

## AUTONOMY OF THE EUROPEAN HIGHER EDUCATION SYSTEM: CHARACTERISTIC FEATURES OF THE CLUSTERS

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### Autonomy of the European Higher Education System: Characteristic Features of the Clusters

The aim of this study is the formation of clusters in terms of autonomy with the identification of their representatives and the formation of the main indicators (options) of development. The article singles out five homogeneous groups in terms of development of autonomy of the higher education system, and analyzes their main characteristics. To study the specific features of each group, representative countries are identified for each of them, including the higher education systems of Norway, Italy, Finland, Poland and France. Based on the analysis of the representatives, the dominants in the development of each autonomy dimension are defined. A comparative analysis of the autonomy of the system of higher education of the representative countries was carried out, which showed that autonomy of the higher education system is a multidimensional phenomenon, and one cannot say that only autonomy can provide advantages in the competitive struggle in the market of educational services.

**Keywords:** higher education system, autonomy, clusters, representatives, universities, financial autonomy, organizational autonomy, staffing autonomy, academic autonomy.

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#### Раєвнева О. В., Стрижиченко К. А. Автономність системи вищої освіти Європи: характерні риси кластерних груп

Метою цього дослідження є формування кластерів автономності з визначенням їх репрезентантів і формування головних показників (варіант) розвитку. Визначено існування п'яти однорідних груп розвитку автономії системи вищої освіти Європи, проаналізовано їх основні характеристики. Для дослідження специфічних особливостей кожної з груп в них виділено репрезентанти розвитку, до яких віднесено системи вищої освіти Норвегії, Італії, Фінляндії, Польщі та Франції. На підставі аналізу репрезентантів визначено домінуючі риси розвитку автономності по кожній складовій. Проведено порівняльний аналіз автономності системи вищої освіти країн-репрезентантів, який показав, що автономність системи вищої освіти є багатовимірним явищем, її не можна говорити що лише автономність може забезпечити переваги в конкурентній боротьбі на ринку освітніх послуг.

**Ключові слова:** система вищої освіти, автономність, кластери, репрезентанти, університети, фінансова складова, організаційна складова, кадрова складова, академічна складова.

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#### Раєвнева Е. В., Стрижиченко К. А. Автономность системы высшего образования Европы: характерные черты кластерных групп

Целью данного исследования является формирование кластеров автономности с определением их репрезентантов и формирования главных показателей (вариант) развития. Определено существование пяти однородных групп развития автономности системы высшего образования, проанализированы их основные характеристики. Для исследования специфических особенностей каждой из групп в них выделено репрезентанты развития, к которым отнесены системы высшего образования Норвегии, Италии, Финляндии, Польши и Франции. На основании анализа репрезентантов определены доминанты развития автономности по каждой составляющей. Проведен сравнительный анализ автономности системы высшего образования стран-репрезентантов, который показал, что автономность системы высшего образования является многомерным явлением, и нельзя говорить, что лишь автономность может обеспечить преимущества в конкурентной борьбе на рынке образовательных услуг.

**Ключевые слова:** система высшего образования, автономность, кластеры, репрезентанты, университеты, финансовая составляющая, организационная составляющая, кадровая составляющая, академическая составляющая.

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**Introduction.** Over the past decade, a large number of countries have faced a new challenge in the international labor market, which is associated with the need to increase the international competitiveness through labor resources. Increasing the competitiveness was being ensured due to demographic and economic factors, which determined two development paths of countries in the labor market: extensive and intensive one. The extensive development path manifested itself in the increasing of the number of the able-bodied population and jobs as well as industrial restructuring. The other path was determined by qualitative changes in the system of training specialists, which provided the society with a highly skilled labor force.

Under conditions of limited economic resources, the second development path is more promising in long-term planning, but, given the limited state funds, this way increases the pressure on the higher education system and administrative and financial management of HEIs.

The intensive path of development of labor resources, which is chosen by the majority of European countries, pre-determines extension of powers of HEIs in each country in different areas of their activities. The purpose of such a reform is to increase the competitiveness by changing the incentive structure for agents of economic relations in the educational space involved in management of HEIs, such as university governing bodies and staff.

