

FINANCIAL SUPPORT OF UKRAINIAN STATE UNIVERSITIES

This paper outlines some problems in Ukrainian higher education financing system. We analyzed characteristic features of incomes and expenditures accounting system in state universities and suggested to provide internal accounting system in concordance with centers of financial responsibilities. Thus we tried to combine elements of market economy (e. g. competition, profit maximization) and tough governing for increasing motivation and efficiency state universities activity.

Key words: accounting; state university; centers of financial responsibility; state incomes and expenditures; state and private financing.

Formulation of the problem. State budget of Ukraine consists of two parts: general and special funds. The general fund is filled by tax payments and fees at the state level. And at the university level, the fund is formed through budget appropriations. But the state institution is filled special fund through its own revenues. Theoretically funding from the general fund shall cover the current and capital expenditures of state institutions. However, Ukrainian budget is not getting enough revenue to cover all forms of expenditures, as covered only part of the current expenditures (70–80 %). After analyzing the structure of the general and special funds of the State Budget of Ukraine for 16 years for the Ministry of Education and Science we found that part of special fund is 30 % for educational institutions and this ratio is growing.

Expenditures for both funds are divided into consumption expenditures and development expenditures. In cur-

rent (or consumption) expenditures we can include the cost of labor, utilities (public services and electric power) est. (See Figure One).

Consumption expenditures – is the part of budget expenditures that ensure current financing of state and local governments, public organizations, current intergovernmental transfers and spending on financial support measures of social protection and social and cultural institutions, as well as other expenses not included in the development cost and unallocated expenses [1].

On the other side, development expenditures – a spending of budgets for the financial support of scientific, investment and innovation, including financial support for capital investment and industrial non-production, financial support for economic restructuring, and other costs associated with the expanded reproduction.

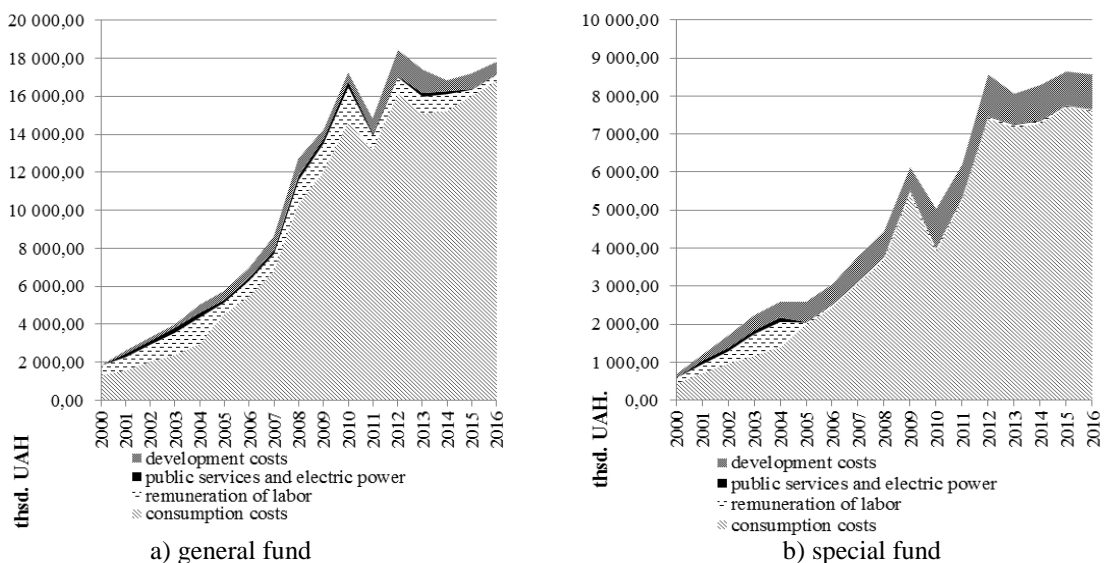


Figure 1. Ministry of Education and Science expenditures structure by general and special fund in 2000–2016 years

Source: Author's calculations based on appendixes of Ukrainian State Budget Law 2000–2016 years

As we saw in Figure One both for general and for special fund Ministry of Education and Science consumption expenditures are dominating and form 87–99 % of general fund and 74–90 % of special fund. So, the major part of special fund is financing consumption, but development is also important for such type of institutions.

