#### **ORIGINAL ARTICLE**



# A bibliometric analysis of governance mechanisms in dividend decisions: an overview and emerging trends

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#### Abstract

The paper reviews the fundamental indicators to provide a scientific production analysis of dividend decisions, focusing on corporate governance. The study is divided into three steps to conduct a structured review and a bibliometric analysis. First, the study employs the preferred reporting items for systematic reviews and meta-analyses flow methodology and search strategy in the initial stage. Secondly, it uses the Scopus database search results to include the articles written in the English language only. Finally, the study includes performance analysis and employs VOSviewer software for science mapping. The findings indicate that themes addressed in prior research are the theories of dividend, corporate governance and dividend alliance, and the relationship between agency costs and dividend decisions. The findings further reveal that the articles on the relationship between internal corporate governance and dividend policy dominate the literature. In addition, the review shows that most studies examined the alliance of dividend policy with board size, board independence, and board gender diversity. The results give academicians and researchers insight into developing future research agendas.

**Keywords** Dividend · Corporate governance · Bibliometrics · VOSviewer

JEL Classification C10 · C18 · C88 · G34 · G35

#### Introduction

The agency dilemma stems from the separation of ownership and management, as well as the differing demands of managers and shareholders (Jensen 1986; Abor et al. 2011), which leads the upper management to pursue their own goals without considering shareholders' wealth maximization. Corporate governance is a weapon for resolving agency conflicts that influence dividend decisions (Shamsabadi et al. 2016). Thus, agency theory is the cornerstone of corporate governance. The directors play a critical role in deciding dividend

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payout; thus, shareholders perceive them as saviors. This is because they have the authority over higher management and are responsible for making meaningful choices that ensure the smooth operation of businesses. La Porta et al. (2000b) proposed two conflicting theories, the 'outcome model' and the 'substitute model', to explain the association between corporate governance and dividend decisions. The 'outcome model' posits a positive relationship between corporate governance and dividend payout. Thus, corporations with effective governance standards tend to pay higher dividends. The 'substitute model', on the other hand, proposes an inverse relationship between corporate governance and dividend policy. This implies that dividends may compensate for poor corporate governance (Elmagrhi et al. 2017). Therefore, corporations declare higher dividends to create a strong reputation with the shareholders (La Porta et al. 2000b).

To highlight the intricacies of dividend policy, Black (1976) coined the term 'Dividend Puzzle', stating that "the more we look at the dividend picture, the more it appears to be a puzzle, with pieces that just don't fit together". This is due to the lack of any well-defined consensus among various authors (He et al. 2016). In fact, in the context of



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developed and emerging markets, the behavior of payout policies is the most contentious issue (Al-Najjar and Kilincarslan 2017, 2019; Brahmaiah et al. 2018). Therefore, the literature assessment reveals that it is necessary to conduct a scientific review of the existing literature on dividend decisions, focusing on the application of corporate governance.

To the best of the authors' knowledge, no similar studies have been conducted on this subject. Previous studies, such as Pinto et al. (2019), limited their systematic literature review to dividend policy/payout policy with a special focus on dividend determinants. Similarly, few studies involved a bibliometric analysis of articles on corporate governance, as prevalent in distinguished journals (Kushkowski et al. 2020). As a result, the current study intends to assess dividend policy and corporate governance studies. Since descriptive literature reviews vividly differ from systematic literature reviews, the current study decides to undertake a bibliometric analysis of studies on the relationship between dividend decisions and corporate governance. The objective of the present study is to determine the fundamental trends and future scope of work in this area. In addition, it aims to provide insights into new relationship models in dividend decisions and corporate governance. In the given pretext, the present study addresses the following Research Questions (RQs): RQ1. What is the annual publication and citation pattern? RQ2. What are the most influential Scopus-indexed journals in the field? RQ3. Which articles have received the most citations? RQ4. Who are the field's most influential authors? RQ5. Which countries and institutions publish the most in this field of research? RQ6. What is the intellectual architecture of the domain's research? RQ7. What are the most common keywords that appear together? RQ8. Which are the areas that warrant additional study?

The results show that research interest in studies of dividend policy and its relationship with corporate governance has grown over time. According to the core journal analysis, the discipline's most influential and productive journal is the Journal of Corporate Finance. Harford et al. (2008) have garnered maximum citations as they employed numerous parameters of agency problems in the USA to investigate the power dynamics between shareholders and management and its relationship with company cash holdings. According to the co-citation analysis, most researchers have addressed the key themes of dividend theories, corporate governance and dividend policy relationships, and the link between agency costs and dividend decisions. The findings of the keyword analysis indicate the predominance of internal forms of governance (board size, board independence, board gender diversity, etc.) and their relationship with the dividend policy. The results suggest that the relationship of dividend decisions with external forms of corporate governance, such as product market competition, media independence, and the role of credit rating agencies, should be further investigated. The impact of sustainability programs, Corporate Social Responsibility (CSR), and Environmental, Social, and Governance (ESG) considerations on dividend policy is another area that needs to be addressed.

The current study is, thus, a modest attempt to address the research gaps. First, to the best of the authors' knowledge, no bibliometric analysis exists outlining the impact of corporate governance (internal and external) on dividend decisions. Second, the study period in the current paper is long, beginning from 1900 (standard starting range). Third, the present study throws light on future avenues of research.

The rest of the study is structured as follows: Sect. "Review of literature" discusses the existing literature, followed by Sect. "Methodology", which discusses the methodology adopted in the study. Subsequently, Sect. "Analysis and findings" presents the data analysis and discusses the findings, and finally, Sect. 5 offers the conclusion along with prospective future avenues of research in the field.

#### **Review of literature**

This section discusses studies on the progression of corporate governance and studies on the interplay between dividend decisions and corporate governance. It examines the research studies on bibliometric analysis in corporate governance and dividend decisions.

#### **Progression of corporate governance**

The research on corporate governance was earlier restricted to principal agency conflicts (Filatotchev and Boyd 2009), which can be termed a traditional narrow view (Roy 2015). The primary focus was on maximizing shareholders' wealth at the expense of the interests of a diverse collection of stakeholders (Judge 2009). However, over time there has been a shift in focus from shareholders to stakeholders (OECD 1999; Aoki et al. 2001). Good governance is a powerful tool used as a guiding source by senior management to maximize shareholder value (Pahi and Yadav 2019) and effectively deal with agency conflicts (La Porta et al. 2000b); thus, governance practices are expected to have a significant impact on the firms' major financial decisions (Pahi and Yadav 2019).

#### Corporate governance and dividend

Dividend decisions are significant financial decisions that should be approached with caution. Numerous researchers in the past have analyzed the relationship between corporate governance and dividend policy.

In the Indian context, Roy (2015) examined the relationship between dividend policy, ownership structure, and a few



governance variables. He observed the absence of influence of promoter group holdings and domestic and foreign holdings on the dividend policy. Furthermore, it was observed that board size, independent directors, and the number of non-executive directors significantly impact the firm's dividend policy. Numerous studies have also been undertaken on family owned businesses. Setia-Atmaja (2010) investigated the impact of board independence on family-controlled enterprises' debt and dividend policies. The findings reveal that family-controlled businesses have high dividend payout ratios and have a beneficial impact on dividend policy. Further, Benjamin et al. (2016) explored how family ownership affects dividend payout in Malaysia. The study found a negative relationship between dividend payout and family ownership when family ownership is between 0 and 5% and a positive relationship when family ownership is between 5 and 33%. Also, Rajput and Jhunjhunwala (2019), by focusing on the ownership structure and family enterprises, indicated that corporate governance has a favorable impact on the decision to pay dividends. The study found that a company's dividend policy is influenced by the board's independence when the company is family-owned.

