Book Review

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Nicola Dalla Via, XBRL for Business Reporting: Reference Framework, Network Analysis, and New Trends, FrancoAngeli, 2020

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Digital technologies have deeply transformed corporate reporting in the last decades and the pace of change is accelerating fast. As of today, millions of companies generate and submit to regulators digital versions of business reports in structured XBRL format. Essentially, XBRL (eXtensible Business Reporting Language) is an open and global reporting standard designed to facilitate the publication, exchange, and processing of financial and non-financial information. The adoption of XBRL eliminated much of the hustle of data gathering and re-keying of reporting frameworks. Recently, the European Securities and Markets Authority (ESMA) adopted the European Single Electronic Format (ESEF) as the electronic reporting format in which issuers on EU regulated markets must prepare their annual financial reports (European Commission, 2018). This may help stakeholders to automate data extraction and processing, as well as compare financial performance across companies and over time. According to a recent survey, CFOs, financial controllers, and other finance leaders have seen an acceleration in the transition from traditional financial reporting to an enhanced corporate reporting model that encompasses financial and ESG reporting (EY, 2021). To meet stakeholders' expectations, ESG reporting should mature to have the same level of rigor and consistency as financial disclosures. This shift in quality and scope of corporate reporting will be facilitated by the development of new sustainability reporting standards and accompanying XBRL taxonomies to digital tag the statements. The provision is already included in the proposal of Corporate Sustainability Reporting Directive (CSRD) agreed at political level by the European Council and the European Parliament in June 2022.

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Against this backdrop, Nicola Dalla Via with his book "XBRL for Business Reporting: Reference Framework, Network Analysis, and New Trends" provides a timely contribution. The book has three main objectives. First, it introduces readers to the XBRL-related studies published in the last twenty years in the accounting field identifying the main research areas and the potential research gaps. Second, it applies an innovative methodology to map the most prominent authors and studies, and to provide suggestions on the current dynamics and future perspectives. This is a helpful analysis because it elucidates with a quantitative approach the knowledge structure and the intellectual development of the extant research on XBRL. Third, it explores in more detail the market consequences of XBRL adoption. The topic is particularly relevant for investors and regulators still uncertain about the new disclosure format. In meeting these objectives, the book is targeted to academics and practitioners interested in understanding the digital development of corporate disclosures, its consequences on firms and stakeholders, and the most prominent research issues.

The book is divided into five chapters. Briefly, the first chapter offers an introduction to XBRL and its history. Chapter 2 provides a comprehensive literature review of XBRL research in accounting and auditing. This is followed by Chapter 3 which complements the review by presenting a Social Network Analysis (SNA) of XBRL research. Based on the research gaps outlined in the review, Chapter 4 explores the relation between XBRL adoption and analyst forecasts, which is an underinvestigated topic. Chapter 5 highlights three trends that will likely impact XBRL research in the next decade and concludes the book. The remainder of this review summarises and discusses the most important takeaways of each chapter.

Chapter 1 presents the book's structure and introduces readers to the theme of the book. It begins by outlining the history of XBRL. This section illuminates the core objectives and the most important milestones of XBRL development. The discussion of historical context is complemented by an overview of the adoption of the reporting format around the world that underlines the different implementation approaches and the trend over time. The XBRL initiative gradually assumed a broader scope and went beyond the digitalization of traditional financial statements.

Chapter 2 examines in detail the literature on XBRL that has been published in peer-reviewed accounting and information systems journals during the last 20 years. Dalla Via extends prior reviews that covered only earlier periods or assumed a different focus (Roohani et al., 2010; Grabski et al., 2011; Perdana et al., 2015), highlighting for example topics different

