Review Paper:

The relationship between Board Composition and Intellectual capital disclosure

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Abstract

Information on intellectual capital (IC) is important to stakeholders in their decision-making. Managers should therefore be willing to disclose intellectual capital information in order to enhance the firm's value by providing investors with a better assessment of the financial position of the firm and help reduce the volatility of stock returns. Therefore, it is important to understand how the characteristics of the board of directors (size, independent directors, CEO duality and gender diversity) influence disclosure.

The review aims in of analysing the emerging relationships between the determinants of the CDA and the disclosure IC information, also highlighting the reasons that push companies to communicate.

Keywords: Intellectual Capital, Intellectual Capital Disclosure, Board Composition, Corporate Governance.

Introduction

The purpose of this study is to investigate the influence of Board composition on intellectual capital disclosure. The importance of intellectual capital (IC) resources in firm's value creation process has continuously increased due to the transition from manufacturing-based economies towards knowledge-based economies. The increased importance of IC results in a reduction of the valuation relevance of financial statement information since general accepted accounting standards hardly capture IC, do not require recognition of IC in the financial statements.

Users, as investors or financial analysts, therefore, increasingly demand firms to voluntarily disclose their intellectual resources to be able to judge firm's performance and value. IC is a key resource for a firm's value creation process and to create sustainable competitive advantages. Intellectual capital is increasingly recognised as having much greater significance in creating and maintaining competitive advantage and shareholder value.

Ulrich[52] defines intellectual capital as competence multiplied by commitment, meaning that intellectual capital equals the knowledge, skills and attributes of each individual within an organization multiplied by the person's willingness to work hard. Many authors cited recognize this general definition to be the simplest and most common explanation of intellectual capital. Klein and Prusak[36] define intellectual capital as the intellectual material that has been formalized, captured and leveraged to produce a higher-value.

Edvinsson and Malone[22] have defined intellectual capital the possession of the knowledge, applied experience, organizational technology, customer relationships and professional skills that provide a competitive advantage. Edvinsson and Malone and Stewart agree that intellectual capital is the merging of three types of capital: human capital, structural capital and customer capital. Once an organization becomes aligned and balanced in these three foundational components, it is able to create the best possible value.

The aim of the study is to offer a review of the literature highlighting the importance of the voluntary disclosure on the IC and how the different composition of the board of directors impacts on these activities. Information on a firm's human resources, innovation, customers, or technology cannot be included in financial statements because of identification, recognition and measurement problems. Investors are increasingly aware of the importance of company information not directly reflected in financial statements.[38]

According to Eccles et al[20], capital markets are looking for more reliable information regarding knowledge resources in a company such as risk factors, strategic direction, managerial qualities, innovatory skills, experience and integrity. This information is relevant given that it sets the parameters in which companies perform when faced with asymmetrical information, agency problems, investor profits and information transparency. In recent years, the OECD and securities regulators in many countries have considered corporate governance and corporate disclosure as inseparable issues for investor protection and for the efficiency of capital markets.[9,12]

Governance and disclosure provide improved protection to investors, thus making capital markets more efficient. While the effects of corporate governance characteristics on financial disclosure have received considerable research interest,[6,8,54] we still have to learn more about the impact of corporate governance on voluntary disclosure.[14,16,25] In particular, we may advance understanding about the impact of corporate governance on the quantity and quality of voluntary disclosure. The specific characteristics of corporate governance mechanisms such as independence of the board or the separation of the roles of chairman and chief executive, are supposed to enhance monitoring quality and reduce the benefits for managers of withholding information.

In this sense, one of the most recent and widely discussed issues in both the academic literature and the business press concerns how to design corporate governance mechanisms to improve firm transparency and to solve the information asymmetry problem arising from the separation between ownership and control. This circumstance leads us to analyse the corporate governance mechanisms that influence voluntary disclosure of intangibles. This study, specifically focusing on intellectual capital disclosure, is a review that examines the previous research that analysed the relationship between the characteristics of the board of directors and IC disclosure.

