Abstract:

Purpose: The aim of the article is to identify the types of economic entities that prefer the cost-based or comparative format and, consequently, to attempt an assessment of the factors that determine this choice. The work has a theoretical-empirical character, focusing on the analysis of data concerning joint-stock companies listed on the Warsaw Stock Exchange in the research part.

Design/Methodology/Approach: In the theoretical part of the article, an assessment of the financial reporting function is made in the context of providing reliable financial information. Various formats of the Income Statement are discussed, and an analysis of criteria determining the choice of a particular format is initiated. The empirical part includes a characterization of the analyzed sample and formulates conclusions and findings based on the conducted study. The main research method utilized in this work is the analysis of financial statements of joint-stock companies listed on the Warsaw Stock Exchange. The theoretical part is based on literature sources related to financial reporting and the provisions of the Polish Accounting Act.

Findings: The analysis revealed that the dominant format of the Income Statement is the cost-based costing variant and that there is no correlation between the choice of the Income Statement format and variables such as the type and scale of business activities. The research results allow for inferences regarding the utility of a given format for specific groups of economic entities.

Practical Implications: The choice of the method of preparing the Income Statement is one of the crucial decisions in the area of a company's accounting policy.

Originality/Value: The analysis did not show a significant correlation between the size of the company and the choice of data presentation method, and similarly, the type of business conducted did not significantly influence this choice. The results confirm that the choice of cost accounting method and Income Statement variant is independent of the parameters examined, suggesting that companies are guided by other considerations when deciding on the reporting method.

Keywords: Corporate management, financial reporting, profit and loss account, public companies.

JEL Classification: A19, G10, M20, M49.

Paper type: Research article.

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1. Introduction

A financial statement is an organized set of numerical information supplemented with explanatory descriptions. It reflects the financial position of a company. In the structure of the financial statement, alongside the balance sheet, the Income Statement holds a crucial role.

According to the regulations of the Accounting Act, economic entities have the option to choose an Income Statement format that most fully reflects their financial results, based on revenue and cost recognition methods. In the context of this choice, the determinants influencing companies' decisions to apply a specific format are significant.

The aim of the article is to identify the types of economic entities that prefer the cost-based or comparative format and, consequently, to attempt an assessment of the factors that determine this choice. The work has a theoretical-empirical character, focusing on the analysis of data concerning joint-stock companies listed on the Warsaw Stock Exchange in the research part.

The primary research method applied in the work is the analysis of the content of financial statements of companies listed on the Warsaw Stock Exchange, using a database prepared in 2021. In the last part, the author presents conclusions drawn through the deductive method and indicates possible criteria for choosing the method of presenting the Income Statement by the analyzed companies.

2. The Role of Financial Statements in Providing Reliable Financial Information

Financial accounting is a system for collecting and processing data related to the states and processes shaping assets to provide economic and financial information (Sawicki, 2008). According to Article 4, paragraph 3 of the Accounting Act, the accounting of an entity includes:

- adopted accounting principles (policy),
- keeping accounting books containing entries regarding events while maintaining chronological and systematic order,
- periodic determination or verification through inventory of the actual state of assets and liabilities,
- valuation of assets and liabilities and determination of financial results,
- preparation of financial statements for the organizational unit,
- collection and storage of accounting evidence and other documentation,
- subjecting to examination and publishing financial statements in cases specified by law.
The above-mentioned elements allow distinguishing three main subsystems in financial accounting, as indicated in Figure 1.

**Figure 1. Financial reporting in accounting**

![Diagram showing the interconnection between bookkeeping, cost accounting, accounting, and financial reporting.](image)

**Source:** Own compilation based on the Accounting Act.

As depicted in Figure 1, financial reporting is prepared based on detailed records of economic events, which are meticulously organized and verified, and on calculations presented in the cost account (Gabrusewicz and Remlein, 2010). Financial reporting encompasses a set of financial statements for a specific period. Each report has a defined time frame, thematic scope, and a method for presenting data.