Reforms of the educational policy in the framework of the intensive development path have two directions. The first direction is related to transformation of universities into non-governmental, non-profit organizations and the creation of additional new non-governmental organizations of HEIs for the purpose of strengthening the internal competition. The second direction, which, in our opinion, is more important, is educational reforms themselves, which lead to increasing the autonomy of existing institutions along with growing responsibility of governing bodies and academic staff [1; 5; 6; 9; 14].

The conducted studies concerning the autonomy of European higher education systems have revealed the heterogeneity in the development of their autonomy in all areas: financial, academic, organizational and staffing, which made it possible to identify the basic clusters in terms of development of autonomy that have their own specific features.

**The aim of the research** is the formation of clusters in terms of development of autonomy with identification of their representatives and the formation of the main indicators (options) of development.

Within the framework of this article the following tasks are defined:

- studying the homogeneous groups with defining the specific features of the clusters and their characteristics;
- identifying representatives of each cluster and defining the dominants in the development of autonomy for the chosen system of higher education;
- comparative analysis of the autonomy of the higher education system of the representative countries and Ukraine.

**Presentation of basic material of the research.**

**Task 1.** Studying the homogeneous groups with defining the specific features of the clusters and their characteristics.

Building clusters in terms of development of autonomy of the higher education system was carried out within the framework of the scientific research [11; 16]. As a result, five basic clusters were defined.

The graphic representation of these clusters is shown in Figure 1.

To calculate the general index of autonomy, it is proposed to use a part of the area of the quadrilateral.

$$I_0 = \frac{S}{2}$$

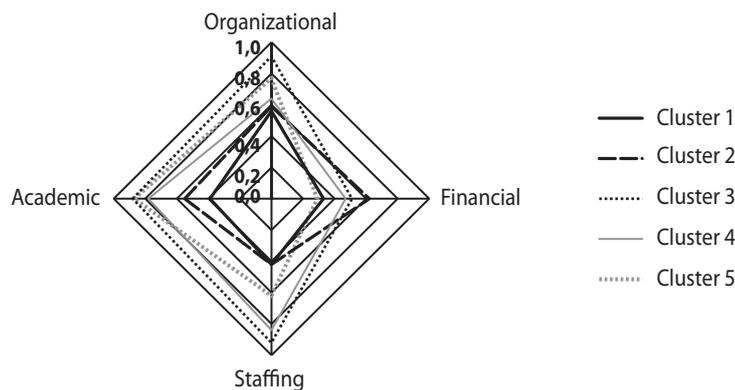


Fig. 1. The mean values of the autonomy clusters of the higher education system

Cluster 1 ( $I_0 = 0,4$ ). This cluster is characterized by a high level of academic autonomy, while the financial autonomy is quite low.

Cluster 2 ( $I_0 = 0,37$ ) is characterized by a high level of financial autonomy.

Cluster 3 ( $I_0 = 0,74$ ). The countries in this cluster are leaders in terms of all dimensions of autonomy of the higher education system.

Cluster 4 ( $I_0 = 0,45$ ) is characterized by a significant level of staffing autonomy.

The overwhelming majority in this cluster are countries of Eastern Europe and the post-Soviet space, including Latvia, Lithuania, Poland, the Czech Republic.

Cluster 5 ( $I_0 = 0,13$ ). This is a cluster with a low level of autonomy of the higher education system. It includes four countries: Greece, Turkey, France and Ukraine.

**Task 2.** Identifying representatives of each cluster and defining the dominants in the development of autonomy for the chosen system of higher education.

The identification of a representative was carried out using the method of taxonomy. Based on the analysis, the following representative countries were identified for each group (Tbl. 1).

Table 1

Representative countries

Cluster	Country	Dimension of autonomy				General autonomy
		Organizational	Financial	Staffing	Academic	
1	Norway	0.77	0.29	0.62	0.87	0.40
2	Italy	0.59	0.62	0.42	0.55	0.30
3	Finland	0.91	0.51	0.92	0.88	0.64
4	Poland	0.64	0.47	0.84	0.78	0.46
5	France	0.56	0.33	0.42	0.39	0.18

**Task 3.** Comparative analysis of the autonomy of the higher education system of the representative countries and Ukraine.