than information systems issues and focusing more on accounting-related research areas. The literature review presented in the chapter identifies the main research areas, past and current trends, as well as opportunities for future studies. It includes over 160 articles extracted from Scopus, and it is articulated into six main areas. The area of XBRL adoption presents the first studies focused on the firm-level determinants of XBRL adoption and the organizational and technological changes triggered by XBRL introduction. After the mandatory adoption, one stream of studies focused on the impact of XBRL filings on the capital markets, such as the effects on the cost of debt and on the cost of equity capital, and the consequences on accessibility and timeliness of financial reporting information. Another stream of research examined the quality of filings and related issues, such as the occurrence of errors and the introduction of taxonomy extensions. A fourth area is identified as XBRL and auditing. Drawing on prior literature, the section shows that there is still an open debate on the assurance of XBRL filings and the use of XBRL data in the auditing process. For instance, in most countries, regulations do not require an audit of XBRL filings, but only on the financial statements as a whole, with consequences for the accuracy and reliability of data. Fifth, the area of XBRL and academic education emphasizes the importance of learning and experience as key drivers affecting how XBRL filings are prepared and used. The last area is focused on the technical developments of the XBRL format, such as the recent SEC adoption of Inline XBRL. The book acknowledges the importance of the studies in this research stream as they explore the most recent advancements in XBRL reporting and they also provide new research opportunities.

Chapter 3 moves on to developing a social network analysis of the studies identified in the previous chapter. The purpose of the chapter is to develop a systematic quantitative analysis depicting the knowledge structure and the intellectual progress of XBRL research. This chapter represents one of the most important parts of the book. It adopts an innovative process that is commonly applied in other academic fields, such as sociology and physics, to identify the most prominent authors, articles, and research topics. The first part of the chapter guides the readers through the origins of SNA, the main applications, and the most important concepts (Wassermann and Faust, 1994). The main analysis requires no prior knowledge of the concepts meaning this section is especially helpful for readers unfamiliar with SNA and the related metrics. As preliminary analysis, Dalla Via conducts a bibliometric analysis to identify the most important authors in the field

and to construct a semantic map; this map can be used to discover linkages among relevant topics and trace research tendencies over time. The outcome of the investigation is salient as it provides information on the usefulness and impact of the publications, as well as highlights the most influential articles. The remainder of the chapter deepens the investigation by analysing co-citations and co-authorship of articles with social network analysis tools to identify the structural characteristics of the co-authorship network, such as density and cohesion. As explained in the book, SNA allows the analyst to identify the core actors in a network and to find and interpret patterns in the social ties among them. In the context of XBRL research, specific measures, such as centrality, provide information about the role of each author and his/her influence and position within networks. It is worth noting that the analysis conducted in the chapter allows us to unveil relations otherwise not identifiable. For instance, there is a small group of authors that have a central position because of the large number of co-authored studies, but other authors are central because they act as a "bridger", using the word of Dalla Via, between authors not otherwise connected by facilitating the connection among authors. In addition to revealing individual characteristics of actors, Dalla Via uses SNA measures to identify whether the cohesion of a network is organized around a particular actor or cluster of actors and reveal who are the most prominent authors in the field and how they cooperate. The last analysis presented in the chapter adopts a different point of view and focuses on articles rather than authors. The cocitation network exhibits five communities or clusters that can be associated with different areas of research. More in detail, it outlines the knowledge base of the research field and identifies the major topics that have been most discussed in past years. Overall, this chapter offers diverse suggestions for academics and practitioners involved with XBRL on the actual dynamics and future development opportunities. Further, as Dalla Via argues, "the analysis shows how clusters of authors are defined based on their fields of research. Therefore, a stronger connection among authors across clusters, with a consequent greater cross-fertilization across XBRL subfields, might lead to new collaborations and research opportunities" (p. 98).

Chapter 4 examines the benefits of mandatory adoption of XBRL in the United States and its impact on analysts' behaviour. All public companies in the US have been required to submit to the SEC in their 10-Q and or 10-K financial reports in XBRL format. In particular, companies became subject to the interactive data requirement in three phases. Phase I filers were large accelerated filers with more than \$5 billion float and a fiscal period