A financial statement is a compilation of aggregated numerical data based on accounting books, presenting the financial position, financial performance, and results of operations of an economic entity (Świderska and Więclaw, 2012).

According to IFRS, individual financial statements provide a structured presentation of the financial position and financial results of an entity (SKwP, 2007). Users of financial statements are divided into external and internal groups, each having different expectations regarding reporting and different purposes for its use.

Investors seek information about potential returns and investment risks, including firms' ability to distribute dividends. Creditors analyze financial data to assess the ability to repay debts, while suppliers and customers focus on payment timeliness and the stability of cooperation.

Financial statements also serve state authorities and public statistics institutions to assess the size, efficiency, and development directions of entities for shaping active economic and tax policies. Reports also fulfill the informational needs of owners, management and supervisory bodies, and employees.

In turn, the monitoring objectives of financial reporting encompass the tracking of revenues, profitability, and financial liquidity. Financial statements enable drawing conclusions from conducted financial operations, based on which managerial and supervisory bodies assess economic efficiency and cash management (Thalassinos et al., 2023). Data comparability is ensured by consistent principles of classification, valuation, and presentation of information in successive periods.
According to the Accounting Act, a financial statement presents the financial position of a specific entity and consists of: an introduction to the financial statement, a Balance Sheet, an Income Statement, a Statement of Changes in Equity, a Cash Flow Statement, and additional information and explanations.

The balance sheet depicts the resources and their sources of origin for the entity at a specific point in time. The value of resources controlled by the company will always be equal to the value of their financing sources (Świderska and Więcław, 2006).

The Income Statement is closely linked to the balance sheet as it illustrates the effects of asset utilization. The final result of the entity's operations presented in the Income Statement is included in the Balance Sheet in equity. Depending on the financial result, it increases or decreases equity (Gabrusewicz and Remlein, 2010).

The Income Statement is a dynamic report as it contains revenues and costs incurred during a specific reporting period. Economic entities may present costs in the Income Statement in a comparative or cost-based format (Olchowicz and Tłaczała, 2008).

Financial reporting is relatively often the subject of publications, both with a practical and theoretical focus. The theoretical approach is reflected in numerous book publications, such as "Accounting Yesterday and Today – Selected Issues" edited by Sławomir Jędrzejewski (Jędrzejewski, 2017), which broadly describes all accounting processes, presents a historical overview of the issue, and thoroughly discusses the Income Statement as a key financial report.

Some works, like (Artieniewicz et al., 2020), focus exclusively on the Income Statement as the primary report used in assessing the financial condition of companies, often equated with financial results. The issue of assessing companies is more broadly discussed in "Assessment of the Financial Condition of a Company by a Bank Analyst" (Zaleska, 2012), which also attaches great importance to the financial result but emphasizes the significance of other elements of the financial statement.

Academic publications also devote a lot of attention to the issue of financial reporting; Helena Żukowska (Żukowska, 2016) focuses on the accounting aspect of reporting and provides a detailed discussion of individual reports. Reference to solutions adopted in the Accounting Act and the US GAAP was proposed by I. Emerling (Emerling, 2014), making a comparison of results obtained depending on the adopted reporting standard.

H. Buk (Buk, 2013) similarly examines the issue, focusing on comparing the content of the Income Statement according to different accounting standards. The issue of reporting is also addressed in scientific journals of Polish universities; an article published in the Scientific Debuts of Students of the Higher School of Banking
(Dziarnowski, 2012) focuses on the use of individual reports as a kind of database allowing the prediction of the financial situation in the coming periods.

Meanwhile, Scientific Notebooks of the University of Szczecin by K. Czubakowska (Czubakowska, 2015) refer to specific requirements placed on individual elements of reporting in small-scale business entities.

The above-mentioned positions describe the reporting system with consideration to the Income Statement, in some cases concentrating predominantly on this issue. In the article by H. Buk (Buk, 2006), the topic of the Income Statement is explored in more detail, focusing exclusively on the comparative variant.

