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RESPONSIBILITY ACCOUNTING INSPIRATION FOR SEGMENT REPORTING

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Abstract: The 50s and 60s of the twentieth century was a period of significant diversification of the economic activities. As a result of that, big companies called conglomerates appeared. The biggest problem with them was efficient management. The system of central management did not work properly. In response to this the concept of decentralization was created. It assumed the transfer of decision-making powers to lower level of the organizational structure and increase the independence of separated areas of the company. The implementation of the decentralization concept also required modification of an existing information system in the company. In response to this responsibility accounting was established. The heart of it were separate areas of the company called responsibility centres. This modified information system provided top management regular internal reports about economic situation in each of separated centres using multi-block income statement. The emergence of large companies resulted in problems not only with efficient management but also the assessment of the economic situation by external users, in particular, the company investors. They also noticed the value of the responsibility accounting. However, the fact that the investors began to demand the disclosure of such information as a part of financial statements, was the first step towards the creation of segments reporting.

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■■■ INTRODUCTION

Management is a key area of each company. Managers are expected to plan, organize, motivate and control the resources of the company, both tangible and intangible, in such a way that the objectives of the organization are achieved in an efficient manner (Boddy, 2008, p. 10; Lewis, Goodman, Fandt, Michlitsch, 2007, p. 5). The four basic management functions are directly related to the necessity of making decisions and the decisions need adequate information to be justified. Accounting is responsible for providing information, management accounting in particular, which should be understood as a system of collection, classification, aggregation, analysis and presentation of financial and non-financial information that supports managers in decision-making and control (Sojak, 2015, p. 36). It should be added that the development of accounting has always been associated with the increased demand for its results for economic calculation conducted by the management. The more difficult the management conditions were, the more interest was in accounting (Siwoń, 1977, p. 42). In this context it should be noticed that management accounting is not an independent entity, but it is an information system that adapts to the needs of the internal business unit and management system.

RESEARCH METHODOLOGY AND RESEARCH PROCESS

The article is theoretical. Its aim is to pay attention to the genesis of the segment reporting, which according to the author should not be seen as a something new created by financial reporting. Segment reporting origins should be seen in responsibility accounting, which was a response of the internal accounting system for the needs of the management decentralization concept. Information available in the responsibility accounting were the first step towards the creation of the segment reporting.

The research method used in the article was based on the literature analysis in the field of management decentralization, responsibility accounting and segment reporting. Also description and comparison method were used.

THE CONCEPT OF DECENTRALIZATION

The progressive economic development is directly linked with the development of the companies. Their development can be carried out in various ways. The main include specialization and diversification. The first requires the company to focus on one area and reach maximum efficiency. The second involves widening the scope of its operations and may take the form of (Nowosielski, 2001, p. 12):

- territorial diversification – expansion of existing operations to new markets,
- horizontal diversification – expansion of existing operations by the input unit in the new field of activity,
- vertical diversification – expansion of existing operations through the acquisition of new skills and strengthening the competitiveness of the existing area under the backward or forward integration.

The 50s and 60s of the twentieth century was a period of significant diversification of the companies economic activities. As a result of that large and international companies were created, which were offering different types of products (Choi, 2003, pp. 22–1). The motive which guided these organisations in expanding their business was to reduce business risks by stabilizing the size of their revenue. The consequence of this growth was the rise of the so-called *conglomerates* (Prodhan, 1986, p. 40). They should be understood as companies offering products which do not have common features. It means that they are not produced from the same materials, using the same equipment or using the same technology. In addition, they do not sell them using the same distribution channels, or to the same customers. The only common feature is that it is sold by the same company (Cramer, 1968, p. 17).

The first problem with these big companies were difficulties with the proper management. The system known as the central management has become less and less effective. There appeared more and more decision-making problems that had to be solved at the same time. Communication path has been extended, leading to the risk of deformation of the information and distancing the top management from the source of the problem, reducing understanding. As a result, large international conglomerates have begun to have more serious problems, and sometimes even brushed against bankruptcy.

