Z. Varnalia, A. Viefleymsky, A. Srichnova, A. Dyakon, D. Dyakon, V.Jamin, E. Zhiltsova, S. Kostanian, Dzh.Salmi, S. Strumilin, A. Chukhno, T. Schulz, S. Yurii, L. Yakobson and others raise questions about the role of education in the development of society, the development of effective mechanisms for regulation and financing of the education system. In today's conditions, aspects of ensuring the quality of higher education, including through the improvement of its financial mechanism, are becoming important. For each country, it remains extremely urgent to find its own mechanism, effective, transparent and stimulating, with the strengthening of the elements of responsibility and the reduction of the influence of subjective factors on the process of making financial decisions in the education system.

## 3 The purpose and problem

The purpose and problem of research is to analyze the financial aspects of ensuring the quality of higher education in Latvia and to determine the perspective directions of the development of the system of higher education in the conditions of the modern global environment.

#### 4 Results of the research

The quality of education depends both on regulatory mechanisms and on the financial capabilities of the system as a whole and every educational institution. Financing education in modern conditions is

an important issue for many countries, since higher education is an important factor in the competitiveness of the national economy.

The directions and dynamics of the development of the education system in each country are determined by the state regulatory policy, including the scale, priorities and funding policies. It is very important that the structure of the education sector corresponds to the potential structure of the labor market with a time lag of 5-7 years to identify potential demand and opportunities for labor supply.

The financing mechanism of higher education institutions in Latvia is mainly based on the number of students and the features of the curriculum. The state covers only a small part of the necessary expenses for higher education. In this case, the state order serves as a regulatory tool for non-popular specialties [1]. But at the present stage, the issues of reforming the financing system, which is due to its general inefficiency, are being updated [2].

The European Union is committed to reducing the gap in funding levels for higher education. The general recommendation is funding at 2% of GDP, while in Latvia this figure is 1% (Table 1).

As can be seen from the table, for Latvia the actual task is to increase the efficiency of financing, to strengthen its stimulating effect and focus on results. Characteristic is also some lagging behind the main tendencies of the European Union in the volume of financing of the system of higher education.

In virtually all countries, the regulation of the educational services market is mixed in the present day. For example, in the UK, the funding structure is distributed as follows: about 70% of the funding comes from the state and 30% from other sources (donations from citizens, private firms, revenues from paid services) [4]. In the United States, the share of public funding is much lower - about 40% of all financial allocations, the other part - mostly private sources. Moreover, private institutions do not receive public funding [5].

In New Zealand, there is a shift to more active use of non-state funding mechanisms. Higher education establishments establish the so-called global budget and provide financial autonomy. Funding (global budget) depends on the number of students (EFTS), but is distributed by management depending on current needs or strategic priorities. The financial autonomy of higher education in New Zealand was introduced in 1989, and has a broad character. Thus, universities are allowed to independently determine the salaries of teachers and administrative staff, make investments, make decisions regarding real estate. The financing of activities takes place in a mixed system, where 75% of the payment is made by the state and 25% falls on the shoulders of students. Those who wish can receive a state loan, which will be paid after graduation, and the interest rate of the

TABLE 1 Comparative characteristics of the financing system of Latvia with the European practice [3]

Financing	The main trends of the EU	Today's situation in Latvia	Latvia's
model Structure of the financing model	Three typical models for the distribution of public funds for higher education institutions: (1) basic funding; (2) financing activities; (3) innovation-oriented financing; performance results ("performance contracts") - used in 15 of the 22 European countries	In Latvia, only the principle of basic financing is used to provide the main state financing of higher education institutions; performance financing is applied (performance contracts)	<b>position</b> Incompatibility with European trends
Baseline financing and performance- based financing: mechanisms	The main financing is carried out on demand indicators with additional financing with historical preconditions; Financing on the basis of: in most systems, the mechanisms for allocating funding are partly based on these characteristics; Most European countries base their financing on the results of their activities.	Latvia applies a funding formula focused mainly on inputs (funding places) The general state budget of higher education remains largely unchanged and develops gradually on a historical basis (rather than demand-driven) The current funding model does not offer significant incentives for better performance and results oriented	Partial compliance with European indicators
Innovative or profileal targeted financing	Often used to support national priorities and to develop national policies Part of such financing is constantly growing, especially in the form of competitive and targeted financing.	This type of financing today consists of a number of different types of financial flows from external resources not included in the system of state financing.	Incompatibility with European practices
Value of public and private expenditures on education	In the OECD countries funding for education from private sources is increasing In the EU, on average, 23% of the total funding of higher education institutions comes from private sources	In Latvia, private funding for higher education institutions is up to 40%	Inconsistency/ overcoming of European tendencies

loan takes into account inflation and market value.