**Cluster 1 (Norway;  $I_0 = 0,4$ ;  $I_{\text{Norway}} = 0,4$ )** [5; 14; 15].

#### *Organizational autonomy*

A specific feature of universities in Norway is the process for the selection of the rector, which includes two approaches and does not depend on an external authority. Based on the first approach, the rector is selected by the university board/council, while in the second approach the rector is elected by the academic staff and students. The model existed to the full until April 2016, but since then most universities have tended towards the first approach, although they have the right to use the second approach to selecting the rector.

The term of office of the rector at Norwegian universities is four years and can be renewed once, and he/she can be dismissed only in the event of gross misconduct. It should be noted that the rector in this country performs to a greater extent executive functions, while the main governing body of the university is the university board, which comprises eleven members, of whom four are external and appointed by the ministry. The other members are internal, with four academics, one non-academic representative and two student representatives.

Norwegian universities can create both for-profit and non-profit legal entities.

#### *Financial autonomy*

The Norwegian higher education budget is allocated to universities on an annual basis. However, universities have all the powers of the internal allocation of funding. The restriction on the financial activities of universities is the prohibition of borrowing financial resources, while the surplus may be kept. Tuition fees at Norwegian universities are not charged. At the same time, universities can develop some master programs, for which tuition is charged.

#### *Staffing autonomy*

University staff in Norway have status of civil servants, whose salary is set on the basis of negotiations between trade union organizations of universities and state self-government authorities. There is a system of continuous staff development.

#### *Academic autonomy*

It should be noted that the academic component strongly correlates with the financial component of autonomy. Since the university funding in Norway is carried out at the state level, so it depends on the image of the university, which affects the number of students, and the quality of education, which is reflected in its success in the labor market.

The admission procedure at Bachelor level is strictly regulated by the state, while at Master level universities have more freedoms (they can independently formulate admission criteria, introduce additional funding, etc.). One of the academic freedoms is the possibility to introduce new programs without prior accreditation. Such an accreditation «credit» is valid for eight years. During these years the program must be submitted to accreditation.

Teaching in universities is carried out in the national language, programs can be taught in other languages only upon consultation with the university authorities.

**Cluster 2 (Italy;  $I_0 = 0,37$ ;  $I_{\text{Italy}} = 0,30$ )** [2–4].

#### *Organizational autonomy*

In Italy, the rector is selected by the full professors of the university and must be a full professor. Since 2010, universities can choose a rector from external candidates, but due to the great importance of family values in Italy, in most cases the rector is elected from the university staff. The rector is elected for one term of 6 years and may be dismissed during this term only on the basis of a decision of the senate of the university, which completely excludes external interference in the procedure for the election and dismissal of the rector.

A specific feature of Italian universities is a dual management structure, which includes the university council and the university senate, and their powers are completely separated. So the university council is responsible for its strategic development, and the senate of the university monitors its academic development.

The council is composed of eleven members (as in Norway), three of whom should be external. It should contain both the rector and student representatives. The senate cannot exceed 35 members, two-thirds of whom are academic staff members, and one-third is non-academic staff representatives.

In 2010 the post of «General Director» was introduced in Italian universities. The role is aimed at improving the quality of university management and strengthening its competitiveness at the domestic and international levels. He/she is fully responsible for the financial strategy of the university and attends the meetings of the council and the senate for a better symbiosis of the academic orientation of the university and its financial support.

Italian universities have complete autonomy to establish both for-profit and non-profit legal entities.

#### *Financial autonomy*

The basis for funding Italian universities is a grants system without any financial restrictions. Grants can be received throughout the academic year. Grants can be of two types: public (allocated annually in a certain period of time) and non-public. The surplus from the grants received can be fully kept by the university.

Universities can carry out full financial and economic activities by attracting credit financial resources under a percentage established by the state.