The literature review conducted demonstrates that the issue of criteria underlying the choice of a specific version of preparing the Income Statement has not been the subject of scientific research in Poland so far, and previous publications have focused on more general issues or did not analyze the premises of possible choices of Income Statement variants.

3. Income Statement Variants and the Determinants of the Choice of Layout by Business Entities

The Income Statement is a key component of the financial report. Assessing a company's operations is essential, considering both the magnitude of the financial result achieved during a specific period and the scale of activities at which the result was attained. The Income Statement is a summary of revenues earned and costs incurred during a given period, proportionate to the revenues obtained.

It simultaneously serves as a tool for determining the financial result (Gabrusewicz and Remlein, 2010). The segmentation of a business entity's activities includes primary, other operational, and financial activities, influencing the structure of the Income Statement.

Elements shaping the financial result include: revenues (e.g., sales revenue, operating and financial revenue), costs of revenue (e.g., the value of goods sold, the cost of producing sold products, selling costs, management costs, financial costs), and mandatory charges against the financial result. To establish it, it is necessary to analyze the partial results of individual activity segments (Cebrowska, 2010).

A fundamental factor shaping the magnitude of the achieved profit is the revenues obtained. Revenues acquired by the company from the sale of goods and services play a particular role in the entity's operations.

Sales define the company's identity in the market economy, and the sales volume is the most crucial indicator of trade and financial success (Gabrusewicz and Remlein, 2010).
By definition, revenues contribute to achieving various economic benefits, influencing the increase in asset components or the reduction of liabilities (Czubakowska and Gabrusewicz, 2009). Generating revenues involves incurring costs, which are an economic expression of the consumption of production resources.

These costs relate to the depreciation of fixed assets and intangible assets, the consumption of materials, the use of external services, and the expenditure of human labor in the production process.

Entities required to prepare an Income Statement can choose one of two variants: the cost-based variant or the comparative variant. The choice is available only to entities that keep cost records in group 4 and 5 accounts. In a situation where cost records are maintained exclusively in group 5 accounts, the entity is obliged to apply the cost-based variant. However, if cost records are conducted solely in group 4, it is required to prepare the Income Statement using the comparative variant.

The cost-based variant of the Income Statement encompasses the costs of the primary operational activity, such as the costs of goods sold, products, and materials, based on records in group 5 accounts. Within these items, the cost of producing sold products and the value of sold goods and materials are distinguished. Additionally, when determining the sales result, sales costs and general management costs are taken into account. In the cost-based variant, costs are divided into:

- directly related to revenues: the cost of producing sold products, the value of sold goods and materials,
- related to the entity's activity during the reporting period: general management costs and sales costs (Gofin.pl).

The cost-based variant does not specify changes in the state of products, as only the costs of products sold in a given period are presented.

The Income Statement in the comparative variant presents the costs of operational activity according to the costs in group 4. Sales revenues, on the other hand, are recognized, taking into account the change in the state of products, considering the difference in the state at the beginning and end of the unfinished production period, finished products, and active and passive inter-period settlements related to the primary operational activity (expertbeck.pl).

Determining the financial result depends, among other things, on the timing and purpose of its determination. During the fiscal year, it is established using a statistical method by reading entries from the accounting books. This method is also employed to determine the tax result. At the end of the fiscal year, the financial result is determined by an accounting method (Paczuła, 2005).
Table 1. The P&L variants - differences in data presentation

