

Book Review

Camilla Falivena (2025). *Accounting for R&D: An epistemology journey between IFRS and US GAAP*. Milano: Giuffrè Francis Lefebvre

by Beatrice Meo*, Sandro Brunelli**

In the post-modern era, both academicians and practitioners are debating the rise of unprecedented invisible sources of value. In this context, the financial reporting system strives to capture the dematerialisation of assets and the emergence of non-financial drivers of value creation (Moffatt, 2016; Lakshan et al., 2022). In the aftermath, even the definition of assets has become elusive and imprecise. In detail, Research and Development (R&D) is a critical class of intangible assets, particularly present in science-based sectors (Park et al., 2024). Organisations in life sciences, electronics, and software should continually strive to innovate, but accounting rules governing R&D can either encourage or discourage investment (Lev, 1999). Under International Financial Reporting Standards (IFRS), the accounting treatment of R&D is based on International Accounting Standard (IAS) 38 – Intangible Assets. Research activities are accounted for as expenses. Instead, those about development activities, if they meet several stringent criteria, might be capitalised as intangible assets and subsequently amortised (Barker et al., 2022; Hellman, 2022). According to IAS 38, the relevant criteria are technical feasibility, intention and ability to complete/use, or sell, the asset arising from the development activities, probable future economic benefits, availability of resources, and reliable measurement.

These requirements make accounting more complex because preparers must distinguish research from development and assess when the criteria are met (Parker, 2012). In contrast, the United States Generally Accepted Accounting Principles (US GAAP) are more conservative. Accounting Standards Codification (ASC) 730 – Research and Development generally requires R&D costs to be expensed as incurred and allows capitalisation only in limited circumstances, such as specific software development and acquired-in-process R&D in business combinations (Persons, 2010). Even for acquired projects, IFRS capitalises in-process R&D regardless of the nature of the transaction (Ma & Zhang, 2023), whereas US GAAPs require expensing R&D acquired outside business combinations (Chaney et al., 2020).

Scholars have questioned whether capitalising development costs under IFRS or expensing them under US GAAP provides more helpful information (Turlington et al., 2019; Oswald et al., 2022; Monson & Kawa, 2025). Evidence from the United Kingdom (UK) shows that when companies had discretion under local GAAP, those choosing to capitalise development costs exhibited a stronger association between R&D and share returns. However, after mandatory capitalisation under IFRS, this effect disappeared (Lv et al., 2019). King (2022) models the uncertainty of future R&D benefits and suggests that immediate expensing produces accounting numbers that explain market values as well as or better than a capitalisation-and-amortisation approach. However, several studies also document the economic benefits of capitalisation: UK and German firms that switched from expensing to capitalising after IAS 38 invested more in R&D, enjoyed lower cost of capital, and higher investment efficiency than non-switchers (Ravselj & Aristovnik, 2019; Dinh et al., 2020; Angelakis, 2023). Users of financial statements generally prefer the principle of capitalising development expenditures but complain that the IAS 38 recognition criteria lack clarity, are subject to multiple interpretations, and create opportunities for earnings management (Angelakis, 2023). For these reasons, users call for additional guidance and disclosures to improve the decision usefulness of capitalised R&D (Lev & Sougiannis, 1996). The IFRS staff's review (IFRS, 2021) of the academic literature notes that intangible assets have unique properties – such as non-rivalry, low excludability, sunk costs, and synergies – that make measurement difficult and suggest that recognition should balance faithful representation with uncertainty (Barker et al., 2022).

The debate has gained relevance because intangible-driven companies now account for a growing share of market value. A study of IFRS adopters found that more than 60% of firms still do not capitalise R&D (Mazzi et al., 2019). In fact, strict IAS 38 criteria and conservatism appear to discourage recognition, leading to inconsistent treatment of internally generated *versus* acquired intangibles and widening book-to-market gaps. The aforementioned study recommends relaxing the criteria for capitalising development costs and improving disclosure so that investors understand management's judgments and the total R&D spend. In the meantime, the IFRS Foundation is reviewing its guidance, and IAS Board is evaluating whether IAS 38 still accurately reflects business models (Angelakis, 2023).

