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### PARAMETERIZATION OF INFORMATION CHANNELS IN STRATEGIC DECISION-MAKING – A CASE STUDY

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**Purpose:** The study addresses the problem of parameterization of information channels, indicating their impact on strategic decision-making in the enterprise. The study is an attempt to answer the research question - how does the parameterization of information channels moderate strategic decision-making in the enterprise?

**Design/methodology/approach**: In the article, the literature study method was applied as well as the financial analysis of data contained in the financial statements of the examined company was conducted. Initially, the structure of assets and liabilities of the examined company was analyzed. Then, the research also used the ratio analysis method. Financial liquidity, profitability and debt ratios were analyzed. The choice of these indicators resulted from the role they play in financial analysis.

**Findings:** The publication contributes to the discussion on the extent to which enterprises use the processes of parameterization of information channels. Ratio analysis of financial statements allows for the interpretation of the company's results. It is therefore a basic tool for identifying threats in the context of business continuity risk, allowing for making effective strategic decisions related to maintaining the optimal financial condition of the enterprise.

**Originality/value:** The publication constitutes the practical analysis of the company's financial situation, including business continuity risk assessment. The publication may constitute a reference point for other enterprises operating on the non-ferrous metal market and contributes to increasing awareness of the constant need to analyze the financial condition of the enterprise. **Keywords:** decision-making, assessment of the company's financial condition, ratio analysis.

Category of the paper: Research paper.

#### 1. Introduction

Effective decision-making in a dynamic business environment depends on access to the widest possible range of information about this environment (Wyskwarski, 2018). When managers encounter limitations in access to data, they must conduct the analysis of markets, competitors and their own enterprise. In such circumstances, it becomes crucial to use advanced financial analysis methods that provide accurate information about the state and conditions of the company's operations (Nowak, 2018; Chytilová, Talíř, 2024a). Financial indicators are important because they confirm the effectiveness of decisions and constitute valuable support in the decision-making process. Parameterization of information channels as a process of identifying and describing various parameters that are important for a given field of management makes it possible to adapt the process of transmitting information to specific needs and conditions and allows to track the flow of information and analyze its effectiveness (Floater, Hormann, 2005). This study attempts to answer the research question: how does the parameterization of information channels moderate strategic decision-making in the enterprise? The research method used in the work is literature studies and financial analysis in the form of a case study.

## 2. Strategic decision – making as a key element of management

Decision-making is a priority element of the management process (Jankowska-Mihułowicz, 2012). In various studies in the field of management, there is a range of definitions of management that consistently emphasize the importance of achieving set goals and effects (Mikuła, 2018). Achieving the expected performance depends on making many management decisions that are based on solid data that enable the analysis and assessment of economic processes (Wasilczuk, 2015). The decision-making process is the transformation of data into managerial actions (Trocki, 2019). The analysis of various options is an important part of the decision-making process, since its accuracy determines how effective the final decision will be. This requires not only recognizing and defining the decision-making problem, but also identifying various operation options and selecting the optimal solution to be used (Stabryła, 2010; Chytilová et al., 2024). In other words, decision-making is the process of selecting a solution that meets unique criteria that enable finding an acceptable compromise through which the decision can be implemented. The decision-making procedure in the company needs regular verification using appropriately selected indicators and methods (Bobruk, 2022).

# 3. Monitoring financial information flow metrics in the company's decision-making processes

Instruments used to parameterize information transmission channels usually focus on methods and strategies for solving financial issues (Romanowska, Melnarowicz, 2020). Financial statements are a key source of data on the operating results of enterprises (Polańska, Rytkowska, 2023). The assessment of various selection options in the context of parameterization of information channels can be effectively carried out using ratio analysis, which complements the analysis of financial statements (Lesiak, 2022). In the literature on financial analysis, indicators are defined as relative values that allow for the analysis and understanding of various economic aspects of the company's operations. The analysis based on indicators is an advanced stage of the initial assessment of financial statements (Wilczyńska, 2018). It uses ratios to show the relationship between important values found in the balance sheet, profit and loss statement, cash flow statement and statement of changes in equity. Financial indicators function as measures of the circulation of economic values in the enterprise and as sources of data for many stakeholder groups (Jerzemowska, Hajduk, 2015).

When analyzing metrics used to assess the selection in parameterization of information channels, it is important to focus on aspects of assessing the condition of the entire enterprise. The financial condition of the enterprise is evaluated taking into account both internal factors and external conditions in which the enterprise operates (Nestorowicz, 2015; Chytilová, Talíř, 2024b). Assessing the internal aspects of the company requires paying attention to the current state of resources, their durability and the possibility of converting them quickly into cash. The analysis of these elements allows for assessing the asset and financial condition, profitability and ability to settle liabilities. In the context of external aspects, the position of the company in relation to its business environment and competitors is analyzed (Mesjasz-Lech, Skowron-Grabowska, 2016). The most important financial indicators that should be monitored in every company allow for assessing the company's ability to repay current liabilities and maintain financial liquidity and these are financial liquidity indicators. Debt ratios, on the other hand, provide information about the company's debt burden and capital structure. In turn, profitability indicators - such as return on sales (ROS), return on assets (ROA) or return on equity (ROE) - assess the company's ability to generate profit. The last group of basic indicators are operational efficiency indicators, which indicate how effectively the company uses its resources (Sierpińska, Jachna, 2004).