Intellectual Capital

Information on intellectual capital is important to stakeholders in their decision-making. Managers should therefore be willing to disclose intellectual capital information in order to enhance the firm's value by providing investors with a better assessment of the financial position of the firm and help reduce the volatility of stock returns. Gibbins et al[27] explored the voluntary disclosure process giving rise to disclosure outputs in response to internal and external stimuli. The reporting activity of a number of firms mainly in Europe has caused a rethink of traditional financial reporting. Traditional financial accounting reports do not require the IC of a company to be reported.[29] This creates information asymmetries among shareholders and other stakeholder groups and possible confusion regarding what is really of value in the business. To compensate for the limitations of the traditional accounting reporting environment, it has been suggested that IC be reported voluntarily by companies to better address stakeholder information needs.

According to the FASB, the term "voluntary disclosure" describes disclosure that is not explicitly required by generally accepted accounting principles (GAAP) or specific country rules. Given that firms are not required by accounting standards or by law to report on most of their IC, they must voluntarily elect to disclose such information. There are clear incentives for companies to do this, although it may be the case that companies are not fully aware of them. The primary incentive for most firms to disclose their IC is to "render the invisible visible". If IC is not reported, there is a risk that it is not receiving sufficient attention from management.[29]

Considering corporate disclosures, two basic functions are attributed on disclosure of information: an informative function which allows investors and market participants making choices and operations of investment and disinvestment and a reporting function, which is directed at the economic-financial evaluation of the final results of business choices and the related transactions. The combination of these two features enables investors and other market participants to use corporate information as a tool of knowledge and valuation of its investment expectations. Various studies on information requests from analysts and investors show a substantial difference between the type of information contained in the annual reports and the type of information requested by the market.[20,21]

In general, investors and analysts require more reliable information on the quality, expertise and managerial experience, relationships with customers, skills and capacity of staff, all factors related to intellectual capital.[11] Companies have become, therefore, aware of the importance of systematically communicating information about intellectual capital.[11] Determinants of intellectual capital disclosure identified in the literature include the size of the company,[10,39,40] the type of industry,[39] the level of debt[33] and profitability.[30] There have been also some studies on the effect of some variables of corporate governance such as ownership concentration,[30] the size of the audit,[40] the size of the Board, the proportion of independent directors, the frequency of meetings of the audit, on intellectual capital disclosure.[15,37]

The study is interesting because it examined both the quantity and the quality of the relationship between disclosure about intellectual capital with some elements of corporate governance of companies such as the size of the board, the proportion of independent directors and the presence of the CEO. Cheng et al[17] in their study examined the relationship between the board and the level of voluntary disclosure, finding that companies with a higher proportion of independent directors have a higher voluntary disclosure, although the size of the board is not associated with the voluntary disclosure.

Another interesting study is the one conducted by Li et al[37] who examined 100 UK listed companies with the aim of identifying the influence of certain attributes related to corporate governance such as the presence of the CEO, the composition of the board of directors, the ownership structure and the size of the audit on intellectual capital disclosure. Hidalgo et al[32] carried out a systematic analysis of some variables of corporate governance and other business-specific factors that influence the decision to disclose the information related to intellectual capital. In this context it can be said that in recent years, the characteristics of corporate governance have received great attention in the information literature.

The literature demonstrates that the composition of the board of directors is primarily based on size which has a significant influence on the efficiency, effectiveness and supervision of management conduct. With reference to the size of the Board, John and Senbet argued that the ability to control the Board of Directors increases as the number of board members this benefit may be offset by the incremental cost of poorer communication. Effective decision-making is often associated with large groups. Thus, a too large Board may actually have a lower ability to monitor and may increase the opportunity by the management to carry out the manipulations. There is no dominant theory or empirical evidence to suggest a relationship between the size of the Board of Directors and the level of voluntary disclosure and remains, therefore, an empirical question.

Cheng et al[17] in their study showed that there is no relationship between the size of the Board and the level of voluntary disclosure. Cerbioni and Parbonetti,[15] however, contrary to their expectations, found that the size of the board has a positive effect on voluntary disclosure of intellectual capital. Empirical studies showed that in general you can expect that the size of the board is associated with a lower effective control of the board, based on the fact that larger boards are less effective and more susceptible to the influence of the CEO.

