COSTS AND THEIR CONTROL IN POLISH ENTERPRISES – SURVEY RESULTS

Ewa Makowska – Aleksandra Banaszkiewicz

Abstract

Proper measurement of costs in the enterprise enables the preparation of financial statements as well as is the basis for an effective management system. Due to the varied information

needs of individual user groups, cost information presented in the cost calculation should

allow making rational decisions. Therefore, such topics as: the role and scope of using the

cost accounting in the business management systems and the anticipated directions of changes

taking place in the applied cost management systems have been the subjects of research

carried out both in Poland and in other parts of the world for many years. The purpose of the

article was to show selected results of a survey that was studying the use of cost accounting in

the Polish enterprises and to present current scope of cost information usage among them. The

article focuses on presenting the most important results of the research, concentrating

specifically on collecting cost information and methods used for calculating the cost of

production and the topics of cost control. The conducted analysis showed that in the most

cases, respondents chose traditional solutions in the field of collecting cost information and

cost control, and mostly the large enterprises utilized the newer techniques.

Key words: Costs in the Enterprise, Cost Accounting, Cost Calculation

JEL Code: M11, M41

Introduction

Changes occurring in the company's environment and growing competition force continuous

control of the level of costs incurred in order to rationalize their level (Banaszkiewicz &

Makowska, 2010). Due to the varied information needs of individual user groups, the

information presented in the cost calculation should enable making rational decisions, i.e.

supporting managers in the decision-making process (Czubakowska at al., 2014). Therefore,

one of the most important tasks of cost accounting is to create an information base about the

costs of the company's operations and to adapt these data to the needs of their users.

1146

Proper measurement of costs in an enterprise and their valuation, identification and registration enable both the preparation of financial statements (the reporting objective) as well as are the basis for an effective management system (management goal) (Sojak, 2017). Information generated in the cost accounting system is also used, among others, in price calculations, business control, profitability assessment, and economic decision-making (Kobiela-Pionier, 2010). The cost accounting is also a tool used in making decisions regarding the use of resources, taking certain bussiness actions or abandoning them (Vilenovich Govdya at al., 2017), (Kolosowski & Chwastyk, 2013), (Gonzalez-Sanchez at al., 2014), (Maruszewska at al., 2017), (Papaj, 2017).

Therefore, issues such as: the role and scope of use of cost accounting in the business management system and the anticipated directions of changes occurring in the applied cost management systems have been the subject of research works conducted in Poland for many years. The results of research on the scope, direction and causes of changes occurring in the cost accounting systems in the practice of Polish enterprises in the transformation period carried out in 1999-2000 and in 1999-2001 indicated low quality of information from the full cost accounting system and their narrow scope (Sobańska, 2010). The barriers to implementing new models of cost accounting (especially in small enterprises) in the light of Szadziewska's research carried out in the years 2000-2001 were small scope of activity and lack of financial resources (Szadziewska, 2002). However, the studies of Gierusz and Januszewski from 2003 indicated the use of traditional cost accounting systems in management. At the same time, the occurring distortions of cost information were, in the opinion of the respondents (especially state-owned enterprises) related to the nature of the activity, and not to the use of incorrect cost accounting methods (Gierusz & Januszewski, 2004). The level of cost accounting maturity in Polish enterprises was the subject of research carried out by Zieliński in 2010-2011 (Zieliński, 2015). On the other hand, research on problem-based cost accounts was conducted, among others, by Ciechan-Kujawa (Ciechan-Kujawa, 2005) and Goldmann and Bernasińska (Goldmann & Bernasińska, 2013).

The aim of the article was to present the results of surveys conducted in 2016 on the use of cost accounting in the practice of Polish enterprises. In addition to general information about the surveyed entities, the questionnaire included questions regarding three areas: the extense of cost information collected by enterprises, the cost accounting system used and the scope of cost control. The article presents results regarding answers to selected questions from the first and third area. The conducted research indicates that the scope, type and purpose of cost information used by the respondents is quite diverse. It is mainly influenced by the type

of business activity performed and its extensity. In most cases, the surveyed companies stick to traditional, proven solutions in the field of recording, calculating and controlling costs. The newer tools are usually applied by large units, operating at least nationally or internationally.