The above situations occurred within the expanding organisations. To survive and function in a competitive way, they had to move away from a central

management system. This was the starting point for the development of the concept of decentralization. The essence of it should be defined as the transfer of decision-making powers to lower levels of organizational structure and to increase the independence of separate areas of the company (Nowak, 2009, p. 192). The result of this should be improvement of resource efficiency (Juralewicz, 2008, p. 123).

The implementation of the management decentralization concept requires a change of organizational structure and information system in the company. An appropriate organizational structure allows for efficient distribution of tasks, delegation of authority and responsibility to managers of individual areas. The design of the structure requires the identification of individual work positions and grouped in a logical way.

RESPONSIBILITY ACCOUNTING

The implementation of an appropriate organizational structure is not enough for the management system based on the decentralization concept to function properly. There is also the need of an appropriate information system. Company's management requires current and reliable information about economic situation in each of separate areas of company's activity. In addition, the appropriate flow of information between different levels of management and separate areas of the company are necessary for efficient functioning of it (Jackson, Sawyers, Jenkins, 2009, p. 407). For this purpose in management accounting the notion of responsibility accounting was created.

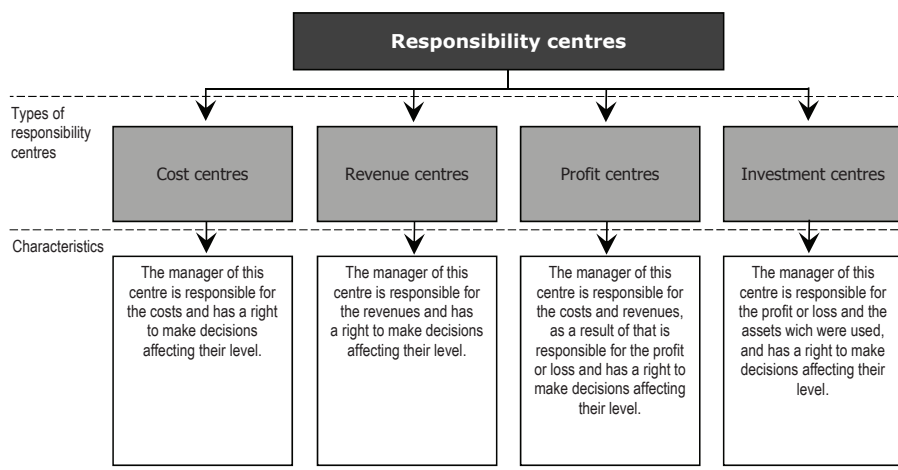
The responsibility accounting should be understood as a retrospective and prospective information system which serves its users for planning, identification, measurement, analysis and evaluation the activity of those who were responsible for the different areas of the company (Sojak, 2001, p. 21). The essence of it comes down to the preparation of the budgets for the areas, gather information about the results of the activities that took place there and to prepare reports summarizing their performance, which is the basis for the assessment of those responsible for managing those areas (Smith, Keith, Stephens, 1986, p. 953). Therefore, the purpose of the responsibility accounting should be defined as the measurement of the plans in the form of the budgets and the results in the form of performance of the budgets for each of the separate areas (Bhimani, Horngren, Datar, Foster, 1999, p. 487).

The responsibility accounting fulfils its role when it provides proper information about the manager of a given area, the information about the activities the manager can control that allow the assessment of the manager’s effectiveness.

RESPONSIBILITY CENTRES

The heart of the information system based on the responsibility accounting concept are internally separated company’s areas called responsibility centres. At the head of a single centre there is a manager who takes full responsibility for the efficiency of the activities that took place there. The manager has the right to decide how to use their resources to carry out the tasks. Depending on the range of decision and responsibilities of the manager there are four responsibility centres. They were presented and synthetically characterized in Figure 1.

Figure 1. Types and characteristics of responsibility centres



Source: own study based on: Sojak, 2015, pp. 537–538.