A central role in corporate governance is carried out by the Board of Directors which has the task to monitor, control and evaluate the behavior of management.[23] The members of the Board must be careful and be cautious and should avoid conflicts of interest in making decisions in the best interests of the company and the shareholders. In general, empirical studies document that firms with weaker governance structures have greater agency problems. Companies that have more agency problems have worse results. Companies that have dominated Board of independent directors do a better job of monitoring and management protect. In addition, the empirical literature on the composition of the board shows that there is a positive relationship between firm value and the quality of corporate governance measured, for example, the fraction of independent directors in the Board of Directors.

According to Patelli and Prencipe,[41] the independent directors have an incentive to protect and build their reputation as experts and controllers, hence they plausibly use the disclosure to signal to financial markets that they are performing their duties effectively.

Cheng and Courtenay[17] examined the relationship between the independence of the Board and the level of voluntary disclosure and found that the Board of Directors with a higher proportion of independent directors is significantly and positively associated with a higher level of disclosure.

Within the company, a central role is played by the Chairman of the Board of Directors and the Managing Director. The Chairman of the Board of Directors should ensure good governance of the company, activate and coordinate the operation of the Board, establish the agenda for the meetings, ensure that directors receive adequate information in order to contribute to corporate decision-making.

The Director, also known as Chief Executive Officer - CEO - is the one who determines the choice of destination to reach and directs the behavior of management to business performance.

Fama and Jensen[23] argue that CEO duality ignores the importance of the separation of control decisions and management decisions. The stakeholder theory argues that the duality prevents the orientation of the board members to stakeholders. Separating the position of CEO and Chairman of the Board disperses power and authority and therefore leads to an improvement in the ability of other members of the board to make decisions effectively directed towards the interests of a greater number of stakeholders.[53]

Drawing from resource-based theory and according to Amran et al,[5] higher gender diversity brings a combination of resources and expertise, greater knowledge, skills and a diverse set of leadership experiences.[19] Based on legitimacy theory, gender diversity can be treated as an effective way to increase the moral legitimacy of society. The stakeholders-agency theory suggests that a more diverse board is more likely to represent diverse stakeholders which should influence IC disclosure.[45]

Companies with a gender-diverse board tend to adopt more socially responsible approaches than those with fewer or no women[24,43] which reduces information asymmetry and mitigates agency problems for all stakeholders.

According to Prado-Lorenzo and Garcia-Sanchez,[44] female directors exhibit greater diligence in monitoring, leading to better manager oversight, greater transparency and a richer information environment. However, previous studies obtained mixed results concerning the influence of gender diversity on information disclosure. On one hand, Giannarakis[26] and Cucari et al[19] found a negative relationship between the presence of women on the board and disclosure, suggesting that a female director does not necessarily influence BD decisions concerning disclosure. On the other hand, Rodrigues et al[45] concluded that gender diversity is not one of the attributes influencing the extent of disclosure.

This systematic review has been conducted by using the following search engines: Scopus, ScienceDirect and Web of Science. The research is divided in two main phases: the first involves the identification of relevant articles based on specific search keywords ("Intellectual Capital" and "Board Composition" or "I.C." and "Board Composition") and the second one involves the examination, reading and understanding of the selected articles.

The search of the articles was based on relevance to the topics investigated, therefore, the research was performed by selecting the areas of interest, namely Management, Business and Accounting. To contribute to the previous literary review studies about IC and Board Composition, we selected only the time-period of research from 2010 to July 2021.

Furthermore, we launched several searches through keywords, "Intellectual Capital" and "Board Composition" or "I.C." and "Board Composition" in order to identify relevant contributions. The final process of research has led to the identification of 38 analysed articles.

Therefore, this revision has placed greater attention on the relationships between IC disclosure and Board composition (in particular: Board Size, Independent director, CEO Duality and Gender Diversity). The latter have been inserted into a spreadsheet that serves as a database. The reading of the articles was conducted by verifying whether the articles of the sample analyze the relationship between the characteristics of the board and the intellectual capital disclosure.

