

Project Management in Universities - Accounting Payroll on the Example of the University of Lodz

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Abstract

In mid-2012, the University of Lodz (UL) was the first Polish public university that commenced the process of implementing a comprehensive financial management system. The solutions introduced at the university were based on the experiences of European universities participating in the project 'The EUIMA - Full Costing project'.

One of the most important issues of the new concept of university management was adequate recording, control, and settlement of salaries' costs. Those costs are a crucial cost element for all types of activities (educational and research projects) in each UL department. The transfer pricing system based on absorption cost (full cost) is used in order to charge remuneration cost to an individual project. The variances from transfer prices are settled at the end of a financial year. The study aims at presenting specific solutions adopted by UL for recording and settlement of salaries' costs.

The solutions implemented in the UL, based on project management, would be applied in other 12 Polish public universities that have received funds from the government to implement their own integrated systems of the university.

Keywords: full costing, cost of salaries, operating costs.

Introduction

Following the provisions stipulated in the Bologna Declaration¹, in order to increase the competitiveness of European universities and facilitate efficient allocation of financial resources from various sources (funds), governments of many countries of the 'old EU' have taken steps towards the implementation of cost accounting (costing) in higher education institutions which is the basic

tool to measure costs for various purposes, including project management. These activities in the European countries were commenced in different years of the last decade and have been taking place to this day. The degree of the implementation of advanced forms of full-cost accounting (full costing) is very diverse. The universities that have adopted changes in cost accounting have faced changes in management processes through the development of strategic management. These processes have become similar to the management of commercial entities. More and more universities 'in the old EU countries' focus their efforts on eliminating waste in order to reduce costs, and on accurate identification of the costs of such projects that involve complex costs. In other words, they strive to increase the efficiency of the use of funds in the realized projects. The acceleration of the processes regarding the implementation of cost accounting in universities has been affected by the crisis that has touched public finances, which has caused the reduction of funds spent by governments on higher education in the European countries (e.g., by 20 % in Italy, 16,4 % in Ireland, and by 10% in the Netherlands).

The experience of the authors in the implementation of cost accounting at the University of Lodz (UL), as well as that of other universities², shows that the majority of problems in designing and implementing full costing in higher education entities is generated by the key resources, i.e. the human factor. The costs of maintaining these resources are fixed costs and account for a large share in the costs incurred by universities (from 50 % to 70 %) and in the direct costs of research projects and educational services. The method for measuring and settling the consumption of these resources during the execution of various activities performed throughout various time periods (calendar year/academic year) is important for the quality of information on the costs and profitability of research projects and educational services.

The purpose of this article is to:

1. present the results of the analysis of the change process that occurred in the years of 1990 through 2011 in cost management in universities from 9 countries of the European Union, where the process

¹ The Bologna Declaration is a document signed by the ministers of education originally from 29 countries (1999), and later by 18 ministers from other countries (2001, 2003, 2005, 2007 and 2010). It includes tasks leading to a convergence of the systems of higher education in the countries from which the signatories of the declaration come from. The main objective is to create a European Higher Education Area. For more on this topic, see: The Official Bologna Process website: <http://www.ond.vlaanderen.be/hogeronderwijs/bologna>.

² Compare with European University Association Publications (2011), (2012), (2013).

of implementing changes in cost accounting is significantly advanced; during the analysis of this process, particular attention was paid to the method of measurement and accounting concerning the payroll costs as regards the academic staff;

- draw conclusions that can be helpful in the development and implementation of cost accounting tailored to the information needs of strategic management in universities in European higher education area.

Research methodology

1. The analysis of the current process of changes in cost management in European universities has been carried out on the basis of literature review and the experience gained during the implementation of full costing in European universities gathered throughout the project 'Full Costing' which was conducted as a part of the EUIMA project realized by the EUA under the 7th Framework Program of the European Commission.

The 'Full Costing Project' was implemented between 2010 – 2012 by the European University Association. This project aimed at:

- raising the awareness concerning the full-cost accounting as a tool for strategic management in universities,
- providing examples of best practice to encourage mutual learning and sharing of experiences in the development of full-cost accounting,
- providing specialist support in the development and implementation of full-cost accounting in European universities,
- encouraging the governments of individual countries to provide their support through facilitating the development of full-cost accounting and showing a positive correlation between the government support and the development of this management accounting tool in universities³.

2. The *Case Study* method – the analysis of the case of the implementation of cost accounting in the Comprehensive Information System (CIS) of the University of Lodz. The CIS project was developed in the years 2004-2007 (it was commissioned by the Rector of the University of Lodz) by accounting professionals employed at the University of Lodz. The updating and implementation of the project was commenced in 2012.

1. Experience of selected European countries in the area of measuring and settling payroll costs in public institutions of higher education

1.1. Experiences from Germany⁴

The costs of remunerations in the full costing system introduced at the Technische Universität Dresden are grouped as follows:

- payroll costs of the staff engaged in the teaching process,
- payroll costs of the staff engaged in research and development,
- payroll costs of the employees performing other services.

