



CORPORATE GOVERNANCE AND RESILIENCE: WHAT DO WE KNOW?

GOVERNANÇA CORPORATIVA E RESILIÊNCIA: O QUE SABEMOS?

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Abstract

Even though corporate governance is not often associated with a company's resilience, they are tightly interconnected. The aim of this study is to analyze in detail how literature has approached these two concepts together by systematically reviewing published articles in both Web of Science and Scopus databases. We find that even though authors are beginning to intertwine resilience and corporate governance, more discussion is needed especially in terms of recognizing resilience as the study object. This paper contributes, mainly, by observing the state of art concerning corporate governance and resilience together enlightening researchers with the literature's borders of knowledge.

Keywords: Corporate Governance. Resilience. Systematic Literature Review. State of the Art.

Resumo

Apesar da governança corporativa não ser frequentemente associada com a resiliência organizacional, elas são estritamente ligadas. Objetiva-se analisar detalhadamente a maneira em que a literatura tem abordado esses dois conceitos juntamente ao revisar sistematicamente artigos publicados nas bases de dados Web of Sciente e Scopus. Encontramos que, apesar dos autores estarem começando a interconectar a resiliência e a governança corporativa, faz-se necessário ampliar as discussões, especialmente em termos de reconhecimento da resiliência como objeto de estudo. Esse artigo contribui, principalmente, observando o estado da arte relacionada a governança corporativa e a resiliência mostrando aos pesquisadores os limites do conhecimento na literatura.

Palavras-chave: Governança Corporativa. Resiliência. Revisão Sistemática de Literatura. Estado da Arte.

Introduction

When the COVID-19 pandemic broke out, people, organizations and governments all around the world suffered its consequences. All spheres of society were affected by the pandemic and along them; most organizations were drowning in despair. In this scenario, resilience gained its reputation.

Before the pandemic resilience was already, a subject of interest for researchers, but with the chaos caused in the beginning of 2020 it seems that resilience has re-emerged as an emerging status quo to be built in all aspects of life, especially organizations.

Resilience is the ability to withstand, survive, and recover from unexpected events such as the 2008 financial crisis or the last (and still current) pandemic. Ortiz-de-Mandojana and Bansal (2016, p.1615) define organizational resilience as "...the ability of organizations to anticipate, avoid, and adjust to shocks in their environment" while Douglas (2020) sees resilience as a strategy to be employed for its essentiality.

Many researchers have tried to build frameworks or models to be followed by organizations in order to build or better their resilience. Douglas (2020) for example, suggests that organizational resilience can be built through human capital management. DesJardine et al. (2019) prove that strategic social and environmental practices indeed affect resilience positively while Marsat et al. (2021) study the relationship between resilience (financial in this case) and environmental performance.

Therefore, building organizational resilience is a continuingly emerging topic that academics have been associating with different organizational strategies and practices. Corporate Governance is one of them.

Even though corporate governance and its mechanisms vary from country to country, it is commonly adopted in organizations in order to, among other things, guarantee investors that their interests will be taken into account. In times of shock, corporate governance as a pre-existing organizational characteristic can be a means of achieving resilience (Tait & Loosemore, 2009). That is because resilience can be measured by stock prices and value (DesJardine et al., 2019; Marsat et al., 2021; Ortiz-de-Mandojana & Bansal, 2016; Sajko et al., 2021; Xia et al., 2022) which in order to maintain a competitive position requires investors' trust.

Although it is possible to notice that corporate governance can be strictly related to an organization's resilience, not many studies investigating that relationship exist. That being said, the aim of this article is to analyze in depth how literature has approached and if/how it attributes resilience to corporate governance practices by conducting a systematic literature review.

The study mainly contributes to the literature by showing what is known about corporate governance and resilience all together and enlightening researchers with the state of art of the existing literature enabling them to identify the knowledge borders concerning these two concepts. Furthermore, identifying and recognizing the value that corporate governance holds on organizational resilience is important to both academics and practitioners who by paying more attention to the first (corporate governance) can end up obtaining the second (organizational resilience). By doing so, this paper broadens the possibilities of research and therefore of knowledge. As for the practical contributions, we offer organizations an understanding of the importance of corporate governance practices to resilience. If, or better when, organizations recognize the value corporate governance has in building resilience, a major competitive advantage can be given to them.

The remainder of the paper is divided into, besides this brief introduction including both a resilience and a corporate governance subsection, a section describing the methodology adopted to research conduction, another analyzing and discussing results and last but not least, concluding remarks.

Theoretical background

The essence of corporate governance can be first identified in the classic "The modern Corporation and Private Property" of Berle and Means (1932) and then in the study of Jensen and Meckling (1976) with the agency theory. Singh et al. (2022, p.6) argue that "governance is central to managing internal activities, as well as stakeholder engagement", that is because corporate governance as a whole can be defined as a system, a conjunction of processes, rules and actions to guarantee to all stakeholders that their interests are not to be forgotten. Corporate governance consists of mechanisms- internal and external- for the system to function.

The objectives of corporate governance are: (a) protection of stakeholder rights and enforceability; (b) manage internal and external stakeholder relationships; (c) information disclosure and (d) strategic and ethical guidance (Aguilera et al., 2015). As such, corporate governance "looks after" a company's stakeholders and by doing so (efficiently), a major drop in its stock prices is not expected and/or if it comes to it, the recovery will probably be rapid.

According to Tait and Loosemore (2009), corporate governance is connected to organizational resilience since its good practices catch investors eye; investors engage in long-term goals which in turn result in stock stability. The objective of corporate governance and the statement above are the reasons why scholars associate corporate governance with organizational resilience.

With uncertainty and unpredictability being more frequent and atypical, the concept of resilience is to be considered under new paradigms and organizational instruments (Rodrigues et al., 2017). The COVID-19 pandemic is a latest example of a time of great uncertainty; one no one could have predicted. In this case, all spheres of life around the world were impacted mostly negatively.