The above-mentioned indicators are crucial for assessing the financial condition of the enterprise, managing its resources and strategic planning. However, sometimes it is necessary to conduct a deep analysis of various aspects of the company's operations, which is crucial for understanding its solvency, profitability, operational efficiency and strategic decision-making. Financial ratios provide information about various areas of enterprise activity, making ratio

analysis an indispensable instrument for the enterprise management board, investors and financial analysts (Dyduch, 2015).

# 4. Parameterization of information channels in the X company – a case study

The scope of activity of the analyzed company is wholesale and retail sale of metals and metal ores, management of metal waste and scrap, and production of copper wire and profiles. The X company has been operating since 2003. From the very beginning, the company has been a supplier of a wide range of non-ferrous metal products. To assess the company's financial condition, its financial statements for 2020-2022, published in Internetowy Monitor Sądowy i Gospodarczy - IMSiG (Internet Court and Economic Journal), were used. The company's bodies are the Shareholders' Meeting and the Management Board. At the end of the 2021 financial year, the share capital structure was as follows: total: 330 (number of shares), 330,000.00 (nominal value of shares), 100% (share in the company's share capital). Basic financial information about the analyzed company is included in Table 1.

**Table 1.** *Balance sheet of the analyzed company for 2020-2022* 

	2020	2021	2022
A. Fixed assets	43.84%	43.94%	26.99%
I. Intangible and legal assets	0.00%	0.00%	0.03%
II. Tangible fixed assets	99.81%	96.18%	99.61%
III. Long-term receivables	0.00%	0.00%	0.00%
IV. Long-term investments	0.00%	0.00%	0.00%
V. Long-term accruals	0.19%	3.82%	0.36%
B. Current assets	56.16%	56.06%	73.01%
I. Inventories	42.00%	38.98%	35.19%
II. Short-term receivables	56.00%	55.73%	59.91%
III. Short-term investments	1.80%	5.05%	1.93%
IV. Short-term accruals	0.20%	0.24%	2.98%
Total assets	100%	100%	100%
A. Equity	43.06%	44.31%	42.67%
I. Share capital	0.48%	0.46%	0.30%
II. Supplementary capital	93.41%	95.27%	66.26%
VI. Net profit	6.11%	4.28%	37.12%
VII. Write-offs from net profit during the financial year	0.00%	0.00%	-3.68%
(negative value)			
B. Liabilities and provisions for liabilities	56.94%	55.69%	57.33%
I. Provisions for liabilities	0.23%	0.23%	0.19%
II. Long-term liabilities	32.57%	31.81%	16.72%
III. Short-term liabilities	55.61%	54.19%	73.57%
IV. Accruals	11.59%	13.77%	9.52%
Total liabilities	100%	100%	100%

Source: Based on IMSiG.

The balance sheet of the company for 2020-2022 is presented in percentage terms in relation to the balance sheet total and in relation to the main parts of assets and liabilities, i.e. fixed and current assets, as well as equity and liabilities and provisions for liabilities. This made it possible to expand the research perspective to the main balance groups. In the empirical part of this study, the structure of assets and liabilities of the examined company was analyzed. In the further part of the research, the indexing method was also used. Financial liquidity, profitability and debt ratios were analyzed. The choice of these indicators was deliberate and resulted from their role as basic measures of financial analysis. The values of the calculated financial ratios of the examined enterprise are presented in Table 2.

**Table 2.**Selected financial indicators of the analyzed company for 2020-2022

Indicators examined\Years examined	2020	2021	2022	Recommended values		
Asset and capital structure indicators						
Equity to fixed assets ratio	0.98	1.01	1.58	≥1		
Fixed capital to fixed assets ratio	1.55	1.57	2.09	≥1		
Asset immobilization ratio	78%	78%	37%	-		
Liquidity ratios						
Current ratio	1.77	1.86	1.73	1.2 to 2		
Quick ratio	1.03	1.13	1.12	about 1		
Immediate ratio	1.03	1.13	1.07	-		
Working capital	39 422 667	42 283 164	78 584 449	Positive values		
Profitability indicators						
Return on Sales (ROS)	1.05%	0.72%	5.44%	Positive values		
Return on Assets (ROA)	2.63%	1.90%	15.84%	Positive values		
Return on Equity (ROE)	6.11%	4.28%	37.12%	Positive values		
Debt ratio						
Total debt ratio	57%	56%	57%	Below 57%		

Source: Own calculations based on IMSiG.