In case of greater detail level of structures expenditures of Ministry of Education and Science in 2016 we realized that only 67 % activity expenditures provide by general fund and other 33 % – by special fund. So, state universities approximately 30 % of their expenditures provide by their own incomes. Management of such institutions is challenged to effectively and efficiently use this funding during the year in order to ensure the functioning and sustainability of budgetary institutions.

Analysis of recent research and publications. Scientific research on the theory of general management and budgeting in particular were developed by I. Ansoff, P. Drucker and further by E. Brigham, R. Kaplan and D. Norton, J. Hope, R. Pindyck and D. Rubinfeld. Theory and practice of budgeting process developed such scientists the former Soviet Union, as I. A. Blank, A. D. Sheremet, A. N. Podderohin and others. Features of the establishment and functioning of the endowment fund are studied in the works of scholars such as O. A. Baturin, M. A. Isaev, L. Kozarenko, A. V. Leonov and others. And there is the basis for increasing the financial autonomy of universities formatting in today's Ukrainian legislative field (new laws about education, higher education, partial financial independence of universities and so on).

Outlining earlier unsolved aspects of the problem. In modern Ukrainian realities the question of financial autonomy of public universities is sharp enough, that causing the need to find additional sources of internal and external financial support. Ukrainian Ministry of Science and Education intends to change the concept of higher education, so state universities have to be ready for new challenges.

Purposes of the article. The main objective of the research is the delineation and grouping of the major problems that associated with the financial support of public universities functioning in Ukraine, and developing specific proposals to improve the financial autonomy of such institutions.

Main research. The main problems in activity of state universities as budgetary institutions. There are lots of problems that appeared in process of financing and accounting in state educational institutions. But we can group these problems in several classes:

1. Efficient governmental control of special fund incomes and expenses after 2000 year. It was time when non-budgetary funds became part of general budget of country. So, administration of universities lost independent control and right to spend such funds without permission of the main administrator of budget funds. All incomes for university have to enter in its account that opened in State Board of Treasury. And all payments of university have to be processed by that Board.

The order of using this fund (and an incomes plan) ought to be affirmed by main administrator before fiscal year beginning for every month. So, this decision provided better control of state budget for government, but did a lot of harm to self-supporting basis for state universities.

2. Complete dependence on the political and economic situation in the country in sphere of the stability of general fund revenues. Budgetary institutions at the beginning of the budget process provides for a specified amount counted funding requirements for the next budget period. After a general summary of all budget proposals and full coordination magnitude of funding, budgetary institutions receive marginal expenditures of the general fund budget.

Limiting amounts don't always meet the stated budget proposal. That is, the budgetary institutions should be prepared to ensure that the general fund will be financed not all projected expenditures. Thus, funding is transferred to a special fund. But even the approved amount of the general fund is not always gives the guarantee of 100 % of fulfillment the budget expenditures.

The value of the general fund of the state budget can be adjusted according to actual revenues of the state budget. Therefore, certain planned spending item cannot be funded. This is influence of external environment to the budget agency, circumstances to which it cannot influence, a certain risk of activity.

3. Failure to accurately predict future funding requirements (contingent of students, etc.) through regulated timing of the budget process. Budgetary institutions have to submit their budget proposals in July. For universities, this means a very complex problem, namely mismatch academic and fiscal year forecast requires recruitment of students for the next academic year at the time has not yet been set in the current year (in September). That is, the accuracy of these forecasts deteriorates. Of course, these problems exist only for education sphere; other institutions are not directly connected to specific periods other than calendar year.

4. Offset the actual level of financial independence of universities and governmental intentions. The program of economic reforms «Prosperous Society, Competitive Economy, Effective State» in 2010–2014 years [5], developed by the Committee on Economic Reforms under the President of Ukraine identifies the main areas of education, namely: first, improvement of education management involves increasing autonomy of educational institutions to make arrangements of financial resources, and secondly, improving education financing involves universities to raise additional funds through legalization institute «endowment» – nonprofit charitable trust funds, using of grant support research projects and educational innovations, expanding the list of paid services provided by educational institutions.