ending on or after June 15, 2009. Phase II companies were all other large accelerated filers with a fiscal period ending on or after June 15, 2010. All other companies with a fiscal period ending on or after June 15, 2011 were included in Phase III. The contribution of the chapter lies on the fact that previous studies on the market consequences of XBRL adoption have focused mainly on information asymmetry and have produced mixed results (Blankespoor et al., 2014; Kim et al., 2012). The empirical investigation extends prior studies (Kim et al., 2012; Liu et al., 2014; Yoon et al., 2011) and exploits the phase-in approach of the SEC mandate to examine whether the impact of analyst forecast behaviour changes depending on the adoption phase. The sample includes 749 Phase II and 1,619 Phase III filers in the period 2007-2013. The findings indicate that XBRL adoption is positively associated with analyst following as well as analyst forecast accuracy. Further, the results show that analyst forecast behaviour changes according to the XBRL adoption phase and has important implications for authorities and market regulators. In sum, the findings of the empirical investigation confirm the value of XBRL to capital market participants and the benefits that sophisticated users of financial information have from examining interactive reports.

The book concludes in Chapter 5 by highlighting three trends that will likely impact XBRL research in the next decade and by outlining some avenues for future research. First, Inline XBRL is an enhanced reporting format that is already changing business reporting both in the US and Europe. It simplifies the analysis performed by information users and it provides new ways of exploring and analysing data. Second, the European Union is supporting the development of non-financial reporting standards based on XBRL. This initiative is consistent with the recent adoption of XBRL for the annual financial reports of European listed companies and it has a high potential for future research studies. As a matter of fact, EFRAG recently published a call for tenders to outsource the development of the XBRL taxonomy of the first set of European Sustainability Reporting Standards (ESRS) to XBRL specialised experts. Third, audit and assurance procedures need to be adapted to the reporting format and new standards will be developed.

Overall, the volume offers several benefits to the reader. Dalla Via provides a timely and comprehensive analysis of XBRL and its role in corporate reporting. The relevance and contribution of this book are confirmed by the recent developments on corporate disclosure introduced by regulators and policymakers. The systematic literature review, complemented by

the bibliometric and social network analysis, allows the readers to discover how XBRL research evolved and to highlight the potential research gaps. Further, the empirical investigation sheds some light on the highly debated topic of the market consequences of XBRL adoption. Finally, the book offers some insights on the future XBRL-related trends that might be of interest to academics, preparers, regulators, auditors, and stakeholders.

References

- Blankespoor E., Miller B. P., and White H. D. (2014), Initial evidence on the market impact of the XBRL mandate, *Review of Accounting Studies*, 19(4), pp. 1468-1503.
- EY (2021), How do you transform data into insight? Reframing finance talent and data analytics to enhance corporate and ESG reporting Eighth Global Corporate Reporting Survey. -- Available at: https://www.ey.com/en_gl/assurance/how-do-you-transform-data-into-insight.
- European Commission (2018), Commission Delegated Regulation supplementing Directive 2004/109/EC of the European Parliament and of the Council with regard to regulatory technical standards on the specification of a single electronic reporting format. -- Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R0815-20220101.
- Grabski S. V, Leech S. A., and Schmidt P. J. (2011), A review of ERP research: A future agenda for accounting information systems, *Journal of Information Systems*, 25(1), pp. 37-78.
- Kim J. W., Lim J.-H., and No W. G. (2012), The effect of first wave mandatory XBRL reporting across the financial information environment, *Journal of Information Systems*, 26(1), pp. 127-153.
- Liu C., Wang T., and Yao L. J. (2014), XBRL's impact on analyst forecast behavior: An empirical study, *Journal of Accounting and Public Policy*, 33(1), pp. 69-82.
- Perdana A., Robb A., and Rohde F. (2015a), An integrative review and synthesis of XBRL research in academic journals, *Journal of Information Systems*, 29(1), pp. 115-153.
- Roohani S., Xianming Z., Capozzoli E. A., and Lamberton B. (2010). Analysis of XBRL literature: A decade of progress and puzzle, *International Journal of Digital Accounting Research*, 10, pp. 131-147.
- Wasserman S. and Faust K. (1994), *Social Network Analysis*. *Methods and applications* (Cambridge: Cambridge University Press).
- Yoon H., Zo H., and Ciganek A. P. (2011), Does XBRL adoption reduce information asymmetry?, *Journal of Business Research*, 64(2), pp. 157-163.