Few studies focused on governance ratings or indices and examined how they relate to company dividend policies. Yarram (2015) discovered that in Australian companies, corporate governance ratings (which include board characteristics, board and sub-committee independence, board functioning, and auditor independence) significantly impact the decision to pay dividends and the average dividend payout of the companies. According to Pahi and Yadav (2019), there is a positive link between corporate governance and dividend payout. They developed five new indices, i.e., an overall board governance index, a board structure index, an audit committee index, a compensation committee index, and a nomination committee index, to measure the extent of corporate governance. They then investigated the relationship between these indices and dividend payout.

Thaiyalnayaki and Reddy (2018) suggested a moderately negative correlation between promoters' shares and dividend yield percentages. Further, studies also examined the role of various corporate governance variables on the dividend payout, like board independence (Adams and Ferreira 2009; Dewasiri et al. 2019; Driver et al. 2020; Tahir et al. 2020), board meetings (Adams and Ferreira 2009; Dewasiri et al. 2019), the number of outside directors on board (Al-Najjar and Hussainey 2009; Abor and Fiador 2013), boardroom gender differences (Adams and Ferreira 2009; Tahir et al. 2020; Trinh et al. 2020), the board size, tenure and age (Adams and Ferreira 2009; Tahir et al. 2020), CEO duality (Abor and Fiador 2013; Tahir et al. 2020), total director compensation and other directorships (Adams and Ferreira 2009), institutional ownership (Abor and Fiador 2013), ownership structure (Roy 2015; Dewasiri et al. 2019; Rajput and Jhunjhunwala 2019), and board meeting frequency (Adams and Ferreira 2009; Dewasiri et al. 2019).

# Bibliometric analysis in corporate governance

Bibliometrics implies quantitative analysis of related documents (Nicholas and Ritchie 1978). Based on an extensive literature assessment, it was observed that only a few studies have been published on bibliometric analysis in corporate governance. Durisin and Puzone (2009) mapped the intellectual structure of corporate governance research by conducting a bibliometric analysis of the articles published in the journal of Corporate Governance: An International Review (CGIR) and other distinguished journals over the period 1993-2007. The studies employed author citation and cocitation analysis for the bibliometric review. Eulerich et al. (2013) applied citation and co-citation techniques to investigate corporate governance research trends, particularly in Germany. Building on the work done by Durisin and Puzone (2009), Zheng and Kouwenberg (2019) used VOSviewer to perform citation, co-citation, and keyword co-occurrence analyses on the studies examining the role of the board of directors for effective corporate governance. Kermanian et al. (2019) undertook a bibliometric analysis of 333 Scopus-indexed articles from 2010 to 2018 that contained the keyword 'corporate governance'. They concluded that the highest citations were received by articles belonging to the USA (8669 citations), followed by the United Kingdom (2094 citations) and Australia (1557 citations). Kushkowski et al. (2020) conducted a bibliometric review of corporate governance studies published in the ISI Web of Science database between 1990 and 2015, using a machine learning method known as Latent Dirichlet Allocation (LDA). They concluded that corporate governance is a transdisciplinary field involving accounting, finance, economics, law, and management.

## Bibliometric analysis in dividend decisions

It was discovered from the thorough investigation of the Scopus database that only a single study has addressed the application of bibliometrics in the domain of dividend decisions to date. Pinto et al. (2019) employed bibliometric analysis to investigate general dividend policy trends, particularly focusing on dividend determinants. They used citation analysis, key author and co-publication analysis, and the author keyword counts to analyze the data. They also featured the top five journals and discussed the geographic locations of the publications.

Thus, researchers, so far, have undertaken bibliometric analysis in corporate governance and dividend determinants individually. Still, no study has examined bibliometric methodologies on the relationship between corporate governance



and dividend decisions. The present study aims to conduct a bibliometric analysis of corporate governance and dividend policy to fill this research vacuum.

# Methodology

Bibliometric analysis was used in this study for the following reasons: First, bibliometrics is a widely recognized field of study with applications in many disciplines (Ellegaard and Wallin 2015), including management (Zupic and Čater 2015). Second, it can process huge amounts of data. Third, to meet the objective of the study, a quantitative method rather than a qualitative method is needed (Baker et al. 2019).

# Database and search strategy

Like Pinto et al. (2019), the data were obtained from the Scopus database. A topic search was conducted from 1900 (standard starting range) to September 1–2, 2021. The study collected bibliographic data from the Scopus database as it covers more indexed publications in arts-based management than other databases like Web of Science (Ferreira 2018).

The following search string was used to identify these keywords within the title, abstract, and keywords:

("corporate governance" OR "governance" OR "board characteristics" OR "board of directors" OR "ownership structure" OR "ownership concentration") AND ("dividend policy" OR "payout policy" OR "dividend" OR "dividend payout").

Figure 1 depicts the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram for the methodology and the search strategy adopted in this study. The data were sought from 1900 (the conventional starting point) until September 1–2 2021. The filtration was applied to the 983 documents acquired from the Scopus database by limiting the document type to articles only, and only articles written in English were included in the study. A total of 806 articles were obtained because of this filtration.

Due to the broad extent of the query string and the data collected, it was decided that the articles are multidisciplinary. Thus, a filtering method was used to narrow the topic of study as per the predetermined objectives. All the authors conducted a panel discussion after thoroughly examining the abstracts of the 806 retrieved publications. The authors agreed to exclude 406 documents as they were beyond the scope of the present study, such as those related to other subject areas or studies that did not examine the relationship between corporate governance and dividend policy. Thus, a final sample of 400 articles was obtained, all of which

focused on the impact of corporate governance on dividend policy.

#### **Bibliometrics and visualization using VOSviewer**

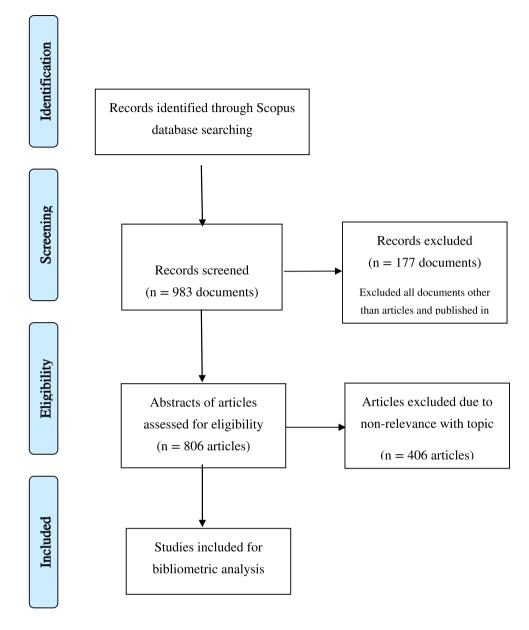
The data for this study are retrieved from the Scopus database and exported to Excel for bibliometric analysis. The VOSviewer software (by the Center for Science and Technology Studies, Leiden University, Leiden, The Netherlands) is employed for bibliometric mapping and visualization as it provides a user-friendly graphical platform for visualization mapping (Liao et al. 2018).

