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ISSUE OF ALLOCATION OF OVERHEADS - THE PRACTICE OF THE HUNGARIAN HOTEL INDUSTRY

Анотація. *У результаті зміни бізнес-середовища особам, які приймають рішення, потрібно все більше інформації. Щоб компанії могли успішно конкурувати в глобалізованому світі, глибокий аналіз їхніх бізнес-процесів і структури продукту є основою для прийняття рішень. Конкуренція за задоволення очікувань споживачів змушує менеджерів постійно стежити за вартістю своїх товарів і послуг, змінами структури витрат, переглядати свою цінову політику. Зросла цінність наявної інформації про внутрішні процеси компанії, характеристики продуктів і послуг серед зовнішніх і внутрішніх зацікавлених сторін компанії. Після Першої світової війни виникла потреба в уніфікованій системі бухгалтерського обліку для учасників галузі з певними характеристиками. У результаті цих зусиль була створена Уніфікована система облікових записів для готельної індустрії (USALI), яка служить для задоволення інформаційних потреб менеджерів, залучених в індустрію послуг тимчасового розміщення. Документ спирається на змістову основу обліку витрат, але водночас не займає твердої позиції щодо питання розподілу накладних витрат. У статті досліджується проблема та практика розподілу накладних витрат між учасниками готельної індустрії Угорщини. Основна популяція первинного дослідження була представлена готелями, які мають правові відносини з членами Угорської асоціації готелів і ресторанів (HHRA). Збір даних проводився за допомогою анкети, завершеної в грудні 2016 року за участю 74 респондентів. На момент закриття анкетування кількість готельних одиниць, які є членами HHRA, становила 398. Таким чином, готовність відповісти склала 18,59% серед членів. Отже, частка вибіркової сукупності становить 7,75% порівняно з 955 діючими готелями. Щоб актуалізувати результати опитування, у травні 2022 року було проведено повторне анкетування в рамках фокус-групи, сформованої керівництвом AHHR (президент, генеральний секретар) та шістьма відомими регіональними лідерами. У повторному опитуванні шляхом письмових чи усних відповідей взяли участь 6 осіб. Результати емпіричного дослідження на вибірці показують, що учасники угорської готельної індустрії переважно покладаються на традиційні методи розподілу витрат для формулювання практики розподілу накладних витрат, але в той же час вони, здається, спрямовані на адаптацію сучасних процедур.*
Ключові слова: *розподіл накладних витрат, USALI, фактори витрат, готельна індустрія Угорщини.*

JEL Classification: D23, L83.

Absztrakt: *Napjaink változó üzleti környezetben a vállalkozások vezetőinek széleskörű információra van szükségük ahhoz, hogy a sikeresen versenyezzenek globalizált világunk versenypalettáján. Szükséges a döntéseik alapjául szolgáló üzleti folyamataik és termékstruktúrájuk mélyreható elemzése. A fogyasztói elvárásoknak való megfelelés arra kényszeríti a vezetőket, hogy folyamatosan kövessék termékeik és szolgáltatásaik önköltségét, a költségstruktúra változásait és felülvizsgálják árpolitikájukat. A vállalkozás külső és belső érdekeltjei körében is megnőtt a vállalat belső folyamatairól, termékeiről, szolgáltatások jellemzőiről beszerezhető információk értéke. Az első világháborút követően jelent meg a sajátos jellemzőkkel bíró ágazat szereplői részéről egy egységes számviteli rendszer összeállításának igénye. Ezen erőfeszítések eredményeként fogalmazódott meg a Szállodaipar Egységes Számviteli Rendszere (USALI), mely a vendéglátóiparban érintett vezetők információigényének enyhítését szolgálja. A dokumentum a költségszámvitel tartalmi keretére épít,*

ugyanakkor nem foglal határozott álláspontot az általános költségek felosztásának kérdéséről. Jelen tanulmány a magyar szállodaipar szereplői körében tárja fel az általános költségek felosztásának kérdéskörét és gyakorlatát. A Magyar Éttermek és Szállodák Szövetsége tagsági jogviszonnyal rendelkező szálláshely-szolgáltatók köréből merített 74 elemű mintát tartalmazó empirikus kutatás eredménye rámutat, hogy a magyar szállodaipar szereplői döntően a hagyományos költségfelosztási apparátusra támaszkodva fogalmazzák meg az általános költségek felosztásának gyakorlatát, ugyanakkor látszanak a korszerű eljárások adaptálásának az irányába tett erőfeszítések. A felmérés zárásakor 398 szállodai egység volt a HHRA tagja. Így a válaszadási arány 18,59% volt a tagok körében. Tehát a minta részesedése 7,75% a 955 működő szállodához képest. A felmérés eredményeinek felfrissítésére 2022 májusában egy megismételt felmérést végeztek a MÉSZSZ vezetőségéből (elnök, főtitkár) hat prominens regionális vezetőből álló fókuszcsoport részeként. A megismételt felmérésben 6 fő vett részt írásbeli vagy szóbeli válaszadás útján. Az empirikus mintavizsgálat eredményei azt mutatják, hogy a magyar szállodaipar szereplői főként a hagyományos költségallokációs módszerekre támaszkodnak a rezsiallokációs gyakorlat kialakításában, ugyanakkor a jelek szerint a modern eljárások adaptálására törekszenek.
Kulcsszavak: *költségfelosztás, USALI, költségfelosztási kulcsok, magyar szállodaipar*