Sahebi et al. (2022) consistently argue that nowadays under these conditions, the continuance of organizational activities at difficult times depends on bouncing back rapidly to the initial state and bouncing forward by learning from experience. This is the reason why many authors in other to measure organizational resilience use variables such as the time of recovery of stock prices and the actual loss of stock prices (DesJardine et al., 2019; Marsat et al., 2021; Sajko et al., 2021; Xia et al., 2022).

Following Singh et al. (2022), organizational resilience is about its capacity to weather and adapt to shocks complementing the definition previously given by Ortiz-de-Mandojana and Bansal (2016). It is worth noticing that both papers consider an organization's environment which for Singh et al. (2022) can be either internal or external as shocks can occur in the organizational environment itself, on a microeconomic level.

Another similar concept of resilience is provided by Sahebi et al. (2022, p. 460) as: "...the capacity to withstand risks that are more significant, rapid recovery after risks, and reduced degradation by virtue of a certain number of hazards." For Douglas (2020) resilience as such becomes a strategic need for organizations that by developing a human capital management strategy can be fulfilled. Irigaray et al. (2017) argue that the concept of resilience both system and individual capacities are included, being that individual capacities are to be used collectively. Organizational resilience is a multidimensional concept that can be studied from different perspectives in the field of management.

Research Methodology

This study is descriptive of quantitative and qualitative nature to better comprehend information we gather from the articles collected from the Web of Science Core Collection and Scopus database. It is quantitative due to its first step: a bibliometric revision.

To conduct the bibliometric revision we followed its three primary laws: Lotka's (1926); Bradford's (1934) and finally, Zipf's (1949). Lotka's law verifies which authors produce most in an area and defends that very few authors produce a lot while many authors produce less. The same goes for Bradford's law but this time concerning journals: few journals publish a lot in a certain area while a lot publish less. Zipf's law regards words and the frequency they appear. We conducted this part by using Rstudio, more specifically, the Biblioshiny package.

To make sure we deeply understand the existing literature, we conducted a Systematic Literature Review (SLR) as a qualitative part of our study. SLRs are profound revisions of the existing literature that according to Paul et al. (2021, p.3) can "signify a state-of-the-art understanding of existing literature and a stimulating agenda to advance understanding through new literature in the review domain". Paul et al. (2021) difference SLR as a methodology from a product of research, the second being what we previously defined even though we use the SLR both as a methodology and product to achieve our objectives. The same authors suggest a protocol as one that overcomes Page's et al. (2021) PRISMA limitations. For this study, we understand that the protocol developed by Paul et al. (2021) may be best, so we adopted the SPAR-4-SLR which is a three-staged, six-sub-staged protocol being the three main stages: assembling, arranging and assessing provided they are the 3As of a SLR as a methodology.

First, in the assembling phase, we formed our research question based in the existing literature and established our main sources, in this case, Web of Science and Scopus. We chose these databases due to the high quality of papers they hold. Paul and Criado (2020) suggest that Web of Science and Scopus are well-established databases, which makes them the main sources used by researchers in systematic literature reviews. Afterwards, we searched for articles in both Web of Science and Scopus. For the search query we used in the Web of Science Core Collection: (ALL=("corporate governance")) AND ALL=(resilience) and: (TITLE-ABS-KEY("corporate governance") AND TITLE-ABS-KEY (resilience)) in the Scopus database limiting our research in terms of document type and language in both. We chose articles as a document type and English for language. Our database is composed of all articles available until October 2022. This search resulted in 139 articles.

Next, in the arranging phase, we organized and later purified the articles. By purifying the articles, we mean that (a) we checked for doubled papers (as there were articles from two different databases); (b) we read the remaining papers abstracts to verify if their contents was on scope (discussing both resilience and corporate governance); and (c) even though we considered not available for download articles for the bibliometric results, that was not possible for what we propose later and so 9 articles were excluded for not being available for download. No articles were later included.

Last but not least, in the assessing phase, we analyzed our database and reported the results. The result analysis was a two-step process. First, 49 articles were considered for the bibliometric results which we examined with the help of the Biblioshiny package in RStudio. Later, to enable the full-understanding of the literature we read and analyzed 40 articles taking notes on their basic information (authors, journal, abstract, keywords) and their content (aim, theories, hypothesis, methodology, variables results, contributions, future research suggestions). To report the results we used figures and tables to complement the text. The protocol followed in this study is detailed, as proposed, in figure 1.

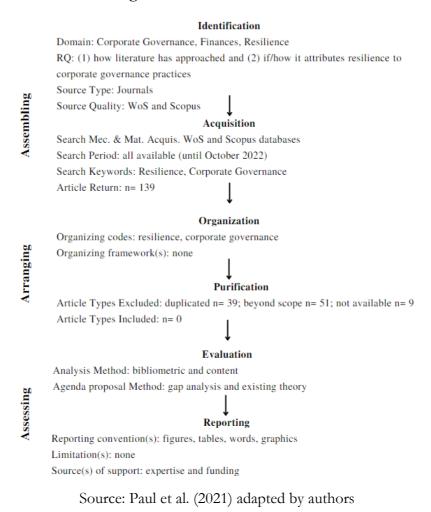


Figure 1- SPAR-4-SLR Protocol

In the next section, we analyze and discuss the results.

Analysis and Discussion of Results

When searching for the articles, the total in both databases (Scopus and Web of Science) was 101 documents. After that, we read all the abstracts and removed the articles that fell outside the scope of what we proposed in this study, which resulted in being left with 49 articles. We divided this section into two subsections: bibliometric results and content discussion being that in the first we analyze the results by the three bibliometric laws whereas in the second we indeed conduct the systematic literature review. We conducted the bibliometric analysis with these 49 articles while for the systematic literature we worked with 40 as 9 were not available to download and therefore read and analyze. Appendix A includes information on the 49 articles.

Articles were written in a period between 2006 and 2022 having two peaks: 2019 with 10 articles and 2021 with 13. It is valid to say that our search was done on the 20th of October, 2022.

Bibliometric Results

Before discussing the three main bibliometric laws, some other data are interesting, such as the growth in literature over time, the main producing countries and the most important journals in the area. Table 1 is a first attempt at summarizing these data. As some articles were not available for download and others did not explicitly provide certain information, the total number of articles in each section of the tables varies.