These groups of remuneration are financed from such sources as the state budget, institution's own resources, and external funds. The allocation of payroll costs is related to the types of positions existing in the structure of the University, as shown in Table 1.

Accounting payroll at the Technische Universität Dresden is done on the basis of staff timesheets.

To sum up the experience of the Technische Universität Dresden, it should be noted that payroll costs, although being primarily divided into three parts (teaching, research and development, other services), are eventually aggregated into two categories: (1) teaching and (2) research and development. The employees of the Technische Universität Dresden fill in timesheets, on the ongoing basis, which are the basis for the settlement of payroll costs related to projects in the area of research and development. Then, the teaching part covers a fixed part of payroll costs, depending on the nature of employment (Table 2).

1.2. Experiences from Portugal⁵

One of the universities in Portugal, where a modern cost accounting system has been implemented in order to effectively manage costs is the University of Coimbra.

Within the costing system, the measurement and settlement of the payroll costs is done, based on the following division:

- teaching (different types of studies),
- research,
- support services.

The most important issue is the principle of settlement of payroll costs in the division into individual didactic activities. Measuring payroll costs is done on the basis of the actual working time of each employee and the average – calculated monthly – actual payroll cost fixed for one hour of actual work. Payroll costs are charged to the area of research activities and the one of support services in the same way.

³ Source: EUIMA report - Full Costing, 'The sustainability of university funding, financial management and full costing', <http://www.eua.be/eua-projects/current-projects/euima/euima-full-costing.aspx>, date of accessing: 2011-11-13.

⁴ On the basis of Küpper (2000), Kopp (2002), Winker (2011, June), Wündisch (2011, June).

⁵ On the basis of Cravo (2010, December), Elsa (2010, December), Gomes (2010, December), Xavier (2010, December).

Table 1

The allocation of payroll costs at the Technische Universität Dresden

Excerpt from the framework manual	Allocation on the basis of teaching loads or allocations ... (in %)	
	teaching	research
Scientific personnel		
Professors	50,0	50,0
Research Fellows (Councils)	50,0	50,0
Research Fellows on time limited app.	25,0	75,0
Teachers for part. Tasks	100,0	-
Non-academic personnel		
Administrative Staff	50,0	50,0
Library Staff	50,0	50,0
Technical personnel	25,0	75,0

Note: From 'Implementation of full costing at TU Dresden', by M. Winker, 2011; presentation during Study Visit to the University of Dresden.

The average (monthly) payroll cost includes the following components: gross remuneration, overheads, remuneration for holidays, provisions for retirement benefits, other kinds of insurance, etc.

Actual payroll costs are settled on the basis of the regularly filled timesheets. Only the actual number of hours spent on a given project is settled.

The principles of measurement and settlement of payroll costs are not uniform in all the institutions of higher education in Portugal. They are developed independently by each institution. For example, at the University of Porto⁶, these costs are divided into four parts: teaching, research, services (related to each of the 'core business' units), and other (not related to the 'core business' activity). A further breakdown of payroll costs is as follows: in the area of teaching – into each type of studies (undergraduate, graduate, etc.), in the area of research and development – into various research projects. In the case of services, their settlement is done based on their types.

1.3. Experiences from the Netherlands⁷

In Dutch higher education institutions, payroll costs are allocated into three main areas: teaching, research, and other activities, e.g. the development of intellectual capital, patient care (in hospitals – this applies to medical faculties), consultancy. The carrier of actual payroll costs is the actual time spent by the academic staff (teaching and research) and the support staff (support services). Such a division makes it possible, for instance, to obtain the information on the payroll costs in a cross-section mode of different fields of study.

1.4. Experiences from Finland⁸

Since 2010, all Finnish universities that previously were state universities have become independent legal entities under a public law or private legal persons. This has generated a need for changes, *inter alia*, in the cost management system to provide managers with relevant and timely information on costs, revenues and results across different categories of information.

The application of the principles of full costing has been required by the Ministry of Education since 1997. Also, the two main sources of national funding have required the use of the principles of full costing since 2009/2010.

Cost management in Finnish universities is standardized. Payroll costs are divided, in the first place, into four types of activities:

- teaching,
- research,
- artistic activity,
- social relations.

Payroll costs include the following components: gross remuneration, overheads, remuneration for holidays, provisions for retirement benefits, other kinds of insurance, etc., and are treated as direct costs of the realized educational projects (services). The harmonization of the rules on payroll costs allocation in Finnish universities provides a good basis for the development of benchmarking in each entity and on the level of the central offices.

1.5. Experiences from the United Kingdom⁹

There is harmonization of practices in the cost management system of UK higher education institutes.

⁶ More information in Ribeiro (2010, December).

⁷ On the basis of European University Association (2010), Aartsen (2011, June), Estermann (2011, October), Aartsen (2012, January).

⁸ On the basis of Ahonen (2011, June), Österberg-Dobson (2011, October).