Abstract. *As a result of the changing business environment, decision-makers need more and more information. For businesses to successfully compete in our globalized world, an in-depth analysis of their business processes and product structure is the basis for their decisions. Competition to meet consumer expectations forces managers to constantly monitor the cost of their products and services, changes in the cost structure, and review their pricing policies. The value of available information about the company's internal processes, products, and service characteristics has increased among the company's external and internal stakeholders as well. After the First World War, there was a need for a uniform accounting system to be put together by the participants of the sector with specific characteristics. As a result of these efforts, the Uniform System of Accounts for the Lodging Industry (USALI) was created, which serves to satisfy the information needs of managers involved in the hospitality industry. The document builds on the content framework of cost accounting, but at the same time, it does not take a firm position on the question of the distribution of overheads. This study explores the issue and practice of the distribution of overheads among participants in the Hungarian hotel industry. The basic population of the primary research was represented by hotels with a legal relationship with members of the Hungarian Hotel and Restaurant Association (HHRA). Data collection was carried out using a questionnaire, ended in December 2016 with the participation of 74 respondents. At the time of the closing of the questionnaire survey, the number of hotel units with HHRA membership was 398. The willingness to answer was, therefore, 18.59% among the members. Consequently, the proportion of the sample population is 7.75% compared to 955 operating hotels. To refresh the conclusions from the survey, a repeated questionnaire was carried out in May 2022 within the focus group formed by the management of AHHR (president, general secretary) and the six prominent regional leaders. A total of 6 people participated in the repeated survey through written or oral responses. The results of empirical research with a sample show that the participants of the Hungarian hotel industry mainly rely on the traditional cost allocation methods to formulate the practice of dividing overheads, but at the same time, they seem to be in the direction of adapting modern procedures efforts made.*
Keywords: *allocation of overheads, USALI, cost drivers, Hungarian Hotel Industry.*

Introduction. The business processes of the participants in the hotel industry form a complex system over which the control, management, and coordination mechanism are overseen by the senior manager and the heads of the various departments. Consequently, the operation of hotels is characterized by a heterogeneous scope of activities, a diversified organizational structure (departments, segments), exposure to seasonality, and a high fixed cost ratio within the cost structure. In the case of capital-intensive enterprises similar to the hotel industry, fixed costs significantly affect the

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success of diversified activities and business models with a decentralized organizational structure. The representatives of the international literature [3, 4] agree that cost information reduces the need for information in management decisions the most. Blocher et al. [3] study emphasize the importance of determining production and service costs, which provides the company with essential information for areas affecting its future operations, such as cost calculation, inventory value determination, planning, cost analysis, and performance evaluation, supporting operational and strategic decisions. The knowledge about the cost structure of the enterprise, the identification of the factors affecting the evolution of costs, and the most accurate determination of the unit cost of the cost bearers - i.e. products, services, processes, various suppliers, and stakeholders - fundamentally influences the quality of managerial decisions, i.e. the long-term competitiveness and effectiveness of the enterprise. In line with the international literature, Hungarian accounting experts [1, 7, 8, 12] also highlight the importance of cost allocation methods when determining the calculation of unit cost. Several experts believe [3, 4] that an inadequate cost accounting procedure can lead to incorrect inventory value, product line definition, resource allocation, distortion of the strategic approach, imprecise determination of success factors, and a reduction in competitive advantage.

The Uniform System of Accounts for the Lodging Industry (USALI) has been available for participants in the hotel industry for nearly a hundred years, which, in terms of content, is suitable for meeting the requirements of financial accounting (preparation and compilation of reports) and management accounting (facilitating management decisions). To date, the document has gone through several editions. Still, at the same time, it does not take a position on the methodology for dividing general costs, which play a dominant role in the sector's cost structure.

In addition to the description of cost allocation and cost allocation models, the study does not avoid the overview of mainstream economics, and the methodology applied in the hotel industry (USALI) to determine the cost calculation and then goes on to describe the results of the primary research conducted among the participants of the Hungarian hotel industry.

The purpose of cost allocation and cost allocation models. Examined from a historical point of view, the cost allocation practice of enterprises was fundamentally shaped by the changes in the economic and operational environment and conditions of the enterprises, as well as by the information constraint of responses to the changes.

