

COVID-19 Research Streams Emerging in International Financial Reporting Standards Related Studies

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Abstract: Interpretation for the adoption of the International Financial Reporting Standards (IFRS) became to be challenging for organizations. Over time, these standards are changed to accommodate the improvements identified in accounting rules. COVID-19 pandemic impacted accounting reporting considering that contingencies and risks arising from this health crisis should be reported to stakeholders. In order to provide empirical evidence of the most important COVID-19 related practical and academic issues and challenges addressed by academics when reporting under IFRS, this study applies an automated computer-aided analysis for clustering the bibliometric data published concerning IFRS and COVID-19. The results support academic studies and practitioners by identifying the COVID-19 research streams that received the most attention in 2020. This study also suggests guidelines for future research that derive from past academic contributions.

1. INTRODUCTION

The adoption of International Financial Reporting Standards (IFRS) made a revolution in the way organizations applying those rules were compared. The fact that stakeholders could look to the accounts knowing that accounting principles were homogeneously created a sense that reports were being written in "*the same financial language*" (Brown, 2011).

Over time, the adoption of IFRS has been studied by scholars. Although the benefits of applying IFRS is huge – cost-benefit, interpretation and responsibility influenced application advantage (Bozkurt et al., 2013), studies also prove that IFRS contributed to the financial crisis, highlighting the need for agencies to improve the transparency of information provided to the capital markets (Barth & Landsman, 2010).

COVID-19 pandemic is a different crisis that crosses health, social and economic domains. In this situation, it is important to understand how IFRS can contribute to overcoming this crisis, namely understanding how IFRS is being addressed to support organizations providing accountability and transparency to stakeholders.

By exploring the literature addressing financial reporting standards-related issues, the present study contributes to unveiling the clusters of themes included in the content of the academic publications in 2020 that address COVID-19 related issues in this field. Important contributions to practitioners and researchers are presented and discussed.

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2. LITERATURE REVIEW

The literature addressing IFRS is vast. According to George et al. (2016), this literature mainly points out benefits in regards to the IFRS adoption process. These authors summarize the following benefits: improved transparency, lower costs of capital, improved cross-country investments, better comparability of financial reports, and increased following by foreign analysts.

Other scholars highlight that there is a cost-benefit decision when deciding on adopting IFRS in developed and emerging countries (Uzma, 2016). This decision process implies considering the corporate governance model, fair value accounting and other environmental concerns.

Indeed, Fox et al. (2013) applied a case-study approach that shows different experiences in adopting IFRS, namely cases when costs exceed the benefits of reporting under the new standards, and difficulty in responding to the large set of stakeholder views.

In the COVID-19 pandemic context, there are also decisions to take, namely regarding the need of adapting IFRS to the challenges organizations face as a consequence of alterations in the supply chain (from onsite to online) or the challenges accountants face when conducting their work remotely.

3. METHODOLOGY

The present study is focused on scientific literature, which implies considering the publications indexed in scholar databases. Scopus is the large academic database of peer-reviewed scientific literature.

In this sense, the sample of publications was selected using the Scopus resources for collecting bibliometric data. First, a query was designed to include IFRS and COVID-19 related studies. The group of terms referring to the COVID-19 pandemic was identified in previous studies addressing the COVID-19 pandemic from a literature review point of view (Yu et al., 2020). To include IFRS-related studies both IFRS and "International Financial Reporting Standards" terms were included. As a result, the following query was applied, restricting the studies to the years 2020 and 2021:

(TITLE-ABS-KEY ("2019-nCoV" OR "COVID-19" OR "Coronavirus Disease 2019" OR "Novel Coronavirus Pneumonia" OR "NCP" OR "2019 novel coronavirus" OR "SARS-CoV-2" OR "2019 Novel Coronavirus Diseases" OR "novel coronavirus" OR "pneumonia") AND TITLE-ABS-KEY ("IFRS" OR "International Financial Reporting Standards" OR "financial reporting")).

This methodology follows previous literature review studies using Scopus and the Web of Science database (Santos et al., 2020).