⁹ On the basis of Bateman (2011, October), Clark, Bush (2011, October), Espinasse (2011, June), Hurd (2011, October), Mitchell (1996).

Accounting payroll is done according to a model based on transfer prices. Payroll costs have been divided into three groups:

- teaching,
- science,
- other.

For example, at Oxford University, analysis has been made of the academic staff work and it has been agreed that:

- academic staff work an average of 54 hours during a working week,
- out of those hours, 27 % covers teaching, 52 % – research, and 8 % – other activities. The remaining number of 13 % is related to support work in these fields,
- every teaching hour needs 4,3 hours of preparation for classes,
- for every hour of research funded by external sponsors, the faculty committed to devote further 1,3 hours to research and 45 minutes to preparatory work.

This data has been used for measuring and settling payroll costs related to research projects and the teaching process.

2. The concept of the Comprehensive Information System at the University of Lodz

Since the launch of the Bologna Declaration implementation in Polish public higher education entities, very different approaches and attempts to introduce changes to cost accounting have been observed:

- a) systemic approach to changes in the university information system, involving the development of the model of a complex system of financial accounting and management accounting (including modern costs and results accounting) for the entire university and its decentralized units (e.g., departments) – University of Lodz,
- b) pilot implementation of the principles of a new costing system (in a single selected department) without the support of an integrated IT system – Wrocław University of Technology,
- c) purchase of a commercially available integrated information system, which makes certain activities in the field of accounting and financial reporting more effective (e.g., Jagiellonian University, University of Silesia, Czestochowa University of Technology). These implementations did not involve a new cost accounting system or other management accounting methods providing information for the sake of the strategic management of the university.

The University of Lodz has used a systemic approach. As early as in 2004, the rector authorities of the university were fully aware that the quality of information provided by the previously used traditional full-cost accounting does not correspond to the needs of university management in accordance with the Bologna Declaration. The starting point for launching the changes in the information system and its adaptation to the information needs of decentralized

management of the university was the establishment of a project team appointed to develop a Comprehensive Information System for the Management of the University of Lodz (referred to below as CIS). It consisted of about twenty professionals – research-teaching staff of this university – working under the supervision of professor Irena Sobańska. In 2007 the team finished the development of the project of an accounting system that takes into account the basic elements of the financial accounting system (chart of accounts, financial reporting) and the assumptions and methods of the management accounting system, such as multi – task costs and results accounting, transfer prices used to value internal services and a performance measuring system.

One of the assumptions for this system states that the principal business of the university is realized in the form of educational projects (one-year projects or several-year projects) and various research projects with different periods of implementation and funding sources.

The developed full-cost accounting system is multi-purpose in its nature and it provides correct measurement of the cost of education (a student), the cost of the type of studies by the obtained degree and sources of funding (undergraduate and graduate studies), the cost of education by the type of studies (intramural and extramural studies), research costs by projects and the sources of their financing, and the cost of services participating in the exchange between the internal units of UL. Simultaneously, the system provides information about the costs and results necessary for financial and departmental reporting (plans and reports on the realization).

The principles of the new full costing system make an innovative solution, due to a lack of information on such cost accounting systems in literature and due to the fact that no university in Poland has applied such a solution in practice. Its assumptions are consistent with the direction of changes introduced to the cost accounting systems of public universities in other European countries that have already been indicated.

In July 2012, the implementation of the Comprehensive Information System was taken up at the University of Lodz. January 1, 2013 saw the production start of the integrated ERP system, a tool supporting the creation of the information in CIS. Under this system, there is held, *inter alia*, the Employee Portal, which is used for recording the working time of the academic staff, since it is the basis for the settlement of the remuneration of this employee group.

3. Principles of measuring and recording payroll data in the Comprehensive Information System at the University of Lodz – the main assumptions

At the University of Lodz, remunerations and the derivative costs related to them¹⁰ (referred to below as payroll costs) account for over 70 % of the costs of the University. Payroll costs are incurred during the

¹⁰ Social security and other employee benefits.

implementation of each process. Thus, the development and adoption of proper arrangements for their settlement is the most important element in cost accounting of the institution, as it determines correct calculation of the actual costs of individual teaching and research projects, and enables their profitability analysis. This information is the basis for a decision to continue or discontinue the realization of some courses of study, specializations, or research activities.

The core business of the university is divided into the following basic processes, out of which the first two are covered by project management:

- teaching,
- research,
- organizational (administrative).

The CIS project included an assumption that education at UL, similarly to the research process, is realized in the form of educational projects.

Individual training projects are the studies carried out as specific courses, on the specific level of education, in a particular form and within a specified time cycle.

The level of education means first degree studies, second degree studies, uniform graduate studies, and Ph.D. studies. Due to the form of providing the students with educational services, studies at all levels of education may be run as intramural and extramural studies as well as evening and weekend studies. The time cycle is the period from the start of a particular educational path until its planned completion.