The implementation of responsibility centres depends on the size of the company. It is not about the level of revenues or assets value. The size should be considered from the standpoint of the functioning management system which will allow or not to separate different centres. Besides the size of the company the types of centres are affected by the following factors: the scope and speci-

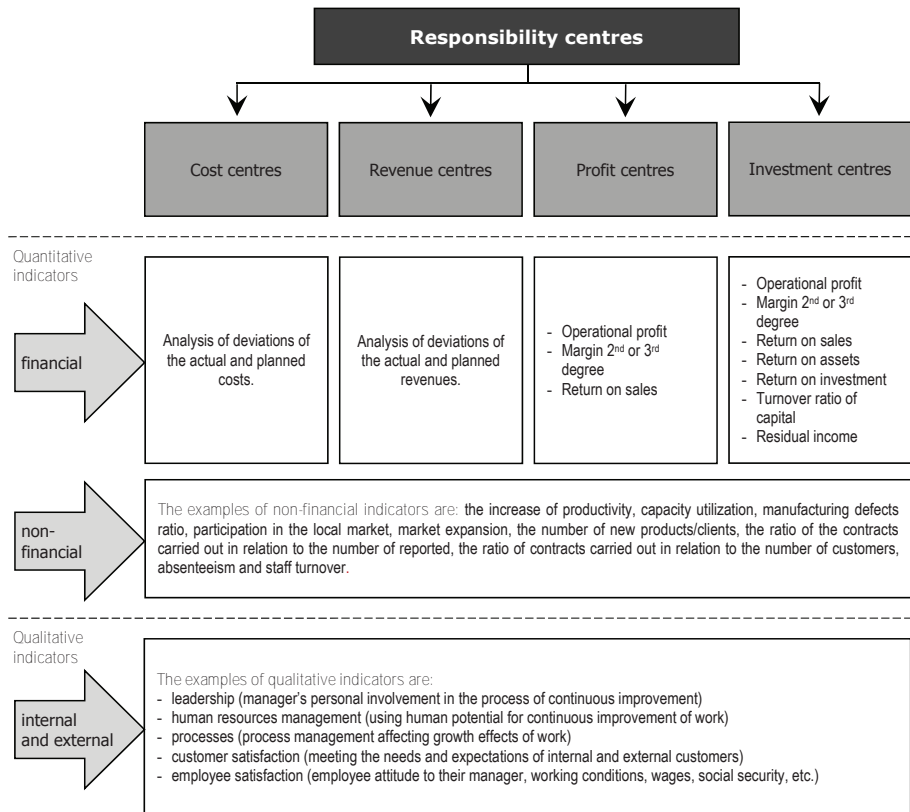
ficiency of the company's activity, the complexity of the economic process, and the ability to define the scope of the authority and responsibility (Nowak, 2000, p. 25).

The separation within the company responsibility centres serves to increase the efficiency of its operations. It is not enough only to entrust the responsibility to the managers of these areas. It is necessary to define the principles for the evaluation of their work and its systematic conduct. Appropriate economic parameters are applied here known as indicators. It should be emphasized that the measuring effectiveness ought to operate as an "*invisible hand*". It means that the indicators are designed in such a way that the manager directing them will take decisions within own area which will be in line with the expectation of the company's top management (Jaruga, Kabalski, Szychta, 2010, p. 420). This measurement should assess the manager in a fair way. It means that the indicators include only those areas which are in control of the evaluated manager (Demski, Sappington, 1989, p. 40).

The subject of the evaluation should be both current and long-term tasks. Quantitative and qualitative indicators are used in assessing it. First of them should be understood as a number of quantifiable characteristic features of different economic events. There are financial and non-financial indicators. The second type, qualitative indicators, are used for immeasurable characteristics or difficult to measure (Nowosielski, 2000, p. 379). Specification of the indicators used to evaluate the responsibility centres is shown in Figure 2.

Out of all above, the most common are financial indicators. It is a result of two aspects. Firstly, these are quantitative indicators that allow quick and easy quantification of economic events and their evaluation. Second, information about them is systematically provided by an accounting system. This results in significantly lower expenditure of obtaining them than it is in relation to other indicators.