The issue of cost allocation came to light in the middle of the 19th century, when the validity of economic calculations provided by the narrow product range dominating the production structure of industrial companies was questioned. The increase in the complexity of the production structure and the separation of management and ownership rights required the acquisition of a new management approach. The owners of large companies - as information users - demanded detailed information about the production costs of the products. The managers of the controlling production and supporting decisions had to deal with the role of indirect costs (overheads), which represent an increasingly large share of the cost structure [16, 1]. The international dimension of the development history of cost allocation serves as a reference point with some generally reasonable procedures and methodologies. The noted representatives of the international hotel industry [e.g. 16] do not differentiate between the sectoral and the cost allocation procedures developed mainly in

economics, which are divided into the following stages depending on time [16, p. 141]:

a) the period between 1900 and 1940: the highlight of traditional total cost allocation (industrial revolution);

b) the period between 1940 and 1980: the era of variable cost calculation and the definition of the narrowly interpreted break-even point of organizational units;

c) the period between the 1980s and the end of the 1990s: the approach to cost allocation based on activity and process;

d) the late 1990s - nowadays: cost allocation is based on market standards, consumer needs, and expectations.

The literature uniformly calls the methodological framework developed in the first two stages traditional. In contrast, the latter is called modern, strategic costing procedures (Figure 1).

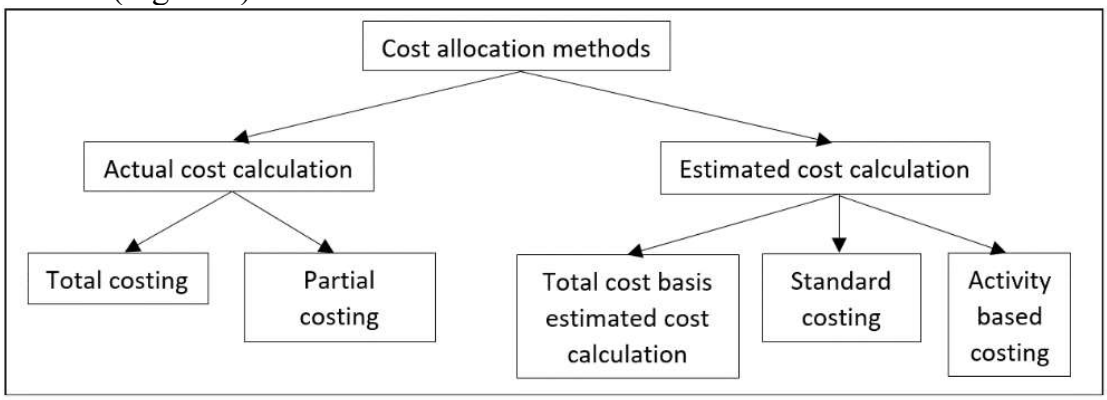

Figure 1. Cost allocation methods

Source: Beke [1, p. 22]

According to Laáb [10], the development of cost calculation procedures can be approached from two directions. On the one hand, progressing from actual cost calculations to estimated cost calculation, on the other hand, partial cost calculation procedures were developed in addition to total cost calculation methods. Musinszki [12] emphasizes the work of the Anglo-Saxon scientific management movement in the development of the allocation of general costs to calculation units, as well as the allocation of resource use to products of the continental trend; at the same time, in the case of the latter, he praises the development steps taken in the direction of determining the cost center.

The traditional total cost allocation system focused on cost efficiency. Until the industrial revolution, the primary purpose of accounting was to register receivables and liabilities. The birth of modern cost accounting can be linked to the spread of heterogeneous product structures, growing company sizes, and complex production processes due to the prosperity of the textile, railway, and metal processing industries. During the period of limited product selection and the homogeneous product structure, the task of cost calculation was to monitor the direct use of labor and materials. They did not deal with the allocation of overheads (indirect, fix costs) to products or the costs of capital commitment. The purpose of the total cost allocation system is to allocate the costs incurred in the context of the company's operation to products using cost drivers.

During *the partial cost calculation*, only variable costs are allocated to the calculation units. Three well-known methods are differential costing, direct costing, and standard costing. Of the three, the direct-costing method is the most widely used in practice, in which methodology only the costs directly adjusted to the level of capacity utilization are charged to the product. It provides information on how much of the product's sales revenue covers the fixed costs and the desired result. Different solutions to the direct-costing procedure can be the following:

- Single-level - directly incurred costs can be charged to the product.
- Multilevel - the fixed cost block is divided into different fixed costs, which are assigned to the cost driver, but only if the costs can be assigned directly without an initial percentage surcharge.

The movement that includes *modern procedures* (estimated cost calculation methods) began in the early 1980s. Satisfying market expectations shifted attention from standardized processes to customized mass products and services. The target of the new cost calculation procedures was the increasing level of overheads and the determination of the price and quality characteristics of individualized products. The interpretation of the cost bearers from the range of products and services to the view of processes, consumer circles, sales/supply channels, and market segments was reassessed [6, 18]. The specific coverage approach of products and services is replaced by the need to know the total cost.