Public funding in Denmark is based on the total number of students. The state provides and broadly covers the so-called "taximetric system." This information is published by the government in the draft budget, which is submitted annually to the parliament. At the same time, higher educational institutions have a high level of autonomy, both financial and administrative. The market behavior of the university is regulated and limited by the demand of students. In these conditions, the role of the Ministry of Education changed, which lost the functions of control and regulation and limited supervision and control of the quality of education [6].

Problems of the ratio of different sources of funding are relevant for each country. International documents (for example, in the World Report "Education for All 2000-2015") recognize the lack of public funding to ensure the effective and successful development of a modern education system. In connection with this, virtually all governments in the world are tasked with finding new ways to attract additional resources in the field of education [7].

In view of this, new organizational and legal forms of universities are emerging in the world. For example, in Germany in the land of Lower Saxony distributed stock universities, whose founders are public or private funds, or which are themselves funds in their organizational and legal form. The advantage of this form of university is the expanded possibility of financing from various sources: the state, funds, various tax benefits, the attraction of private capital. For example, in Hesse, the Goethe-University, which is located in Frankfurt am Main, acquired such a specific form.

In connection with such a complex system of financing and regulation of the educational services market in Germany, a system of indicators for assessing the performance of higher education institutions and their competitiveness has been developed. These include the results of the competition "outstanding initiatives", participation in large-scale scientific projects, the number of laureates Prize Leibniz, Nobel, the number of publications in international and prestigious publications. In addition, the processes of internationalization are important, the indicators of which are: the number of foreign students and professors in the university, the number of international projects and contracts.

These indicators are the basis for financing higher education institutions and giving them certain freedoms. In Germany, a results-based funding system has been developed. For example, in North Rhine-Westphalia, about 23% of university funding is awarded on a performance basis. Of these, about half of the funding is allocated - by the number of graduates, about 40% - depending on the amount of financial resources involved, about 10% provides a number of female

professors. These indicators affect the level of funding, with the higher the funding, the more opportunities for higher education institutions to increase other indicators. This is the so-called Matthew effect, also called the effect of accumulated advantages [8].

Equally important is the availability of autonomy in higher education institutions, which largely determines their ability to accumulate resources and independently solve the issues of their effective use. That is why the issue of autonomy of universities is given an exceptional significance, both in scientific circles, and in educational policy and practice. The following table contains information on the assessment of the financial autonomy of higher education institutions and their rules of conduct in the market of financial instruments in Latvia and in the EU (Table 2)

TABLE 2 Assessment of the financial autonomy of higher education institutions in Latvia [9]

Indexes	European trends	The situation in Latvia	Conformity
Financial autonomy	In 25 countries, block grants are used, with a 3-point budget. There are no restrictions on the distribution and use of funds in 14 countries.	The annual block-grant divided into subcategories	Corresponds to European trends
Possibility for higher education to accumulate the balance of financial resources	Universities can accumulate the balance in 27 systems, can not - in 4 systems.  There are no limitations with a surplus in 15 systems.  Some limitations with a surplus in 12 systems.	Higher government-funded funds can maintain a positive balance, subject to a higher authority's approval.	Corresponds to European trends
Possibility of higher education to take loans	Universities have the opportunity to borrow money in financial markets in 23 countries, can not - in 7.  There are no restrictions on borrowing in 7.  Some restrictions - in 16.	In Latvia, higher education has the opportunity to take loans	Corresponds to European trends
bility to own buildings	Universities can have their own buildings in 22 countries, can not - in 6.  There are no restrictions on the sale of assets in 8 countries.  Some restrictions on the sale of assets - in 14 countries	Latvian universities have their own buildings. Latvian universities can sell their buildings (restrictions may be regarding state property).	Identity / ahead of European trends
Possibility of universities to set salaries for their employees	Universities can not freely set salaries in 28 countries, you can freely set a salary of 5	Latvian universities have the right to set salaries for their employees (above the minimum wage level)	Ahead of European trends
Possibility of higher education establish a level of tuition fees	In most European countries, the ability to establish a higher tuition fee is limited to an external reputable position, especially for internal students / EU	Latvian universities can set the level of payment	Above the European trend
The overall level of financial autonomy	The overall level of financial autonomy in Europe has grown significantly over the past 15-20 years	Universities have a high level of financial autonomy, Latvia has ranked 4 <sup>th</sup> among European universities	Outstrips European trends

As can be seen from the table, the possibilities of financial autonomy of higher educational institutions in Latvia outstrip the trends of developed countries, which is a good prerequisite for

the further formation of a highly effective education system. In addition to the above, an important element of the financial autonomy of universities is the possibility to set a tuition fee (Table 3).