The bibliometric procedure used in this investigation is depicted graphically in Fig. 2. The data retrieved from the Scopus database is analyzed in two steps. First, performance analysis is conducted, and the descriptive statistics are presented graphically and tabularly. This sheds light on the annual growth trends in publications, citation trends, and the overall citation structure over time. The core journal analysis highlights the domain's most productive and influential journals by providing data on the h index, total publications, total citations, citations per publication, Australian Business Dean's Council (ABDC) ranking, and the journal's impact factor. Similarly, the citation analysis reveals the most influential articles. The present study also encompasses data on the most prolific authors (in terms of productivity and citations). Also, country-by-country and organization-wide comparisons are made, and ranks are assigned based on countries and institutions with maximum publications.

Second, the VOSviewer software performs bibliometric mapping and visualizations. The study involves visualizations for citation, co-citation, and co-occurrence analysis (using author keywords). The document citation analysis and source citation analysis depict the most influential papers and the most cited journals. This reflects the influence of each article and the journals (Zheng and Kouwenberg 2019). The co-citation analysis outlines the basic themes (Liu et al. 2015) and theoretical foundations of the research topic. This is done by classifying the references into thematic clusters. The keyword (co-occurrence) analysis depicts the most frequently co-occurring keywords in the articles (Whittaker 1989). The study reveals the evolution of keywords through time by comparing the top keywords' appearances. A table depicting the most commonly occurring keyword pairs is presented to improve the utility for readers. In terms of frequency of publication, this illustrates the most significant and dominant keywords in the literature. The data on the most frequently occurring keyword pairs show the general trends and the emerging trends in the domain of dividend decisions (with special reference to corporate governance). This aids in tracing the future scope of research in the discipline while also describing the issues that have already been well-investigated.



Fig. 1 PRISMA flow diagram depicting the methodology and search strategy. Source: Moher et al. (2010)



# **Analysis and findings**

The research illuminates the most influential sources based on publishing trends and citation analysis. This study identifies the intellectual structure and general trends in dividend policy and its relationship with corporate governance. The results help to identify the fertile research streams that need more exploration in the future.

#### **Evolution analysis of publications**

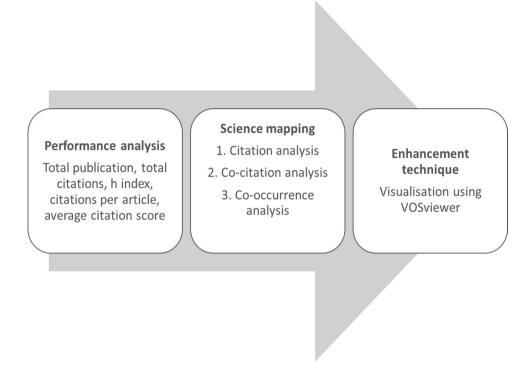
An evolution analysis is performed to answer RQ1 (What is the pattern of annual publication and citation?). Figures 3 and 4 show the annual publishing patterns and citation trends, respectively. It is observed that from its very

inception, there has been a growing tendency in the number of publications. Since 2008, the trend has been increasing annually, indicating the topic's increasing importance and the growing research interests in the domain. It also demonstrates that many papers have already been published, and it is necessary to investigate the research gaps carefully to make new contributions to the field.

Table 1 shows the evolution of citations over time by dividing the study period into two parts, with 2008 as the cut-off point. The year 2008 is chosen as the cut-off point because, until 2008, the citations were primarily increasing, but after 2008, it showed a mixed tendency (both increasing and decreasing). In addition, the financial crisis of 2008, also known as the Global Financial Disaster, was a devastating global economic crisis. Thus, 2008 is chosen



**Fig. 2** Bibliometric procedure adopted for the study. *Source*: Donthu et al. (2021)



# Annual publication analysis

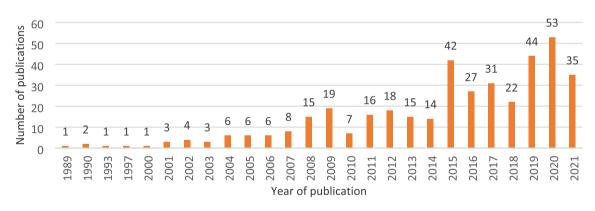


Fig. 3 Annual publication trends in the area of corporate governance and dividend decisions

as a cut-off point to aid in tracing the cause of anomalies in the publishing and citation patterns, as depicted by Figs. 3 and 4.

Figure 3 shows a spike in the number of publications in the discipline since 2008. Cheffins (2015) suggested that the term 'corporate governance' was widely used by academics, legislators, investors, and corporate leaders around the world during and immediately after the 2008 financial crisis to discuss concerns about managerial accountability, board structure, and shareholder involvement in publicly listed firms. Since dividends are an important part of a company's financial status and a prominent topic of discussion among

shareholders, several scholars have investigated the impact of corporate governance on dividend payout since 2008.

However, it is observed from Fig. 4 that there is no concurrent increase in the number of citations. The citations increased until 2008 and afterward showed a mixed (both increasing and decreasing) pattern. The citations for the articles did not grow due to the recurrence of identical topics. In 2008, there were 41 on ownership structure and dividends and 14 on ownership concentration. In the aftermath of the financial crisis of 2008, similar concepts were examined by different studies in the context of different economies (Leng 2007; Setia-Atmaja 2008; Harford et al. 2008; Kowalewski



#### Annual citations trend

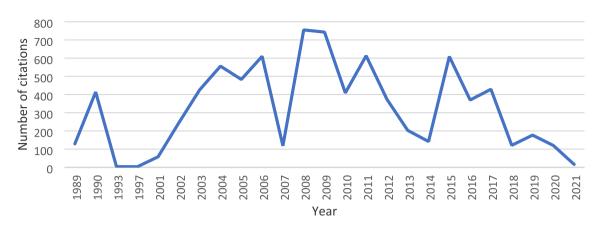


Fig. 4 Annual citation trends in the domain of corporate governance and dividend decisions

**Table 1** General citation structure of the publications over period 1989–2008 and 2009 to 2021

	1989–2008		2009-2021	
Citations	Number of papers	Percent of papers	Number of papers	Percent of papers
> = 100 citations	12	21.0526	4	1.1661
100 > Citations > = 50	3	5.2631	14	4.0816
50 > citations > = 10	21	36.8421	85	24.7813
< 10 citations	21	36.8421	240	69.9708
Total	57	100	343	100

et al. 2008; Kouki and Guizani 2009; Bokpin 2011; Jeon and Ryoo 2013; Al-Najjar and Belghitar 2014; Ongore et al. 2015). Besides, comparable concepts were tested in different settings, like the banking and non-financial sectors within the same country (Abreu and Gulamhussen 2013; Zameer et al. 2013; Hastori et al. 2015). Since 2008, the number of citations for novel themes such as board gender diversity, family businesses, CEO behavior, CEO bias, and CEO compensation has increased. These subjects either did not or occasionally emerged in the literature before 2008.