<table>
<thead>
<tr>
<th>Comparative Variant</th>
<th>Cost-Based Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Net Sales Revenues and Equivalent</td>
<td>A. Net Sales Revenues</td>
</tr>
<tr>
<td>I. Net Sales Revenues of Products</td>
<td>I. Net Sales Revenues of Products</td>
</tr>
<tr>
<td>II. Change in Inventory (increase - positive value, decrease - negative value)</td>
<td>II. Net Sales Revenues of Sale of Goods and Materials</td>
</tr>
<tr>
<td>III. Cost of Manufacturing Products for Own Needs</td>
<td>B. Cost of Sold Products, Goods, and Materials</td>
</tr>
<tr>
<td>IV. Net Sales Revenues of Sale of Goods and Materials</td>
<td>I. Cost of Manufacturing Sold Products</td>
</tr>
<tr>
<td>B. Operating Costs</td>
<td>II. Value of Sold Goods and Materials</td>
</tr>
<tr>
<td>I.-VII. General Costs</td>
<td>C. Gross Profit (Loss) from Sales (A - B)</td>
</tr>
<tr>
<td>VIII. Value of Sold Goods and Materials</td>
<td>D. Selling Costs</td>
</tr>
<tr>
<td>C. Profit (Loss) from Sales (A - B)</td>
<td>E. General Administrative Costs</td>
</tr>
<tr>
<td></td>
<td>F. Profit (Loss) from Sales (C - D - E)</td>
</tr>
</tbody>
</table>

Source: Own compilation based on the Accounting Act.

Adopting the assumption that economic entities listed on the Warsaw Stock Exchange record costs both in the accounts of group 4 and group 5 enables the process of determining financial results in both available variants by entities with the mentioned accounting data.

The choice of a specific variant of the profit and loss account belongs to the group of so-called formal instruments of the company's balance sheet policy. A characteristic feature of this group of instruments is the ability to present a different scope of information for recipients; however, this does not affect the final (substantive) values of the financial results achieved.

The remaining two groups of instruments in the balance sheet policy are so-called substantive instruments affecting the achieved results (e.g., choice of depreciation method) and time instruments (e.g., choice of fiscal year).

4. Characteristics of the Study Sample

Research on the choice of the profit and loss account variant was conducted based on 401 national joint-stock companies listed on the Warsaw Stock Exchange as of December 31, 2021, on the primary market. Selected research variables were drawn from individual financial statements made available by the companies on their official websites. Based on this, the process of generating and structuring the database was carried out.
Key information about companies, such as classification according to the Polish Classification of Activities (PKD), industry profile, total assets, total revenue, total costs, fiscal year-end date, applied financial reporting standards, and the chosen variant of the profit and loss account, was collected.

During the analysis of the database, it was observed that a certain percentage of companies do not publish financial statements online (15 companies – 3.7% of the sample), have blocked access to their websites (6 companies – 1.5% of the sample), or provide only consolidated reports (6 companies – 1.5% of the sample). As a result, the study covered 374 companies, which represents over 93% of the population.

The evaluation of companies also included the criterion of the basis used in preparing financial statements. From the examined group, 320 companies prepared reports in accordance with International Financial Reporting Standards, while the remaining 54 applied the Accounting Act. The Accounting Act obliges capital groups (where the parent entity is listed on regulated markets) to prepare financial statements according to International Financial Reporting Standards (IFRS). However, the Act allows for the voluntary application of IFRS by selected entities. (Accounting Act – Article 45).

An important criterion for assessing a company is its core business activity, i.e., the industry in which it operates (Figure 1).

**Figure 1. Joint-stock companies in the examined sample – classification of activity.**

![Figure 1](image)

*Source: Own study.*

In the examined sample, companies engaged in service activities are most common (186 entities – nearly 50%), followed by manufacturing enterprises (104 entities),
and companies with a commercial profile of activities. The geographical analysis of the locations of companies listed on the Warsaw Stock Exchange revealed concentration in seven main cities in Poland (55% of headquarters), with Warsaw, Wrocław, Katowice, Poznań, Gdańsk, Lublin, and Toruń being predominant. 97% of companies prepared financial statements at the end of the calendar year, with few exceptions concluding the fiscal year at a different time.

The revenue generated by a given company does not determine the level of financial results; however, it can be used to estimate its size and classify it into groups: large companies (revenue above PLN 1 billion) – 67 entities (nearly 18% of entities), and small ones (below PLN 1 billion) – 307 units. The above classification was made for the purposes of the study. In this context, the basis on which the financial statements were prepared and the connection of this criterion with the size of the entity can be significant.

