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THE LIMITATIONS OF FINANCIAL ACCOUNTING IN POLAND IN RESPECT OF HUMAN RESOURCES

Abstract: Accounting is a very important function in enterprises because its role is to provide measurable information on their businesses. However, there are areas which contemporary financial accounting in Poland does not deal with, and one of these is determining the value of the human factor and keeping records of it. People are becoming an increasingly important factor in economic activity. Despite human resources having such a vital role, Polish financial statements provide little information on them. This is definitely not satisfactory in the current economic conditions, with the growing significance of knowledge, experience, and skills. The aim of this paper is to identify the negative consequences for stakeholders of the limited scope of human resources-related information contained in financial statements. We also aimed to describe the underlying causes. Achieving this required a literature review and the use of a general deductive method. The flaws resulting from the application of legal standards should be remedied so that information from the accounting system was more useful. Therefore, it is advisable to develop a universal model. Despite the fact that the literature presents a wide range of methods for the valuation of human resources, none of them has so far been considered suitable for practical use. Also, no standard has been developed in this regard. Hence, while the accounting community is aware of the problem, the proposed ways to solve it are not adequate, and require improvement.

Keywords: financial accounting, human resources, valuation, financial reporting.

1. Introduction

Accounting is a particularly important function in business entities. This is due to the primary purpose of maintaining accounts which is to provide economic information. This information lays down foundations for making decisions, such as those taken by the management, and increases the level of knowledge among recipients of information on the situation of enterprises (AAA 1966).

Such information should have appropriate qualitative features, which vary between different stakeholder groups. For example, managers focus on brevity and relevance as well as on future orientation while external recipients expect true and verifiable information about past events (Bujak 2013). This does not mean, however, that executives are not interested in information about past economic events. The process of assessing the efficiency of enterprises usually relies on financial-statement data. For this reason, the principle of the true and fair view of the company is of particular importance to each of these stakeholder groups. However, with no binding legal definition, the meaning of the aforementioned principle can be ambiguous. The Court of Justice of the European Union has taken a position on this matter. In its judgment it stated that this principle required that annual financial statements reflected activities and transactions which should be described, and that accounting information was provided in the form deemed to be the most accurate and appropriate to meet the information needs of third parties without harming the interests of the company (Judgment of the Court of 7 January 2003).

Due to the complexity of the operations conducted by business entities, in some cases the application of the existing regulations on financial accounting in Poland does not contribute to the presentation of a true and fair view of the company. In practice, there are areas of activity which accounting in Poland simply does not deal with. This problem concerns, inter alia, determining the value of the human factor, and how to include it in ledgers. Therefore, the aim of this paper is to identify the negative consequences for stakeholders of the limited scope of human resources-related information contained in financial statements, and also to determine the causes of the identified problems. We achieve this aim by conducting a literature review and by using a general deductive method.

2. Literature review

2.1. The importance of human resources for enterprises, and the scope of information about them, as presented in Polish financial statements

There is no doubt that people are a very important resource in any organisation. Without them no assets can be deployed. The efficiency and effectiveness (see Szołno 2016) of an enterprise's activities result directly from the productivity of the people engaged in it. And their productivity depends on various factors, such as individual capabilities, education, skills, experience, personal goals, values, attitudes, personality traits, and motivation – essentially all aspects of human behaviour in the working environment (Shahverdi and Tajedini 2016; da Silva and Fernandez Jardón 2019). All the problems which arise in the course of business operations are also solved by people who have the opportunity to learn and improve, are able to think conceptually, and are creative. People are crucial to the performance of each business (Shahveisi et al. 2017). Hence, enterprises should pay considerable attention to them in order to improve the operational efficiency of their businesses (Nicholson and Kiel 2004) by implementing various types of incentive programmes, or providing training aimed at continuous improvement (Vokić 2012; Ismail et al. 2011). In addition, decisions made by managers facilitate the achievement of each organisation's goals and strategies, and support their ongoing operations (Moghadam et al. 2017). People also directly influence the competitive advantage of enterprises (Gontiuk 2013) and economic growth on the national and international scales, as confirmed by a number of studies (Affandi 2019). In recent years the value of intangible assets, including human resources, has also been growing (Lev and Daum 2004).

The increasing importance of the human factor in the Polish economy is confirmed by macroeconomic data. A constant increase in the level of labour costs per employee and per hour worked has been observed over many years. The total amount of the most important component of labour costs, i.e. payroll, is also growing (in Poland in 2017 alone they increased by 7.9% year-to-year (GUS 2018)). Payroll also constituted the third-largest costs by type category, after consumption of materials and energy and external services. In the first half of 2019 the proportion of payroll in the costs incurred by non-financial enterprises, including social-security and other benefits, amounted to 19.4% (GUS 2019).