Thus, increasing the autonomy of universities to make arrangements of financial resources means one of things: exclusion special fund from the State Budget of Ukraine, or the involvement of other mechanisms, which are not yet announced. The same problem with endowment funds: uncertain whether they will be included in a special fund budget and thus to the state budget or not.

5. Significant dispersion subordination of educational institutions, which reduces the possibility of management and control over their activities sole administrator or any other entity. Estimates of universities approve main administrator – the branch ministries and departments, and the Ministry of Education and Science of Ukraine. So

there is no sole main administrator for the educational sector.

Flawed system management university characterized by the subordination of its dispersal, in particular at the beginning of 2009/10 academic year in the management of the Ministry of Education and Science were 293 universities of I-IV accreditation levels, the Ministry of Health – 56, the Ministry of Agrarian Policy – 47, the Ministry of Culture and Tourism – 35, the Ministry of Transport and Communications – 20, the Ministry of Internal Affairs – 13, the Ministry of Family, Youth and Sports – 10, State Forestry Committee – 8, by 5 University of I-IV accreditation subordinated to the Ministry of Defense and the Ministry of Labor and Social Policy. 169 universities of I-IV accreditation levels are in control of other ministries (agencies) [2].

These types of problems prevent further development of educational sphere and decrease competitiveness of university (educational and scientific sectors) and also graduating students.

Centers of financial responsibility as the first step to market success of universities. Valid accounting and revenue management is the foundation for improving financial results and performance of any enterprise. For budgetary institutions also necessary and possible to carry out accounting and control revenues and expenditures received and implemented within the proceeds of a special fund in the context of structural units – responsibility centers.

Separation in the structure of the budget entity financial responsibility centers will track actual performance of units, their level of profitability or loss, and in accordance with the current strategy, optimize the structure of the institution, leaving only those units that strengthen its financial position.

Implementation of organization and accounting of revenues and expenditures of the special fund proposed exercise by the presented scheme (See Figure Two) in several stages. Equivalent at the beginning is the allocation of responsibility centers specific budget agency and classification of revenues and expenditures of special funds.