The literature indicates the purpose of cost allocation as follows [1, p. 91; 3, p. 226-227]:

- Determining the actual costs of organizational units, departments, and products - to determine the cost-effectiveness of separate departments within the organization and the profitability of different products and stock evaluation.
- Encouraging decision-making - lower-level managers should act independently, following the goals of senior management.
- The fair justification of costs and rewards – i.e. the fair assessment of rewards earned by managers for their efforts and skill, as well as the effectiveness of their decision-making.
- Motivation - on the one hand, cost allocation can make managers responsible for controlling costs; on the other hand, it can also become a source of conflicts due to the conflicting interests of individual-organizational units.

In Blocher et al. [3, p. 83-84], in the case of service sectors, the importance and role of cost allocation are justified by the existence of organizational units in the organizational structure, similar to production companies.

The USALI's framework for overheads allocation. After the First World War, there was an increase in the demand from the sectors with specific characteristics to compile a coordinated form of financial statements. The Association of the Printing Industry assumed the role of the initiative in England in 1913. The Uniform System of Accounts for the Lodging Industry (USALI), published by the Hotel Association, was among the first in the USA. The document published in 1926 was based on the accounting system accepted in the United States (US GAAP - General Accepted Accounting Principles) and served as a suitable framework for determining and publishing the business results of those involved in the hotel industry. In addition, USALI assists in compiling financial statements and reports to be prepared for external and internal stakeholders [9].

In connection with establishing the result, USALI treats the various activities within the business unit (hotel) as separate responsibility centers. In its understanding, the hotel as an investment center is structured as a profit center of the different activities (segments), where the different departments' units perform the cost and revenue centers. Therefore, the basic principle used during the concept is the so-called "responsibility accounting," which examines the impact of the human factor on operations. Furthermore, the concept emphasizes that the manager can only influence and control the activities within the company that it has real insight into. The USALI defines 32 separate units (segment, department) within the hotel. Due to the nature of the department, the managers of the different departments have different views on the development of the department's revenues and expenses. Therefore, USALI distinguishes between profit centers and cost centers. Profit center managers are responsible for revenues and costs, while cost center managers are responsible for cost trends. The concept is based on the methodology of multi-step partial cost calculation within the framework of traditional cost management when determining the efficiency of different departments. First, the distributable part of the indirect costs is allocated against the margin amounts of the different segments, applying the cause-and-effect principle. At the same time, the result of the period is determined by deducting the undistributed costs of the responsibility centers (Figure 2).

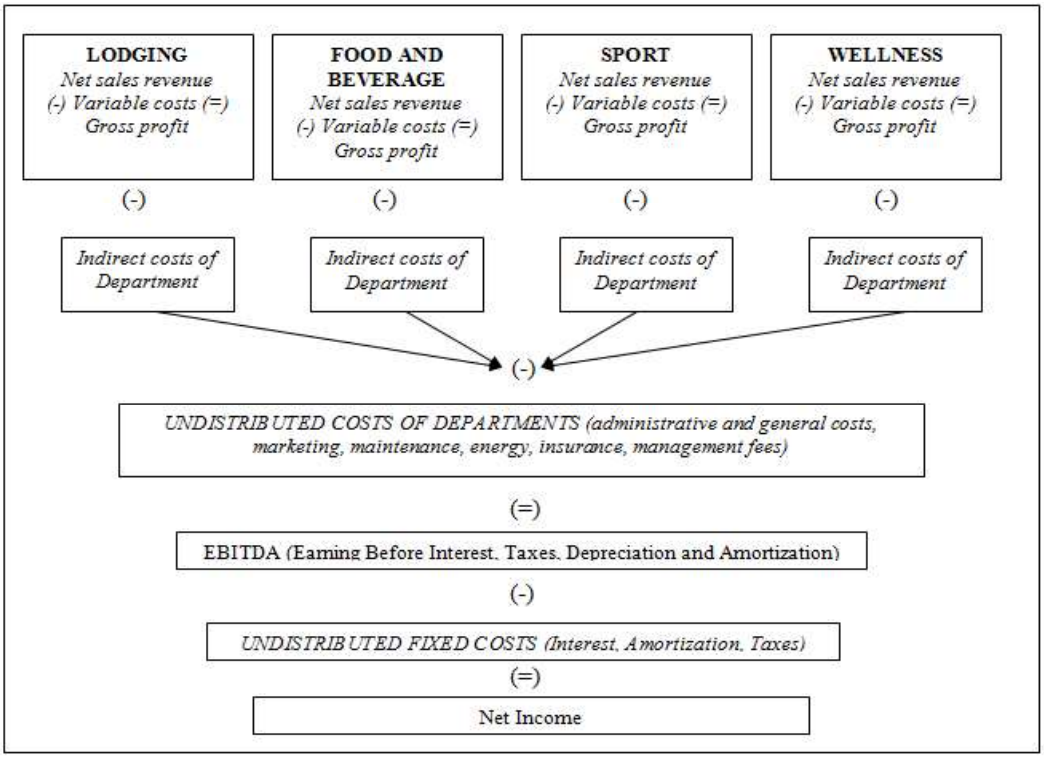

Figure 2. Overheads allocation based on USALI

Source: Peršić–Janković [16, p. 230]