Despite the important role of people in conducting business activities, financial statements, i.e. the end product of the accounting system, contain limited information on the deployed human resources. The elements which must be presented (Ustawa z dnia 29 września 1994 r. o rachunkowości) are only:

1. The amount of payroll liabilities, provisions for retirement benefits, and special funds, as reported in the balance sheet; part of the value of assets in use can also include costs generated by people providing work (this includes the costs of completed development works, fixed assets, fixed assets under construction, tangible current assets, and prepayments)
2. Employment costs in the profit-and-loss account, i.e. payroll and social security and other benefits (the costs of using the human factor may also be a component of amortisation and depreciation, with other costs by type, and other operating expenses)
3. The amounts of expenditures related to net payroll and social security, medical insurance, and other benefits, as reported in the cash-flow statement (expenditures related to people providing work also include some other items, e.g. other operating expenses or adjustments related to changes in liabilities)
4. Average employment level by professional groups, and possibly costs by type in the explanatory notes (also the costs of research and development works, some of which might be labour costs, and remuneration due to auditing companies)

2.2. The problems related to the recognition of information on human resources in the Polish financial accounting system

Knowledge is directly related to the people who perform work and it consists of information embedded in the relevant context and having a specific meaning

(Skyrme 1999). There are also many other definitions in the literature which accentuate various aspects of knowledge (see e.g. Brooking 1999; Boiral 2002; Nonaka et al. 2000; Vorbeck and Finke 2001). What they have in common, however, is the recognition that knowledge always involves a person who learns, understands, experiences, is aware of something, has beliefs, etc. The value of the know-how, i.e. "generated" knowledge, can be shown in the balance sheet as the costs of completed development work, constituting a component of intangible assets. However, this requires meeting statutory conditions (among other things, they relate to reliable valuation, documentation, practical application, and obtaining measurable benefits) (Ustawa z dnia 29 września 1994 r. o rachunkowości). However, all the knowledge possessed by employees and used for the purposes of business activities cannot be "extracted" and documented. Some of it remains only the attribute of specific employees.

Applicable law does not prescribe exactly how to value an asset as specific as knowledge. In addition, the knowledge possessed by individual employees of the company does not have to be included in the balance sheet, not only because determining its value is difficult, but also because of the inability to link it to specific results. Therefore, the question may be asked – does the lack of valuation of employees' knowledge mean that such knowledge has no value for the company? The answer must be in the negative. Otherwise, no organisation would care who works for it. Thus, not measuring the value of assets related to the human factor is a serious mistake.

International Financial Reporting Standards also apply to the use of human resources and the obligation to present specific information about them in financial statements. The regulations contained therein are more general than those in the Polish Accounting Act. In essence, they require that the relevant elements of financial statements include intangible assets, the amounts of provisions, and the costs and liabilities arising from employee benefits, as well as research and development expenditures. Knowledge can be an element of intangible assets, and market and technical knowledge are given as examples. However, it is necessary to meet both the general conditions applicable to each asset and the specific conditions relating only to intangible assets. Apart from exercising control, arising from past events, reliably determined value and achieving future economic benefits, an intangible asset should be non-monetary and have no physical form yet be identifiable. At the same time, the recognisability of the qualifications, talents, and competencies of employees as assets is questioned, mainly due to difficulties in determining the future economic benefits attributable to them (The Commission of the European Communities 2008; Burton and Jermakowicz 2015).

However, it should be emphasised that the presentation of additional information related to the use of the human factor is not only possible but it is essential (Millmore et al. 2008). This is allowed by both the Polish Accounting Act and international standards. For example, Polish law does not prescribe a limited scope of aspects to be included in the explanatory notes. In exceptional situations, certain laws may even be derogated from, if compliance with them would prevent adherence to the principle of a true and fair view of the enterprise's situation (Ustawa z dnia 29 września 1994 r. o rachunkowości).

Similar regulations are contained in International Financial Reporting Standards. They stipulate that in documents other than financial statements it is possible to present the value of resources and other types of data which are not disclosed therein (the disclosure of information about human and intellectual capital is also recommended in a non-mandatory document called the IFRS Practice Statement 1). These standards also allow for the requirements specified therein not to be applied if they could compromise the purpose of the reporting, i.e. providing useful information on the company's activities to a wide range of recipients for decision-making purposes (The Commission of the European Communities 2008).