According to researchers and practitioners, the issue is that the different treatments under IFRS and US GAAP make difficult comparisons and could distort business-administration decisions (Mishra & Celestin, 2025).

These issues require harmonising the criteria, providing more explicit guidance on when development expenditures become assets, and increasing transparency about unrecognised intangibles (Barker et al., 2022).

R&D accounting sits between financial reporting, corporate strategy, and capital markets (Lev, 1999). Under these lenses, the debate focuses on the trade-off between reliability and value relevance: IAS/IFRS emphasise a forward-looking approach, while US GAAP adopts a more conservative stance (Hellman, 2008). Different treatments of R&D affect reported profits, valuation, investment incentives, and even merger-and-acquisition strategies. Academics and practitioners worry that inconsistent reporting reduces comparability and could mislead investors (Lev et al., 2005; Lv et al., 2019; Alhadi et al., 2021; Anderson, 2025).

To address this gap, Falivena (2025) offers an engaging and timely contribution in her book “*Accounting for R&D: An Epistemology Journey between IFRS and US GAAP*”, aiming to bring order to the multiple viewpoints that characterise the literature on this topic. The book integrates Italian *Economia Aziendale* traditions with international accounting research and explicitly connects accounting rules to agency theory, stakeholder theory, and the resource-based view. The book is motivated by a gap in sector-specific analyses: most comparative studies examine R&D in general, whereas the author focuses on the medical-device subsector within the broader life-sciences industry. By doing so, the research brings a nuanced understanding of how R&D accounting practices influence investment decisions in firms whose survival depends on continuous innovation. The aim of the book is twofold: first, to resume the academic debate about the role of a specific class of intangibles, R&D, in business administration practices between IFRS and US GAAP, and, secondly, to open up the urgent issues regarding.

The book is divided into four chapters. The first one opens with a historical overview of intangible assets: how they went from being negligible balance sheet items to becoming the focal strategic asset of organisations. The chapter focuses on the lack of a common terminology in the literature, while emphasising that R&D is indeed essential in highly innovative sectors such as life sciences and electronics. The chapter examines multiple definitions of intangible assets, ranging from intellectual property and intellectual capital to knowledge-based resources, and further emphasises that conceptual fragmentation is a barrier to research progress. It separates intangible assets from goodwill, explains why grouping internally developed intangible assets under goodwill can obscure economic reality, and emphasises

that understanding intangible assets is essential for interpreting corporate performance and strategic choices (Xie & Zhang, 2023). The chapter also explores the unique properties of intangible assets, which can be identified by the following organisational characteristics: Open, Dynamic, Complex, Goal-oriented, Probabilistic, and Autopoietic. This raises discussion of both accounting theory and a resource-based view of the firm and highlights why R&D cannot be viewed solely as an expense but must be considered a strategic investment.

Chapter two compares the standards governing R&D under IAS/IFRS and US GAAP. It examines the accounting treatments, recognition criteria, measurement methods, and disclosure requirements for development costs, providing a comparative analysis. The chapter explores issues such as internally generated intangible assets, ongoing R&D acquired in business combinations, and software development. It examines how each framework impacts the income statement, balance sheet, and voluntary disclosure practices. This comparative discussion helps understand the differences in standard-setting philosophy and how these translate into differences in reported numbers. The IFRS and US GAAP approaches to R&D are then examined. Based on IAS 38 research costs are accounted for as expenses, but mandate the capitalization of development costs once six criteria are met: technical feasibility, intention to complete the intangible, ability to use/sell it, the possibility to generate economic benefit, availability of technical, financial asset to develop the intangibles, and the possibility to reliably and effectively measure intangibles expenses. This principles-based approach also requires the ability to distinguish research from development. In contrast, ASC 730 of US GAAP requires R&D costs to be accounted for as incurred, and only certain costs (such as software development or in-process costs) can be capitalised.