1 Characteristics of the research group

149 companies from the Kuyavian-Pomeranian, Pomeranian and Warmian-Masurian voivodships of Poland participated in the survey. The largest group of respondents were service companies (42%). Companies conducting manufacturing activity accounted for 31% of the total number of respondents. The remaining 27% of the respondents were companies dealing with commercial activities. More than half of the respondents (67%) were enterprises that have been in business for more than 10 years. Respondents operated mainly in the domestic arena (43%). You can also distinguish the local area companies - 24% and international ones - 29% within the sample. Taking into account the size of employment, the largest group among the respondents were smaller companies employing up to 10 people and in the range from 11 to 50 (44 entities in each of the ranges). There were 39 bigger companies (with more than 200 people), and 22 mid-range entities (with 51-200 employees).

2 Cost information and its use in the surveyed enterprises

In this part of the questionnaire respondents were asked to indicate for what purposes information on costs is applied in their enterprises and to assess the usefulness of utilizing this type of data. Over 67% of the surveyed units use information on product manufacturing costs in financial accounting and management. In 23% of cases, this information is only used for financial accounting. Noteworthy is the fact that the frequency of the cost information usage for both reporting and management purposes increases with the size of the enterprise. In micro-enterprises, it is around 60%, while in large units it is almost 90%.

More than half of the respondents deemed the use of information on the cost of manufacturing a product in areas such as production cost control, pricing, profitability calculation of products and the valuation of finished products as very useful. The usage of information on the product manufacturing costs in areas such as: analysis of individual cost elements and division of costs by types has been assessed as moderately useful by over 40% of respondents. About 10% of respondents deemed the use of this information as unusable in the areas of: planning of production and sales structure, production cost control, calculation of

product profitability, evaluation of production in progress, valuation of finished products, as well as determining costs in the calculation system.

When asked about dividing operating costs into variable and fixed ones, 56% of respondents gave an affirmative answer. In more than half of the cases, respectively 62.50% for commercial companies and 59.52% for trade companies the responses to this question were positive. In service enterprises, positive and negative answers were distributed in half. Among the respondents taking part in the study, 76% stated that the cost calculation does not identify the costs of unused production capacity. Only 20% of respondents gave an affirmative answer. 4% of respondents did not answer this question. Among the applied cost statements, the most indications were given to the full actual costs account (from 72% to 67%). Definitely less responses pointed to the variable costs account (from 26% to 16%). The companies that use it are mainly entities that have been in business for more than 10 years. At the same time, among the respondents who provided such an answer were both local, national and international companies. The manufacturing enterprises also pointed to the use of full standard cost accounting (19%), multi-level and multi-block cost account (13%), target costs account (11%), and activity costs account (9%). Among the enterprises conducting trade activities, indications regarding the use of multi-level and multi-block cost accounting were 10%, the activity costs account 7% and the standard full cost account 7%. On the other hand, service enterprises pointed to the use of the operating cost account (8%) and the full standard cost account (7%). The respondents who mentioned the use of multi-block and multi-level cost accounting as well as the target costs account were companies that operate on the market for more than 10 years and run their activities on an international or national scale. On the other hand, the operating costs account is used by companies present on the market for at least 10 years, regardless of the scope of their operations.

3 Costs control

Based on the answers given by respondents to the question whether there is a cost control system in the company, it can be stated that in the vast majority of units such a system is run. The affirmative answer was given by the vast majority of respondents. Among them, by far the largest number were companies with at least national (58) or international (35) coverage. The percentage of companies applying cost control is increasing along with the duration of business activity by the entity. Among entities that carried out activities from one to five years, it amounted to 64%, for companies operating from 6 to 10 years it was 70% and for

entities operating for more than 10 years it was equal to 81%. Cost control is applied in the majority of entities conducting manufacturing activity. As many as 89% of such enterprises indicated its use. Among the trade companies, this percentage was 80%, while for service companies - 70%.