The policies of forming tuition fees are entirely regulated by universities. There is only one restriction on the part of the state. The amount collected from self-funded students cannot exceed 20 % of public funds. Therefore, the competitiveness of the university and the receipt of additional financial resources directly depend on public funding. In this regard, Italian universities formulate their academic policy depending on the needs of the state in specialists with higher education in the labor market.

#### *Staffing autonomy*

As in Norway, all the staff of Italian universities have civil servant status, and as a consequence, its number is regulated by the state. The recruitment for individual positions is carried out through a competitive process, the criteria of which are formed by the university itself. Universities can recruit academic staff members both on the basis of an internal Italian competition and attracting foreign teachers to improve the quality of education. The number of newly available positions is also regulated by the Ministry.

Due to the fact that all members of the academic staff of the university have the status of civil servants, their salary is regulated by the state. Moreover, universities cannot set salary increments, which limits salary-related competition among the academic staff. Universities can only use image competition to attract high-quality personnel.

#### *Academic autonomy*

Italian universities have the right to decide on the overall number of students. The more students can be attracted to the university, the greater the possibility of receiving more public funding. Also universities set their own criteria for admission of students.

Since the funding of training programs is based on the number of students, all the programs must be submitted to prior accreditation and their content must be developed in accordance with the requirements of the Ministry.

**Cluster 3 (Finland;  $I_0 = 0,74$ ;  $I_{\text{Finland}} = 0,64$ )** [8; 17; 18].

#### *Organizational autonomy*

The rector at Finnish universities is selected directly by the university board/council according to the criteria determined by the Ministry. The maximum length of a term of office for the rector is 5 years, with no limit on renewals.

The governance structure of a Finnish university is similar to that of an Italian one and includes the board and the senate. The board is the main central body for making managerial decisions, while the powers of the senate include solving financial matters. Since the senate is responsible for financial resources, it should include external experts in finance and audit. The number of such specialists must comprise a minimum of 40 % of the total membership of the senate.

Similar to Italian universities, Finnish ones have the right to establish for-profit and non-profit legal entities.

#### *Financial autonomy*

The specific feature of funding Finnish universities is the annual grant based on the developed four-year plans. Such plans, except for funding, include the projected number of students and curricula to meet the needs of the Finnish economy. The term of four years is chosen not by chance. It is in line with government planning periods of development of Finland.

Universities can freely reallocate financial resources, attract credit financial resources. The buildings and constructions are owned by universities and the state on a two-thirds/one-third basis.

Universities of Finland do not charge tuition fees to national and EU students. What is more, they can establish the size of scholarships to students. However, for non-EU students, universities can set tuition fees that are strictly regulated by law.

#### *Staffing autonomy*

In the field of staffing autonomy, Finnish universities have complete freedom. They can freely recruit senior academic and administrative staff according to the set criteria. Thus, universities can freely decide on the salary band.

#### *Academic autonomy*

The overall number of students is established by negotiations between the university and external authority. Universities have the right to independently set the criteria for admission of students to Bachelor and Master levels. Universities can independently decide on introducing new educational programs, but their subject area should be within their field of educational responsibilities and the “knowledge branch” defined by the government.

A special feature about degree programs is the impossibility of their termination on the part of the university. The suspension of a program requires negotiation between universities and an external authority.

**Cluster 4 (Poland;  $I_0 = 0,45$ ;  $I_{\text{Poland}} = 0,46$ )** [10; 12; 13].

#### *Organizational autonomy*

A special feature of the selection of rectors in Polish universities is the candidate's belonging to the university staff. The candidate also must have a doctoral degree and hold an academic position.

The rector is selected for one term of four years and can be dismissed only in case of serious misconduct. The university governance structure is unitary and consists of the senate, the main governing body and an advisory body that deals with strategic issues and changes in the university's charter.

The number of members of the senate and its structure are regulated by law. Thus, professors must comprise from 50 % to 60 % of the senate and students — at least 20 % of its members.

Universities can create associations with other universities to achieve common goals. In addition, they have complete freedom to establish for-profit and non-profit legal entities.