The issue of international standards should also be considered from the perspective of the usefulness of the information. Can we say that information on human resources is useless? Certainly not. Various data characterising employees may be used by both managers (for managerial purposes) and external entities (e.g. potential investors interested in the value of the intangible assets of a given entity). After all, such elements as the experience, competence, and knowledge possessed by employees are taken into account – albeit not as separate assets – when making decisions. The requirement of usefulness of the information included in the standards (Burton and Jermakowicz 2015) is, therefore, not met in practice in regard to this aspect. The shortage of this type of data in financial statements also has a negative impact on compliance with the principle of a true and fair view of the company.

These flaws of accounting solutions also stem from the method of allocating costs related to the use of the human factor. As an example, we may refer to various costs contributing to the acquisition of new knowledge by employees, e.g. related to training and research, the incurring of which increases the level of costs in the relevant period. Despite this increase in the level of knowledge (an increase in the quality of human resources), the value of total assets does not increase, while at the same time the potential surplus falls, negatively affecting profitability. This contributes to the distortion of the company's position as shown in financial statements (Edvinsson and Malone 1997; Ming Chen and Jun Lin 2004).

The lack of a generally accepted methodology in this respect should be considered the main reason for which the accounting system does not facilitate the disclosure of a broader set of information on human resources. A universal valuation standard is yet to be developed although literature provides a wide range of potential solutions.

2.3. A review of methods of valuation of human resources

It is perfectly reasonable to present the value related to employees in financial statements. Of course, this does not mean that a valuation of an employee should be carried out as this would be unacceptable for ethical reasons. However, it is possible to determine the value of specific attributes of employees, recognising that they are important for the enterprise and contribute to achieving economic benefits. But the problem of choosing the method to be used remains to be solved. Using any of the categories specified in the Accounting Act[1] is not an option because they relate to market-exchange transactions which do not involve human resources. Therefore, one should reach for other solutions employed in management accounting. These methods are very diverse (Hamad 2019; Bechtel 2007). A general classification of methods for the valuation of intangible assets described in the literature has been proposed by Sveiby (2010). He identified the following groups:

1. Market Capitalisation Methods
2. Return-on-Assets Methods
3. Scorecard Methods
4. Direct Intellectual-Capital Methods

The measurement of intangible assets using the first group of methods applies to the difference between the market and book values of a company. Valuation involving the return on assets is based on the use of two types of the return-on-assets indicator – one being specific to an entity, and the other being the average for the industry in which the entity operates. Assuming that additional profits derive from the involvement of intangibles, the procedure is to first calculate the amount of these profits and then to divide them by the interest rate received to derive the value of the intangible assets. Scorecard methods are employed to identify intangible assets using non-monetary indicators to measure these elements and to determine the scope of their use in business activities.

The described features of the three groups of methods described so far preclude them from being used for accounting purposes. Scorecard methods do not use monetary measures (i.e. no valuation is made), while market capitalisation and the return on assets are significantly affected by factors which can have an adverse effect on reliability of valuation that is so important in the accounting system. For example, the market value of a company depends on the economic situation, analytic forecasts, and psychological aspects of investors' activities, while the state's economic policy, local operating conditions, or legal restrictions can affect the financial results used to calculate profitability ratios. Therefore, the value of the intangible assets estimated using the above methods can be subject to significant fluctuations at various times which will not be caused by changes in the intangible assets used. These methods do not allow the identification and valuation of individual non-material assets either.

Direct intellectual-capital methods are designed to calculate the monetary value of various intangible assets. Unfortunately, the way in which the valuation of human resources is compared according to different methods does not match in every aspect the basic minimal regulations that have long been in force. Table 1 shows a synthetic set of information concerning the limitations of various direct intellectual-capital methods

[1] I.e. purchase price, manufacturing cost, sale price or fair value (Ustawa z dnia 29 września 1994 r. o rachunkowości).

which hinder their application under the accounting principles currently applicable in Poland.

Table 1. Description of direct intellectual-capital methods in the context of compliance with the basic Polish accounting principles set out in the law