# Journal analysis

Table 2 presents an analysis of the sources retrieved from the Scopus database and answers RQ2 (Which are the most influential Scopus-indexed journals in the field?). Table 2 shows the top 16 journals based on the number of documents published. The table provides a journal-wise analysis, which counts the number of documents greater than or equal to 100, 75, 50, 25, 10, and 5 citations. This is useful for determining the level of influence and reader preference for the journal articles. The results reveal that the Journal of Corporate Finance has published the maximum number of documents, followed by the journal: Corporate

Ownership and Control. Among the top 16 sources, the Journal of Corporate Finance is also the most cited source, followed by the Journal of Banking and Finance. The next column in Table 2 shows the h index of the journals as per the SCImago ranking, which is an author-level metric and corresponds to the number of citations to the number of publications (Hirsch 2005). H index is a superior indicator than the total number of publications, citations, and citations per publication (Hirsch 2007). The other column represents the impact factor (2020), which aids in measuring the article's influence and comparing journals of various sizes (Garfield 1955). The quality of the journals is also assessed using the Australian Business Dean's Council (ABDC) ranking list (2019). The publisher's name is depicted in the next column in Table 2. Out of the top 16 journals, five journals belong to Elsevier Publishers. The last column in Table 2 depicts the current Scopus status of the journal, whether the journal is listed or discontinued from the Scopus source list (2021). It is observed from Table 2 that 14 journals are active. In comparison, two journals are discontinued from Scopus, namely, Corporate Ownership and Control (discontinued in 2017) and International Research Journal of Finance and Economics (discontinued in 2013). This aids the researchers in making decisions on their research work.



 Table 2
 Contribution by top 16 journals publishing in the area of corporate governance and dividend policy

Source title	h T	TC T	TP TC	TC/TP ≥ 100		<i>≥</i> 75	> 50	≥ 25	≥ 10	≥ 5 IF		ABDC Publisher	Scopus status
Journal of Corporate Finance	101	946 2	26 36	36.38		3	4	14	19	24 4.	4.25 A*	Elsevier	A
Corporate Ownership and Control	19 2	22 1	15 1.4	1.47 0	_	0	0	0	0	Z	NA B	Virtus Interpress	D(2017)
Managerial Finance	39 1	199 1	2 16	16.58	_	0	0	4	9	1.	1.04 B	Emerald Group Publishing	A
Journal of Banking and Finance	161 3	367 9	40	40.78		1	7		7	3.	3.07 A*	Elsevier	A
Pacific Basin Finance Journal	58 3	309	34	34.33		3	7	8	3	1 2.	2.51 A	Elsevier	A
International Journal of Managerial Finance	25 9	6 06	10	0	_	_	0	_	8	<u>-</u>	1.74 A	Emerald Group Publishing	A
Corporate Governance (Bingley)	58 8	85 7	12	12.14 0	_	0	1	_	2	3.	3.28 C	Emerald Group Holdings Ltd	A
Journal of Business Finance and Accounting	77 3	317 6	52	52.83 2	_,	0	7	7	ε.	5.	2.54 A*	Wiley-Blackwell Publishing	A
Corporate Governance: An International Review	85 1	169 6	28	28.17 0	_	0	2	7	4	5 2.	2.91 A	Wiley-Blackwell Publishing	A
Journal of Applied Business Research	22 1	16 6	2.67	2 (2	_	0	0	0	0	0.	0.49 NA	CIBER Institute	A
European Journal of Finance	36 1	162 5	32.4	7.	_	0	7	7	3	-	1.74 A	Taylor & Francis Online	A
International Review of Financial Analysis	59 5	51 5	10	10.2	_	0	0	_	7	1 5.	5.34 NA	Elsevier	A
Review of Quantitative Finance and Accounting	43 1	1 5	2.2	0	_	0	0	C	0	. 2	2.25 A	Springer International Publishing	A
Journal of Asian Finance, Economics and Business	14 1	14 5	2.8	0		0	0	0	0	4.	4.74 A	Korea Distribution Science Association (KODISA)	А
Finance Research Letters	39 4	49 5	9.6	0	_	0	0	_	7	5.	5.47 B	Elsevier	A
International Research ournal of Finance and Economics 24		69 5	13	13.8	_	0	0	C	2	NA	A NA	EuroJournals, Inc	D (2013)



Table 2 is useful as it helps readers to refer to the most prominent journals and gives information for submitting new manuscripts to journals according to their level of influence.

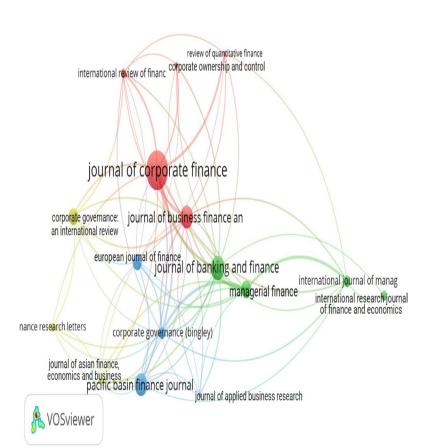
#### **Citation analysis**

Citation analysis determines the number of times other Scopus documents cite a specific publication. This helps discover the most influential journals and authors in the given field and, thus, reflects the influence associated with each article and publication (Zheng and Kouwenberg 2019).

#### Most influential sources

The RQ2 (Which Scopus-indexed journals are the most important in the field?) was addressed with the help of this visualization. Figure 5 visualizes the top 16 journals, with the Journal of Corporate Finance being the most cited (largest red-colored circle) journal. The interconnecting lines point toward the link between the journal articles, and the red, yellow, green, and blue clusters exhibit the commonality of the content among the sources.

Fig. 5 Visualization for the most influential sources (minimum 5 documents and minimum 10 citations)



**Notes:** International review of financ= International Review of Financial Analysis; review of quantitative finance= Review of Quantitative Finance and Accounting; journal of business finance an= Journal of Business Finance and Accounting; international journal of manag= International Journal of Managerial Finance; nance research letters = Finance Research Letters.

#### The most influential articles

Table 3 presents the information on the most influential articles and answers RQ3 (Which articles have garnered the most citations?). The articles are ranked from 1 to 16 based on the number of citations obtained. The findings reveal that the article published by Harford et al. (2008) is the most cited article, followed by notable works by Pinkowitz et al. (2006) and Kaplan and Reishus (1990). Each document's citations per year are also noted to offer a consistent baseline for comparing citations without regard to the publication year. The citations per year are defined as the total number of citations divided by the number of years since publication (Chung et al. 2001). Further, as observed from Table 3, the study by Harford et al. (2008) has the highest average citations. This indicates that the article by Harford et al. (2008) can be regarded as the most impactful article in the domain.