Then, the implications of these differences are analysed in terms of approach (IAS 38 is activity-oriented, while ASC 730 is entity-based), practice, and accounting rules for R&D (which are reflected in the recognition of internally generated intangible assets). Moving on, the analysis examines the impacts of the two frameworks on Financial Statements, particularly the income statement and balance sheet, underscoring the importance of improving disclosure quality. The chapter concludes by discussing how financial transparency can be improved and also highlights some challenges, such as addressing the evident subjectivity in certain reporting elements and ensuring consistency with disclosure requirements.

Chapter Three, “Accounting for R&D: evidence from the international literature”, maps the state of academic research on R&D accounting. It identifies key themes that revolve mainly around disclosure practices, earnings management, forecast accuracy, value relevance, and investment efficiency. The chapter provides a descriptive analysis of disclosure trends and data sources and offers a thematic synthesis that highlights unresolved issues and emerging areas of consensus. The author argues that the debate is divided by those who emphasize the uncertainty of R&D investments and those who are more interested in providing information on performance. At the end of this third chapter, there is a section on avenues for further research in which the author suggests that active scholars place greater emphasis on empirical evidence that can yield new theoretical insights.

Chapter four situates the debate within a specific industry context: the R&D characteristics of life sciences firms. First, it depicts industry-specific characteristics and examines how these characteristics pose challenges for cost accounting and financial reporting, as well as their influence on investment decisions. The author argues that life sciences companies face unique R&D characteristics: projects are lengthy, subject to scientific and regulatory uncertainty, and require substantial investment. The chapter includes two case studies: Medtronic and Siemens Healthineers. By analysing the financial performance and effectiveness of their R&D activities, these cases illustrate how different accounting treatments under IFRS and US GAAP influence companies’ financial statements and strategic decisions. The case studies reveal both the strengths and weaknesses of current reporting requirements and show how US GAAP provisions permitting R&D capitalisation in business combinations can raise merger and acquisition processes and related market concentrations. The analysed cases also link accounting choices to managerial incentives and investment decisions, echoing broader research that managerial discretion in R&D capitalisation can be driven by earnings management and bonus considerations. The comparison of the two cases highlights the possibility that capitalising in-progress R&D assets under US GAAP can amplify mergers and acquisitions and the growing number of R&D-based alliances.

A careful reading of each chapter demonstrates that R&D accounting is not just a technical issue but also influences investment behaviour, market competition, and the alignment of accounting with strategy. This re-

view of regulatory analysis, academic evidence, and industry practice provides a resource for academics and practitioners looking to understand the multifaceted impacts of R&D accounting. The book is also motivated by several interrelated gaps in both the academic literature and practice. One is conceptual: research on intangibles has long been hampered by a constant lack of a homogeneous terminology, with overlapping terms such as intellectual property, intangible assets, intellectual capital, and knowledge capital. This fragmentation undermines comparative analysis and makes it difficult to develop coherent accounting treatments. Also, the divergent treatments of R&D under IFRS and US GAAP unveil another gap. As mentioned, IAS 38 requires capitalising development costs once specific criteria are met, whereas US GAAP requires immediate recognition of expenses and allows capitalisation only in specific circumstances. These differences affect both reported earnings and investment incentives, often simultaneously, but much of the existing literature examines the standards separately or at an abstract level. Another gap concerns sector-specific impacts. The author emphasises the unique R&D challenges faced by life sciences firms, but the existing debate tends to treat R&D generically. By focusing on medical device companies within the life sciences sector, the book addresses an area that is underexplored. This book represents a successful attempt to address and/or open new avenues for research into the reported gaps by comparing IFRS and US GAAP on a granular level and by examining how those standards operate in practice through industry case studies.

Finally, the book seeks to bridge disciplinary divides. It weaves together Italian *Economia Aziendale* traditions and international accounting research, linking technical accounting rules to management theories such as agency, stakeholder, and resource-based views. This approach is somewhat rare in the academic literature, which usually splits financial reporting from strategic management. This work bridges the gap between regulatory standards and the realities faced by organisations by incorporating theoretical perspectives, examining concrete evidence, and analysing real-world cases, resulting in a balanced and clear summary. The book contributes to the ongoing debate about how to reconcile stability and value relevance, where intangibles pilot competitive advantage. This book will be of interest to academics, practitioners and regulators interested in aligning accounting standards with the realities of a knowledge-based economy.

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