

1.Introduction

his textbook explores the standard methods for calculating and analyzing operating capital costs. These costs represent the tied-up operating expenses incurred by a company throughout the entire performance process. To measure these costs, the weighted average cost of capital (WACC) is commonly used. WACC serves as a key metric for determining break-even returns (minimum required returns) on investment projects in a well-founded manner. However, capital costs cannot always be clearly derived from monthly business analyses or annual financial statements.

In the past, theorists (whose names are not mentioned here for legal reasons) have developed numerous intriguing models for calculating capital costs—often without testing the practical applicability of their approaches.

Many key operational metrics can only be generated if sufficient business data is available and a sound evaluation process is in place. Theoretical models frequently assume that both—ample data and structured evaluation processes—are readily available in companies. In reality, however, this is often not the case.

This textbook is grounded in real-world business practice. Its core section demonstrates how operating capital costs can be mathematically identified as a concrete value using a formula and how they can be derived from a company's balance sheet and profit and loss statement. Additionally, it explains how to establish the well-founded business analyses and database required in theory under actual market conditions.

Designed as a reference book for practitioners, this textbook translates scientific findings into practical applications without relying on academic presentation styles.

Instead, it is specifically structured to provide direct, hands-on benefits for auditors, tax consultants, management consultants, controllers, and entrepreneurs. Its strong practical focus also shapes the organization of the book. It begins with a business analysis of a fictitious company, clearly illustrating how operating capital costs can be derived from balance sheet and profit and loss figures.

The company analysis follows a structured approach. First, profitability and returns are assessed over a two-year period. Next, the company's balance sheet structure is examined, revealing its debt situation, which serves as the basis for determining capital costs. The subsequent step evaluates the company's financial stability—

specifically, how long it can sustain operations without generating revenue while covering ongoing expenses.

The book also demonstrates how capital costs and WACC can be identified within an operational analysis using key financial metrics and their professional interpretation. Moreover, it highlights the value of well-founded business figures, as they create opportunities for sustainable optimization.

The ultimate goal of this textbook is to present a quantitative method that businesses can practically apply to derive meaningful financial metrics—particularly WACC—and enhance cost transparency. To maintain this focus, the book strictly concentrates on improving business management analyses through the practical application of WACC. Consequently, it does not include statistics on the operating capital costs of German companies or discussions of legal matters, such as those related to insolvency. The company and financial data presented are entirely fictitious, and any resemblance to real businesses or figures is purely coincidental.

2. The company

The determination of key figures and optimization approaches is illustrated using the example of a company in the chemical industry. This fictitious chemical company, Plewhe Chemie GmbH, is engaged in the development of a drug for cluster headaches.

The company's individual departments are outlined in the following table.

Business Departments
Administration
Controlling/Finance
Management
Human Resources
Research and development
Project- Management
Sales

The basic company data follows here:

Legal status	GmbH
Founded	1905
Headquarter	Breit-Beerbach
Management	Mr. Phillip von Plewhe
Nummers of Stuff	250
Industry	Chemy

The company operates as a GmbH and is headquartered in Breit-Beerbach in the Hessian Odenwald.

Its greatest challenge lies in the complexity of its finances, which makes it difficult to objectively assess the profitability of individual departments and the performance of different business areas. The company's primary goal is to identify cost traps at all levels in a timely manner and implement sustainable measures to prevent long-term revenue losses.

This reference book focuses exclusively on the internal analysis and evaluation of the company's financial structure. External factors such as market influences and seasonal fluctuations are not considered.

Founded in 1905 by the great-great-grandfather of the current managing director, Philip von Plewhe, the company has a long-standing tradition. Mr. von Plewhe is a business-minded and highly innovative