



UNIVERSITY OF NATIONAL AND WORLD ECONOMY

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# MANAGEMENT ACCOUNTING:

## Integrating Basic Concepts and Meaning

PUBLISHING COMPLEX – UNWE  
Sofia, 2023

## **MANAGEMENT ACCOUNTING: Integrating Basic Concepts and Meaning Second Edition**

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Cover Photo: © Yavor Michev / Traffic – Sofia, Bulgaria

ISBN: 978-619-232-719-4

UNIVERSITY OF NATIONAL AND WORLD ECONOMY  
Sofia, Studentski grad "Hirsto Botev"

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*На моите родители*

# About the Author



## Michael Musov

is an Associate Professor of Accounting at the University of National and World Economy (UNWE) – Sofia (<https://www.unwe.bg/>). In 2010 he earned a PhD in management accounting from the “Accounting and Analysis” department at the same university.

Musov teaches “Principles of Accounting” and “Management Accounting” in the BSc and MSc programs at the UNWE. He also teaches “Management Accounting for Decision Making” and “Management Accounting for Performance Management” in the UNWE MSc Program, accredited by the Association of Chartered Certified Accountants (ACCA), UK. Since 2015 Musov is the coordinator of the Partner-in-Learning agreement signed between the UNWE and the Institute of Chartered Accountants in England and Wales (ICAEW), UK. He has been the Academic Secretary of the “Accountancy and Analysis” department (2016–2022) and the Secretary-General for International Cooperation of UNWE (2019–2021). He is the UNWE Vice-Rector for Research and International Affairs (since 2021). Musov is co-chair of “SDSN Bulgaria” – the National Sustainable Development Solutions Network, hosted by the UNWE (<https://www.unsdsn.org/bulgaria>). In 2023 he was invited to join the global Networks Strategy Council of the SDSN, chaired by Prof. Jeffrey Sachs, Columbia University, New York, USA. A year before Musov was elected as a member of the General Assembly of the European Grouping of Territorial Cooperation HELICAS, Greece.

Musov is the UNWE institutional coordinator of all activities of the ENGAGE.EU European University (<https://www.engageuniversity.eu/>), coordinated by the University of Mannheim, Germany. He is also a member of the ENGAGE.EU Executive Committee.

For his teaching Musov was distinguished with the CIMA Teaching Excellence Award by the Chartered Institute of Management Accountants (CIMA) at the first-ever CIMA Excellence Awards virtual ceremony on 11 December 2020. This award recognizes lecturers who have demonstrated excellent engagement with CIMA students and effectively helped them to enhance their understanding of the subject taught.

Musov's research has been published by many leading journals in Bulgaria and also appeared in conference proceedings of selected papers published abroad (the USA included). For his research on management accounting and accounting education in 2015 and in 2017 Musov was listed on SSRN's Top Ten download lists for all papers first announced in the Social Science Research Network (SSRN) in the last 60 days. At the beginning of 2018 he was included in the top 10% of Authors on SSRN by total new downloads. He is the author of "*Study Guide to accompany Management Accounting: Integrating Basic Concepts and Meaning*" (2019, in English), of "*Professional Competencies and Personal Capabilities in Accounting Higher Education*" (2017, in Bulgarian), of "*Management-Accounting Analysis of Corporate Capital*" (2023, in Bulgarian) and (with Assoc. Prof. Boyka Brezoeva) of "*Management Accounting*" – text with cases (2020, in Bulgarian).

In advancing the practice of management accounting Musov has developed and/or financially managed more than 100 investment projects totaling more than EUR 100M. Many of the projects have given him the first-prize edge.

# Preface

The business and societal environment has dramatically changed over the past two decades. The accountant is not more a bookkeeper but a business partner in creating both economic and societal value. Being grounded in operational reality and employing leading edge methods needed for the organizational success, management accounting is at the heart of accounting profession today. This book is your guide through the challenges in understanding this fascinating field of accounting and this profession.

## Assumptions About This Book's Audience

*Management Accounting: Integrating Basic Concepts and Meaning* is intended primarily for the undergraduate (BSc) core course in management accounting. It could be used in MSc programs, for students whose undergraduate work did not include a management accounting course. It also could be used by students who are preparing for the management accounting examinations of the professional accountancy bodies at the foundation professional level. A course in financial accounting is a desirable but not obligatory preparation.

The aim of the second edition of this book is to provide an understanding of the basic concepts of management accounting in a clear, understandable, and integrative fashion. A balance of readability and factual soundness is pursued following Einstein's "make it as simple as possible, but not simpler". Since these concepts are inseparably interrelated as well as related to other areas of accounting and finance, I emphasize such interrelationships throughout. Great care is exercised to spell out the logic of each model or method and walk the student through realistic illustrative examples emphasizing the practical relevance of theory to management accounting practice.

## Book Philosophy and Structure

The purpose of this book is to provide an integrated framework of the basic management accounting concepts. This intent makes the text helpful in understanding the models and methods involved in decision making and performance evaluation at the foundation professional level.