TABLE 3 Setting tuition fees at higher education institutions [9]

Indexes	European Trends	The situation in Latvia	Compliance with European trends
Cost of education	A significant variety of paid systems, there is no clear European trend. Most students pay for studies in 28 countries, a smaller proportion is 13.	Latvia applies a tuition fee: 49% of all students pay for studies (37% of the full time and 97% of students-correspondents). Compared to most other European countries, relatively high fees	There is no clear European trend
Student support	systems, there is no clear European trend.	Latvia's higher education system offers mainly support on the basis of state-funded training places, as well as, to a greater extent, on the basis of state loans	There is no clear

Thus, we can determine that the financing system of higher education institutions of Latvia generally complies with European norms. At the same time, the analysis of world experience proves that highly effective systems of regulation of the educational services market include strategic orientation, promotion of national interests and strategies, the formation and functioning of a competitive environment, the creation of a system of bonuses and sanctions, etc. In addition, such systems are characterized by sustainability, which manifests itself in guaranteed and continuous financing, the availability of long-term planning mechanisms, the understanding of differences in the cost of training different programs, a clear and balanced system of financing.

To improve the system of Latvian education, it is necessary to characterize its strengths and weaknesses, which allows us to determine the possibilities for its effective development. The strength of the education system in Latvia is a highly diversified structure of higher education institutions, a large number of training programs, the availability of both public and private educational institutions, and opportunities for public-private partnerships. In addition, in Latvia, a significant part of private higher education institutions, as well as quite influential research institutes, both locally and nationally.

Positive for the education system is the presence of a large number of young people aged 15-24, which provides sufficient demand for the educational services market. In addition, Latvia has a high level of employment and good preconditions for secondary training and retraining of specialists. Equally, the strength of the education system in Latvia is the high level of adaptability that manifested itself during the economic crisis.

Strengths of funding are the formation of a national labor market development plan; availability of funding for scientific purposes from the EU structural funds; the opportunity to raise additional resources by installing a tuition fee. In addition, production contracts have been signed between higher education institutions and the Ministry. The strengths of the financing of higher education in Latvia can be attributed to the existence of a funding policy based on a developed formula that takes into account the number of students and significant funding of research work from the EU structural funds. In Latvia, a sufficiently developed system of public borrowing with rather attractive terms of repayment of a loan. These loans are available to a large number of students. In addition, there is the possibility of choosing a full tuition fee system.

Higher educational institutions in Latvia have a significant degree of financial autonomy, which envisages both the freedom of entrepreneurship

and the low level of dependence on one source of funding. The high mobility of students and employees makes it possible to transfer part of the costs of training specialists to other countries, which may also be among the strengths of the financial system of higher education in Latvia.

The disadvantages and weaknesses include: insufficient funding for higher education and research projects; low level understanding of the value of quasi-social benefits; the availability of university students to study in the countries of the European Union; the ability of teachers to have more than one job; high academic load of teachers and insufficient amount of time for scientific work; a high level of quality control training only at the initial stages of the launch of new training programs; freedom of employment of graduates after graduation abroad.

The weaknesses of funding are the lack of a real system of financing at the local level and a weak link with national and institutional strategies. Similarly, there is no system for financing innovation and financing of private higher educational institutions, and the financing of research projects can be regarded as weak. Latvia has a low overall level of funding for higher education in comparison with other European Union countries, and the declared increase has not been implemented in practice. In addition, the cost of higher education in the country is not much higher than the average and initial, and the system for calculating the basic cost of education for public procurement is obsolete.

To the weaknesses of financing, the same applies: subjective distribution of subsidized places; annual review of funding, which makes it impossible to develop strategic plans for higher education institutions; lack of state support for students of correspondence education; poor financial support for poor students; high dependence on the EU structural funds for research and development (R & D), which does not contribute to the stability of the financial system in the long run; low level of participation of business in the activity of higher educational establishments; loyal conditions for cancellation of student loans.

The autonomy of higher education institutions depends largely on the diversification of funding sources. Expansion of the financial base of the university allows to increase the level of stability, as well as develop long-term plans of activity. These goals can also be achieved by increasing the objectivity of funding, since at the moment it depends on a large number of factors and takes a lot of time. Obtaining a block grant, its allocation is determined by negotiation, using the funding formula, based on an analysis of the experience of financing previous periods. However, in developed European countries, budgeting based on

performance is more actively used. Thus, a system of financial incentives for improving the performance of higher education institutions is being formed.

The main results of the activity can be recognized:

- Number of graduates in different programs;
- Place of higher education in international rankings;
- · Number of publications in international
- peer-reviewed publications;
- Participation of a higher educational institution in international grants and projects;
- · Number of foreign students;
- Number of patents;
- Results of scientific research, etc. (Figure 1).