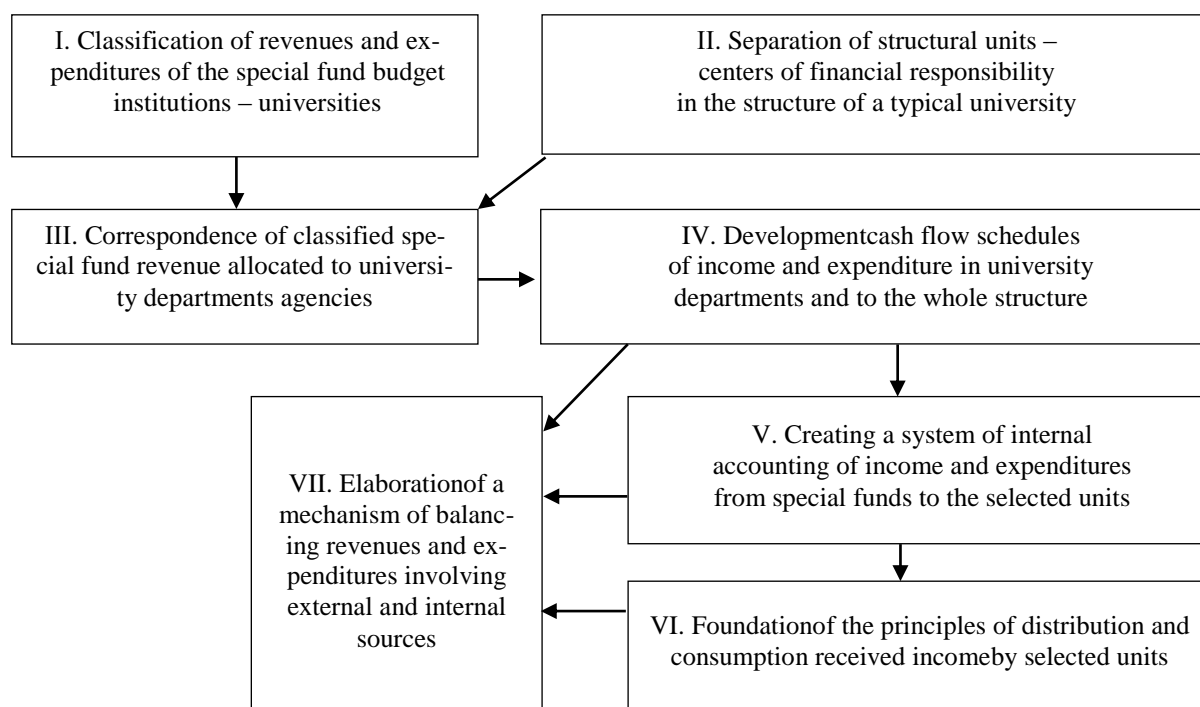


Figure 2. The sequence of system implementation recording income special fund universities in terms of responsibility centers

Source: Author’s own elaboration

In the process of allocating in the structure of the institution (university) responsibility centers we need to understand that most of the money will come as tuition. Other units that don’t generate their own income have to fund from the share of these funds.

The starting point of this option is the selection of the structure of universities mentioned above responsibility centers (See Figure Three).

Center of responsibility is a division of the organization, which has its own budget, defined authority and responsibility in the plane of the expenditure, the formation and use of proceeds. For universities, it is advisable to allocate such responsibility centers: centers of investment,

financial results, income, basic and secondary education expenses; center management costs and investment center.

Investment center is a university as a whole, with all its territorial units. Investor center focuses a portion of the proceeds of all departments and directs them to make investments.

Centers of income include university departments, which are responsible for obtaining the appropriate income, providing not only cover operating costs, but also the development of material resources, social development. Head of the center is responsible for revenue within his unit. Centers of income may include the branch, representation, and management of the university.

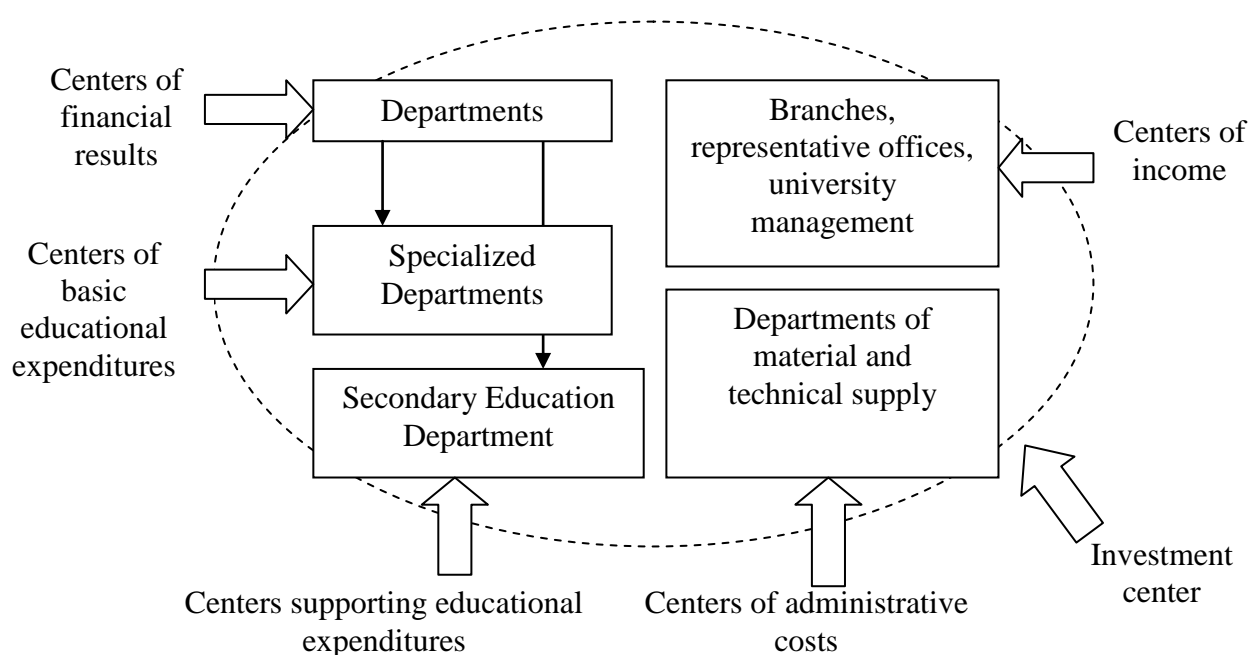


Figure 3. Distribution of responsibility centers on the structure of universities