Table 1- Distribution of articles by publication journal, continent, and year

Journal	No of Articles
Corporate governance-the international journal of business in society	3
Asian journal of accounting and governance	2
Corporate governance-an international review	2
International journal of social economics	2
Journal of business research	2
Journal of family business management	2
Sustainability	2
Others	34
Total	49
Country (Authors')	
United Kingdom	7
United States of America	6
Italy	5
Malaysia	4
China	2
Germany	2
Netherlands	2
Spain	2
Others	19
Total	49
Year	
2006- 2008	2
2009- 2011	2
2012- 2014	2
2015- 2017	7
2018- 2020	16
2021- 2022 (oct/2022)	20
Total	49

Source: organized by authors

When looking at the journals, we observe that even though some published three or two articles, the ones with only one article published hold more than 65% of total published articles. Countries concerned, the United Kingdom, the United States of America, Italy and Malaysia are the main producers of studies in the field of resilience and corporate governance all together.

Over time, literature has grown, having two peaks: one in 2019 and another in 2021. Figure 2 shows more closely these results.

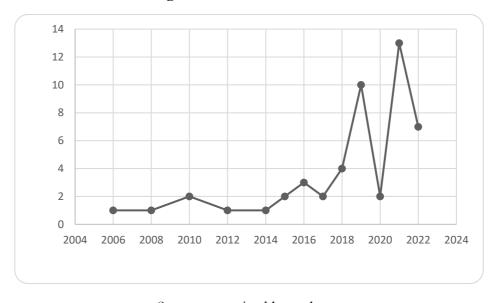


Figure 2- Literature over Time

Source: organized by authors.

The first law to be discussed is Bradford's (1934) which suggests that there are three zones each with one third of the published articles. Bradford (1934) believed that the first zone would consist of only a few journals that publish a lot while the second and third zones would be of more journals publishing less.

Results illustrated in Table 2 are partly consistent with Bradford's law (1934) as even though three zones of journals were created, the last two zones do not show any difference between them having journals publishing only one article. Meanwhile, in the first zone there are journals with three, two and one articles published. However, we can observe that there is one main journal with 3 articles published: Corporate Governance- The International Journal of Business in Society.

Zone **Journal** Freq **Cum Freq** Corporate Governance-The International Journal of Business in Society 3 3 2 5 Asian Journal of Accounting and Governance 2 7 Corporate Governance-An International Review Core 2 9 International Journal of Social Economics 2 Journal of Business Research 11 Journal of Family Business Management 2 13

Table 2- Bradford's Law

Academy of Accounting and Financial Studies Journal		Sustainability	2	15
African Journal of Hospitality		Academy of Accounting and Financial Studies Journal	1	16
Annual Review of Financial Economics		Administrative Sciences	1	17
Australian Accounting Review		African Journal of Hospitality	1	18
Australian Journal of Emergency Management 1 21		Annual Review of Financial Economics	1	19
Building Research and Information		Australian Accounting Review	1	20
Chinese Management Studies		Australian Journal of Emergency Management	1	21
European Journal of Industrial Relations 1 24		Building Research and Information	1	22
European Journal of Industrial Relations		Chinese Management Studies	1	23
European Journal of Risk Regulation		Comparative Politics	1	24
European Journal of Risk Regulation	7 0	European Journal of Industrial Relations	1	25
Geneva Papers on Risk and Insurance-Issues and Practice Global Policy International Journal of Advanced Science and Technology International Journal of Innovation International Journal of Supply Chain Management Journal of Business Continuity & Emergency Planning Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Intermediation Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Long Range Planning Management Decision Qualitrative Research in Financial Markets 1 44 Quality-Access to Success 1 25 Log Range Planning Qualitrative Research in Financial Markets 1 44 Quality-Access to Success	Zone 2	European Journal of Risk Regulation	1	26
Global Policy International Journal of Advanced Science and Technology International Journal of Innovation International Journal of Innovation International Journal of Supply Chain Management International Financial and Quantitative Analysis International Financial Economics International Financial Intermediation International Financial Intermediation International Financial Markets Institutions & Money Internationa		Frontiers In Public Health	1	27
International Journal of Advanced Science and Technology International Journal of Innovation International Journal of Supply Chain Management Journal of Supply Chain Management Journal of Business Continuity & Emergency Planning Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Transport and Supply Chain Management Long Range Planning Management Decision Qualitative Research in Financial Markets Judical Markets Judical Markets Judical Markets Judical Management Judical Managem		Geneva Papers on Risk and Insurance-Issues and Practice	1	28
International Journal of Innovation International Journal of Supply Chain Management Journal of Business Continuity & Emergency Planning Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Long Range Planning Management Decision Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 35 Journal of International Financial Markets Journal of Transport and Supply Chain Management July Access to Success July Access to Success		Global Policy	1	29
International Journal of Supply Chain Management Journal of Business Continuity & Emergency Planning Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Stability Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Transport and Supply Chain Management Long Range Planning Management Decision Qualitative Research in Financial Markets 1 44 Quality-Access to Success		International Journal of Advanced Science and Technology	1	30
Journal of Business Continuity & Emergency Planning Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Stability Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Transport and Supply Chain Management Long Range Planning Management Decision Qualitative Research in Financial Markets Quality-Access to Success 1 45		International Journal of Innovation	1	31
Journal of Financial and Quantitative Analysis Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Intermediation Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Operations Management Long Range Planning 1 42 Management Decision Qualitative Research in Financial Markets Quality-Access to Success 1 45		International Journal of Supply Chain Management	1	32
Journal of Financial Economics Journal of Financial Intermediation Journal of Financial Stability Journal of Financial Stability Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Operations Management Long Range Planning Management Decision Qualitative Research in Financial Markets Journal of Management July 42 Management Decision Quality-Access to Success July 45		Journal of Business Continuity & Emergency Planning	1	33
Journal of Financial Intermediation 1 36 Journal of Financial Stability 1 37 Journal of International Financial Markets Institutions & Money 1 38 Journal of Management 1 39 Zone 3 Journal of Operations Management 1 40 Journal of Transport and Supply Chain Management 1 41 Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of Financial and Quantitative Analysis	1	34
Journal of Financial Stability 1 37 Journal of International Financial Markets Institutions & Money 1 38 Journal of Management 1 39 Zone 3 Journal of Operations Management 1 40 Journal of Transport and Supply Chain Management 1 41 Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of Financial Economics	1	35
Journal of International Financial Markets Institutions & Money Journal of Management Journal of Operations Management Journal of Transport and Supply Chain Management Long Range Planning Management Decision Qualitative Research in Financial Markets Quality-Access to Success Journal of International Markets Institutions & Money 1 38 40 41 42 42 43 44 Quality-Access to Success July 45		Journal of Financial Intermediation	1	36
Zone 3 Journal of Management 1 39 Zone 3 Journal of Operations Management 1 40 Journal of Transport and Supply Chain Management 1 41 Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of Financial Stability	1	37
Zone 3 Journal of Operations Management 1 40 Journal of Transport and Supply Chain Management 1 41 Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of International Financial Markets Institutions & Money	1	38
Journal of Transport and Supply Chain Management Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45	Zone 3	Journal of Management	1	39
Long Range Planning 1 42 Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of Operations Management	1	40
Management Decision 1 43 Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Journal of Transport and Supply Chain Management	1	41
Qualitative Research in Financial Markets 1 44 Quality-Access to Success 1 45		Long Range Planning	1	42
Quality-Access to Success 1 45		Management Decision	1	43
		Qualitative Research in Financial Markets	1	44
Review of Accounting and Finance 1 46		Quality-Access to Success	1	45
		Review of Accounting and Finance	1	46