The size of the enterprise does not determine the choice of the legal basis for preparing the financial statements. Large companies prepare financial statements mostly (81%) according to IFRS, and the remaining 19% according to Polish Accounting Act.

Small enterprises prepare financial statements according to the Accounting Act in only 13%, as these are entities that do not have a capital group or are exempted by law from preparing consolidated financial statements. Another considered parameter is the type of company's business and its connection with the scale of generated revenues (Table 2).

**Table 2. Enterprise Size and Type of Business Conducted**

<table>
<thead>
<tr>
<th></th>
<th>Services</th>
<th>Manufacturing</th>
<th>Trade</th>
<th>Trade, services</th>
<th>Manufacturing, trade</th>
<th>Mining</th>
<th>Manufacturing, trade, services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue below PLN 1 billion</td>
<td>160</td>
<td>85</td>
<td>39</td>
<td>8</td>
<td>10</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total revenue above PLN 1 billion</td>
<td>26</td>
<td>19</td>
<td>15</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Source: Own study.*

Among companies with an annual turnover exceeding 1 billion PLN, the services sector dominates, representing 38.8% of this group. Manufacturing companies account for 28.4%, while the trade sector covers 22.4% of large economic entities. An analysis of companies with revenues below 1 billion PLN shows a similar trend, with the majority (52.1%) operating in the services sector.
Manufacturing companies in this category hold a 27.7% share, while trade is represented by 12.7% of small businesses.

These data indicate the prevalence of the service sector among companies of various revenue sizes. Companies engaged in mining or mixed activities constitute the smallest group, both among large and small companies.

Another criterion examined is the total sum of assets. For the purpose of the analysis, joint-stock companies were divided by size based on the total sum of assets into (Figure 2):

- Small, where the total sum of assets does not exceed 1 billion PLN,
- Medium, where the total sum of assets is between 1 billion and 5 billion PLN,
- Large, where the total sum of assets exceeds 5 billion PLN.

**Figure 2. Total assets and the basis for preparing financial statements.**

![Graph showing the distribution of companies based on total assets and legal regulation.]

**Source: Own study.**

The conducted comparative analysis between the total assets sum and the selected legal regulation as the basis for preparing financial statements revealed no correlation between these factors. Subsequently, an analysis of the relationship between the value of assets and the financial results of the examined companies was carried out (Figure 3).

The analysis of financial results of companies in relation to the value of their assets revealed that there is no direct correlation between these two variables. Regardless of the size of the enterprise, the majority of them (in the range of 73-82%) reported a profit for the analyzed reporting period. The last factor examined is the relationship between the type of business activity and the size of the enterprise (Figure 4).
The conducted segmentation analysis based on the value of assets and the type of business activity revealed a clear dominance of the service sector among small enterprises, constituting 50.0%, with the manufacturing sector ranking second with a 28.1% share among the surveyed companies, and trade lagging behind at 14.4%. In the group of medium-sized enterprises, the service sector also prevails, though with a smaller margin. The manufacturing industry, with a result of 26.7%, ranks second,
while the trade sector covers 22.2%. In this category, entities engaged in trade and services, as well as mining, achieve an identical share of 4.4%. In the segment of large enterprises, services again demonstrate a dominant position, reaching 59.5%—exceeding the share in small companies.

The manufacturing sector maintains a similar level to that observed among smaller units at 27.0%. Trade in large companies constitutes only 5.4% of the market, with the same share held by trade and service companies. In the analyzed group of large enterprises, no companies were identified operating in the mining sector or in manufacturing and trade.

4. Discussion of the Results

The analysis of the Income Statement content among the surveyed companies revealed that the majority of entities (83%) apply the cost-based variant of the Income Statement. This stems from the practice of cost tracking using accounts from groups 4 and 5, or solely group 5. The first criterion examined is the basis for preparing financial statements (Table 3).