Source: Author's own elaboration

Centers of financial results included departments that are directly engaged in the flow of funds from extra-budgetary sources. The chief of these centers is responsible for the income and expenses in the total unit and able to assess the financial performance. Usually, such centers may be faculties.

There is no possibility to allocate here profit centers (which exist in structure of self-supporting enterprises), budgetary institutions have no profit and don't calculate financial results because of state financing form and ownership. However, there is a necessity for universities to distinguish revenue centers and «profit» centers like at the enterprise. We can call it – centers of «financial results».

It's possible to identify such a category as «income» or «results from economic activity» [8] when we talk about special funds incomes, although it is not legally prescribed and provided. However, each «profit center» universities can separate the incomes and expenses from ongoing activities and bring some financial results.

But in reality this does not happen because of a clear separation of all allocations (in general fund), the full disbursement of the special fund and rigid centralization of university revenue management. In the case of segmentations such responsibility centers it's necessary to adopt new sub-accounting for revenues, expenditures and financial results of economic activity in the required detail by departments, faculties or specialties. In the process of responsibility centers separation internal accounting department can add new sub-accounting for revenues, expenditures and financial results of economic activity in the required detail by departments, faculties or specialties.

Centers for basic educational expenses operate on the direct provision of services to third parties. In relation to

providing educational services it can be specialized departments.

On the other side secondary departments provide the learning process (e. g. general and fundamental disciplines) who indirectly participates in shaping income of departments and university in general, but not be the center of administrative costs. It is therefore advisable to allocate separate centers supporting educational expenses.

Centers for administrative costs may be based on units that do not directly generate revenues for university, but they make it indirectly through the provision of various services to other units of institution. These are departments and service of university's management.

Each of indicated above responsibility centers has its own budget and is responsible for its implementation. The value of budgeting for university derives from the fact that it is:

- represents the strategic and tactical goals of the university in the form of specific financial indicators;
- reveals the possibility of implementing programs and plans of universities in terms of the provision of financial resources; to determine the priorities of the university in the context of limited financial resources;
- determines the amount of university departments funding from a variety of sources;
- allows monitoring targeted and efficient usage of financial resources.

The most competitive divisions will develop, invest funds received in new projects, invest in training of their teachers and students abroad and will be able to improve its financial base, etc. (See Figure Four). The centers of financial results for the university usually are faculties, institutes or departments.