Figure 2. Evaluation indicators of the responsibility centres



Source: own study based on: Makowska, 2005a, pp. 288–293; Makowska, 2005b, pp. 253–259; Makowska, 2003, pp. 182–183, 185–188; Sojak, 2000, pp. 398–400; Nowosielski, 2000, pp. 381–382.

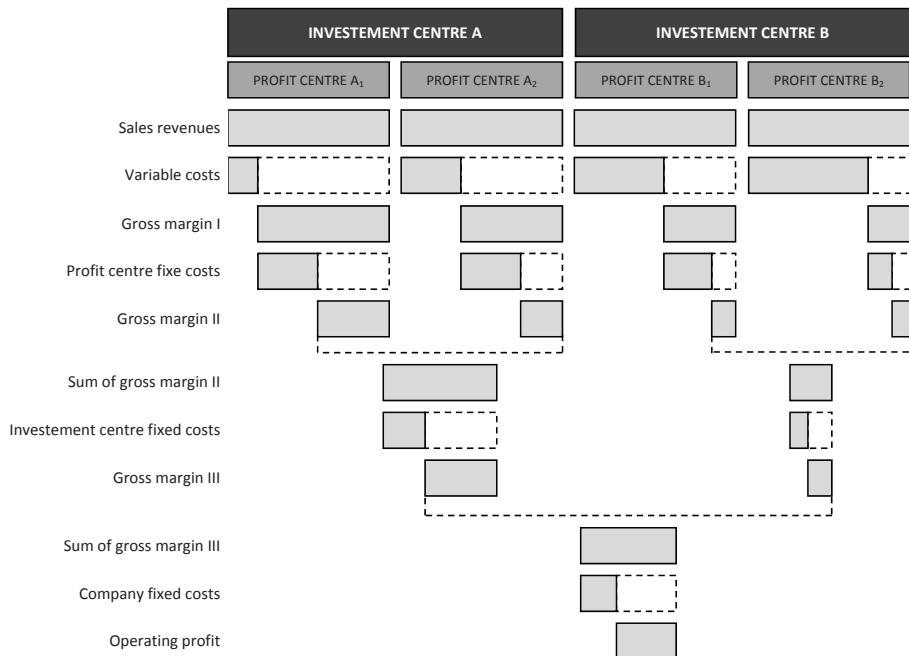
INTERNAL REPORTING

Senior management of the company receive information about the economic situation in each of the given areas as a part of internal reporting. The scope of the information depends on: the type of business, organizational structure, separated responsibility centres, specificity of economic processes taking place in the company, information needs of different management levels, capabilities and cost-effectiveness of obtaining data (Sawicki, 2000, pp. 194–195). Invention that accompanies the creation of an internal reports system is not

subject to any restrictions. There is a variety of customized solutions. They are determined only by the desire to obtain specialized information.

Considering the aspect of internal reporting the multi-block income statement is worth noting. Its essence is based on the concept of account variable costs and margin to cover fixed costs and profit. It presents in a multi-stage, multi-block and multi-level variable costs, fixed costs and operating result of complex economic processes taking place in the company. It is used mainly in the planning and internal reports in the responsibility accounting. The multi-block income statement is adapted to evaluate the managers of the responsibility centres, its essence is presented in Figure 3.

Figure 3. Multi-block income statement for the decentralized company



Source: own study based on: Jarugowa, 1997, pp. 27–28.

The multi-block income statement measures the operating effectiveness in each of the individual areas by identifying the different levels of gross margin. The scheme presents the following three types:

- gross margin I – is the difference between revenues of the profit centre and its variable costs, it is called “input” because it should cover all other fixed costs in the company,
- gross margin II – is a basic criterion in assessing the profit centres effectiveness, it includes revenues reduced by variable and individual fixed costs, there is no distortion by arbitrary assigning the investment centre fixed costs or the company fixed costs,
- gross margin III – is a basic criterion in assessing the investment centres effectiveness, it includes gross margin II reduced by investment centre fixed costs, there is no distortion by arbitrary assigning the company fixed costs.