The search returned 53 documents indexed in the referred database, which includes the type of documents listed in Table 1.

The scientific articles are the most common type of document on the sample. After collecting bibliometric data, the full corpus of the documents was exported and a total of 20 files were downloaded from the Scopus database. This means that about 33 were not possible to access due to publisher protocols.

Document type	Absolute frequency
Article	41
Book	1
Book Chapter	1
Conference Paper	3
Conference Review	2
Letter	1
Review	4

Table 1. Absolute frequency of data by document type

Source: Own research

The content of the full documents was analysed using the text mining technique, allowing to provide information on the terms most applied in this literature and apply topic modelling algorithm for grouping documents in topic trends (Santos et al., 2020). The data was prepared based on the identification of stopwords and equivalents/synonyms in order to the terms with the same meaning appear as a single term.

4. **RESULTS**

The publications addressing IFRS-related issues were cited 362 times, meaning that on average each study was used as a reference in 12 studies, a significant number in a few months.

In the dataset, 23 publications received null citations, which is a significant percentage (43%).

The text mining analysis through Orange3 revealed that the most frequent terms applied in research addressing IFRS issues are Report, Information, and Rate, as shown in Table 2.

Order	Term	Number of times	Order	Term	Number of times	Order	Term	Number of times
1	report	176	11	world	52	21	assess	32
2	information	154	12	health	51	22	affected	30
3	rate	126	13	risk	38	23	effect	29
4	infection	113	14	future	37	24	university	28
5	estimates	112	15	spread	36	25	across	28
6	country	99	16	conditions	36	26	work	27
7	available	84	17	level	36	27	context	21
8	online	78	18	long	36	28	associated	21
9	change	71	19	high	34	29	access	18
10	account	56	20	development	32	30	appropriate	16

 Table 2. Most cited terms in publications

The absolute frequency of the terms is visually shown in Figure 1 through a word cloud format.

In this word cloud, the 30 most cited terms are displayed, which reveals a focus on reporting information and estimates in respect to rates, online channels, and risk related issues.

The topic modelling algorithm revealed two topics with about 0,5 marginal probability each (Table 3), meaning that both topics are similarly represented in literature.

Source: Own research

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Figure 1. Word cloud of the absolute frequency of terms included in the corpus Source: Own research

Table 3. Topics in literature				
Topics	Marginal Topic Probability			
Topic 1	0,567101585			
Topic 2	0,431354917			

Source: Own research

In regards to Topic 1, the terms defining the topic include Report, Information, Online, Available, Future, and Account (see Table 4). The publications most related to Topic 1 address the role of regulation included in IFRS 9 Financial Instruments for disclosing expected credit losses in financial assets as a result of the COVID-19 pandemic (Efimova & Rozhnova, 2021).

Topic 1	Correlation coeficiente	Topic 2	Correlation coefficient
Report	0,165741	Information	0,203042
Information	0,143347	Rate	0,0995
Online	0,071885	Report	0,089692
Available	0,063097	Long	0,082731
Future	0,051224	Available	0,072255
Account	0,050402	Change	0,051134

Table 4. Characterization of topics and correlation coefficient

Source: Own research

Based on the analysis of financial reports of enterprises, these authors concluded that enterprises are not disclosing issues of pandemic impact on their activity and results. A similar conclusion was obtained by (Silva et al., 2021), which study's results reveal that the companies took utmost care in disclosing information and the impact of COVID-19 in the financial statements. This includes information regarding going concerned, sustainability, revenue, and estimations.

In regards to Topic 2, the authors focus on the adequacy of the value of the information contained in IFRS 1. From this perspective, the authors examine the impact of the reported impairment of assets on the market reaction of investors, in the context of the COVID-19 pandemic (Lisicki, 2021). In this study, authors conclude for a lack of reaction of the investors to the disclosure of information on impairment of assets. Articles on this topic also discuss the role that non-financial reports play in supporting companies to provide accountability on growing expectations to assess, address, and remedy the negative impacts of their activities on human rights (Morgan, 2013).