Harford et al.'s (2008) study employed numerous metrics of agency problems in the USA to explore the power dynamic between shareholders and management and how it relates to corporate cash holdings. This research was the first to be carried out in the USA. The findings show that corporations with poor governance systems choose to repurchase



Table 3 Most influential articles in the area of corporate governance and dividend decisions

R	Document title	Authors	Year	Source title	TC	C/Y
1	Corporate governance and firm cash holdings in the US	Harford J., Mansi S.A., Maxwell W.F	2008	Journal of Financial Economics	620	47.69
2	Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis	Pinkowitz L., Stulz R., Williamson R	2006	Journal of Finance	474	31.6
3	Outside directorships and corporate performance	Kaplan S.N., Reishus D	1990	Journal of Financial Economics	326	10.52
4	Corporate governance and expected stock returns: Evidence from Germany	Drobetz W., Schillhofer A., Zimmermann H	2004	European Financial Management	215	12.65
5	Corporate governance and dividend payout policy in Germany	Gugler K., Yurtoglu B.B	2003	European Economic Review	193	10.72
6	The link between dividend policy and institutional ownership	Short H., Zhang H., Keasey K	2002	Journal of Corporate Finance	185	9.74
7	Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment	Gugler K	2003	Journal of Banking and Finance	184	10.22
8	Agency problems of corporate philan-thropy	Masulis R.W., Reza S.W	2015	Review of Financial Studies	179	29.83
9	The role of dividends, debt and board structure in the governance of family-controlled firms	Setia-Atmaja L., Tanewski G.A., Skully M	2009	Journal of Business Finance and Accounting	175	14.58
10	Earnings and dividend informativeness when cash flow rights are separated from voting rights	Francis J., Schipper K., Vincent L	2005	Journal of Accounting and Economics	170	10.63
11	Ownership concentration, firm performance, and dividend policy in Hong Kong	Chen Z., Cheung YL., Stouraitis A., Wong A.W.S	2005	Pacific Basin Finance Journal	163	10.19
12	Corporate governance and dividend policy in emerging markets	Mitton T	2004	Emerging Markets Review	161	9.47
13	Determinants of dividend smoothing: Empirical evidence	Leary M.T., MichaelyR	2011	Review of Financial Studies	155	15.5
14	Managerial entrenchment and payout policy	Hu A., Kumar P	2004	Journal of Financial and Quantitative Analysis	137	8.06
15	Board of Director Composition, Share- holder Wealth, and Dividend Policy	Schellenger M.H., Wood D.D.,Tashakori A	1989	Journal of Management	129	4.03
16	Corporate governance and dividend policy: Shareholders' protection or expropriation?	Adjaoud F., Ben-Amar W	2010	Journal of Business Finance and Accounting	109	9.91

R Rank allotted to the document; TC Total citations; C/Y Citations per year

rather than boost dividends when distributing funds to share-holders, avoiding future payout commitments. The authors claim that in addition to providing concrete evidence of this relationship in the USA, the study's findings also have implications for the value of country-level rights protection versus firm-level shareholder control constraints.

Figure 6 presents the diagrammatic representation of the most cited publications with at least 100 citations. The largest circle represents the article's maximum number of citations. The tabular data (Table 3) are further supported by the VOSviewer visualization, which shows the article by Harford et al. (2008) as the most referred article, depicted by the largest purple-colored circle.

In the center of Fig. 6, there is a small bunch of interconnected articles. For better comprehension, this set of six related articles is visualized and shown separately in Fig. 7.

As shown in Fig. 7, the article by Adjoud and Ben-Amar (2010) is connected to four other documents. Gugler's paper (2003) depicts two links, while the articles by Setia-Atmaja et al. (2009), Hu and Kumar (2004), Mitton (2004), and Short et al. (2002) are each linked to one other article.



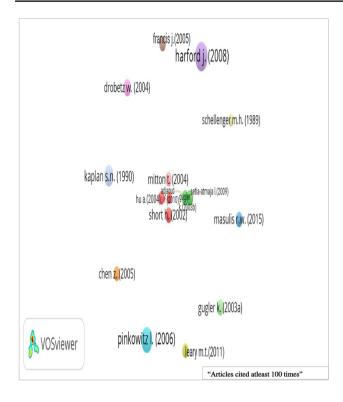


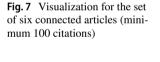
Fig. 6 Visualization for the most influential articles with minimum 100 citations

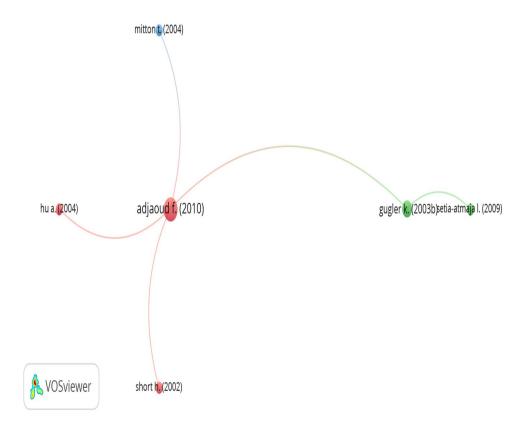
The article by Adjaoud and Ben-Amar (2010) is linked to the maximum number of articles. The article investigates the relationship between corporate governance quality and dividend policy in Canada. The corporate governance quality of a firm is assessed through an annual corporate governance index and four sub-categories scores (board composition, shareholding, and compensation issues, shareholder rights issues, and corporate governance disclosure policy). The shareholding and compensation issues are related to directors' and CEOs' share ownership and CEOs' stock option plans. This section assesses how closely the interests of shareholders and the CEO align.

The other articles linked to Adjaoud and Ben-Amar (2010) also deal with the ownership aspect of the companies. The major concern of all these articles is the protection of interests of the minority shareholders from expropriation by the controlling shareholders.

#### The most prolific and influential authors

This analysis was conducted to answer RQ4 (Who are the most dominant authors in the field?). Table 4 presents a ranking of the authors based on the number of documents (left side of the table) and the number of citations/influence (right side of the table). It is observed from the table that Luc Renneboog is the most productive author in this field. He has authored six documents in collaboration with other co-authors, published in 2005, 2007, 2009, 2011, 2016, and







**Table 4** Ranks of authors on the basis of productivity and citations

	Ranks on basis of pro	f productivity				Ranks on basis of	citatio	ons	
Rank	Author	TP	TC	TC/TP	Rank	Author	TP	TC	TC/TP
1	Renneboog L	6	230	38.33333	1	Harford J	1	620	620
2	Goergen M	5	229	45.8	2	Mansi S.A	1	620	620
3	Farooq O	5	10	2	3	Maxwell W.F	1	620	620
4	Zhang H	4	221	55.25	4	Pinkowitz L	1	474	474
5	Jiraporn P	4	127	31.75	5	Stulz R	1	474	474
6	Al-Najjar B	4	120	30	6	Williamson R	1	474	474
7	Liljeblom E	4	66	16.5	7	Gugler K	2	377	188.5
8	Guedhami O	4	51	12.75	8	Kaplan S.N	1	326	326
9	Guizani M	4	38	9.5	9	Reishus D	1	326	326
10	Setia-Atmaja L	3	220	73.33333	10	Renneboog L	6	230	38.333
11	Kilincarslan E	3	68	22.66667	11	Goergen M	5	229	45.8
12	El Ghoul S	3	51	17	12	Zhang H	4	221	55.25
13	Yarram S.R	3	46	15.33333	13	Setia-Atmaja L	3	220	73.333
14	Guney Y	3	37	12.33333	14	Drobetz W	1	215	215
15	Liu Y	3	31	10.33333	15	Schillhofer A	1	215	215
16	Benjamin S.J	3	24	8	16	Zimmermann H	1	215	215
17	Dewasiri N.J	3	24	8	17	Yurtoglu B.B	1	193	193
18	Baker H.K	3	21	7	18	Keasey K	1	185	185
19	López-Iturriaga F.J	3	11	3.666667	19	Short H	1	185	185
20	Pahi D	3	5	1.666667	20	Masulis R.W	1	179	179
21	Yadav I.S	3	5	1.666667	21	Reza S.W	1	179	179

TC Total citations, TP Total publications, TC/TP Citations per document

2020. Further, Jarrad Harford, Sattar A. Mansi, and William F. Maxwell are the most cited authors in the literature for their article 'Corporate Governance and Firm Cash Holdings in the US', published in 2008.