<table>
<thead>
<tr>
<th>International Financial Reporting Standards (IFRS)</th>
<th>Cost-based variant</th>
<th>Comparative variant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>266</td>
<td>54</td>
</tr>
<tr>
<td>Accounting Act</td>
<td>45</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Own elaboration.

It has been observed that 86% of companies using the cost-based variant adhere to the International Financial Reporting Standards (IFRS), while the remaining 14%, following the comparative variant, base their financial statements on the Accounting Act. The obtained proportions are nearly identical in the group of companies applying the comparative variant, indicating a consistent choice of the legal basis for reporting, regardless of the adopted model for presenting financial results.

The second parameter analyzed is the examination of preferences in presenting the income statement based on the type of business activity. Clear trends among companies with diverse business profiles were identified (Table 4).

<table>
<thead>
<tr>
<th>Table 4. Choice of Income Statement Variant and Industry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-based variant</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>36</td>
</tr>
</tbody>
</table>

Source: Own study.
The obtained results indicate that companies engaging in complex activities involving production, trade, and services, as well as those specializing in mining, apply the cost-based variant format of the Income Statement. Subsequently, the distribution of preferences for presenting financial results is as follows:

- In the trade industry, nearly 80% of companies opt for the cost-based variant.
- In the service sector, over 19% of companies prefer the comparative variant.
- In the production sector, over 88% of economic entities present results in the cost-based variant.
- Among trading and service companies, only slightly over 18% opt for the comparative variant.
- The production and trade industry is characterized by the dominance of the functional format.

As part of the conducted analysis, the next group of research criteria focuses on the aspect of the size of enterprises. In the first step, companies were analyzed based on the revenue criterion (Figure 5).

**Figure 5. Choice of Income Statement variant and Revenue.**

The dominant method of presenting results among small enterprises is the cost-based variant, chosen by 84% of them. A similar trend is observed among large entities, where 81% of companies prefer this presentation method. These results suggest that the size of the enterprise does not have a significant impact on the choice of reporting method, with a slight advantage for smaller entities more often opting for the cost-based variant.

Next, the parameter of the size of the enterprise, measured by the size of assets, was examined. Companies were divided into three groups: small (total assets up to 1
billion PLN), medium (between 1 and 5 billion PLN), and large (over 5 billion PLN) (Figure 6).

**Figure 6. Choice of Income Statement variant and enterprise assets.**

![Choice of Income Statement variant and enterprise assets.](image)

**Source:** Own study.

Among small and medium enterprises, the cost-based variant is clearly dominant, used by 84% and 96% of the surveyed companies, respectively. Analyzing large entities, a preference for companies using the cost-based variant is also noted, i.e., 65%. However, this difference is not as pronounced as in the case of smaller enterprises.

5. **Conclusion**

This article presents the results of research on cost accounting methods and the choice of the Income Statement variant in companies listed on the Warsaw Stock Exchange. An analysis of 374 individual financial statements of public companies revealed that the majority (320 companies) adhere to the International Financial Reporting Standards (IFRS), while 54 rely on the Accounting Act.

The dominant sector is the service sector, and Warsaw is the region with the highest concentration of companies. Companies were classified by revenue size and total assets, allowing for a comparison of practices among small, medium, and large enterprises. Both small and large companies showed a tendency to generate profits and a preference for the cost-based Income Statement variant.

The analysis did not show a significant correlation between the size of the company and the choice of data presentation method, and similarly, the type of business
conducted did not significantly influence this choice. The results confirm that the choice of cost accounting method and Income Statement variant is independent of the parameters examined, suggesting that companies are guided by other considerations when deciding on the reporting method.

In summary, joint-stock companies demonstrate a tendency to use the cost-based Income Statement variant, regardless of the size of the enterprise and the type of business. These studies provide valuable information about reporting practices in enterprises and can serve as support in managerial decisions regarding cost accounting and financial presentation strategies. Further research should focus on examining the motivations of management in their preferences for the cost-based Income Statement.

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