An example of a teaching project is intramural undergraduate studies, carried out in the form of a course in accounting realized within the teaching cycle (in years) from 2013 to 2016. Each of these projects is treated as a separate educational project. It meets all the basic features of projects, and, therefore, has a fixed start date and completion date, distinguished phases of the project life cycle, scope of subjects, implementation schedule, cost budget, and sources of funding.

Research activity is one of the fundamental tasks of the University, and it includes scientific research and development work as well as the provision of research services. Research and development activity is understood as creative performance including scientific research or development work undertaken on a systematic basis in order to increase the stock of knowledge and the use of it to create new applications. The whole area of research is realized by UL in the form of research projects. An example of a research project is 'Development of the Principles of the Comprehensive Information System at the University of Lodz'.

Teaching and research projects are carried out primarily by the teaching–research staff belonging to the group of employees called 'academics'. Each university teacher, in addition to the activities related to teaching and research, is required to perform specific administrative tasks. These tasks include, for example, participation in faculty meetings, committees, etc. These activities are referred to at UL as an organizational process, which due to its specific nature is covered by project management.

The present costing ensures correct valuation of the full cost of teaching and research projects in terms of ex–post and ex–ante in the structure which contains direct costs and indirect costs. In the category of direct project costs, the largest share is represented by the costs of academics' remuneration. Depending on the category of the project (teaching or research), different rules for measuring the payroll cost broken down into individual projects are applied.

The costs of remuneration of the academics involved in teaching projects are determined during the calendar year on the basis of transfer pricing.

In accordance with the guidelines of the Ministry of Science and Higher Education, only the actual costs should be charged to the full costs of the research projects carried out. For this reason, the University of Lodz has abandoned the use of transfer pricing for the purpose of the on–going recording of the payroll costs concerning academics incurred in research projects. The reason for this approach is the fact that the settlement of deviations from the transfer prices of remunerations, due to their nature and its consequent limitations, takes place at UL twice a year: at the end of a calendar year and at the end of an academic year. The use of transfer pricing of remuneration in research projects would lead to a situation in which the actual costs of these projects would not be established on a regular basis, which would prevent the settlement of the financial resources provided by funders.

For the sake of measuring and settling payroll costs, a classification has been used of the University employees according to the criteria of the functions held by them at the university and the nature of their work. In this classification, the following two groups of employees have been distinguished:

- I. Academic teachers (AT),
- II. Employees who are not academic teachers.

In the first, primary, group of employees there are four subgroups of academics marked with the following symbols: TR, T, R, L:

1. Teaching and research staff (TR);
2. Teaching staff (T);
3. Researchers (R);
4. Librarians (L).

To facilitate the process of budgeting and the control of the costs of payroll in individual projects, it has been decided to use transfer pricing in the current registration of payroll costs, concerning academic teachers executing educational projects.

At the University of Lodz, transfer prices are set for 1 working hour of teaching. Average rates are determined separately for each position, for example, the highest rate applies to an hour worked by professors, a lower rate applies to an hour worked by assistant professors and the lowest rate applies to classes run by teaching assistants. A transfer price is the cost of maintaining the human resource for one hour and includes the following types of costs:

- gross remuneration,
- compulsory social insurance of employees,
- other employee benefits mandatory at the University of Lodz, and

- some indirect costs of the internal unit of the University of Lodz employing academic teachers, i.e. costs that accrue to maintaining the human resource involved in the educational process.

The remuneration (including the related derivative costs) for the period of leave has been excluded from the calculation of the transfer price.

For the calculation of the transfer price for one hour, potential annual working time of an academic staff member in the amount of 1 792 hours of work has been adopted. Thus, the transfer price of one working hour (**P**) consists of two basic components: remuneration along with its derivatives (**X1**) and indirect costs overhead of the unit employing an academic teacher (**X2**), which can be represented by the following formula:

$$P = X1 + X2$$

where:

* *wh* – working hour – working time of an academic teachers

Transfer prices that will be in force next year are set at the end of the current calendar year on the basis of annual budgets: the budget payroll costs of academics, the budget of derivative costs related to the payroll of academic teachers, and the budget of the costs of maintaining the entities employing the academic teachers. They are applied throughout the following calendar year. A change in the rates of transfer prices during a calendar year is permissible in the event of significant changes in the remuneration or substantial changes in the values of social security benefits or other benefits for employees.

The ERP system acquired by the University of Lodz did not include the Human Resources Payroll module adapted to the specifics of the processes carried out at the University and the information requirements of the implemented cost accounting. For the correct measurement of the payroll in teaching projects, the University has decided to adopt a systemic approach, which involved purchasing the additional system 'Staff Portal', which has very broad functionality, and one of the areas of this module is the registration of the working time. This system is linked to the so-called 'dean' USOS system operating at the University of Lodz, where the schedules for the upcoming semester are posted. The employee portal automatically downloads each teacher's schedule. At the end of each month, the data from the employee portal form the basis for measuring and recording payroll costs regarding academic teachers by individual projects. During the given period, changes to the schedules are taken into account by means of introducing adjustments. After completing timesheets with other activities in the form of research projects and participation in the organizational work, the data is automatically transferred from the Employee Portal to the Human Resources Payroll system¹¹, and then to the ERP system for further processing. Then, registration is carried out into the General Payroll Ledger by the realized projects: teaching

and research ones as well as other activities. As a result, the costs calculated as the product of the transfer price (**C**) and the actual number of hours spent on various educational projects are charged to educational projects.