Spanish Journal of Finance and Accounting- Revista Espanola De Financiacion Y Contabilidad	1	47
Strategic Change-Briefings in Entrepreneurial Finance	1	48
Tourism Management	1	49

Source: organized by authors via Biblioshiny

When aiming to identify the most relevant sources, Corporate Governance- The International Journal of Business in Society, Corporate Governance- An International Review, International Journal of Social Economics and Journal of Business Research are the journals bearing it.

As for Lotka's law (1926) which refers to authors and their production, results indicate that only three researchers have two articles under their name, while 120 authors have one. Results also show that from these three authors with two articles each, two of them are co-authors. The main researchers with their respective articles are illustrated in Table 3.

Table 3- Main Authors

Author	Articles	Co-authors	Journal
Govender,	The relationship between resilience and organizational control systems in the South African Aviation Industry. (2021)	Serfontein, E.	Journal of Transport and Supply Chain Management
Krishna	Embedded Resilience Properties Identified in Quality Assurance and Corporate Governance in the South African Aviation Industry (2020)	Serfontein, E.	African Journal of Hospitality, Tourism and Leisure
Minichilli,	Weathering the Storm: Family Ownership, Governance, and Performance Through the Financial and Economic Crisis (2016)	Brogi, M.; Calabrò, A.	Corporate Governance: An International Review
Alessandro	Local Political Uncertainty, Family Control, and Investment Behavior (2018)	Amore, M. D.	Journal of Financial and Quantitative Analysis
Serfontein,	The relationship between resilience and organizational control systems in the South African Aviation Industry (2021)	Govender, K.	Journal of Transport and Supply Chain Management
Estie	Embedded Resilience Properties Identified in Quality Assurance and Corporate Governance in the South African Aviation Industry (2020)	Govender, K.	African Journal of Hospitality, Tourism and Leisure

Source: organized by authors via Biblioshiny

When searching for the most relevant affiliations, Bocconi University in Italy is the main one with six articles. That can be explained or even explain why Italy is the second most cited country of all only staying behind the United States of America. Italy is also the country with the greatest scientific production followed by mainly the USA, UK, China and Malaysia respectively.

Zipf's Law (1949) is about the frequency words appear and, in this case, the most frequently used words/phrases were "corporate governance", "performance", "ownership", "management", "firm performance", "boards", "impact" and "directors", which all are related to either corporate governance or resilience. A word cloud summarizes the results about words in Figure 3.

Figure 3- Word Cloud



Source: organized by authors via Biblioshiny

Other interesting information about the database is about the references. The most cited document from the database is the study of Ding et al. (2021) "Corporate immunity to the COVID-19 pandemic" which examines the relationship between corporate characteristics and stock price reactions- a variable used to measure resilience. This article was cited 208 times. The article entitle Theory of the firm: managerial behavior, agency costs and ownership structure (Michael C.Jensen's and William H.Meckling's, 1976) was the most cited paper by articles in the database.

Meanwhile, the collaboration network is scattered, having 12 groups that do not connect to each other; Figure 4 is an illustration of that.

benyvenulo m
avram r
avram c

calabra a
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andersen suchuri k
chowdhury a

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Figure 4- Collaboration Network

Source: organized by authors via Biblioshiny

In the next section, we carry out a more profound analysis of the articles along with a suggestion of a possible future research agenda.

Synthesis and Analysis of Articles (identifying gaps)

As of the research methodology authors opted to use, table 4 is an attempt to summarize the data considering the articles' approach and collection data.

Table 4- Distribution of articles by research approach and data source

Research Approach	No of Articles	Percentage
Quantitative	29	72,5
Qualitative	11	27,5
Total	40	100
Data Sources		
Primary- survey, interviews	9	22,5
Secondary- databases, literature	31	77,5
Total	40	100

Source: organized by authors

As observed in Table 4, most articles are of quantitative nature and use secondary data from different sources. This is due to the fact that to measure resilience and discuss corporate governance researchers need variables and quantitative data to examine the relationship between those variables.

While studying corporate governance in relation to resilience, only 65% of the articles mention and de facto approach resilience, that is 26 out of the 40 articles. The forms of resilience the authors studied are many; however, two stand out: resilience measured/perceived as performance (Buyl et al., 2019; García-Cestona & Sagarra, 2022; Y. Li et al., 2022; Minichilli et al., 2015; van Essen et al., 2015) and resilience measured/perceived as market value (Ding et al., 2021; Hoang et al., 2021; J. Li et al., 2022; Torres & Augusto, 2021). Another variable authors associated resilience with was risk-taking (Chan et al., 2016; Ferreira et al., 2021).