This book is organized into four sections. The chapters are grouped as follows:

- Part One, Chapters 1 to 3, aims to provide an *introduction to management accounting*. You shall see that the knowledge gained in this part is crucial for the other three parts of the book where I consider costing, decision making, and performance management.
- Part Two, Chapters 4 to 7, aims to provide a consistent overview of the *major types of costing systems* used by today's organizations. It provides the intuition behind the costing systems needed for managing costs and making decisions, not just for reporting costs.
- Part Three, Chapters 8 and 9, aims to explore the development and use of financial information for *making managerial decisions* that increase the value of the organization. It discusses two different forms of managerial decisions.

- Part Four, Chapters 10 to 12, aims to consider the development and use of information for aligning the goals of the decision makers (i.e., the managers) with those of the organization (i.e., the shareholders). It deals with *performance management systems* that integrate planning and control at different levels within an organization.

The object of study in this book is the basic management accounting concepts, basic being the concepts that are the fundamental building blocks of the theory of management accounting. The subject of study is the interrelationships existing among the concepts, the relationships between these concepts and concepts of other areas of accounting and finance, as well as their application in basic models and methods involved in decision making and performance evaluation.

## Key Features

The author of this book uses as a starting point the framework established by some of the leading texts in management accounting around the globe. These include, but are not limited to, (in alphabetical order) the U.K. editions by Drury and the U.S. editions by Garrison, Noreen, and Brewer; Horngren, Datar, and Rajan; Lanen, Anderson, and Maher, among others. Although I rely on this framework, I have developed a text that distinctly reflects the Bulgarian educational settings. While some sections still require higher intellectual efforts than others, I believe that in comparison to the extant literature in management accounting, users will find this book shorter, clearer, and easier to understand. The strongest pedagogical features of each chapter include:

1. **“Management Accounting in Action” boxes.** Each chapter includes one opening and two in-chapter boxes demonstrating the application and importance of management accounting in a variety of real world settings. I believe that once students understand the useful applications of each topic they will have the motivation to learn the concepts, models, and methods discussed.
2. **An original common structure.** All chapters (with few exceptions) share a common structure to facilitate student’s learning. This structure includes:
  - (i) an introduction to the problem;
  - (ii) discussion of the basic concept(s) involved;
  - (iii) presentation of the general model that should be applied; and
  - (iv) description of important ethical issues.
3. **A lot of examples.** Each concept, model, or analytical method is immediately followed by one or more examples. These examples are visually marked with the following symbol ● to visually guide eye movements.
4. **A lot of illustrations.** A lot of illustrations are used to clarify the topics discussed. Most of them are originally designed.
5. **An unconventional chapter summary.** Each chapter closes with a single-page summary. This summary visually emphasizes all key concepts, models, and methods contained in the chapter, so the student can self-check understanding.
6. **Valuable appendixes.** Each chapter includes one or more appendixes. They are intended to challenge students who have a more extensive background in accounting and related fields.

## Study Guide

In addition to this book, a Study Guide is available for students. The second edition of the Study Guide follows the structure of this book and contains three sections: a section of multiple-choice questions, a section of problems with a number of requirements illustrating the application of the management accounting concepts and methods, and a section of answers to the multiple-choice questions and detailed, step-by-step solutions to all the problems. Readers who use this text together with the second edition of the Study Guide have a very strong self-study tool to understand the logic and practical relevance of management accounting.

## New in the Second Edition

The second edition builds on the success of the first edition. The text has been reviewed extensively to identify improvements over the previous edition. Changes are motivated by a desire to make it even more accessible and relevant to the contemporary management accounting practice. Selected chapter-by-chapter content changes are summarized below:

- Chapter 1** The section on the business and societal context of management accounting has been revised to emphasize the shared value thinking but not just the “social responsibility” mind-set. A new Exhibit 1–9 has been added. This chapter has a new appendix titled “Accounting Function in Today’s Organizations” to emphasize the major changes in the structure of the management accounting function in the organizations and the way it is performed. The existing appendix “Management Accounting and the Professional Qualifications” has been updated. The opening *Management Accounting in Action* box and the box on shared value creation have been revised.
- Chapter 2** The section on the cost classification for inventory valuation and profit measurement has been revised to improve the presentation of the existing material. The *Management Accounting in Action* box on the opportunity cost has been updated.
- Chapter 3** This chapter has a new appendix titled “Big Data Analytics” to incorporate recent developments in the management accounting literature and practice. The partial table of the  $t$  distribution has been removed to a separate APPENDIX A at the end of the book.
- Chapter 4** The section on applying job-order costing in multiple departments has been revised to clarify the usage of a single overhead rate vs departmental overhead rates.
- Chapter 5** The section on the comparison of weighted-average and FIFO methods in process costing has been revised to improve the presentation of the existing material.
- Chapter 6** The section on the activity cost driver has been revised to better explain the key concept. The discussion of the (dis)advantages of ABC systems has been slightly expanded. The section on the application of ABC systems has been revised.
- Chapter 7** The appendix titled “Throughput Costing” has been completely rewritten, including a new Exhibit 7A–1. The appendix “Allocating Actual Fixed Manufacturing Overheads for External-Reporting Purposes: The Requirements of IAS 2 *Inventories*” has been revised for clarity. A new Exhibit 7C–1 has been added.
- Chapter 8** The existing content of this chapter has been partially reorganized. The subsection on Scenario Analysis has been moved to the section on the operating risk where it