This way of settling payroll costs is based on the assumption that the time of conducting classes includes: the time spent in the room with students and additional time required to prepare for a class. Analysis shows that one hour of work 'in the classroom' requires additional three hours devoted by the teacher to prepare material for the class, checking exam papers, and individual consultations with students. Thus, if the schedule shows that a teacher realized one hour of classes, in fact, the actual time of his work is four hours. The converted, actual time of work is included in the records of the teacher's working time.

Payroll costs charged to teaching projects during the calendar year are established on the basis of transfer prices and the converted amount of working time. Due to the fact that some classes can be attended by students under various educational projects, charging payroll costs to projects is carried out in two stages:

1. first, the payroll cost in the transfer price is identified with a particular subject, which means that at the end of each month, from the database of timesheets, information is collected on the number of hours spent by each teacher for each **subject** within the schedule of classes. Then, the product is calculated of the appropriate transfer price and the number of hours spent on each subject.
2. then, information is collected on the number of students assigned to a specific project and attending the classes concerning a given subject. The following situations may occur:
 - a) one subject is attended by students assigned to the same project; then the payroll cost of a teacher conducting the class is charged to a single project,
 - b) one subject is attended by students assigned to different projects; then the payroll cost of a teacher conducting the class is allocated to each project proportionally to the number of students under a given project participating in classes concerning the given subject.

The number of students, which is a key issue to measuring and settling payroll costs is automatically downloaded from the 'dean' USOS system. The above steps are shown in Figure 1.

Charging payroll costs to teaching projects is done at the end of each month. Due to that, the University has current information about the increasing costs of implementing a specific project.

Settling the deviations from transfer pricing in order to calculate the actual costs of teaching projects takes place twice a year, at the end of each calendar year and at the end of an academic year. The settlement made at the end of the academic year is aimed at the settlement of any deviations and determination of the actual full cost of the ongoing and ending projects. The settlement at the end of the calendar year is primarily enforced by the obligation to settle the received annual state educational grants and the

¹¹ It is the University's own system, developed by the team of the employees of the University of Lodz and adapted to the needs of CIS.

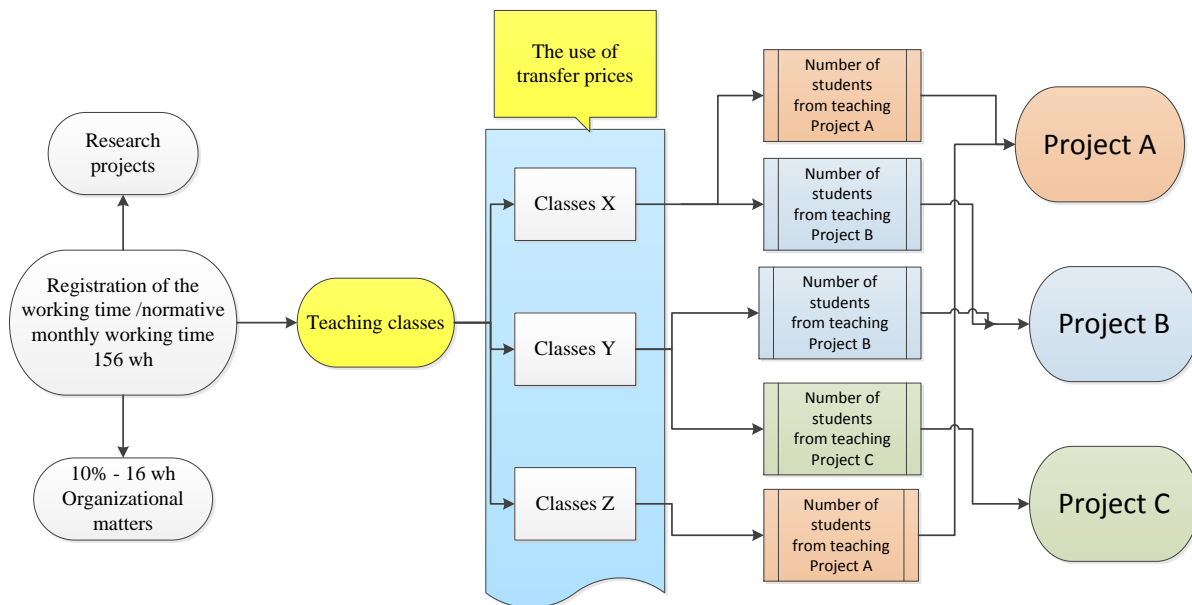


Figure 1. Principles of settling payroll costs by educational projects realized at the University of Lodz