The restricted number of articles studying resilience resulted in 17 that aimed or resulted in a possible association between resilience and corporate governance. The first to do that was Dahms (2010) who defended the idea that good risk management leads to good governance and resilience. Dahms (2010) treats both (governance and resilience) as states of being, not processes. Abdel-Baki and Leone Sciabolazza (2014) aimed to develop a consensus-based ethical and market-driven corporate governance index (CGI). The authors did not discuss resilience directly, but their results showed a consistent positive relationship between corporate governance and financial performance metrics as well as that poor governance leads to higher risk exposures, among others. Therefore, even though "resilience" was not embedded in the article, performance and risk exposure are variables/measures literature often uses to treat resilience and as such these authors' results (Abdel-Baki & Leone Sciabolazza, 2014) are valid for the discussion held in this paper.

Armeanu et al. (2017) seeked to verify and explore the connection between governance features and the risk of failure. By doing so, they found that the presence of women CEOs and the establishment of Consultative Committees negatively influence business failure risk while larger boards also do, but partially. Resilience in their article is described as a competitive advantage that not only supports companies during crises, but also to reach their goals. Authors (Armeanu et al., 2017) suggest that as

future research avenues, their aim is to develop a business failure risk indicator by considering neural network architecture.

Serfontein and Govender (2020, 2021) initially with a qualitative research and afterwards with a quantitative one explore stakeholder perception on the relation between organizational resilience and control systems (corporate governance and quality assurance) in a specific niche- the aviation industry of South Africa. They found a strong relationship between good practices of both corporate governance and quality assurance and resilience. Organizational resilience is measured by 4 main pillars: Strategic management and company culture; Monitoring and awareness; Exposure management; and Responsive adaptation. Serfostein and Govender (2021) suggest that future research examines the relationship between control systems and resilience in specific industries.

Cosentino and Paoloni (2021) seeked to understand the contribution of women managers to overcome crises in male-owned and managed companies. Their results showed that (i) the attitude to change; (ii) the ability to promote new initiatives; and (iii) the ability to have initiated, consolidated, and managed solid formal relationships with institutional stakeholders are female managerial characteristics and skills fostering resilience. They suggest that future research could investigate the same as they did but in companies in which women are the responsibility holders. They also say the extension of the sample and the comparison of results obtained in companies managed by men is welcome. Another hint they give is the comparison in different regions or countries to consider culture's effects.

The articles discussed above are the ones that did not approach resilience as performance, market value or risk-taking. Chan et al. (2016) approached resilience as the destination of practices such as a reduction of systematic risks and improvement of solvency positions; that is, less risks and better solvency positions lead to resilience. The authors aimed to examine the impact of directors' socioeconomic backgrounds on risk-taking of listed banks in China and found that smaller boards and more independent directors negatively affect risk-taking. The results also showed that banks with boards that have gender diversity, government affiliation and higher average age help reduce risks.

As of resilience being related to performance and formerly associated with corporate governance, we identified five studies that did so. Minichilli et al. (2015) were the first by, mainly, aiming to verify family-controlled firms' financial performance in "steady-state" conditions as opposed to situations of severe economic distress. They suggested three hypotheses to reach their goal: (H1) Family firms' financial performance during an economic shock; (H2) Family firms' financial performance during an economic shock will be higher for those firms headed by a family CEO; and (H3) Family firms' financial performance during an economic shock will be higher for those firms headed by a family CEO, and with a less concentrated family ownership. They found that family firms operate better when in crises and that these perform the best when the CEO is a family member while the ownership concentration is low.

Buyl et al. (2019) investigate how CEO narcissism, in combination with corporate governance practices, impacts organizational risk-taking and how this in turn affects organizations' resilience to environmental conditions. They evaluate resilience as "drop in performance" and "recovery to preshock performance level". What they found is that CEO narcissism positively affected riskiness policies before the shock, an effect bolstered by compensation policies encouraging risk-taking and dampened when board monitoring was more effective. They also found that banks with more narcissistic CEOs before the 2008 shock experienced a slower recovery to preshock performance levels afterwards; preshock riskiness of policies partially mediated this relationship.

Buyl et al. (2019) suggest that future research should answer these questions: What is the effect of other CEO characteristics, such as age, on resilience? Do other key players' characteristics, such as the middle managers or employees, interact with those of the CEO in affecting resilience? Are the effects of CEO narcissism on resilience similar for all types of shocks? What are the long-run effects of CEO

narcissism when no shock occurs? That is, the authors strongly suggest the continuing study on CEO characteristics; however, another interesting avenue for future research would be board characteristics and their impact on resilience, a possibility not yet explored.

To verify the impact of corporate governance on financial performance was Benvenuto et al. (2021) aim which they fulfilled when they found that governance has a significant impact on performance. Here the authors measured corporate governance by its index (IGC), not examining specific attributes, mechanisms or characteristics.

García-Cestona and Sagarra (2022) seeked to evaluate if the difference of results after crises in two different "types" of banks (commercial and cajas) responds to different ownership structures, governance practices and top managers' human capital. Their results showed that banks with a more experienced manager, more years "in business" and a diploma performed better than those without that manager's profile. In terms of resilience (as performance) the presence of employees and depositors could play a positive role during the crisis. The authors measured resilience as: ROA, ROA's volatility, Z-score and loan quality.

The most recent approach of resilience is market value. In our database research on resilience as market value begins in 2021. Torres and Augusto (2021) did not pursue studying resilience, their aim was to examine complementarities between tourism firms' attention to social issues and corporate governance mechanisms; however their tenets and results focused primarily on resilience observed as market value in times of crises/shocks. The results concerning resilience showed that firms' attention to social issues and CEO duality are positively associated with firm resilience.

Hoang et al. (2021) also approached resilience as market value while comparing the impact of the COVID-19 pandemic on stock returns in the first two waves. During the first wave larger firms with more cash reserves pre-COVID-19 and corporate governance practices positively influenced stock performance. In the meanwhile, these pre-existent characteristics did not make any difference in the second wave. The authors suggest that factors related to companies' international activities can be taken under consideration.