#### **Institution and country statistics**

This analysis is done to answer RQ5 (Which are the leading countries and institutions publishing in this area of research?). Table 5 presents a country-wise comparison of the published documents (left side of the table) and the organizational statistics in terms of publication (right side of the table). It is observed that the USA is the most productive, followed by the United Kingdom (in terms of both productivity and citations). Regarding institutional statistics, the Pakistan Institute of Development Economics is the leading institution (in terms of productivity and citations).

## **Co-citation analysis**

A co-citation occurs when two documents are cited jointly in another article (Small 1973). Co-citation analysis helps to identify the intellectual structure (Rossetto et al. 2018) and reveal the central themes (Liu et al. 2015). Co-citation analysis is used to investigate RQ6 (What is the intellectual structure of research conducted in the domain?).

#### Cited references co-citation analysis

Figure 8 presents the visualization of the co-citation analysis of cited references. Out of the 13,700 citations, visualization is done for 22 references, meeting the 10 citations per cited reference threshold.

In Fig. 8, the number of citations received by the references is shown by the bubble size. Each bubble represents a reference, and the connection between the two circles denotes a co-citation relationship. This indicates that another author has cited these two sources in their work. The color of the bubble corresponds to the cluster in which the article is included.

The cluster analysis is done in VOSviewer by applying the Smart Local Moving (SLM) algorithm (Waltman and Van Eck 2013). The visualization identifies the thematic clusters to emphasize the study's core themes and intellectual structure. Three clusters (red, blue, and green) are depicted in Fig. 8. The central theme in all the clusters is the dividend/payout policy. The references in each cluster are thoroughly scrutinized. This aids in determining the underlying theme of the articles in each cluster, and the clusters are labeled according to the themes. The green-colored cluster is titled 'Theories of Dividend' and contains studies on the impact of dividend payout on firm valuation. The red cluster is titled 'Corporate Governance and Dividend Policy'



**Table 5** Country wise and organization-wise publication and citation status

Country	TP	TC	TC/TP	Organization	Affiliated Country	TP	TC	TC/TP
United States	101	3545	35.099	Pakistan Institute of Development Economics	Pakistan	4	57	14.25
China	39	505	12.949	University of Otago	New Zealand	3	21	7
United Kingdom	39	1217	31.205	University of New England	Australia	3	46	15.333
Malaysia	31	153	4.9355	Aalborg University	Denmark	2	3	1.5
Indonesia	28	353	12.607	Cranfield University	United Kingdom	2	5	2.5
India	22	57	2.5909	Islamic Azad University	Iran	2	7	3.5
Australia	20	572	28.6	University of Colombo	Sri lanka	2	24	12
Pakistan	16	108	6.75	Universitas Bung Hatta	Indonesia	2	1	0.5
Taiwan	16	147	9.1875	Universitas Putra Indonesia Yptk	Indonesia	2	1	0.5
Canada	13	274	21.077	Universitas Sebelas Maret	Indonesia	2	21	10.5
France	13	121	9.3077	Henderson State University	United states	2	9	4.5
Hong kong	12	386	32.167	University of Technology Sydney	Australia	2	43	21.5
South Korea	12	131	10.917	Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology	Pakistan	2	46	23
Spain	10	134	13.4	University of Central Arkansas	United states	2	9	4.5
Japan	9	90	10	National University of Kaohsiung	Taiwan	1	8	8
Netherlands	9	279	31	University of Huddersfield	United Kingdom	1	33	33
Italy	8	134	16.75	Indian Institute of Management	India	1	0	0
Russian Federation	8	102	12.75	Cardiff University	United Kingdom	1	2	2
Tunisia	7	34	4.8571	University of Hull	United Kingdom	1	2	2

TP Total publications; TC Total citations; TC/TP Total citations per published paper

and contains studies on the relationship between corporate governance and dividend policy. The blue cluster is labeled 'Agency Costs and Dividend Decisions' and focuses on how the dividend policy is tied to agency issues.

#### **Keyword/co-occurrence analysis**

Keyword co-occurrence analysis depicts the frequency with which the keywords occur together in the articles (Whittaker 1989). This analysis addresses RQ7 (What are the most frequently co-occurring keywords?). This analysis also examines the historical and emerging patterns to answer RQ8 (What areas need further study?).

#### **Author keyword statistics**

Table 6 presents the list of frequently occurring keywords. It is observed that 'corporate governance/governance' is the keyword occurring most frequently, followed by 'dividend/payout'. Further, the word 'product market competition' started gaining momentum in 2012. Before that, there was only one study on product market competition and dividends authored by Grullon and Michaely (2007).

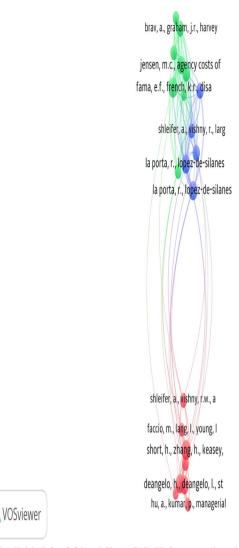
Table 7 presents a comparative analysis of the appearances of top keywords from 2008 to 2021. This aids the reader in understanding the evolution of keywords over time. The keyword co-occurrence analysis was done from the year

2008 because it is marked as the year of the Global Financial Crisis. Further, the period before 2008 is excluded because, before 2008, information on author keywords was sparse in the articles. This analysis reveals several publishing and citation trend irregularities, as shown in Figs. 3 and 4.

The preponderance of internal governance measures like ownership structure, ownership concentration, institutional ownership, board independence, the board size, and so on is reflected in the top 34 keywords used over time. Product market competition, on the other hand, became a prominent external governance mechanism in the years following 2012. According to Gilson and Roe (1993), "Intense product market competition is the most elegant monitoring mechanism". From the agency theory perspective, Grullon and Michaely (2007) investigated the relationship between competition and dividend payout. Further, according to Grullon and Michaely (2007), product market competition may have two conflicting effects on payout policies. This finding is similar to that of La Porta et al. (2000b). First, according to the 'outcome model', product market competition and dividend payout have a positive association. On the other hand, payout policy could operate as a substitute for competition, as demonstrated by the 'substitute model'.

He (2012) found that product market competition does not impact agency conflicts and dividend policies in Japan, a developed economy where principal–principal agency issues are relevant. In Taiwan, where investor protection is





Notes: Figure 8 includes "La Porta, R., F. Lopez-de-Silanes, A. Shleifer, 1999. Corporate ownership around the world. *Journal of Finance* 54: 471-517"; "La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. 2000a. Agency problems and dividend policies around the world. *Journal of Finance* 55:1-33".