Most often, the originator and initiator of the implementation of cost control in the enterprise was its owner. Nearly half of all respondents gave such an answer. The initiative of the management staff was indicated by 38% of enterprises, mostly the ones operating in manufacturing, present on the market over 10 years which were of national and international scope. An external consultant was indicated in the next place. About 10% of respondents operating on a national and international scale provided such a response. As the initiator of cost control were indicated also the following entities: the supervisory board, an external company dealing with accounting, a central (mother company), a financial controller and an accounting department.

Giving the reasons for applying cost control, the respondents unanimously indicated that the most important of them was the desire to gain a competitive advantage. Among international companies, 77% indicated this aspect, for the ones with local coverage the indicator amounted to 70% and it was 64% for the domestic ones. Another mentioned reason was the difficult financial situation of the company. This factor was chosen by 17% of local companies and 24% of domestic companies. Most often, these were service enterprises and relatively young companies, operating from 1 to 5 years. Respondents also pointed to problems in terms of cost calculation. This answer was chosen mainly by manufacturing entities operating on the domestic market for 1 to 5 years. The same entities also pointed to problems with the implementation of the company's strategy. In the case of local companies, the reason for introducing cost control was a desire to tame the disorder in the company. Interestingly, such responses were provided by entities operating on the market for 6 to 10 years, conducting service and commercial activities. The least indications were given for reasons such as low efficiency of decision making and ineffective planning system. The question regarding the reasons for conducting cost control in the company was semi-closed and the respondents had the opportunity to indicate individual causes. 17 companies took advantage of this opportunity. These were mainly entities that carry out manufacturing activities for 6 to 10 years with an international reach. The reasons they indicated were: cost planning, ongoing cost analysis, awareness of the importance of costs, functioning of the cost limit system, requirements of the mother company, willingness to improve the company's management and improvement of profitability, and thus the financial results, willingness to continuously reduce costs, good management and compliance control with the budget, budget constraint and the economic situation.

The next question concerned the expectations that entities associated with cost control at the time of its introduction. Respondents regarded the improvement of financial results as the most important aspect. 88% of manufacturing companies, 82% of service and 76% of commercial companies gave such an answer. Another issue was the improvement in the decision-making quality. Approximately 40% of all respondents made such an indication. The group was dominated by companies with international reach, operating for 6 to 10 years. Another topic raised was the improvement of both strategic and operational planning. About 26% of respondents mentioned this argument. The improvement of the speed of service as well as the legitimacy and reduction of costs were the factors indicated by two respondents as examples of other expectations related to the introduced cost control.

As for the areas covered by cost control in the surveyed units, the base activity was definitely dominant. The majority of respondents marked this area irrespective of the type, range and duration of their activity. In the case of manufacturing enterprises, the control of supply (61% of indications) and sales (52% of indications) was almost equally important. For commercial companies, these areas were also important. The control of the purchasing department obtained 54% of indications and sales of 49%. Service providers gave slightly less importance to cost control of these areas. The supply department was indicated by 26% of respondents and sales by 37%. In both cases, entities of international and national importance prevailed among them. Cost control in the finance and accounting department was relatively more important in commercial units. This answer was given by 27% of entities conducting such an activity. Individual respondents also mentioned the following areas as the ones covered by cost control in their enterprises: external services, all cost departments and the entire enterprise.

The next question concerned analyses which, in the opinion of respondents, support the cost control process. In answering this question, respondents could choose more than one answer. Among the production enterprises the most indications were directed towards the analysis of material and raw material costs (72%), sales analysis (64%), analysis of the financial result (56%), analysis of profitability (53%) as well as rotation of receivables and liabilities (41%). The specificity of the business activity of these enterprises, resulting from the production process being carried out, is most often connected with the necessity to incur high costs directly attributable to the manufactured products. Hence the need for a deeper analysis of costs and the directly dependent on them financial result. For commercial

enterprises, the largest value in the area of cost control can be attributed to sales analysis (63%), material and raw material cost analysis (51%), profitability analysis (51%) and financial result (46%), as well as receivables and liabilities turnover (41%)). Also for these units, the nature of the activity they carry out, is reflected in the indications regarding the analyses used in the cost control process. For service companies, analyses supporting cost control are sales analysis (49%), financial result (42%), material and raw material costs (34%), profitability analysis (29%) and analysis of receivables and liabilities turnover (29%). The least applicable, from the point of view of cost control, as seen by the surveyed entities are the environment analyses. As for other specific analyses used, one company indicated the analysis of budget performance and employment. Detailed information is presented in Tab. 1.