Ding et al. (2021) examined the connection between five pre-2020 corporate characteristics (corporate governance included) and stock return reaction. Their results indicate that the drop in stock returns was (i) milder among firms with stronger pre-2020 finances; (ii) less exposure to COVID-19; (iii) more corporate social responsibility activities; (iv) less entrenched executives; and that (i) firms controlled by families; (ii) large corporations; and (iii) governments performed better in terms of stock returns. Results also showed that stock markets positively price small amounts of managerial ownership but not high levels of managerial ownership during the pandemic. Here the authors measured what they called "stock resilience" with two variables: Weekly Stock Return and Abnormal Return. It is not clear whether their aim was corporate resilience or stock resilience; either way, as their title suggests "Corporate immunity to the COVID-19 pandemic", resilience is, in this article, considered a synonym for corporate immunity to shocks measured by stock reactions.

The last (but not least) paper to approach resilience as market value and associate it to corporate governance was the one Li et al. (2022) carried out when examining whether the market recognized the value of corporate governance mechanisms. The authors found that government companies, duality and high managerial compensation positively affect resilience measured by stock returns.

Table 5 summarizes how articles approached and directly measured, resilience while discussing corporate governance together. By observing the following table, resilience as performance and/or market value becomes more visible.

Table 5- Resilience measures

Author(s)	Approach	Variable
		Strategic management and company culture;
SERFONTEIN		Monitoring and awareness; Exposure
E;GOVENDER K (2021)	Embedded resiliece	management; Responsive adaptation
BUYL T;BOONE		
C;WADE J	Performance	Performance drops and recovery
LI J;MA Y;SHI B;YANG Y	Market Value	Stock returns
KLEINKNECHT R	Market Value	Tobin's Q
VAN E M;STRIKE	Perfomance and favorable	Cumulative market adjusted stock returns and
V;CARNEY M;SAPP S	employee outcomes	workforce decreased and wage reduction
LI Y;WANG X;GONG		
T;WANG H	Operational Resilience	Performance Loss
MINICHILLI A;BROGI		
M;CALABRO A	Performance	ROA and ROE
HUY V H H;CUONG N		
C;KHANH H K	Stock Resilience	Stock returns
		Stability, capacity (liquidity), gearing and sustainability enable an assessment of financial
RYAN C;IRVINE H	Financial Health	resilience.
GARCIA-CESTONA		ROA, Volatilidade do ROA, Z-score, loan
M;SAGARRA M	Performance	quality (impaired loans over gross loans)
DING W;LEVINE R;LIN		
C;XIE W	Stock Resilience	Weekly Stock Return e Abnormal Return

Source: organized by authors

More qualitative papers, or even quantitative that observed resilience indirectly, associate it with vaster concepts. Table 6 is an attempt to summarize these different concepts that resilience is close to following literature. It can be observed that most of the approaches below (with the exception of the articles marked with an asterisk) are also close to the two main strategies/abilities resilience is based on: bouncing back and bouncing forward.

Table 6- Resilience

Author(s)	Approach
*CHAN S;KOH E;ABD K M	Less risk taking and higher solvency power
*TORRES P;AUGUSTO M	Market Value when exogenous shocks occur
MIHOTIC L;RAYNARD M;CONIC D	Manage change for long-term business continuity
COSENTINO A;PAOLONI P	Ability to overcome crisis caused by an unexpected shock
ARMEANU D;VINTILA G;GHERGHINA S;PETRACHE D	Competitive advantage as it enables firms to circumvent, deter, defend, react, and adjust to shocks and recover quickly
KEENAN J	Elasticity of a host to revert to the status quo
*FERREIRA D;KERSHAW D;KIRCHMAIER T;SCHUSTER E	Lower Risk Taking and Failure
GAULTIER-GAILLARD S;LOUISOT J	To be successful and sustainable
MARTIN-OLIVER A;RUANO S;SALAS-FUMAS V	Capacity to respond/recover from shock/loss
SERFONTEIN E;GOVENDER K	Adaptive capacity enabling adaption to fluctuations in either the macro or microenvironment.
*DAHMS T	As a destination

Source: organized by authors

Other articles in the database did not discuss corporate governance and resilience all together. However, there are examples of articles such as the one of Kleinknecht (2015) whose outcomes indirectly link resilience to corporate governance. Kleinknech (2015) approached resilience as market value while examining the works councils and employee board-level representation on performance. Performance, which he later defined as firm value and/or resilience measured by average level of Tobin's Q and relative growth in Tobin's Q. The author found that employee participation buffers against a loss of value in bad times.

Dong's et al. (2019) "Athletes in boardrooms evidence from the world" aimed to examine the relation between the athletic experience of board directors and corporate outcomes. By measuring corporate outcomes as firm value and performance, they used the following variables: Tobin's Q, ROA and Stock returns, which in turn are often used to measure resilience. The authors' results indicate that athletic experience in the boardroom positively influences firm performance. Even though resilience was not the focus of this article, the attributes of corporate outcomes and resilience are closely related, thus we conclude that the athletic experience of directors may positively affect organizational resilience.

A problem detected in the database and that resulted in papers inconclusively/indirectly discussing resilience without even mentioning the term is the fact that although literature approaches resilience and its different forms, it lacks a consensual measure and use of variables. The next section briefly points out directions for future research based on the discussion held until this point.

Directions for future research

As for the future, authors have many possibilities to broaden their horizons. Here are some paths authors can pursued enlightening literature:

- Propose, in order to achieve, a clear consensus on how to measure resilience;
- The effect board characteristics, as well as, CEO characteristics (or even their interaction) exert on resilience.
- CEO characteristics do not seem to go further than "visible" ones. Characteristics such as culture, previous profession (such as the case of athletes studied), work-home conflicts, among others.
- Capture different and/or new aspects of corporate governance mechanisms and characteristics. To do so, other methods and biases should be considered in this field of study.

The next section makes some concluding remarks on the study.