Based on the USALI guidelines, the allocation of overheads has the following options [16, p. 396]

1. *Direct method* - indirect costs are allocated exclusively to the profit centers, with the help of cost drivers such as the sales revenue, wages, or the square meter.

2. *Indirect or incremental method* - gradually allocates indirect cost to profit centers by giving the overheads of service departments to other departments (that is, profit center and other - cost center - departments).

3. *Reciprocal or algebraic method* - the most accurate and accepted practice. We can also talk about cost allocation between the service units during the procedure.

USALI does not take a position regarding the cost drivers to be used during the allocation of costs, leaving it to the officials within the hotel. Therefore, when choosing a relevant factor, it is necessary to explore the nature of the cost driver and its interrelationship between overheads.

A group of international accounting specialists [15, 3] points out in their studies that using only one factor (cost driver) in the distribution of overheads to cost bearers cannot lead to accurate results. Their findings are traced back to the analysis of the evolution of the types and groups of costs that can be found in the framework of overheads, as well as the cause-and-effect relationship between factors. According to their opinion - especially in the case of enterprises characterized by the structure of the hotel as a center of responsibility - there is a cause-and-effect relationship between the types of overheads and the cost factors (e.g., product, department). Therefore there is not only one factor (cost driver), which in itself would express the development of the level of overheads and the intensity of the relationship between the cost bearers.

The cost allocation factors, the cost drivers. The international literature places the appearance of the traditional cost accounting methodology - which forms the basis of USALI - at the beginning of the 20th century, which was developed to produce the information required by the industrial revolution. The characteristic of the period was that the focus was on determining and monitoring the direct labor costs of some standardized products for the production structure of the companies. The allocation of overheads of production into products was carried out in proportion to the direct labor costs. Today, the internal structure of the total cost has undergone a significant change, in which the dominance of direct labor costs has been replaced by the dominance of overheads. The unanimous opinion of accounting experts [1, 3] is that, due to the gradual reduction of direct labor costs in the cost structure, their use as a cost driver is now unsuitable, as it can lead to incorrect cost determination.

We can see a diverse picture about of use of cost drivers in the allocation of overheads, however, the problem that arises in all of them is the justification of their application. As a general practice, wages are used as the cost driver under labor-intensive production conditions, while working hours under capital-intensive production conditions. Due to the complexity of the processes and related systems of businesses operating in today's business environment, the company is usually forced to use sophisticated cost drivers when allocating indirect costs to cost bearers. Such a cost drivers is included in the following table [7, 17] (tabl 1.).

Enz – Potter [5] investigated the impact of the customer mix and the variety of products (rooms, food, retail, etc.) offered at the hotel on undistributed operating expenses and profitability. Their empirical research findings are based on 40 entities belonging to hotel chains in the North-America. Results of the statistical analysis show that increasing costs associated with an expansion of product/service variety are compensated for with incremental revenue. The same cannot be said for an expansion of a property’s customer mix. According to their finding most of a product/service variety’s undistributed operating expenses are related to two key cost drivers: available

and occupied rooms in a hotel. Patiar [13] analyzed cost allocation practices among Australian hotels. His empirical research examined the role of the Food&Beverages (F&B) activities (departments, segments) during the implementation of activity-based cost allocation methodology. From the practice of the 19 item sample, he concluded that overheads are not allocated to determine the costs of F&B department.

Table 1.

Possible Cost Drivers according to Activities in the different Functional Areas

Functional Areas	Activities	Cost Drivers
Materials Management	Issue of purchase orders	Number of purchase orders
	Inspection of materials	
Stores Management	Storing of materials	Value of materials stored
	Servicing of requisitions	Number of requisitions
	Inspection and Verification	Number of times inspected
	Stock Taking	Value of stock
Quality Control	Testing of Samples	Number of batches produced
Marketing	Demand Creation	Increase in sales
	Advertising	Increase in sales
	Despatches	Number of orders
Personal Management	Recruitment of employees	Number of employees recruited
	Maintenance of leave records and attendance	Number of employees
Research and Development	Research	Number of research Projects
Machining	Setup Cost	Number of production runs
	Power cost	Machin hours

Source: Singh [17]

In the theory and practice of accounting, the following three approaches to the distribution of overheads have mostly become established:

- simple allocation calculation (application of uniform cost driver),
- allocation calculation with equivalent numbers (application of different cost drivers for the company's departments and products),
- additional cost driver allocation (application of different cost drivers along the activity).