more naturally belongs. The section on the multi-product CVP analysis has been revised for clarity and expanded to include the target operating income and the margin of safety for multiple products. New exhibits (8–18 and 8–19) have been added to better explain the application of the multi-product CVP analysis.

**Chapter 9** This chapter has been renamed to better reflect its content. The section on the relevant-information has been completely rewritten for clarity. Exhibits 9–5, 9–8 and 9–11 have been revised to make them easier to understand. The appendix entitled “The Relevant Costs of Direct Materials and Direct Labor” has been completely rewritten and new exhibits (9A–1 and 9A–2) have been added. The same applies also to the appendix entitled “Pricing Decision in the Long Run” – it has been completely rewritten and a new Exhibit 9B–1 has been added.

**Chapter 10** This chapter has been renamed to better reflect its content that has been completely reorganized and rewritten to emphasize the five elements of the performance management systems. The performance management hierarchy, the critical success factors, the key performance indicators and the contingency theory approach, among others, have been added to the chapter and integrated with the existing material. Three new exhibits (10–1, 10–9, and 10–11) have been added and other three (10–2, 10–4, and 10–13) have been revised. The discussion of the sources of accounting information has been dropped from the text of the chapter and organized in a separate new appendix titled “Accounting Information and Performance Management”. A new appendix 10A–1 has been added.

**Chapter 11** A new section stresses the possible alternative structures of the master budget. The section on budgeting under uncertainty has been revised for clarity. The *Management Accounting in Action* box on the advertising budgets has been updated. This chapter has two new appendixes. One is titled “Budgeting Using Microsoft Excel” with an exhibit to highlight the power of Excel as a tool for management accounting. The other is titled “Learning Curves” with seven new exhibits and focuses on budgeting costs subject of the learning effect, i.e., of the improved productivity of the labor force.

**Chapter 12** This chapter has been renamed. The discussion of the standard cost concept has been rewritten for clarity. A new section with focus on the various aspects of completing the variance analysis cycle has been added. Exhibit 12–12 has been revised and a new Exhibit 12–13 has been added. The appendix entitled “Direct Material Variances: Further Aspects” has been renamed and revised. This chapter has two new appendixes titled “Direct Labor Variances: Further Aspects” and “Production-Volume Variance: Further Aspects” with two new exhibits respectively.

## Note to the Student

Students should keep in mind that just reading the text will not be enough to understand management accounting concepts. These concepts should be studied with the text in one hand and a pencil in the other. Only by carefully following the examples, you might be sure that you master the concepts. As you shall see, management accounting is relevant to all managers and relates to all activities of an organization. I truly believe that your understanding of these concepts will contribute to your education, career, and life, more generally.

# Acknowledgements

I am indebted to Prof. Dr. Trifon Trifonov who was the first to inspire me to work in the field of management accounting. Prof. Trifonov's notable research laid the foundations of management accounting in Bulgaria. His contributions to management accounting cannot be overestimated. I am honored that Prof. Trifonov highly appreciated the manuscript.

I am also grateful to Assoc. Prof. Dr. Boyka Brezoeva, CPA and Assoc. Prof. Dr. Nikolay Oresharov, CPA who were the reviewers of the first edition of this book. They have indirectly contributed to this text by sharing their expertise and experience with me. However, any errors, mistakes, and misconceptions are my own and should not tarnish the reputations of these esteemed professionals.

Appreciation also goes to my colleagues at the UNWE who have supported me in this endeavor: Prof. Dr. Dimitar Dimitrov, Prof. Dr. Stoyan Stoyanov, CPA; Prof. Dr. Snejana Bacheva, CPA; Prof. Dr. Daniela Feschiyan, Prof. Dr. Romyana Pojarevska, and Prof. Dr. Venelin Boshnakov, among others. It always has been and always will be a pleasure to work with them on the problems of accounting theory, practice, and education.

I am grateful for the permission to use materials from numerous organizations around the globe. In particular, I would like to thank Mr. Van Morrill – Permissions Coordinator at Harvard Business Publishing. Without his valuable and kind assistance in granting me the permission to use a number of materials copyrighted by Harvard Business Publishing, this edition of the book would never be the same.

Special thanks go to my students. They continue to inspire and motivate me to improve.

Last but definitely not least I thank my wife and my daughters, who by now must be thoroughly sick of this book and all my research work. Their love, understanding, and sacrifices have made it possible.

*–Michael Musov, 2023*