Concluding Remarks

Corporate Governance having mechanisms that avoid and mediate, if necessary, the effects of possible agent- principal conflicts has been studied as a performance incentive. Performance is many times associated with the resilience of organizations, which allows them to survive and quickly recover from external shocks. Even though it makes sense to study corporate governance and organizational resilience all together, scarce are the papers doing so. The objective of this article was to analyze in depth how literature has approached and if/how, it attributes resilience to corporate governance practices. For such, we conducted bibliometric and systematic literature reviews searching for articles that approached both concepts in the Scopus and Web of Science databases.

Although results did not confirm the main bibliometric laws, some interesting information came through. "Corporate governance-the international journal of business in society" is the publisher of three articles, the most for a journal in our database; The UK, USA, Italy and Malaysia are the countries with the most productivity; over time literature has advanced being that 2019 was the first peak of

published articles and Govender, Minichilli and Serfostein are the main producing authors found in the database. Another valid information is that 72,5% of the articles are quantitative and that the most common data come from secondary sources.

While testing for Zipf's law, words connected to either corporate governance or resilience came up (performance, boards, ownership, directors, etc.). These results indicate a problem posteriorly confirmed: the lack of consensual variables to measure resilience, which is often related to performance and/or market value, among others, by authors.

It is important to notice that out of the 40 articles fully read and analyzed, 26 discussed resilience and just 17 discussed resilience and corporate governance together. The first article to approach both concepts together was Dahm's (2017) who observed both corporate governance and resilience as results of good risk management.

Quantitative articles mostly saw and measured resilience as performance and, more recently, market value. Concepts that, even though essential to resilience, are restraining and not able to capture resilience as a whole. On the other hand, qualitative studies approach resilience relating it to its two main strategies: bouncing back and forward. Articles examining both corporate governance and resilience often find positive relations between them. Therefore, we observe a possible resilience forerunner- corporate governance.

As for the study's limitations we can point out that, we restricted our search in document type (article) and language (English) which even though we consider these restrictions minimums, may have excluded other important collaborations. Furthermore, the strings used while searching for the articles might have compromised the extent of literature considering resilience. Further research is needed to better understand the relationship between corporate governance and organizational resilience. We strongly suggest researchers study the effect one has on the other and how organizations can stimulate their resilience by making better use of their corporate governance mechanisms.

Finally, the main contributions this paper offers are three-fold: (1) to literature, by showing its existing border when it comes to connecting corporate governance to resilience; (2) to researchers by broadening the possibilities of future studies and indicating the way; (3) to organizations by showing that corporate governance can help them build resilience and show a way of obtaining competitive advantage. We believe that this paper has enlightened different "target audiences" and that research on the effects of corporate governance on resilience should be carried out especially now that after the outbreak of the COVID-19 pandemic, resilience has shown its paper in organizations.

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https://doi.org/10.1016/j.pacfin.2022.101791

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Appendix A- Data Information

DOI	Year	Authors	Title
10.3390/su13105535	2021	BENVENUTO M;AVRAM R;AVRAM C	ASSESSING THE IMPACT OF CORPORATE GOVERNANCE INDEX ON FINANCIAL PERFORMANCE IN THE ROMANIAN AND ITALIAN BANKING SYSTEMS
10.4102/jtscm.v15i0.59 8	2021	SERFONTEIN E;GOVENDER K	THE RELATIONSHIP BETWEEN RESILIENCE AND ORGANISATIONAL CONTROL SYSTEMS IN THE SOUTH AFRICAN AVIATION INDUSTRY
10.1177/014920631769 9521	2019	BUYL T;BOONE C;WADE J	CEO NARCISSISM RISKTAKING AND RESILIENCE AN EMPIRICAL ANALYSIS IN US COMMERCIAL BANKS
10.3389/fpubh.2021.81 2253	2022	LI J;MA Y;SHI B;YANG Y	CAN THE MARKET RECOGNIZE THE VALUE OF THE CORPORATE GOVERNANCE MECHANISM OF CHINESE LISTED COMPANIESEMPIRICAL EVIDENCE FROM COVID19
10.1108/CMS-10-2015- 0226	2016	CHAN S;KOH E;ABD K M	THE CHINESE BANKS DIRECTORS AND THEIR RISKTAKING BEHAVIOR A CORPORATE GOVERNANCE AND FINANCE PERSPECTIVE
10.1177/095968011452 3820	2015	KLEINKNECHT R	EMPLOYEE PARTICIPATION IN CORPORATE GOVERNANCE IMPLICATIONS FOR COMPANY RESILIENCE
10.1016/j.tourman.202 1.104400	2021	TORRES P;AUGUSTO M	ATTENTION TO SOCIAL ISSUES AND CEO DUALITY AS ENABLERS OF RESILIENCE TO EXOGENOUS SHOCKS IN THE TOURISM INDUSTRY
10.1111/1758- 5899.12562	2018	HALLERBERG M;MARKGRAF J	THE CORPORATE GOVERNANCE OF PUBLIC BANKS BEFORE AND AFTER THE GLOBAL FINANCIAL CRISIS
10.1002/jsc.2461	2021	PARAMESWAR N;HASAN Z;DHIR S	ROLE OF MANAGEMENT PRACTICES AND THEIR EFFECTS ON FIRM PERFORMANCE EMERGING MARKET CONTEXT
10.1111/corg.12087	2015	VAN E M;STRIKE V;CARNEY M;SAPP S	THE RESILIENT FAMILY FIRM STAKEHOLDER OUTCOMES AND INSTITUTIONAL EFFECTS
10.1016/j.jbusres.2021. 01.061	2021	UDDIN M;CHOWDHURY A;ANDERSON K;CHAUDHURI K	THE EFFECT OF COVID19 PANDEMIC ON GLOBAL STOCK MARKET VOLATILITY CAN ECONOMIC STRENGTH HELP TO MANAGE THE UNCERTAINTY
10.1108/CG-01-2020- 0044	2021	VISSER W	MEASURING FUTURE RESILIENCE A MULTILEVEL INDEX
	2018	IZMAILOV M;KHOROSHAVINA N;KOLESNIKOVA O	MAJOR FACTORS OF ACHIEVEMENT OF QUALITY OF CORPORATE MANAGEMENT IN THE RUSSIAN MEDIUMSIZED COMPANIES
10.1108/JFBM-03- 2022-0047	2022	MIHOTIC L;RAYNARD M;CONIC D	BOUNCING FORWARD OR BOUNCING BACK HOW FAMILY FIRMS ENACT RESILIENCE IN TIMES OF CRISIS
10.3390/admsci110401 29	2021	COSENTINO A;PAOLONI P	WOMENS SKILLS AND APTITUDES AS DRIVERS OF ORGANIZATIONAL RESILIENCE AN ITALIAN CASE STUDY
10.1017/err.2022.25	2022	VILLIERS C	NEW DIRECTIONS IN THE EUROPEAN UNIONS REGULATORY FRAMEWORK FOR CORPORATE REPORTING DUE DILIGENCE AND ACCOUNTABILITY THE CHALLENGE OF COMPLEXITY