The first two methods belong to traditional cost accounting, while the third, activity-based costing, provides much more accurate cost calculations in line with today's cost accounting expectations [11].

Accounting experts [1, 2] agree that cost allocation can be carried out based on cause-and-effect criteria or based on arbitrary allocation. According to Beke [1, p. 93] "*we speak of a cause-and-effect allocation if there is a cause-and-effect relationship between the cost and the cost driver*." If there is no significant relationship between the cost to be allocated and the applicable cost driver, then we are talking about arbitrary division.

The cost drivers to be used during the arbitrary allocation are the following [1, p. 93]: working hours, wage costs; production unit proportional; material cost proportional or production cost proportional.

When applying the arbitrary allocation, the performance of the managers and employees of the department burdened with the cost does not affect the amount of the cost to be charged to the department, so the total costs of the product or department do

not provide accurate information about the cost of the product and the operation of the department. In contrast to easy-to-apply, arbitrary systems, cause-and-effect cost allocation systems, such as activity-based costing, give a much more accurate and sophisticated picture. Cause-and-effect cost allocation systems with low error costs and high accuracy generally use more cost drivers.

Limitations of the USALI's methodology. The traditional cost allocation methods underlying USALI are based on production volume. The basis of the procedure is that at the level of the products, the direct material and labor costs can be identified, while the overheads are divided among the cost bearers along a suitably chosen cost drivers. However, a fundamental problem with overheads is that, while the cost pool where the costs are incurred is known, it is difficult to justify the cost driver, i.e., the distribution level to the cost bearers. Moreover, due to the arbitrarily chosen cost driver, the exact distribution of overheads does not take place, so in connection with the "burdening" of individual cost bearers with overheads, we can speak of underflow or overflow compared to the actual, real situation, which process results in a distortion of the cost of products or services.

Blocher et al. [3] emphasize that the traditional cost accounting procedure used by companies with broad product structures, highly heterogeneous business processes, and customer base provides distorted cost information for several reasons:

- its primary purpose is to provide information on the total value of the stocks;
- when allocating overheads to cost bearers, use a cost factor suitable for the company or organizational unit (department, segment) as a whole, such as direct labor hours;
- tacitly marginalizes the possibility of long-term analysis (fixed costs cease to exist in the long term);
- the group of managers aware of the distorting effects of traditional cost accounting, to "correct" the process, tend to use incorrect modifications in cost information, regardless of their actual effects.

While the goal of the total cost accounting procedure is to cover general costs, variable cost accounting, which supports the decision-making process, does not always lead to the coverage of all costs. Due to this shortcoming, there was an incessant demand for developing a new, more perfect method, which serves as an effective aid to managerial decisions and provides suitable support for determining the unit cost.

Several sectoral experts in the hotel industry [16, 14] see the root of the solution to the traditional cost allocation problem in implementing modern, so-called activity-based cost accounting (ABC) method. From their point of view, the source of the advantage primarily comes from the fact that three-quarters of the hotels' cost structure is indirect, and the so-called it consists of uncontrollable costs, which is precisely the basis for the creation of the activity-based cost accounting procedure. This view is also confirmed by Cooper-Kaplan [4], according to which the advantages of the methodology can be exploited by companies that face high and rising costs, have a broad product and service line, customer base, process structure, or combinations of these.

Methodology. The empirical part of the study builds on the sample statistics of research exploring the use of cost allocation procedures among participants in the Hungarian hotel industry. The basic population of the primary research was represented by hotels with a legal relationship with members of the Hungarian Hotel

and Restaurant Association (HHRA). Data collection was carried out using a questionnaire. The data collection ended in December 2016 with the participation of 74 respondents. At the time of the closing of the questionnaire survey, the number of hotel units with HHRA membership was 398. The willingness to answer was, therefore, 18.59% among the members. Consequently, the proportion of the sample population is 7.75% compared to 955 [19] operating hotels.

To refresh the conclusions from the survey, a repeated questionnaire was carried out in May 2022 within the focus group formed by the management of AHHR (president, general secretary) and the six prominent regional leaders. A total of 6 people participated in the repeated survey through written or oral responses.

During the primary research, we use a 5-point Likert scale (extreme values of the value scale: 1-completely disagree, while 5-completely agree) to reveal the cost allocation method followed by the hotel units, which is evaluated based on the arithmetic mean and standard deviation of the answers.

Characterization and evolution of the cost structure of the statistic sample. Before proceeding to the presentation of the primary research results, it is advisable to examine the cost structure of the sample population and its evolution. The development of the cost structure was obtained from the accounting data that can be extracted from the financial statements of the hotels participating in the survey.