Tab. 1: Analyses supporting the cost control process

Activity	Manufacturing	Trade	Service
Sales analysis	64%	63%	49%
Analysis of material and raw material costs	72%	51%	34%
Analysis of receivables and liabilities rotation	41%	34%	29%
Analysis of the financial result	56%	46%	42%
Profitability analysis	53%	51%	29%
Environment analysis	13%	5%	15%
Other	0%	0%	3%

Source: own preparation based on the conducted study

The next issue in the scope of cost control, which the examined units were asked about, were the tools used within it. In answering this question, respondents could choose more than one answer. Among the manufacturing companies, the most frequently used tool was the break-even point analysis (55%), the ratio analysis (55%) and budgeting (52%). Trading companies most often used index analysis (56%), budgeting (49%) and analysis of break-even point (39%). On the other hand, service companies pointed to the use of budgeting (38%), profitability analysis (32%) and ratio analysis (30%). Analysis of strengths and weaknesses is a tool pointed out by every fourth company. In turn, a balanced scorecard is a tool used only by 13% of manufacturing companies, 15% of trade companies and 7% of service companies. Only one entity pointed to another economic tool used for cost control, namely a systematic analysis of expenditure.

The scope of operations was influencing the popularity of the tools used. International companies more often pointed to the use of the break-even analysis (50%) and ratio analysis (52%) as well as budgeting (52%). The applied analyses enable comparison of the obtained results, which is extremely important in this type of companies. In domestic companies these tools were also used, but they obtained a slightly lower percentage of indications with break-even point analysis respectively at (43%), ratio analysis at (46%) and budgeting at (46%). In the case of local companies, the strengths and weaknesses (39%), budgeting (33%) and ratio analysis (31%) were the most indicative. These are tools that are based on the experience and knowledge of managers and information derived from the financial statements. These entities most often do not do the accounting themselves. Often, they do not have too extensive cost accounting records. Therefore, they do not have overly extensive cost information. Therefore, the use of tools such as profitability analysis or profit sensitivity analysis is difficult for them.

Conclusion

Based on the analysis of the results from the conducted study, it can be concluded that the scope of the collected and processed cost information and the assessment of their usefulness for decision and control purposes is quite diverse among the surveyed enterprises. The methods of calculation and cost calculation used by them depend on the individual needs of users. According to the respondents, the cost information is useful in such areas as: control of production costs, pricing, calculation of product profitability and valuation of finished products. The full cost account was the most commonly used one by all surveyed entities. It results, among others, from the fact that it is also used in Poland for reporting purposes. The second most-used account was the variable cost account. Its usefulness may result from providing real information on the costs of variable products. Over half of the surveyed enterprises divide costs into fixed and variable ones. Such a classification allows the use of variable cost accounting and the use of tools such as break-even point, profit sensitivity analysis or planning.

Cost control was an important issue for the majority of respondents. The main reasons for its application were the desire to gain a competitive advantage, the difficult financial situation of the company, difficulties with calculation, and problems with the implementation of the strategy. It included within its reach mainly the base activity as well as the supply and sale departments' activities. The scope of operations was influenced by the popularity of the tools used. International companies more often pointed to the use of break-even analysis, index analysis and budgeting analysis. The above, applied analyses made it possible to

compare the obtained results, which is extremely important for this type of companies. In national enterprises, these tools were also used, but they received a slightly lower percentage of indications. In the case of companies with local coverage, the strengths and weaknesses analysis, budgeting and index analysis were the most important ones to be indicated. These are tools that are mainly based on the experience and knowledge of managers and information derived from the financial statements. In many cases, these units do not have extensive accounting records of costs. Therefore, they do not have too extensive cost information and the use of such tools as profitability analysis or profit sensitivity analysis proves difficult for them.