10.1002/joom.1176	2022	LI Y;WANG X;GONG T;WANG H	BREAKING OUT OF THE PANDEMIC HOW CAN FIRMS MATCH INTERNAL COMPETENCE WITH EXTERNAL RESOURCES TO SHAPE OPERATIONAL RESILIENCE
10.3390/su9020173	2017	ARMEANU D;VINTILA G;GHERGHINA S;PETRACHE D	APPROACHES ON CORRELATION BETWEEN BOARD OF DIRECTORS AND RISK MANAGEMENT IN RESILIENT ECONOMIES
10.1111/corg.12125	2016	MINICHILLI A;BROGI M;CALABRO A	WEATHERING THE STORM FAMILY OWNERSHIP GOVERNANCE AND PERFORMANCE THROUGH THE FINANCIAL AND ECONOMIC CRISIS
10.1080/09613218.201 6.1085260	2016	KEENAN J	FROM SUSTAINABILITY TO ADAPTATION GOLDMAN SACHS CORPORATE REAL ESTATE STRATEGY
10.1108/IJSE-11-2020- 0769	2021	HUY V H H;CUONG N C;KHANH H K	DOES THE SECOND WAVE OF COVID19 UNDERMINE CORPORATE IMMUNITY INTERNATIONAL EVIDENCE
10.1016/j.jfi.2021.1009 09	2021	FERREIRA D;KERSHAW D;KIRCHMAIER T;SCHUSTER E	MANAGEMENT INSULATION AND BANK FAILURES
10.1057/palgrave.gpp.2 510090	2006	GAULTIER-GAILLARD S;LOUISOT J	RISKS TO REPUTATION A GLOBAL APPROACH
10.1108/RAF-06-2018- 0111	2019	KRIGMAN L;RIVOLTA M	CAN NONCEO INSIDE DIRECTORS ADD VALUE EVIDENCE FROM UNPLANNED CEO TURNOVERS
10.1111/j.1835- 2561.2012.00163.x	2012	RYAN C;IRVINE H	NOTFORPROFIT RATIOS FOR FINANCIAL RESILIENCE AND INTERNAL ACCOUNTABILITY A STUDY OF AUSTRALIAN INTERNATIONAL AID ORGANISATIONS
10.1080/02102412.202 1.2024012	2022	GARCIA-CESTONA M;SAGARRA M	GOVERNANCE HUMAN CAPITAL AND POLITICIZATION OF SPANISH BANKS
	2019	AMIN S;NOR S	BOARD DIVERSITY AND FIRM PERFORMANCE IN THE CONSTRUCTION MANUFACTURING AND TRADINGSERVICES INDUSTRIES
10.1016/j.jfineco.2021. 03.005	2021	DING W;LEVINE R;LIN C;XIE W	CORPORATE IMMUNITY TO THE COVID19 PANDEMIC
10.1146/annurev- financial-110420- 090352	2021	MEGGINSON W;LOPEZ D;MALIK A	THE RISE OF STATEOWNED INVESTORS SOVEREIGNWEALTH FUNDS AND PUBLIC PENSION FUNDS
10.1108/CG-09-2020- 0438	2021	BABOUKARDOS D;GAIA S;SHE C	SOCIAL PERFORMANCE AND SOCIAL MEDIA ACTIVITY IN TIMES OF PANDEMIC EVIDENCE FROM COVID19RELATED TWITTER ACTIVITY
10.1108/CG-01-2018- 0027	2018	RICCIARDELLI A;MANFREDI F;ANTONICELLI M	IMPACTS FOR IMPLEMENTING SDGS SUSTAINABLE COLLABORATIVE COMMUNITIES AFTER DISASTERS THE CITY OF MACERATA AT THE AFTERMATH OF THE EARTHQUAKE
10.1016/j.jfs.2017.02.0 04	2017	MARTIN-OLIVER A;RUANO S;SALAS-FUMAS V	THE FALL OF SPANISH CAJAS LESSONS OF OWNERSHIP AND GOVERNANCE FOR BANKS
10.1017/S00221090180 0025X	2018	AMORE M;MINICHILLI A	LOCAL POLITICAL UNCERTAINTY FAMILY CONTROL AND INVESTMENT BEHAVIOR
10.1016/j.intfin.2018.1 2.009	2019	DONG Y;DUAN T;HOU W;LIU Y	ATHLETES IN BOARDROOMS EVIDENCE FROM THE WORLD
10.1108/MD-09-2019- 1319	2021	AHN S;CHO C;CHO T	PERFORMANCE FEEDBACK AND ORGANIZATIONAL LEARNING THE ROLE OF REGULATORY FOCUS
10.1108/JFBM-11- 2021-0143	2022	ECKEY M;MEMMEL S	IMPACT OF COVID19 ON FAMILY BUSINESS PERFORMANCE EVIDENCE FROM LISTED COMPANIES IN GERMANY
10.1016/j.jbusres.2020. 07.005	2020	MERENDINO A;SARENS G	CRISIS WHAT CRISIS EXPLORING THE COGNITIVE CONSTRAINTS ON BOARDS OF DIRECTORS IN TIMES OF UNCERTAINTY

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