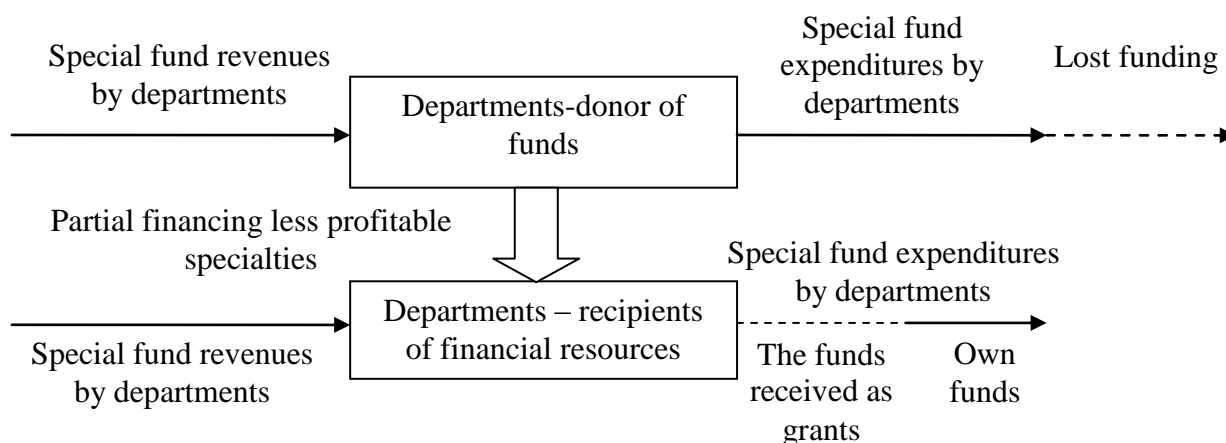


Figure 4. Interaction of donors and recipients departments inside of university

Source: Author's own elaboration

Also, it's the usual practice of using unpaid financing of certain departments of university. It means that such departments receive subsidy funds for a principle of irrecoverability and free of charge. Lost resources of more profitable divisions do not compensated in any way. Thus, it leads to eliminating any motivation to increase own revenues by such units and damages for the entire institution as a result.

Thorough analysis requires more details: not only the distribution of department's cash flows, but also records of these funds on specific specialties within each department.

Of course, these changes will require additional costs: additional staff of accounting department, creating appropriate software for internal accounting system to service centers of responsibility etc. However, such costs are reasonable and definitely are investments in the further development of the institution. Parts of the funds that remain available for the department have to cover all current expenses and priorities of development expenditures. When we cover only the highest priority current expenditure, the motivation of activity disappears. To calculate the specific particles we need to analyze real data of some state university.

We have tested this model on Economy department of Black Sea State University data. We proposed to use separate accounts for internal accounting of revenue, expenses and financial results of financial responsibility centers [6]. Analytical provision for operations on domestic borrowing between departments was developed. We defined the internal accounts for managerial accounting for income and expenditure of departments, transactions between them and the financial results of their activities. Three-dimensional model of information-analytical display revenue generation and cost-sharing for responsibility centers on the special funds was developed. The proposed model connects educational, scientific services and products of each center with revenues, expenses and financial results of units as often as necessary [7].

Balance and cash flow management of state university. The appearance of a temporary excess or deficiency of funds is not a good thing even for the state university. On the one hand surplus does not signal the problems existing in the institution, but it indicates about inefficient usage of available resources, which can subsequently lead to more problems.

For those enterprises that do not have full or partial funding from various levels of budgets, the question of imbalance cash flow is solved in case of:

- lack of funds – the borrowing of funds for a certain period of credit institutions or other participation in the financial markets (stocks, bonds, etc.);
- excess of funds – the temporary placement of surplus funds in the financial market (often in the form of deposits).

There are also exist the access to the resources of the financial market for state institutions but with some limitations. In this area clearly separated institutions that are funded by local and state budgets. The procedure and the order of temporarily deployment free funds are prescribed for local budgets, which can place part of the general or special fund on account in the authorized banks, if it does not lead to the insolvency of the local budget [3].

However, for budgetary institutions those are financed not from the local budget it isn't an appropriate procedure. But state universities are mostly such institutions. The Ukrainian Law of «About State Budget of Ukraine» for some years, and the Ukrainian Law «About Higher Education» were prescribed authorizations for budget institutions – universities to place temporarily free funds on deposit in banks, but after the new Budget Code (2010) the above laws were adjusted accordingly. And only in 2015 the Ministry of Finance of Ukraine adopted a resolution about order for higher and vocational education institutions for possibility placing temporarily free budget funds received for paid services to deposit accounts in state banks [4]. But there is not any procedure or explanation for this order still.

Thus within a budget organization can see primary essence of credit and deposit operations of financial market when entities with temporary excess resources provide another enterprises with a temporary need for the principles of repayment etc.

The advantages of this proposal are that:

- units that need to temporarily bring cash, get the necessary financing (provided the necessary financial stability);
- financial resources are not go beyond the institution (no external risks).

The difference between the current practice and proposed funding options is that resources are not transferred

to the unit-recipients by a principle of irrecoverableness and free of charge, because such an approach disappearing any motivation for self-development and improvement of the financial condition of subdivision. Of course it's not possible to immediately apply market principles in the state universities. For example, the provision of financial resources on terms requiring payment includes except the refund debt the accruing interest.