5. FUTURE RESEARCH DIRECTIONS

Considering that the COVID-19 pandemic will last for years, the discussion on the literature regarding how companies disclose COVID-19 related issues impacting business may be comprehensively explored. Considering that no specific IFRS is guiding the disclosure of COV-ID-19 impact, future studies could contribute to providing best practices and guidelines for professionals and agencies.

6. CONCLUSION

This study applies text mining techniques for reviewing literature addressing IFRS in the context of the COVID-19 pandemic. The content of 53 peer-reviewed documents was analysed and topics identified.

Two topics emerge when using topic modelling through Orange3 software. Topic 1 includes the following terms: Report, Information, Online, Available, Future, and Account. Topic 2 is composed of publications in which the following terms are significantly applied: Information, Rate, Report, Long, Available, and Change.

The results contribute to the academic community to highlight that the studies addressing IF-RS's role in this pandemic crisis are not vast. By unveiling the topics on which scholars are focused, this study contributes to designing future research agendas in the topic gap that are not already explored by researchers.

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REFERENCES

- Barth, M. E., & Landsman, W. R. (2010). How did financial reporting contribute to the financial crisis? *European Accounting Review*, *19*(3), 399–423. https://doi.org/10.1080/09638180.20 10.498619
- Bozkurt, O., Islamoğ lu, M., & Öz, Y. (2013). Perceptions of professionals interested in accounting and auditing about acceptance and adaptation of global financial reporting standards. *Journal of Economics Finance and Administrative Science*, 18(34), 16–23. https://doi. org/10.1016/S2077-1886(13)70019-2

- Brown, P. (2011). International financial reporting standards: What are the benefits? *Accounting and Business Research*, *41*(3), 269–285. https://doi.org/10.1080/00014788.2011.569054
- de George, E. T., Li, X., & Shivakumar, L. (2016). A review of the IFRS adoption literature. *Review of Accounting Studies*, 21(3), 898–1004. https://doi.org/10.1007/s11142-016-9363-1
- Silva, D., Schutte, D., & Surujlal, J. (2021). Unpacking the IFRS Implications of COVID-19 for Travel and Leisure Companies Listed on the JSE. *Sustainability*, *13*(7942).
- Efimova, O., & Rozhnova, O. (2021). COVID-19: Financial Impact and Disclosure. Lecture Notes in Networks and Systems, 186, 205–213. https://doi.org/10.1007/978-3-030-66093-2_20
- Fox, A., Hannah, G., Helliar, C., & Veneziani, M. (2013). The costs and benefits of IFRS implementation in the UK and Italy. *Journal of Applied Accounting Research*, 14(1), 86–101. https://doi.org/10.1108/09675421311282568
- Lisicki, B. (2021). Impairment of Assets and Market Reaction during COVID-19 Pandemic on the Example of WSE. *Risks*, *9*(10), 183. https://doi.org/10.3390/risks9100183
- Morgan, G. G. (2013). Purposes, activities and beneficiaries: Assessing the use of accounting narratives as indicators of third sector performance. *Qualitative Research in Accounting & Management*, 10(3/4), 295–315. https://doi.org/10.1108/QRAM-04-2013-0016
- Santos, M. R. C., Laureano, R., & Moro, S. (2020). Unveiling Research Trends for Organizational Reputation in the Nonprofit Sector. *Voluntas*, 31, 56–70. https://doi.org/10.1007/ s11266-018-00055-7
- Uzma, S. H. (2016). Cost-benefit analysis of IFRS adoption: developed and emerging countries. *Journal of Financial Reporting and Accounting*, 14(2), 198–229. https://doi.org/10.1108/ JFRA-01-2015-0019
- Yu, Y., Li, Y., Zhang, Z., Gu, Z., Zhong, H., Zha, Q., Yang, L., Zhu, C., & Chen, E. (2020). A bibliometric analysis using VOSviewer of publications on COVID-19. *Annals of Translational Medicine*, 8(13), 1–11. https://doi.org/10.21037/atm-20-4235