Fig. 8 Visualization of the co-citation analysis based on cited references

inadequate, Kao and Chen (2013) examined the relationship between product market competition and dividend policy. Previous studies have examined the relationship between product market competition and dividend payout in countries with well-protected investors. However, the authors investigated the link for the first time in Taiwan, characterized by weak investor protection.

Iqbal et al. (2020), following the footsteps of the previous studies, explored the applicability of competition for payout policy in the context of principal-principal agency issues in China. Further, Pan et al. (2020) examined the impact of corporate governance and product market competition on payout policies when firms are exposed to agency concerns and external funding restrictions. The

Table 6 Top keywords and their frequency

Keyword	Occurrences
Corporate governance/governance	167
Dividend/payout	119
Ownership structure	46
Ownership concentration	17
Emerging markets	15
Agency problem	14
Family firms	13
Institutional ownership	12
Firm performance	9
Board of directors	8
Free cash flow	8
Share repurchase	7
Executive compensation	7
Institutional investors	7
Dividend smoothing	7
Japan	7
Malaysia	7
Product market competition	6
G34	6
G35	6
Growth opportunities	6
Managerial ownership	6
Board characteristics	6
Audit committee	5
Board independence	5
Board size	5
Board structure	5
Capital structure	5
China	5
Government ownership	5
Indonesia	5
Information asymmetry	5
Investment	5
Controlling shareholder	5

findings reveal that product market competition can be a more effective governance tool than other monitoring approaches. Finally, in an emerging market like India, Pahi and Yadav (2021) examined the impact of product competition in the market (external) and board corporate governance (internal) on dividend policy using a newly developed Board Corporate Governance Index (BCGI).

The importance of analyzing the impact of competition on dividend payout arises from the fact that market competition levels can help managers to make more precise dividend decisions. Therefore, while drafting corporate governance guidelines, the legislators should consider the industry's competitiveness.



Table 7 A comparative analysis of the top keywords' appearances from 2008 to 2021, having minimum five occurrences

Keyword	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Corporate governance/ governance	8	9	4	8	9	6	9	11	9	12	11	10	13	16	135
Dividend/payout	6	7	8	7	8	6	7	6	6	9	8	9	8	10	105
Ownership structure	2	3	0	2	3	2	3	2	3	4	2	4	2	3	35
Ownership concentration	1	1	0	0	0	0	0	3	3	0	2	2	3	2	17
Emerging markets	1	1	0	0	1	1	0	0	2	1	1	2	3	1	14
Agency problem	1	1	1	1	0	1	0	1	1	1	0	1	1	2	12
Family firms	1	0	1	1	0	0	0	4	1	0	0	3	0	1	12
Institutional ownership	0	0	0	0	0	0	2	0	1	1	1	2	1	3	11
Firm performance	0	0	0	0	0	1	0	1	0	1	1	2	1	1	8
Board of directors	0	0	0	0	0	1	0	1	0	1	1	2	0	1	7
Free cash flow	0	1	0	0	0	0	1	1	1	1	0	0	1	1	7
Share repurchase	0	1	1	1	0	0	0	0	1	0	0	1	2	0	7
Executive compensation	0	0	0	0	0	0	1	1	2	1	0	0	1	0	6
Institutional investors	0	0	0	0	0	0	0	1	1	1	0	1	0	1	5
Dividend smoothing	0	1	1	1	0	0	1	1	0	0	2	0	0	0	7
Japan	0	0	0	1	2	0	0	0	1	1	1	0	0	1	7
Malaysia	1	0	0	0	0	0	1	1	2	0	0	0	2	0	7
g34	0	0	0	0	0	2	0	2	0	0	0	0	0	1	5
g35	0	0	0	0	1	1	0	1	0	0	0	1	1	0	5
Growth opportunities	0	0	0	0	1	1	1	1	0	0	0	0	1	0	5
Managerial ownership	0	0	0	1	0	0	1	0	1	0	0	0	2	1	6
Board characteristics	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3
Audit committee	1	0	0	0	0	0	1	2	0	0	1	0	0	0	5
Board independence	0	0	0	0	0	0	0	1	0	1	0	0	0	3	5
Board size	0	0	0	0	0	0	0	2	0	0	1	1	1	0	5
Board structure	1	1	0	0	0	0	1	0	0	1	0	1	0	0	5
Capital structure	0	0	0	0	0	1	0	0	0	1	0	0	1	0	3
China	0	0	0	1	0	0	0	1	0	1	0	0	2	0	5
Government ownership	0	1	0	1	0	0	0	0	0	0	0	1	1	1	5
Indonesia	0	0	0	0	0	0	0	0	0	0	3	1	1	0	5
Information asymmetry	0	0	0	0	0	0	1	0	0	1	0	1	2	0	5
Investment	0	0	0	0	1	1	1	0	0	0	1	0	0	1	5
Product market competition	0	0	0	0	1	1	0	0	0	0	0	0	2	1	5
Controlling shareholder	0	0	0	0	1	0	1	1	0	1	0	1	0	0	5

Table 8 presents the most frequently co-occurring keyword pairs. It is observed that the keywords 'corporate governance and dividend policy' have co-occurred the maximum number of times. The other pairs of keywords mainly relate to internal forms of corporate governance, except product market competition (a form of external governance mechanism). This points toward the need to delve deeper into the association between external governance mechanisms and the dividend policy.

Figure 9 shows the visualization of the keywords that appeared in the dividend-related literature. The keyword 'corporate governance' is depicted by the largest circle, representing the highest frequency, followed by 'dividend'.

The interconnected nodes represent the connections between different terms (which are described as keyword pairs in Table 8).

# Conclusion, limitations, and future scope of the study

The present study reviews the fundamental indicators to perform a scientific production analysis in the context of the relationship between corporate governance and dividend decisions. The study provides an overview of publication and citation trends. It highlights the most impactful



Table 8 Most frequent keyword pairs

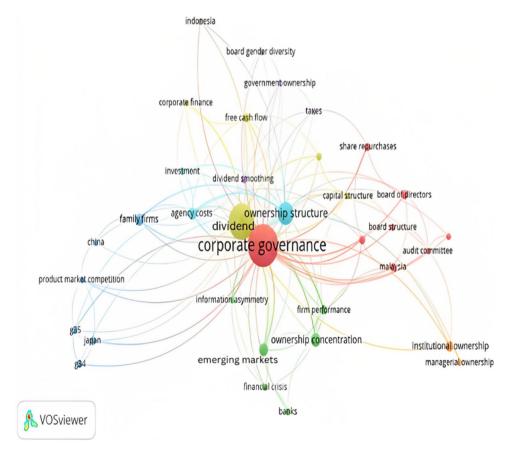
Keyword 1	Keyword 2	Frequency
Corporate governance	Dividend policy	149
Agency costs	Dividend policy	13
Ownership structure	Dividend	44
Family firms	Payout policy	11
Ownership concentration	Payout	16
Institutional ownership	Dividend decision	7
Board of directors	Payout policy	6
Executive compensation	Dividend	6
Product market competition	Dividend decision	6
Board structure	Dividend	5
Board independence	Dividend decision	4
Board size	Dividend policy	4
CEO duality	Dividend	3
Board attributes	Dividend	2
Board composition	Payout	2
Board effectiveness	Dividend policy	2
CEO tenure	Payout	2
CEO power	Dividend	2
Controlling shareholder	Dividend policy	2

**Fig. 9** Visualization of the keywords (Co-occurrence analysis)

areas and simultaneously shows the emerging trends in the domain. This helps to identify the future avenues of research in this field and the areas that demand more attention.