However, for some units lack of funds is only temporary (or they attract them to invest in), and they afford to pay the interest, but some units can have a constant lack of funds, which in any other way will not be covered. For them, of course, will be sufficient to return borrowed resources and the implementation of payment interest will be unreasonable.

So, we offer the following levels of management and revenue sharing of university structural units:

1. Management and distribution at whole institution level (as in most universities at the moment).

2. Management and distribution at unit level on the principles of payment and return (depending on the state of each unit).

3. Management and distribution separately within each of the three types of financial responsibility centers (units that provide educational services, no educational services and administrative units).

4. Management and distribution within each major center of responsibility composed of several units with different income levels.

Thus, the total amount of funds that develops university and the directions of their distribution almost will not change, however, significantly change the principles by which financial resources are allocated. As some structural units (institutes, departments) includes several components (departments, specialties), the initial allocation of funds may be accomplished for major units, then financial resources will not be scattered throughout the whole institution in result.

Positive consequences and prospects. To increase the efficiency of economic activities of state universities,

as well as to enhance their financial autonomy we offer to distinguish funds by special funds from the state budget and to consider transfer their service from State Treasury of Ukraine to private banking institutions.

The implementation of classification special fund revenue and allocation of structural units – responsibility centers allowed the development schedule of revenues and expenditures (cash flow) for the institution as a whole and in selected structural units for continuous monitoring of the formation of temporary surpluses or shortages of money each month. Were offered the ways of balancing cash flow units by grounding principles of special fund income distribution that received by responsibility centers, using the elements of the internal accounting system of units. The units will be able to estimate the size of their revenues and expenses, the temporary funding needs and involve the necessary funds.

Financial independence of units will enable them to build and motivate their own base income. That will consolidate the financial position of the whole institution. Implementation principles of self-sufficiency of structural units is an attempt to create a kind of mechanism, such as the market, which would stimulate to simultaneously improve the quality of services and reduce their costs without centralized intervention.

In case of stable financial position and development of university, when it's possible to carry out development expenditures, it is necessary to create an additional development fund of organization. Surplus of subdivisions income may be source of financial resources. A successful development of sponsorship universities and a significant level of charitable contributions university can accumulate sufficient funds to develop innovative projects and research.

While in most countries with developed market economies such system funding of university exists and develops, is not enough market leverage to motivate businesses to make significant sponsorship and charitable contributions to the development of education and science in the Ukrainian economy today.

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ФІНАНСОВЕ ЗАБЕЗПЕЧЕННЯ УКРАЇНСЬКИХ ДЕРЖАВНИХ УНІВЕРСИТЕТІВ

В дослідженні окреслені окремі проблеми у фінансовому забезпеченні, з якими стикаються українські державні вищі навчальні заклади. Автором було проаналізовано характерні риси поточної організації обліку доходів і витрат у державних університетах та запропонували створити внутрішню систему обліку відповідності до виділених центрів фінансової відповідальності в структурі таких установ. Таким чином, ми пропонуємо поєднати окремі елементи ринкової економіки (у т. ч. конкуренцію, максимізацію прибутку) та державного управління для зростання мотивації та ефективності діяльності державних вищих навчальних закладів.

Ключові слова: облік; державні вищі навчальні заклади; центри фінансової відповідальності; доходи та витрати; державне та недержавне забезпечення.

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ФИНАНСОВОЕ ОБЕСПЕЧЕНИЕ УКРАИНСКИХ ГОСУДАРСТВЕННЫХ УНИВЕРСИТЕТОВ

В исследовании обозначены отдельные проблемы в финансовом обеспечении, с которыми сталкиваются украинские государственные высшие учебные заведения. Автором были проанализированы характерные особенности текущей организации учета доходов и расходов в государственных университетах, предложено создать внутреннюю систему учета в соответствии с выделенными центрами финансовой ответственности в структуре таких учреждений. Таким образом, мы предлагаем совместить отдельные элементы рыночной экономики (в т. ч. конкуренцию, максимизацию прибыли) и государственного управления для роста мотивации и эффективности деятельности государственных высших учебных заведений.

Ключевые слова: учет; государственные высшие учебные заведения; центры финансовой ответственности; доходы и расходы; государственное и негосударственное обеспечение.