As can be seen from Figure 1, the most

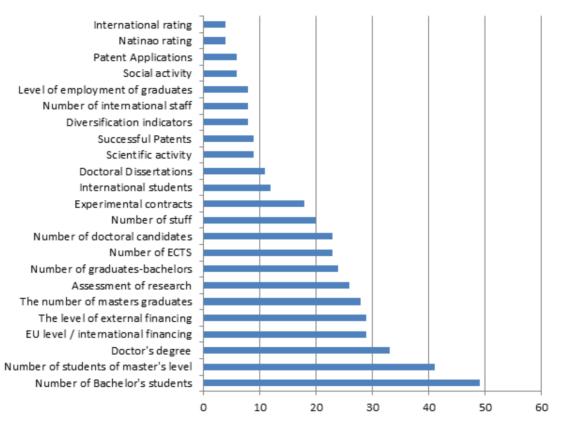


Figure 1 Indicators of results used to fund higher education institutions in Europe [9]

commonly used indicators of the number of students and staff, the number of graduates. The patent and scientific performance indicators are much less used. It is obvious that for each country it is expedient to move to a system of financing that would include orientation towards innovation activity, stimulation of the development of competitive advantages.

In most European countries, higher education institutions receive government funding to cover core expenditures. At the same time for obtaining grant blocks there is a fairly strong competition. Under the grant block, "a financial grant is intended to cover such cost categories as training, current operating costs and / or research. Universities are responsible for spending such funds according to their needs (flexibility may be limited by minor constraints)" [10].

The total amount of funding can be determined by a multitude of ways, from historical background

to negotiation in each particular case. Moreover, these conditions can be considered separately and in the system (Figure 2). The weight of each element is determined in each particular case, depending on the higher educational institution, its history, as well as from the accepted features of the distribution of financing in the country.

A rather significant part is determined by financing projects that are determined on a competitive basis. This is especially important for financing scientific research. As can be seen from the figure, for some systems, funding for special achievements, such as large-scale projects, is also characteristic of some systems. This funding is used in Germany, France and the UK.

"Other direct funding mechanisms" means targeted funding allocated by the state to support specific goals and projects. Finances can be allocated on a competitive basis, which is used in France and the UK. In France, these resources are

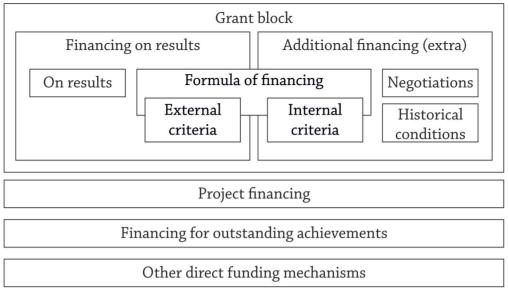


Figure 2 Forms of state financing

aimed at improving the overall success rate for a bachelor's degree.

#### **5 Conclusions**

Reforming the system of higher education, including the financing system, should be guided by strategic goals and interconnectedness with the labor market. Improving the quality of education is a complex problem that affects not only the system of accreditation, but also financial aspects: increase of financial autonomy of higher educational institutions of Latvia, expansion of resource base, increase of financing volumes. Analyzing the experience of developed countries and Latvian realities, it is worth noting that for Latvia, it is extremely necessary to gradually increase the financing of education and science to the level of European countries. Reorienting funding for results will improve the quality of the training of specialists, as well as the innovative component of the activity of a higher educational institution. In addition, the distribution of public funding must be clear and objective-oriented, with the simultaneous decline in the importance of performance indicators.

Financing science should also be based on the results of activities (number of publications, patent activity, the implementation of patents, etc.).

Diversification of financing of higher education by attracting funds from business, non-governmental and charitable organizations remains an important task. The urgent task of the financing system in Latvia is also to ensure the transparent nature of all flows and enhance the stimulating effect of financial instruments, which necessitates the refinement of the existing model of financing of higher academic institutions and the education system as a whole.

The study and analysis of current trends in the education system, the emergence of imbalances and new phenomena require increased attention and the development of effective mechanisms and regulatory instruments. As modern practice of educational activity shows, the mechanisms of regulation of the education system are becoming more diverse. This is manifested both in the structure of funding and the scale of autonomy and autonomy of educational institutions, and in the application of procedures for guaranteeing the quality of education, and in many other ways. In general, only a well thought out, systematic and purposeful policy of the state can ensure the effective functioning of institutions of higher education, including - and the systematic improvement of the quality of educational services provided in the current conditions of the formation of a knowledge society.

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