From figure 2, shows the dominance of material expenditures, including proportional costs prevails, while the rate of amortization, which can be interpreted as a fixed cost gene, is negligible (fluctuates between 5.47-11.45%). On the other hand, the share of personal expenses, treated as a critical factor from the sector's point of view, fluctuates between 29.67-32.44% and increases somewhat with the onset of the epidemic situation (by 4.95 percentage points, to 37.98%).

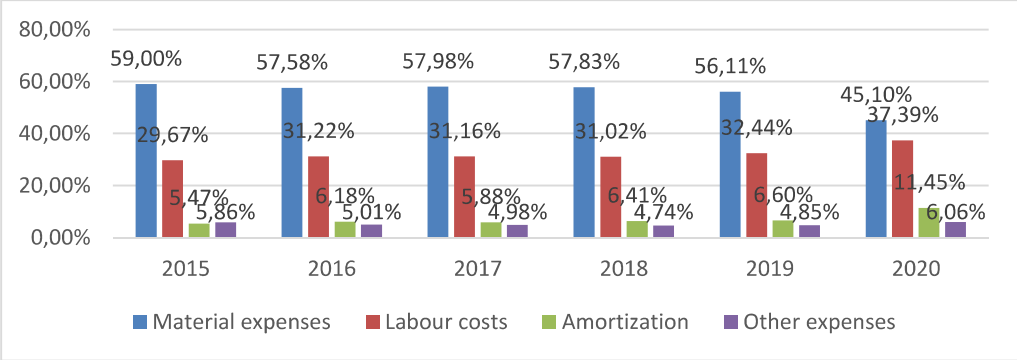

Figure 3. Proportion of expenses in the sample (between 2015-2020, %)

Source: own editing

Belak [2, p. 17] emphasizes that the interpretation of direct labor costs as proportional costs in labor-intensive sectors is questionable. The expertise and experience of human resources employed in the hotel industry is the most valuable element of the company's intangible assets, i.e., it is a key factor in generating and achieving sales revenue. In this approach, the fixed cost part accounts for 35-50% of the cost structure of the sample statistics in the examined time frame, which places the issue of cost allocation methodology at the center of our analysis.

Results. The critical comments against the USALI recommendation are formulated against the unit cost calculation methodology used for short-term efficiency based on the partial cost calculation procedure. The survey results give an idea of the formulation of a similar value judgment if we ask about the decision-supporting role of the cost accounting practice that forms the basis of unit costing. The opinions about the applied procedure praised its role in supporting managerial decisions with short-term consequences. According to survey results 87.9% of the respondents (58 answers out of 66 respondents) believe that the applied cost accounting practices achieve strategic goals.

Today's business environment places demands on the management of hotels - the emphasis on quality, the broadening of the range of services, the reduction of the life cycle of products/services, the spread of flexible service systems, the rapid development of technology, the various processes - logistics, procurement, data processing, etc. - gaining ground - among which staying in the competition can be achieved by applying procedures that ensure the calculation of the total cost. The existence of overheads and their inappropriate allocation are the primary sources of inaccurate determination of unit cost calculation. Within the cost structure of Hungarian hotels, for a quarter of the respondents (response rate 52.70%), the share of general costs exceeds half of the total costs (Table 2).

Table 2.

The proportion of overheads ratio within the cost structure

Proportion	Frequency (N)	Proportion (%)	Cumulate value (%)
Less than 25%	6	15,38	*15,38*
Between 25,1-50%	23	58,97	*74,35*
Between 50,1-75%	9	23,08	*97,43*
Above 75,1%	1	2,57	*100*
Total	***39***	***100***	***100***

Source: own editing

Let's examine depending on the ratings of the hotel. We can state that the expansion of the service portfolio results in a change in the same direction in the proportion of general costs within the cost structure (Table 3).

Table 3.

The average level of overheads based on the hotel ratings

Hotel rating	Not rated	2 stars	3 stars	4 stars	5 stars	Average
Average of the overheads (%)	20	10	39,82	49,05	50	*45,06*
Frequency (N)	1	1	17	19	1	*39*

Source: own editing

Regarding the applied practice of cost allocation, it is typically based on the methodology of traditional cost accounting (54 respondents - 72.97% - allocate general costs to the same extent or with the help of a different projection base) (Table 4, with several answer options).

Table 4.

Practice of overheads allocation (multiple answer options)

Practice	Frequency (N)	Proportion (%)
The different departments of the hotel equally allocate the overheads	12	*19,67*
Departments of the hotel use different factors (cost drivers) to allocate overheads	42	*68,85*
It is implemented along the lines of activities and processes (e.g. based on the ABC method)	5	*8,2*
Not allocated	2	*3,28*
Total	***61***	***100***

Source: own editing

The most frequently used cost driver (66 answers, with multiple answer options) was the sales of revenue, the ratio of all costs, the number of guests, the number of materials used, and the floor space and working hours (Table 5). Under the other options, we received two answers; in both cases, the number of doses was mentioned. Among the answers did not mention projection bases such as labor cost ratio, inventory value-based allocation, or activity time requirement.