The presented considerations on the multi-block income statement can be concluded that the managers of profit and investment centres are only assessment subjects. Such a conclusion is inappropriate. The assessment applies to all managers of the responsibility centres. In practice, the multi-block income statement is much more developed. It should also contain the values established in the budget at any level beyond presented information, deviations between the values achieved and planned and the responsibility centre manager comments about the resulting deviations. This includes managers of costs and revenues centres.

SEGMENT REPORTING

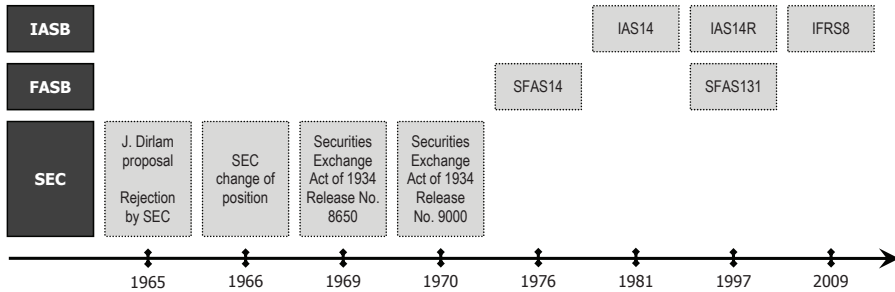
Over time, the value of information about responsibility centres has also been recognised by financial statement external users, the investors in particular. They began to demand their disclosure as a part of financial reporting (external reporting). In their opinion, the conglomerates financial statement contained only aggregated data. The particular areas of the company can operate in different economic conditions. Probably this can result in different levels of rates and associated levels of risk. These areas can affect the economic situation of the company in a different way. It means that the investors making decisions based on aggregated data contained in a financial statement of a diversified company are at greater risk, than in the case of the financial statement of the company which operates only in one area.

The first legal regulation which obligated companies to disclose information about segments (separate areas of the company activity), appeared in the United States on July 14, 1969. It was the Securities Exchange Act of 1934 Re-

lease No. 8650 published by The Securities and Exchange Commission (SEC). The companies were obliged to disclose revenues and results received in particular segments. Those regulations applied only to companies which placed new securities to public trading (Skousen, 1970, p. 39). Due to the fact that the information was non-cyclical and did not apply to all companies its value was significantly reduced. The consequence of this was the publication by SEC on October 21, 1970 the new legal regulation contained in Securities Exchange Act of 1934 Release No. 9000. According to it, the information about segments should be published as a part of annual report which was required by SEC from all companies whose securities were in public trading. The change of regulations obligated companies to disclose information about revenues and results for each segments which provided at least 10% of consolidated revenues or results of the company as a whole.

