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Management Accounting and Resilience Economics Model for Sustainable Development of Manufacturing Companies

Reza Sotudeh [1*] Abasali Haghparast[2] Alireza Hirad[3]

1) Assistant Professor, Department of Financial and Accounting, Faculty of Humanities, Meybod University, Meybod, Iran. *Sotudeh@meybod.ac.ir*
2) Assistant Professor, Department of Accounting, Zahedan Branch, Islamic Azad university, Zahedan, Iran. *Aa.haghparastt@gmail.com*
3) Assistant Professor, Department of Accounting, Khash Branch, Islamic Azad university, Khash, Iran. *alireza.hirad@gmail.com*

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***Correspondence:**
Reza Sotudeh
Sotudeh@meybod.ac.ir

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Abstract

The purpose of this study is to explain the management accounting and resilience economics model for sustainable development of manufacturing companies. The present study was conducted based on the exploratory method and the content analysis and interview methods in terms of data collection. The statistical population consisted of 14 management accountants, financial managers of manufacturing companies, and faculty members as experts, selected based on the purposive sampling method in 2024. According to the content analysis method, 57 indicators were identified, and through interviews with experts and theoretical saturation, 7 dimensions, 18 components, and 58 indicators were identified in relation to the research model. The dimension of production management and optimization has the components of bottleneck and constraint management, increasing operational efficiency, cost management and continuous process improvement, the dimension of quality and standardization in the component of total quality management, the dimension of customer orientation and market has the components of customer and value chain, the dimension of financial and economic performance with a focus on profitability and sustainability in the components of profitability, economy and improving pricing according to the correct cost, the dimension of human and organizational resource management has the components of participation and commitment, training and learning and performance evaluation, the dimension of focusing on production costs has the components of optimal overhead allocation, cost allocation and activity identification, and the dimension of domestic production and decision-making has the components of domestic and national decision-making and production.

Keywords: Management Accounting, Resistance Economy, Sustainable Development, Manufacturing Companies.

JEL Classification: Q56, M41, Q01, D2, P42, D24.

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INTRODUCTION

Sustainable development is one of the key concepts in the current era that companies should pay attention to. Sustainable development means balancing today's needs with the future ability to meet these needs. While manufacturing companies seek to produce high-quality and profitable products and services, they must also consider their responsibility for negative impacts on the environment and society. In order to exploit sustainable performance opportunities, small and medium-sized companies should consider the drivers of supply chain dynamics and provide the basis for developing sustainable performance of the company by using supply chain dynamics indirectly through reproducibility and supply chain resilience (Ebrahimpour et al. 2023). The components of sustainable development in the performance of manufacturing companies include several different aspects. The first component is environmental management. Companies should adopt strategies and policies to reduce negative impacts on the environment. Sustainability reporting is a vital tool for managing the shift towards a sustainable global economy; an economy that combines long-term profitability with ethical behavior, social justice, and environmental stewardship. (Bremser, Wayne G. 2014). In the current era, when the global economy is facing multiple challenges, including severe volatility, increasing competition, and resource constraints, achieving sustainable development has become crucial for manufacturing companies, especially in developing countries. In the meantime, the resistance economy has been proposed as a local economic model with the aim of strengthening the country's economic foundations and reducing vulnerability to external shocks. On the other hand, management accounting, as a key tool at the disposal of managers, plays a fundamental role in planning, control, decision-making, and performance evaluation. The present study aims to explain and examine the link between the management accounting model and the resistance economy for the sustainable development of manufacturing companies. This model can be a guide for managers and policymakers in achieving sustainable development of manufacturing companies and ultimately, achieving the macro goals of the resistance economy. The purpose of the research is to answer the following questions: 1. What dimensions, components, and indicators does the management accounting and resistance economy model for sustainable development of manufacturing companies have? 2. What is the ranking of the dimensions of the management accounting and resistance economy model for sustainable development of manufacturing companies according to experts?

METHODOLOGY

This study aims to present a combined model of management accounting and resilience economics for the sustainable development of manufacturing companies and uses a mixed research method. This method is a combination of quantitative and qualitative approaches that allows for a deeper and more comprehensive understanding of the phenomenon under study. In this study, two qualitative methods were used: content analysis and semi-structured interviews with experts. Using open, axial, and selective coding methods, related concepts and categories were extracted and initial indicators were identified (Strauss, & Corbin, 1998). Semi-structured interviews were conducted with experts in the field of financial accountability and the public sector in order to complete and enrich the indicators identified in the content analysis stage and discover possible new dimensions. The experts included 14 management accountants, financial managers of manufacturing companies, and faculty members who have conducted research in the field of management accounting and resilience economics. Experts were selected based on purposive sampling and taking into account criteria of expertise, experience, and research conducted in the field of management accounting and resistance economics.

The number of interviews continued until theoretical saturation was reached, in which new interviews did not add new information to the data. Interview questions were designed based on the initial indicators identified in the content analysis stage and were completed and revised based on the experts' responses.

RESULTS

The purpose of this study was to present a management accounting and resilience economics model for the sustainable development of manufacturing companies and to rank the dimensions of the research model according to experts. In the content analysis stage, 57 indicators were identified. In relation to identifying the dimensions, components, and indicators of management accounting and resilience economics for the sustainable development of manufacturing companies, 7 dimensions, 18 components, and 58 indicators were identified according to experts. The production management and optimization dimension has the components of bottleneck and constraint management, increasing operational efficiency, cost management, and continuous process improvement; the quality and standardization dimension has the components of total quality management; the customer orientation and market dimension has the components of customer and value chain; the financial and economic performance dimension focuses on profitability and sustainability with the components of profitability, economics, and improving pricing based on correct cost; the human and organizational resource management dimension has the components of participation and commitment, training and learning, and performance evaluation; the focus on production costs has the components of optimal overhead allocation, cost allocation, and activity identification; and the domestic production and decision-making dimension has the components of domestic and national decision-making and production.

CONCLUSIOIN

Managing bottlenecks and constraints increases efficiency and reduces waste by identifying and eliminating bottlenecks in the production process. This, in turn, helps reduce costs and increase profitability. Also, increasing operational throughput optimizes processes and using new technologies can increase production capacity and respond to market demand. Controlling and reducing production costs is one of the main pillars of a resilient economy. This allows companies to offer more affordable prices in competitive conditions and maintain their profitability. Continuous process improvement allows companies to always be on the move and adapt to market and technological changes. Total quality management, by focusing on quality at all stages of production, increases customer satisfaction, reduces waste, and improves productivity. companies evaluate and improve their performance. Improving pricing based on correct cost pricing of products based on actual cost enables companies to compete in the market and maintain their profitability. This, in turn, helps increase the company's market share and profitability. Paying attention to economic indicators such as productivity, value added, and return on investment helps Correctly allocating overhead costs to products allows the actual cost of products to be calculated and pricing to be done correctly. Identifying and allocating costs to different activities helps companies identify and eliminate unnecessary costs. Using accurate and timely information for management decisions enables domestic resources reduces dependence on imports, creates employment, and boosts economic prosperity. In general, these dimensions and components, by creating a comprehensive management accounting system and focusing on the principles of resilient economics, help manufacturing companies increase their

efficiency and productivity, reduce production costs, improve the quality of their products and services, increase customer satisfaction, maintain and increase their profitability, be resilient to economic fluctuations, and achieve sustainable development.

Contribution of Authors
The authors jointly contribute to the preparation and publication of the article.

Ethical Approval
Informed written consent was obtained from individuals for the publication of their anonymous information in this study.

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This study had no sponsor.

Conflict of Interest
No conflict of interest was declared by the authors.

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