Source: The author's own elaboration

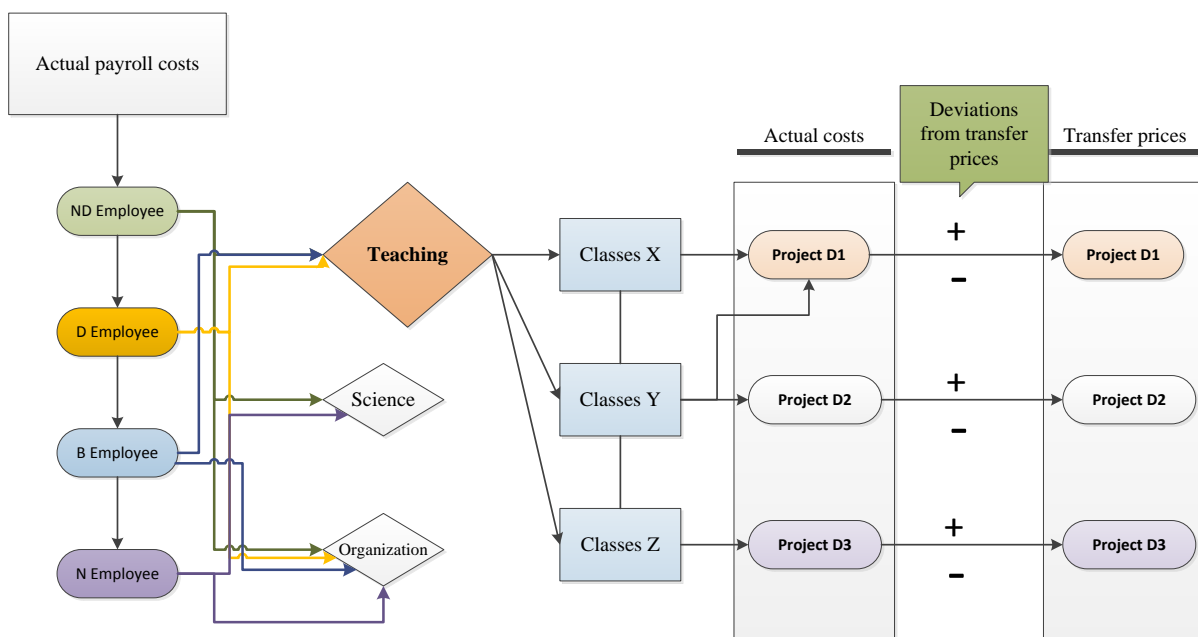


Figure 2. Diagram of the settlement of deviations from transfer pricing at the end of the period

Source: The author's own elaboration

principles of financial reporting applicable to Polish universities.

More frequent settlements of the deviations from transfer pricing are not justified on the grounds that the actual distribution of working hours of employees during the academic year is uneven. Remunerations of the full-time academic staff make the fixed cost incurred regularly

each month in the same amount, irrespective of the dates of the conducted classes, and the classes carried out by individual teachers are usually unevenly distributed during the academic (and calendar) year. It happens sometimes that a teacher performs all his/her tasks in one semester, but he/she receives remuneration regularly, at a fixed amount every month.

Settling the deviations from transfer pricing is made in proportion to the total number of the hours spent on various educational projects.

A key issue in the process of the settlement of deviations from transfer pricing is that a university teacher is paid for three basic types of activities, which are:

- teaching – the time devoted to teaching activities (for educational projects),
- science – the time spent on research projects,
- organization – the time spent on organizational matters (formal matters).

Only a part of the remuneration for teaching activities is subject to the settlement of the deviations from transfer pricing. For this purpose, detailed records of the actual working time of the teachers from the Employee Portal are used. With the working time records, the University of Lodz obtains, among other things, the following information for each teacher separately: the number of teaching hours spent on individual classes over each month of the academic year.

At the end of a calendar year and an academic year, actual payroll costs related to the ‘teaching’ academic staff are compared with the costs of remunerations based on transfer prices charged to various educational projects. Deviations from transfer prices are charged to the costs of educational projects. This approach is justified because the distribution of employee hours during the academic year is uneven. The cost of the remunerations for conducting scientific activities, at the end of each month, is charged to the cost of individual research projects.

Payroll costs for organizational tasks are charged to the appropriate internal units – as their maintenance costs – which is shown in Figure 2.

It should be noted that the method for measuring and settling payroll costs developed in the costing project carried out by the University of Lodz differs from the solutions used by the previously analyzed universities. The transfer price of one hour of work of an academic lecturer (AT) used in the teaching projects covers the full cost consisting of direct costs of maintaining the human resource (gross salary plus its derivatives plus indirect costs of maintaining the internal unit that employs a given AT). Direct costs do not include remuneration for the time off from work and the cost of pension provisions (such provisions are not created at the University of Lodz).