Name of method	Selected features
Human-Resource Costing & Accounting (HRCA 1, HRCA 2)	1. The valuation of human resources is based on the costs of employment or the value of future pay (costs relating to, inter alia, the recruitment of human resources, their education, future pay, or severance; and not all costs – e.g. recruitment or severance costs – show cause-and-effect relationships with the value of employees) 2. Determining individual values requires estimations (for instance, of future pay and severance costs)
Human-Resource (HR) Statement	1. This method focuses on presenting financial and non-financial information related to human resources 2. The methodology for valuating human resources is not specified
Citation-Weighted Patents	Not applicable to human-resources valuation
Technology Broker	1. Identifying individual components of intellectual capital is subjective 2. There is considerable flexibility in how the valuation is carried out
Accounting for the Future (AFTF)	1. This valuation is based on market value and planned cash flows, not on historical data 2. It is characterised by a significant level of subjectivity associated with the estimates made
Inclusive-Valuation Methodology (IVM)	1. Integrates various sources of value creation without focusing on individual intangible assets 2. Is characterised by subjectivity caused by the need to estimate financial and non-financial values
Total-Value Creation (TVC)	1. This does not relate directly to human resources but to future activities contributing to value creation 2. Is based on planned cash flows arising from actions to be taken, showing the anticipated financial consequences of these actions
Intellectual-Asset Valuation	1. Not directly applicable to human resources 2. Undermines the role of historical prices 3. Uses the planned cash flows related to separate elements of intangible assets
The Value Explorer	1. This valuation is not focused on human resources but on the key competencies of the organisation 2. The determination of the value depends on the experience of the people making the valuation and on their views
Financial Method of Intangible Assets Measurement (FiMIAM)	1. The methodology of the valuation of intangible assets, including human resources, uses the market value of the enterprise as reflected by its stock-market capitalisation which is constantly changing, and which is influenced by many different factors 2. The valuation of individual intangible assets is affected by weights which are assigned in a subjective manner

Name of method	Selected features
Dynamic Monetary Model	1. The valuation is based on estimates (e.g. alternative cost and subjective indicators using the expected time of gaining benefits from engaging the employee) 2. The value of one employee and a group of employees is determined differently (the value of the group is not the sum of the values of the employees who comprise it)
Estimated Value Via Intellectual Capital Analysis (EVVICA)	Not applicable to human-resources valuation

Source: the authors' own development based on (Sveiby 2010; Bontis 2001; OECD 2013; Eronen and Ahonen; M'Pherson and Pike 2001; Stone and Warsono 2004; Sullivan Jr and Sullivan Sr 2000; Rodov and Leliaert 2002; Milost 2007; McCutcheon 2008).

When analysing selected features of the presented methods, it can be stated that the valuation of human resources in many cases depends on the elements whose size (it not always has to be a value) is not objective. If any element of the value formula is difficult to determine due to the lack of clear, mandatory rules, then the total value of the given asset is subjectivised and can vary between individual enterprises, not only due to the different human resources used. The valuation would then be influenced by factors such as the views of the evaluators and their individual preferences, prejudices, expectations, and assessments regarding reality. And it should be mentioned that in the case of the methods described, the range of estimates is very wide and often has a decisive impact on the estimated value. Subjectivity, especially in accounting, significantly impedes, and in some cases even prevents, comparability. This means that it is unknown whether the value of the same economic category in two units is different because the resources used are different or simply because different estimates have been made regarding their value. For this reason, none of the methods described should be used to perform cross-sectional comparisons between different economic operators.

Valuation in accounting is often based on future values which warrants, and in special cases even dictates, the application of both international standards and the Polish Accounting Act. However, the estimates must be reliable. It might even be problematic to calculate the interest rate itself used to determine the economic value or current value, e.g. of receivables or liabilities, whose nominal amounts and payment dates are known. This is due to the fact that various assumptions can be made in this regard. The situation is particularly complicated when, in addition to the discount rate, the estimates relate simultaneously to costs and revenues, incomes and expenditures, the pay of specific persons, or various non-financial values, e.g. the period of employment in a given enterprise.

If accounting were to present facts from the future, it would not be necessary to analyse what has occurred historically – namely, the assets and financial performance of the enterprise as shown in financial statements. We believe that the undeniable advantage of accounting in accordance with current principles is that it provides both the essential data on events and the appropriate methods of their analysis, so that anyone interested can interpret these data on their own. Therefore, financial statements should not suggest an assessment. However, if they contained many estimates of the future it would become a promise and an opinion, without possessing the attributes of objectivity and repetition (M'Pherson and Pike 2001).

Non-uniform valuation principles used for accounting purposes provide great manipulative possibilities in terms of the adopted assumptions. Hence, it seems necessary to conduct an audit to determine whether a true and fair view of the entity would be presented in financial statements. However, the question arises as to who should do it. This task certainly cannot be performed by the management of the entity as it is not impartial. Therefore, an external auditor would have a special role to play. It would be his or her duty to verify the assumptions and to additionally check the results obtained in terms of accounting. For these reasons, each check would have to be fairly meticulous, and as such most likely significantly extended in time and expensive.

3. Results – authors' proposal

Despite the fact that the literature contains descriptions of many different methods of valuation of human resources, none of them has been considered suitable for practical use so far (Derun 2013). No standard has been developed which would address this issue. This means that even though the accounting community is aware of the problem, the proposed ways to solve it are inadequate and require further improvement.