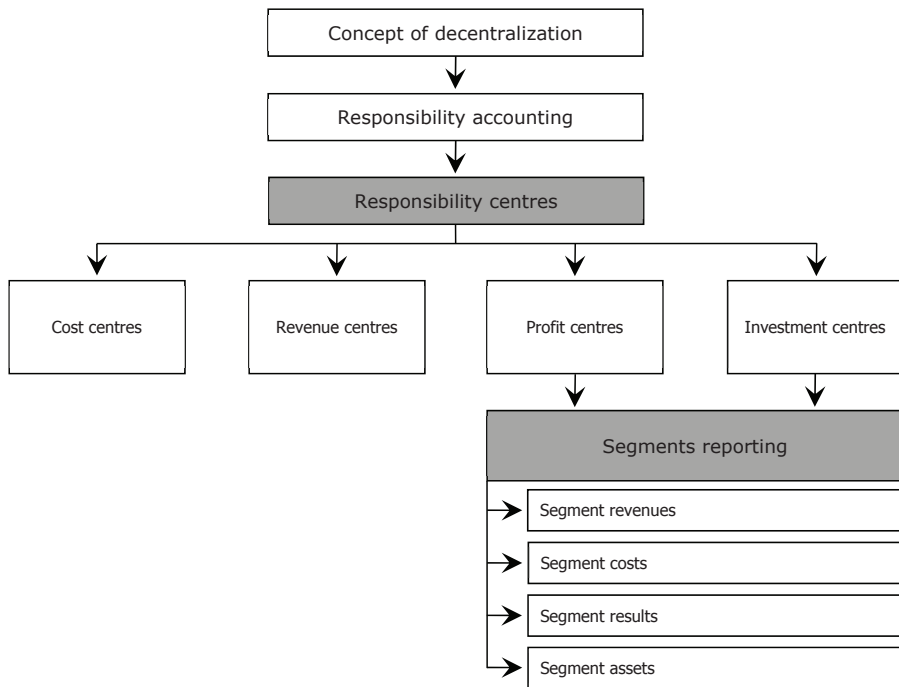
The importance of segment reporting was also recognized by the two largest in the world organizations improving accounting rules – Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB). FASB first started work and in year 1976 published the first accounting standard dedicated to segment reporting. It was the Statement of Financial Accounting Standards No 14 *Financial Reporting for Segments of a Business Enterprise* (SFAS14). In this standard besides the revenues and results the companies were obligated to disclose the value of assets involved in each of presented segments. SFAS14 was the basis of segment reporting for the companies obligated by the United States Generally Accepted Accounting Principles for over twenty years. After this period, in year 1997, FASB issued a new standard: the Statement of Financial Accounting Standard No 131 *Disclosures about Segments of an Enterprise and Related Information* (SFAS131). This standard has applied to the present day. The second organization, IASB, issued the first standard dedicated to segments reporting in year 1981. It was the International Accounting Standard No 14 *Reporting Financial Information by Segment* (IAS14). This standard was the basis of the segment reporting for the companies obligated by International Financial Reporting Standards for more than fifteen years. In 1997 IAS14 was revised and changed its name to International Accounting Standard No 14 *Segment Reporting* (IAS14R). The revised standard was in force till year 2009. Then IAS14R was replaced by the new standard: the International Financial Reporting Standard No 8 *Operating Segments* (IFRS8). The new standard has applied to the present day. The synthetic presentation of the above events is shown in Figure 4.

Figure 4. Key events on segment reporting



Source: Zimnicki, 2011, p. 168.

The implementation of segment reporting as a part of financial statement was possible thanks to the concept of decentralization. It forced the reconstruction of the internal accounting system. As a result, responsibility accounting was established whose task was to identify, collect, process and transfer financial information about the economic situation in each of responsibility centres. The possession of such information by the company gave the reason to the external users of financial statement to apply for its disclosure. Legal regulation in this area obligated some companies to disclose information about the economic situation of responsibility centres. But the information has been limited to the profit and investment centres and to the basic economic values such as revenues, costs, results and assets. The relation between responsibility centres and segments is presented in Figure 5.

Figure 5. Relation between responsibility centres and segments

Source: own study based on: Sojak, 2007, p. 35.

The scheme shows that segment reporting is based on two types of responsibility centres: profit and investment centres. Cost and revenue centres are not the object of its interest. This approach is a result of these two following reasons:

- the fear of competition by disclosing too detailed information,
- difference between the aim of responsibility accounting (current management) and the aim of segment reporting (identification of general differences in economic situation of separate segments).

■■■ SUMMARY

To summarize the above considerations it must be concluded that with the development of the company it is necessary to implement management system based on decentralization. But decentralization without adequate information

system is not enough. The management system will be effective if it has information about scheduled tasks in the form of the budget, their results through the presentation of incurred costs, received revenues, involved assets and liabilities, and the analysis of the deviations and their causes in each of separated activity areas. Possession of such information by the top management of the company allows to evaluate the managers of these areas.

The management is not the only party interested in maintaining the company in a good condition. The company investors are a lot more interested in this area. They have invested their own capital to the company and want at least that the capital will not be reduced. In contrast to the management they do not have internal data allowing for an assessment of the company economic situation. The emergence of large companies resulted in the problems not only with efficient management but also with the assessment of the economic situation by external users, in particular the investors. They also noticed the value of the responsibility accounting. However, the fact that they began to demand the disclosure of such information as a part of financial statements, was the first step towards the creation of segment reporting.

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