## 5. Analysis of the results

The analysis of the results of the X company indicated in the financial statements allows for the observation that in the years 2020 and 2021 the company achieved similar values of most balance sheet components. The value of the balance sheet total was PLN 90 million in 2020 and PLN 91.5 million in 2021. The value of current assets and fixed assets was also at a comparable level, as was the value of equity and external capital in both mentioned years.

The situation of the analyzed entity changed in 2022. The balance sheet total increased by approximately 56% compared to 2021, which amounted to approximately PLN 91 million. Such a significant increase in the balance sheet total was the result of an increase in net sales revenues, which increased by approximately 74% compared to 2021. The increase in net sales revenues resulted in an over tenfold increase in net profit, which amounted to over PLN 40

million (of which 10% was allocated for dividend payout) and an over 100% increase in short-term receivables in 2022.

On the side of fixed assets, the value of tangible fixed assets is noteworthy, reaching a similar level throughout the analyzed period, approximately PLN 70 million. In 2022, the value of inventories also increased significantly, which can be justified by the increase in sales revenues and the need to maintain high inventory levels to ensure continuity of production and sales.

It should be emphasized that the assets of the examined company are financed with external capital at the level of approximately 57% throughout the analyzed period. This result is a limit value for this indicator, thus the company's situation in this respect requires a broader analysis. However, taking into account the value of supplementary capital from the generated profit and the value of short-term receivables, the total value of which exceeds the value of external capital, the risk related to the total debt ratio is significantly minimized. This may also explain why the company maintains relatively low reserves for liabilities. It is worth adding that in the analyzed period, approximately 10% of foreign capital reflects the level of the company's accruals, which are the result of received subsidies.

Equity to fixed assets ratios and fixed capital to fixed assets ratio reached the recommended values in all years examined. The asset immobilization ratio was very good for an industrial enterprise.

The high level of cash in hand and on accounts means that all the liquidity indicators reached the recommended levels, and working capital achieved very high positive results in the X company, which means that the company has no problems with settling its liabilities. All the profitability indicators are positive, which is assessed positively, although their results in 2020 and 2021 were rather low, while 2022 brought an increase in the value of all the tested profitability indicators.

The company's analysis based on financial assessment indicators proves the good condition of the company. Very good profit for 2022, the highest in the company's history, and very good liquidity result in the fact that the company has security allowing for positive forecasts for its further operations. To sum up, based on the analysis of the results presented in the financial statements, it can be concluded that the accumulated funds allow for financing current operations mainly from external capital. Working capital remained at a safe, positive level in the years 2020-2022, and the appropriate values of liquidity ratios are also noted. The financial statements for 2020-2022 show that the company is profitable, and the level of profitability should be considered satisfactory.

### 6. Discussion

Based on the analyzed data, it should be concluded that the company's situation in the examined period is stable, which is confirmed by its financial results. It is worth emphasizing that in 2019, the company received financing from the National Center for Research and Development of nearly PLN 5.5 million. In 2020, the public aid the company received amounted to PLN 4.1 million. In 2021, on the other hand, the value of public aid obtained by the company amounted to PLN 1.5 million.

According to the data published on the Rejestr.io Fundacja Moje Państwo portal, the company also received funding from public aid of PLN 2.2 million in 2022 guaranteed by Bank Gospodarstwa Krajowego. Moreover, the X company is the beneficiary of numerous projects co-financed from public funds, which proves the company's potential to conduct R&D activities. Based on the above analysis and the specific nature of the company's operations, its financial condition is assessed as good and its financial risk as low.

#### 7. Summary

By parameterizing information channels based on data from financial statements in the examined enterprise, it is noted that possessing current and up-to-date information on the financial condition of the enterprise has a decisive impact on strategic decision-making in the enterprise (Edwards, 1954). The publication helps confirm that enterprises that monitor their financial situation on an ongoing basis, using the process of parameterization of information channels, gain an advantage in the competitive market and opportunities to survive in a turbulent environment. When answering the research question: how does the parameterization of information channels moderate strategic decision-making in the enterprise? - the answer comes to mind that correctly performed parameterization of information channels provides the information necessary to identify threats in the context of business continuity risk, thus allowing for making effective strategic decisions in the enterprise. As the conducted research has indicated, the analyzed company has a stable and safe financial situation, therefore strategic decisions in this company are not burdened with business continuity risk. Making strategic decisions in the event of a threat to the continuation of the company's operations is associated with high risk, therefore the parameterization of information channels using indicators in the field of financial analysis contributes to an increase in awareness of the constant need to analyze the financial condition of the company (Schwartz, 2016).

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