The way of measuring and settling payroll costs developed at the University of Lodz takes into account the remuneration system, used and repeatedly modified, focused on measuring payroll only by employees, rather than the projects under their performance, which in recent years have been significantly differentiated.

Summary and conclusions

The process of implementation of cost accounting in European universities has become a reality that is not disputed. However, the way this process is realized is a problem far more complex and it requires a combination of the experience of many different specialists and government institutions. That is why the initiative of the

European University Association in the form of the ‘Full Costing’ project has been particularly valuable, as it enabled the exchange of knowledge across the European countries, including those which are not European Union members.

Based on the analysis of solutions and experiences of universities from different countries, an image of a great ‘building site’ emerges, in which – depending on the country – the construction work on the application of a new cost accounting system in higher education institutions is more or less advanced. The analysis of the experiences expressed by the participants of the ‘Full Costing’ project and authors’ own experience allow drawing certain conclusions that seem to be universal for any university in any country.

1. The main factor decisive for the effective implementation of cost accounting in universities is the need for support from the central government, involving the coordination and stimulation of activities for the creation of general principles of the cost accounting system in the universities of any country as well as financial support.

2. Prior to the implementation of the new cost accounting system, it is necessary to develop an accurate and detailed design of such a system customized for each university, and then draft its implementation. In the majority of cases, academic professionals dealing with management accounting actively participated in the development of the costing project and its implementation.

3. The implementation process is a time of ‘trial’ for the entire university. It is necessary to ensure incessant communication of the goals and objectives of the performed activities and financial incentives for the employees involved in every stage of the implementation in order to minimize the risk of failure. It is of paramount importance to obtain strong commitment of the highest university authorities (rector, chancellor) in the process of implementing the new system of cost management, as this would enable quick resolution of important issues.

4. The implementation of new methods of management accounting at the university, including costing, should be based on a decentralized management model, which gives significant autonomy to individual departments.

5. The experience of the authors shows that the implementation of cost accounting and other management accounting methods requires increasing awareness and knowledge of all the university employees. Therefore, it is necessary to carry out cycles of training not only for the employees of financial and accounting departments, but also, and perhaps primarily, for the academic and administrative staff who will be responsible most for the quality of the obtained information. One of the main risks associated with the implementation of the new system, which must be responded to accordingly, is that the modern system of management accounting is based on the creation of information by the so-called ‘non-financiers’, who then are the main beneficiaries of the knowledge acquired from this system.

6. The most difficult problem related to costing at universities is to measure the costs of remuneration paid to employees and their settlement according to different activities (research projects, courses of studies, forms of studies, conferences, postgraduate studies).

7. The condition necessary to ensure the functioning of the costing system at universities is also implementing an integrated ERP system.

8. Because of the individualized remuneration systems used by universities and the differences in the specifics of their business, the measurement and allocation of payroll costs must also be individualized, which prevents a direct use of the ERP systems available on the market adapted to the measurement of remunerations in production facilities.

9. The human factor as a key resource in the processes carried out in universities requires the development of detailed rules for measuring the costs of its maintenance and accounting due to various activities.

10. In all the analyzed cases of the implementation of cost accounting in universities, the costs of maintaining human resources, including payroll costs, are usually divided into three groups according to the basic processes carried out in universities: teaching, research and development, and other activities.

11. The analysis of the costing implementation process in public universities in several EU countries shows that there are different ways of measuring and settling payroll costs concerning academic staff. In the 'old EU', the measurement and accounting in the payroll area focus on the direct costs of maintaining this resource, while the University of Lodz takes into account the full cost of maintaining such a resource which includes both direct costs and indirect costs. In EU countries, direct costs include gross remuneration for the time worked including its derivatives, provisions for pensions, remuneration for the time off from work plus its derivatives. In the case of the University of Lodz, these costs include only the gross remuneration for the working time including its derivatives, due to the fact that provisions for pensions are not made at the University of Lodz, and the same refers to the remuneration for the time off from work.

12. Proper measurement of the costs of maintaining human resources and their settlement in accordance with resources' engagement in individual types of activity determine the quality of information on the costs and profitability of research and educational services created in full costing. The effectiveness of the university-based costs management in the long run and the status of remaining competitive depend on the quality of the above-mentioned information.

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Projektų valdymas universitetuose – darbo užmokesčio apskaitos pavyzdys Lodzės universitete

Santrauka

Keletą metų iš eilės vis mažėjo pelnas Lenkijos valstybiniuose universitetuose. Viena vertus, taip yra dėl Lenkijos demografinės padėties. Kita vertus, esama padėtis buvo sukelta pagrindinio institucinio finansavimo sumažinimo ir finansavimo, dėl kurio konkuruojama, padidinimo. Dėl to universitetai labiau suvokia būtinybę geriau identifikuoti savo veiklos kaštus. Prieš keletą metų universitetai ėmėsi optimizuoti veiklos kaštus, kad būtų galima užtikrinti reikalingą pelną.