In our view, the presented limitations of financial accounting in Poland, the flawed attempts to valuate human resources, and the lack of well-established practices of recording the assets in question are sufficient to warrant attempts to develop a universal model solution which could be used in various types of entities, mainly in enterprises. Providing information on the value of human resources would be aimed at creating a numerical basis for decision-making by internal recipients, i.e. executives who could better manage these resources, as well as by recipients from outside the entity who would receive a broader set of information on the situation of the specific economic operator. The proposed model solution should meet specific conditions – a number of desirable features in terms of human resources in the accounting system, including:

1. Compliance with existing fundamental accounting principles
2. The widest-possible limitation of subjectivity
3. Comparability between different entities
4. Intelligibility and ease of use

Valuation of human resources, records, and reporting should be in line with the applicable accounting rules set out by the law. It would be best if the resources in question were treated in the same way as other assets, e.g. fixed assets, investments, or products. However, full compliance will not be possible due to the specific nature of the resources in question. It is important that information generated by accounting possesses the attributes of reliability, relevance, freedom from error, and verifiability (Ustawa z dnia 29 września 1994 r. o rachunkowości).

Objectivity is another important postulate regarding the attributes of information provided by accounting. In the Polish Accounting Act this concept appears only once, and that in the context of the assessment of the company's situation based on a statement on non-financial information (Ustawa z dnia 29 września 1994 r. o rachunkowości). However, it is difficult to imagine that the information, which is meant to be reliable, could be objective. The specific nature of economic activity and the various types of operations associated with it mean that people dealing with accounting are often in the position to choose the solutions used. If their scope is relatively narrow, and also when the methodology of performing specific actions is known, the problem of maintaining objectivity basically does not occur. On the other hand, if certain issues are so broad-ranging that they cannot be embedded in the framework of the applicable legal regulations, if no definitional constraints are imposed or if there is no uniform theoretical basis describing specific issues, subjectivity comes into play.

Everyone, even subconsciously, perceives facts through the lens of their own experiences, views, feelings, and interests. Consequently, information about the same event given by two different people can be different. That is why the elimination of subjectivity in judging actual events is so important in accounting. It can be achieved only if every accountant includes a given business operation in the records and financial statements in exactly the same way. Instead of allowing flexible estimates, it is definitely better to follow specific, uniform procedures for the valuation of human resources, even if the value determined by these procedures is not perfectly matched to the real value, which is unknown in practice.

Modern accounting is clearly heading towards standardisation. In the global economy this trend is fully warranted since usually the activities of major companies are not restricted to the territory of only one country but cover many countries, and even continents. When making decisions regarding the allocation of capital, investors expect comparable information from business entities operating in different parts of the world, i.e. prepared according to the same principles. The lack of uniform regulations could, for example, lead two enterprises whose actual financial and asset situation is different to present similar information in the balance sheet. As a consequence, a person interested in the future results of these entities could draw similar conclusions. Comparability plays an important role, not only on an international scale. From the perspective of management goals and the needs of the management team, it also seems necessary to combine information on various entities operating, e.g., in the same industry on the domestic market, individual enterprises operating within capital groups, or even different organisational units within the structure of one entity. The scope of the presented information on human resources should facilitate a reasonable staffing policy, aiming to constantly increase the difference between the productivity of the human factor and its costs, thus contributing to the maximisation of the achieved results.

Usually, finance and accounting staff is responsible for recognising human resources in the accounting system. It is, therefore, important that the concept is transparent and intelligible. Its application should not require specialised, non-accounting knowledge. It is worth, however, relying on an analogy to other assets, i.e. similarity in valuating, recording and reporting them, thus limiting the use of accounting principles differently from those currently applicable.

4. Conclusions

Regardless of the final form of the proposed model solution, its practical implementation will certainly not go without problems. First of all, the task of the accounting community will be to understand the new concept and to adapt the recording and reporting system to it, including adjustment of the principles of producing and circulating documents. This will require time, a certain amount of work, additional costs, and probably will not be immediately successful. The less complex the implemented model proves to be, the lower the costs will it generate. In addition, in the case of the valuation of certain specific resources, i.e. selected attributes of employees, it will probably be extremely difficult to fully eliminate subjectivity. The described barriers related to the practical application of the proposed accounting model should not, however, obscure the benefits which can be obtained by making use of additional, previously unavailable information to facilitate human-resource management.

The proposed uniform model for the valuation, recording, and presentation of information on employees could be implemented not only in Poland. However, it should be remembered that different countries have different regulations on financial accounting.

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