Table 5.

Cost drivers used during the allocation of overheads (multiple answer options)

Cost drivers	Revenue	Total cost proportion	Number of customer	Used materials	Square	Working hours	Other	*Total*
Frequency (N)	32	16	7	6	2	1	2	*66*
Proportion (%)	48,48	24,24	10,61	9,1	3,03	1,51	3,03	*100*

Source: own editing

Among the cost driver bases that form the basis of modern methodology, the following methods were identified in terms of processes and activities (5 respondents, with multiple answer options):

- management-related processes: 4 answers (80%)
- accommodation (check-in and check-out) activities: 3 answers (60%)
- cleaning services: 2 answers (40%)
- laundry services: 2 answers (40%)
- purchasing activities: 2 answers (40%)
- additional services (e.g. swimming pool, wellness): 2 answers (40%)
- marketing activities: 1 answer (20%)

In the case of the examined hotel units, the average numerical value of the simultaneously applied processes as cost factors is low in international terms; as a result of the empirical research, this value is 3.6 for hotels, while its standard deviation is 6.26. From this point of view, the primary research results are similar in many respects to international surveys [e.g. 14]. In addition to the processes, we cannot talk about the practice of other cost drivers (e.g., consumer circle, market segment, supply chain, etc.) considered modern in the literature by international results [6] in Hungary.

Table 6.
The practice and limitations of determination of unit cost (multiple answer options)

Determining the unit cost of the product or service	Yes	Fre-quen-cy (N)	No	Freq-uency (N)	Tot al	Fre-quency (N)
The unit cost is determined precisely	24	44,44	30	55,56	54	72,97
The difficulties encountered during the unit cost calculation can be attributed to:						
- Inaccurate allocation of overheads (application of inappropriate methodology)	44	77,19	13	22,81	57	77,03
- Different nature (versions) of products and services	45	80,36	11	19,64	56	75,68
- Complexity of products and services	50	86,21	8	13,79	58	78,38

Source: own editing

From the opinions expressed about the unit costing practice, 44.44% of the respondents (24 answers) evaluated it as adequate. For two-thirds of the sample population (72 responses, 66.2%) the accounting policy does include unit cost calculation, but slightly more than half of the respondents (56.8%, 42 responses), - a total of 57 responses with 77.0% participation - consider it appropriate for basing future business decisions (Table 6). The shortcomings noted concerning the regulations, which limit decision-making to satisfy consumer needs, can be traced back to the complexity (86.21%) and breadth (80.36%) of the supply structure. In comparison, a significant proportion (77.19%) is the incorrect allocation of costs which is compatible with the results of international survey [e.g. 14, 11].

In May 2022, six of the AHHR management and members of the focus group made up of regional leaders (8 people) participated in the repeated survey. The respondents confirmed the importance of the role of cost information in a sector characterized by an increasingly lively competitive environment and a changing economic situation (e.g., COVID-19, the war in Ukraine), which pushes the sector's actors in the direction of learning and applying more modern unit costing methods. Two emphasized the importance of USALI in supporting management decisions, while two also emphasized the priority of "survival mode" over cost information in the management's view under the conditions caused by the COVID-19 pandemic in recent years.

Conclusion. The study summarizes primary research results on the cost allocation and unit costing practices of enterprises in the Hungarian hotel industry. The empirical research was based on hotels that are members of the HHRA. The communication of the results of the practical examination is carried out by the development of the historical approach to the sectoral characteristics and theoretical foundations, so the conclusions obtained from the responses of the 74-item statistical sample serve as a suitable framework for exploring the cost allocation practice of the Hungarian hotel industry, as well as for assessing the degree of integration into international practice.

The primary research results draw attention to the dominance of the traditional cost accounting method used in cost allocation in the Hungarian hotel industry. The ratio of sales revenue to total cost appears among the factors used as a cost driver for

the distribution of overheads, while activity-based cost accounting method, considered a modern methodology, is present in only 8.2% of the respondents.

In contrast to the traditional approach, where the application of a uniform cost driver on the inventory value of enterprises can be traced back to the homogenous product structure and the practical rise of the unchanged business environment, the participants of the Hungarian hotel industry are faced with modern cost allocation solutions that are better adapted to the heterogeneous supply portfolio of the sector and the hectically changing intense competitive environment with its sprouts. Furthermore, the application of modern methodology conveys reliable information about the profitability of products and services, which is a necessary prerequisite for developing an optimal product structure and pricing policy, which serves as a starting point for the efficient use of resources. This conclusion can be confirmed due to repeated inquiries in the focus group.

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