References

Banaszkiewicz, A., & Makowska, E. (2010). Rozwój rachunkowości zarządczej – wybrane narzędzia. In S. Sojak (Ed.), *Katedra Rachunkowości Uniwersytetu Mikołaja Kopernika – wizerunek naukowy i dydaktyczny* (pp. 115-150). Toruń: TNOiK.

Ciechan-Kujawa, M. (2005). Rachunek kosztów jakości. Kraków: Oficyna Ekonomiczna.

Czubakowska, K., Gabrusewicz, W., & Nowak, E. (2014). *Rachunkowość zarządcza. Metody i zastosowania*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Gierusz, J., & Januszewski, A. (2004). Ocena przydatności rachunku kosztów pełnych i rachunku kosztów zmiennych w zarządzaniu – wyniki badań empirycznych. *Zeszyty Teoretyczne Rachunkowości*, 19 (75), 42-60.

Goldmann, K., & Bernasińska, B. (2013). Wdrożenie rachunku kosztów działań w Pomorskiej Spółdzielni Mieszkaniowej. In E. Nowak & M. Nieplowicz (Eds.), *Systemy rachunku kosztów i kontroli kosztów* (pp. 203-216). Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.

Gonzalez-Sanchez, M. B., Lopez-Valeiras, E., & García-Montero, A. C. (2014). Implementation of a Cost-Accounting Model in a Biobank: Practical Implications. *Pathobiology*, 81, 286–297. DOI: 10.1159/000362796

Kobiela-Pionier, K. (2010). Rachunkowość w zarządzaniu kosztami i wynikami przedsiębiorstwa. Warszawa: WIZJA PRESS & IT.

Kolosowski, M., & Chwastyk, P. (2014). Economic Aspects of Company Processes Improvement. In B. Katalinic (Ed.) *24th DAAM international symposium on intelligent manufacturing and automation 2013*, (pp. 222-230). Book Series: Procedia Engineering, *69*. doi: 10.1016/j.proeng.2014.02.225

Maruszewska, E. W., Strojek-Filus, M., & Drábková, Z. (2017). Information About Cost of Goods Produced and its Usefulness for Production Engineers – a Case of Sme. *Management Systems in Production Engineering*, 25(4), 267-272. doi: 10.1515/mspe-2017-0039

Papaj, E. (2017). Reciprocal Allocation Method in Service Departments. The Case of a Production Enterprise. *Management Systems in Production Engineering*, 25(4), 273 -277. doi: 10.1515/mspe-2017-0040

Sobańska, I. (2010). *Rachunkowość zarządcza. Podejście operacyjne i strategiczne*. Warszawa: Wydawnictwo C. H. Beck.

Sojak, S. (2017). *Podstawy rachunku kosztów, rachunkowości zarządczej i zarządzania finansami*. Warszawa: Stowarzyszenie Księgowych w Polsce.

Szadziewska, A. (2002). Rachunek kosztów w przedsiębiorstwach produkcyjnych północnej Polski – stan i kierunki zmian. *Zeszyty Teoretyczne Rachunkowości*, *9*(65), 90-111.

Vilenovich Govdya, V., Nikolaevna Khromova, I., Konstantinovna Vasilieva, N., Ivanovich Sigidov, Y., & Nikolaevna Polutina, T. (2017). Decomposition Approach to Formation of Accounting and Analytical System of Cost Management in Agricultural Enterprises. *Journal of Experimental Biology and Agricultural Sciences*, 5(6), 818-830. DOI: http://dx.doi.org/10.18006/2017.5(6).818.830

Zieliński, T. M. (2015). Poziom dojrzałości rachunku kosztów w polskich przedsiębiorstwach. *Controlling, March-April*, 28-33.

Contact

Aleksandra Banaszkiewicz

The Faculty of Economic Sciences and Management, Nicolaus Copernicus University in Toruń, Poland ul. Gagarina 13a, 87-100 Toruń aleksandra.banaszkiewicz@umk.pl

Ewa Makowska

The Faculty of Economic Sciences and Management, Nicolaus Copernicus University in Toruń, Poland ul. Gagarina 13a, 87-100 Toruń ewa.makowska@umk.pl