It can be inferred from the findings that the topic of dividend policy and its association with corporate governance has shown increasing research interest over the years. A total of 400 documents have been published from 1900 to September 1–2, 2021. The journal analysis reveals that the Journal of Corporate Finance is the most influential and productive. Furthermore, the county-wise analysis shows that the USA evolved as the leading country in terms of productivity and citations. However, other emerging economies have also shown growing research interest in this area. This indicates the maturity of the research topic. Hence, the findings highlight the future scope of research to resolve this issue.

Citation analysis is performed to get information about the articles' influence levels. The analysis reveals that the paper by Harford et al. (2008) is the most cited due to the application of multiple parameters of agency problems to investigate the power dynamics between shareholders and management and its relationship with firm cash holdings in the USA. Regarding the author-wise contributions to the field, it is observed that Luc Renneboog is the most productive author in this field. On the other hand, Jarrad Harford, Sattar A. Mansi, and William F. Maxwell are the most cited authors in the literature for their article, 'Corporate





Governance and Firm Cash Holdings in the US,' published in 2008.

The co-citation analysis reveals the intellectual structure of research conducted in the domain. The basic themes addressed by the researchers are linked to dividend theories, the investigation of the relationship between corporate governance and dividend policy, and the description of the link between agency costs and dividend decisions.

Based on keyword analysis and scrutiny of the publications, it is noted that the articles depicting the relationship between internal corporate governance and dividend policy dominate the literature. For example, over the years, the authors have examined the relationship between dividend payout and board size, board independence, board gender diversity, etc. However, there are few articles on external governance mechanisms and the impact of sustainability initiatives on dividend decisions.

Table 9 depicts the list of articles indicating the emerging trends and future research directions in the domain. It is observed that a total of four documents that focus on sustainability initiatives and dividend decisions have been published so far. Limkriangkrai et al. (2017) analyzed the influence of environmental, social, and corporate governance and the composite ESG ratings on stock returns and corporate financing decisions of the major stocks in the Australian equity market. They concluded that companies with low corporate governance ratings pay lower dividends. Ni and Zhang (2019) examined the impact of CSR on dividend distribution and also analyzed the intertwining role played by corporate governance. They observed that statutory CSR disclosure considerably reduces corporations' dividend payout and concluded that organizations with poor corporate governance have a stronger negative association. According to Zadeh (2020), environmental and social transparency is linked to higher dividend payout. The positive link is amplified for companies with strong information asymmetry, poor financial reporting quality, and poor governance. Further, Oh and Park (2021) investigated the link between Corporate Sustainable Management (CSM) and dividend policy in the context of Korea. They observed that CSM and dividends have a significant positive association.

The above-discussed studies thus show how ESG issues stimulate the attention of researchers and open the door for more research on dividend payout.

Further, 20 articles have examined the relationship between external forms of governance and dividend policy to date. Jackson et al. (2018) emphasized the need to consider the impact of market and industry-related factors on firm profitability, which in turn, highlights the need to relate the external factors to dividend distributions, which is an outcome of firm profitability. Further, Owen et al. (2010) also emphasized the application of product market competition and internal governance mechanisms for meaningful interpretation in their study. Thus, there is a scope for studying the relationship between external forms of corporate governance, like product market competition, media independence, the role of credit rating agencies, and the dividend payout in future research. Another issue demanding attention is the impact of sustainability initiatives, corporate social responsibility, and environmental, social, and governance factors on the dividend policy. This is due to the increasing significance of environmental, social, and governance issues in the modern era (Waas 2021).

The present study is restricted to research articles. However, the study can be extended to other document types. The researchers can also conduct the same analysis using the Web of Science or other suitable databases. Further, future research can be done using network analysis and literature mapping tools like PageRank analysis and literature cluster analysis to gain further knowledge of the concepts (Pinto et al. 2019).

The present study shall be beneficial for academicians, policymakers, and individuals to surf through the research trends and provide them guidance about the publication and citation status of different sources. The study also provides data for motivating the joint publications of the researchers with the leading authors. Again, from the managerial perspective, the study shall allow the key personnel to focus on the most cited documents and the leading journals to gain practical and valuable insights into the field. Finally, the paper also throws light on the future avenues of research in the domain of dividend decisions and corporate governance.



Table 9 Corresponding list of articles pointing toward the emerging trends and future research directions

Title	Source title	Year
Impact of Sustainability initiatives/corporate social responsibility/ESG factors on dividend	l payout	
Corporate sustainable management, dividend policy and chaebol	Sustainability (Switzerland)	2021
The effect of corporate social responsibility transparency on corporate payout policies	International Journal of Managerial Finance	2020
Mandatory corporate social responsibility disclosure and dividend payouts: evidence from a quasi-natural experiment	Accounting and Finance	2019
Environmental, Social, and Governance (ESG) Profiles, Stock Returns, and Financial Policy: Australian Evidence	International Review of Finance	2017
Impact of external governance mechanisms on dividend payout		
Product market competition, agency cost and dividend payouts: new evidence from emerging market	Journal of Management and Governance	2021
The impact of legal systems on dividend payments	Studies in Business and Economics	2021
Regulatory Dualism as an Alternative Trust-Enhancing Mechanism for Dividends and Debt: Evidence from Brazil	International Review of Finance	2021
Family control, external governance mechanisms, and dividend payouts	Quarterly Review of Economics and Finance	2021
Dividends and economic policy uncertainty: International evidence	Journal of Corporate Finance	2021
Does political instability influence dividend payout policy: evidence from Tunisian Stock Exchange?	EuroMed Journal of Business	2020
Equity incentive schemes, investor protection and corporate performance: Evidence from China	China Finance Review International	2020
Principal–principal agency conflicts, product market competition and corporate payout policy in China	Journal of Asia Business Studies	2020
Provincial governance quality and earnings management: Empirical evidence from Vietnam	Journal of Asian Finance, Economics and Business	2020
The effects of corporate governance and product market competition on payout policy under agency problems and external financing constraints	International Journal of Business	2020
The Impact of Investment Opportunities and Investor Protection on the Dividend Policies of Ultimate Owners	NTU Management Review	2018
Is internal and external mechanism of governance enriching the performance of the banking sector of Pakistan?	Corporate Governance (Bingley)	2017
Corporate dividend decisions and dividend smoothing: New evidence from an empirical study of Turkish firms	International Journal of Managerial Finance	2017
How product market competition affects dividend payments in a weak investor protection economy: Evidence from Taiwan	Pacific Basin Finance Journal	2013
Media independence and firm performance: Evidence from emerging stock markets	Journal of Applied Business Research	2013
Agency problems, product market competition and dividend policies in Japan	Accounting and Finance	2012
Media independence and dividend policy: Evidence from emerging stock markets	Journal of Applied Business Research	2012
Corporate Governance and Dividend Payout Policy: A Test Using Antitakeover Legislation	Financial Management	2011
Dividends and politics	European Journal of Political Economy	2009
Corporate payout policy and product market competition	AFA 2008 New Orleans meetings paper	2007

Note: ESG stands for environment, social and governance

# **Declarations**

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

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