Kaštų apskaitos įdiegimas Europos universitetuose tapo neabejotina tikrove. Tačiau būdai, kuriais to siekiama, yra žymiai sudėtingesnė problema, kuri reikalauja susieti daugelio specialistų ir vyriausybinių institucijų patirtį. Štai dėl ko Europos universitetų asociacijos „Pilnųjų kaštų“ (angl. „Full costing“) projekto iniciatyva buvo itin vertinga: ji leido keistis žiniomis tarp Europos (ne tik Europos Sąjungos) šalių.

Atsižvelgiant į įvairių šalių universitetų sprendimų ir patirties analizę, matoma, kad susidaro tam tikra prasme „statybų aikštelė“, kurioje (priklausomai nuo šalies) naujų apskaitos sistemų pritaikymo aukštajame moksle „statybos“ yra daugiau ar mažiau pažengę. Projekto „Full Costing“ dalyvių ir pačių straipsnio autorių patirties analizė leidžia daryti kai kurias išvadas, kurios, atrodo, turėtų galioti bet kuriam universitetui, bet kurioje šalyje.

1. Pagrindinis veiksnys, reikalingas efektyviam kaštų apskaitos įdiegimui, yra centrinės vyriausybės parama, į kurią įeina bendrųjų kaštų apskaitos principų universitetams kūrimo koordinavimas ir skatinimas bei finansinė parama.

2. Prieš pradėdant taikyti naują kaštų apskaitos sistemą, reikia parengti tikslų ir detalių tokios sistemos projektą, pritaikytą kiekvienam universitetui, ir tada pasirengti ją taikyti. Daugeliu atvejų kuriant ir įgyvendinant apskaitos projektą aktyviai dalyvavo su valdymo apskaita dirbantys profesionalai – dėstytojai.

3. Įdiegimo procesas yra „išbandymo“ laikas visam universitetui. Siekiant sumažinti nesėkmės tikimybę, būtina užtikrinti nuolatinį atliekamų veiksmų tikslų ir finansinių skatinamųjų priemonių atskleidimą darbuotojams, dalyvaujantiems kiekviename įgyvendinimo etape. Itin svarbu pasiekti, kad aukščiausia universiteto valdžia (rektorius, kancleris) stipriai įsipareigotų remti naujos kaštų valdymo sistemos diegimą, nes tai leis greitai išspręsti svarbius klausimus.

4. Naujų valdymo apskaitos metodų (taip pat ir kaštų apskaitos) diegimas universitete turėtų būti paremtas decentralizuotu vadybos modeliu, suteikiančiu didelę autonomiją padaliniais (katedroms).

5. Patirtis rodo, kad kaštų apskaitos ir kitų valdymo apskaitos metodų įdiegimas reikalauja, kad visi universiteto darbuotojai įgytų naujų žinių. Dėl to reikia perkvalifikuoti ne tik finansų ar apskaitos skyrių darbuotojus, bet ir (gal net visų pirma) dėstytojus ir administratorius, kurie bus atsakingi už surinktos informacijos kokybę. Viena iš pagrindinių rizikų, susijusių su naujos sistemos įgyvendinimu (ir į kurią reikia atitinkamai atsižvelgti), yra ta, kad šiuolaikinė valdymo apskaitos sistema remiasi informacija, kurią kuria vadinamieji „nefinansininkai“, kurie pirmieji ir gauna naudą iš šios sistemos surinktų žinių.

6. Sudėtingiausia problema yra kaštų, susijusių su užmokesčiu darbuotojams pagal įvairią veiklą (mokslinių tyrimų projektus, kursus, konferencijas, doktorantūrą), nustatymas.

7. Tam, kad veiktų kaštų nustatymo sistema, universitetuose taip pat turi būti įdiegta integruota EPR sistema.

8. Dėl individualizuotų universitetų darbo apmokėjimo sistemų ir jų veiklos specifikos skirtumų, darbo užmokesčio kaštų skaičiavimas ir paskirstymas taip pat turi būti individualizuotas. Dėl to neįmanoma tiesiogiai panaudoti rinkoje esančių EPR sistemų, kurios pritaikytos darbo užmokesčiui vertinti gamybos įmonėse.

9. Tai, kad žmonės yra pagrindinis išteklius procesuose, kurie atliekami universitetuose, reiškia, jog reikia paruošti detalias taisykles, leidžiančias nustatyti jų išlaikymo kaštus ir atsižvelgti į įvairias veiklas.

10. Visais analizuotais kaštų apskaitos įgyvendinimo universitetuose atvejais žmogiškųjų išteklių išlaikymo kaštai (įskaitant darbo užmokesčio kaštus) paprastai skirstomi į tris grupes pagal pagrindinius universitetuose atliekamus procesus: dėstymas, moksliniai tyrimai ir kita veikla.

Reikšminiai žodžiai: „pilnieji kaštai“, atlyginimų kaštai, veiklos sąnaudos, universitetas.

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