*Financial autonomy*

The funding of Polish universities has a grant structure. Grants are mostly allocated rather directly to faculties and specialties than to the university as a whole. The University has the right to freely reallocate grant funds. Surpluses from grants can be kept by the university; however, their allocation is coordinated by an external authority and can only be used for investment purposes.

A special feature of this autonomy dimension for Poland is the possibility of borrowing funds on the financial markets. The state is the guarantor of this loan in most cases, but the application for the loan must be approved by an external authority.

Important from the standpoint of financial autonomy is that universities can freely decide to sell or lease the buildings and constructions.

The tuition fees cannot be charged to students. However, universities have the opportunity to form a list of special educational services for which fees are charged.

*Staffing autonomy*

As regards the area of staffing autonomy, Polish universities are completely independent. Only full professor posts must be confirmed by the ministry.

Concerning salaries the ministry establishes their minimum level and universities have the opportunity to set salaries.

*Academic autonomy*

Polish universities can decide on the overall number of students, however, for some areas of knowledge there are quotas established by the ministry.

Polish universities have the right to independently adopt educational programs without a prior accreditation, both at Bachelor and Master levels.

**Cluster 5 (France;  $I_0 = 0,13$ ;  $I_{\text{France}} = 0,18$ )** [1; 2; 6; 7].

*Organizational autonomy*

The selection of the university's executive head (president) is carried out by the university board/council and requires validation of the ministry. French universities have a dual governance structure that includes both a board/council and a senate-type body. The main decision-making body of the university is board/council which, like in other countries, carries out strategic management of the university in the areas of academic, financial and organizational debt. The activities of the council are complemented by the senate-type body («academic council») of the university, which, as a separate body, was established in 2013. The competence of the senate includes a focus on staffing matters.

Unlike other analyzed countries, in France universities do not have the right to change their organizational structures, but they have the right to create legal norms for the functioning of both for-profit and non-profit legal entities.

*Financial autonomy*

The financing of universities is carried out on a grant block basis, however, unlike other countries, in France the block grants are clearly split into categories. The funds have a special purpose and their movement must be negotiated with an external authority. In addition, universities with the consent of an external authority can receive the funds raised and keep the surplus at their disposal.

In terms of tuition fees, French universities almost do not have autonomy. Tuition fees are differentiated for different categories of students and set by an external authority.

However, unlike the situation in some countries, universities in France have the freedom to dispose of their property. They can buy it or sell it without restrictions.

*Staffing autonomy*

The level of staffing autonomy is significantly low. There are a lot of restrictions and rules for recruiting staff to the university. Thus, professors in the university can be selected only from the national list of professors, administrative staff is hired only with the consent of an external authority, etc. For universities, there are two restrictions on recruiting: the number of posts that is determined by an external authority and budgetary restrictions on salaries within the university. The dismissal procedures are strictly regulated, since all employees have civil servant status.

*Academic autonomy*

The low level of academic autonomy is determined by the restriction on the number of students in specific areas at the national level. Admission of students to Bachelor's program is carried out only on the basis of documents issued by an external authority.

All training programs, both at Bachelor and Master levels, must be accredited, since only after accreditation they can receive funding. Autonomy in the academic sphere has a manifestation in the development of content of academic programs.

**Conclusions.** Based on the study, the following conclusions are drawn:

1. The autonomy of the higher education system of European countries has a differential structure, which is determined by different dimensions of autonomy and characterizes by specific features of each cluster.
2. In terms of general autonomy, countries may have a low level, but from the standpoint of the local components of autonomy, the higher education system in each cluster can be quite autonomous. This testifies not to the low level of autonomy of the higher education system, but to its specific development conditioned by the traditional and national principles of the higher education system.
3. The identified representatives in each cluster characterize specific features of the cluster. The study of representatives determined the characteristic advantages of the higher education systems of the member countries.

Thus, autonomy of the system of higher education is a multidimensional phenomenon, and one cannot say that only autonomy can provide advantages in the competitive struggle in the market of educational services.

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