Subsequently, we investigated the close relationship between the issues referable to Intellectual Capital disclosure and Board Composition and due to its lack, regarding the correlation between the search keywords, we excluded 24 articles from the reference sample. Finally, although consistent with the topic, 3 articles have been excluded because they were published before 2010. Therefore, the final sample counts 11 articles used for this research. The analysis of the articles and the information included in the spreadsheet have been summarized through the use of pivot tables useful for identifying the information previously described.

Results and Discussion

We underlined some aspects such as the trends relating to the years of publication, the geographical context of the articles used in the final sample and the relationship between the IC disclosure and the board composition (Board Size, CEO Duality, Independent Director and Gender Diversity). Further information concerns the type of companies (e.g. Listed Company, Family Firms, Government Linked Company) and their economic sectors in relation to the sample used for the review. As for the analysis of trends relating to the years of publication, 2 articles were published in 2013, 4 in 2015, while there is only one publication for each of the following years: 2016, 2017, 2019, 2020 and 2021. The maximum number of publications consistent with the research topic was reached in 2015. Figure 1 shows the publication trend by year.

From the analysis of the geographical area (geographic means the reference area relating to the research conducted in each article used for the following study), it emerges that Spain and The United Kingdom are the most studied countries by the researchers. The geographical boundaries of reference are not specified within the searches two times while the researchers conducted in Italy, Malaysia, New Zealand, China and Portugal only appear once (the term Iberian Peninsula means the analysis conducted jointly in Spain and Portugal). Figure 2 shows the composition of the geographical areas relating to the research included in the sample useful for the review.

Regarding the sample used for this research, the type of organization that appears to be mainly present is the Listed Company. By considering organizations such as Public Listed Company, Linked Government Company and Family Firm, they appear only once.

Likewise, the type of organisation that is the subject matter of the research is not specified in a single article. Figure 3 shows the typology of organisation analysed by researchers in the articles sampled for review.

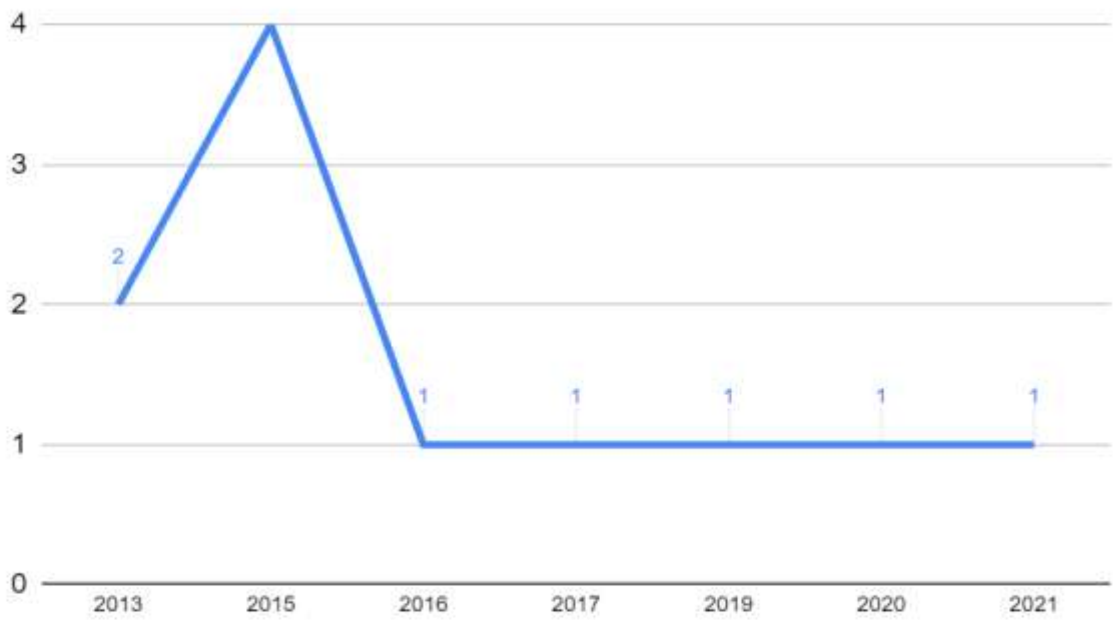

Fig. 1: Number of publications by year

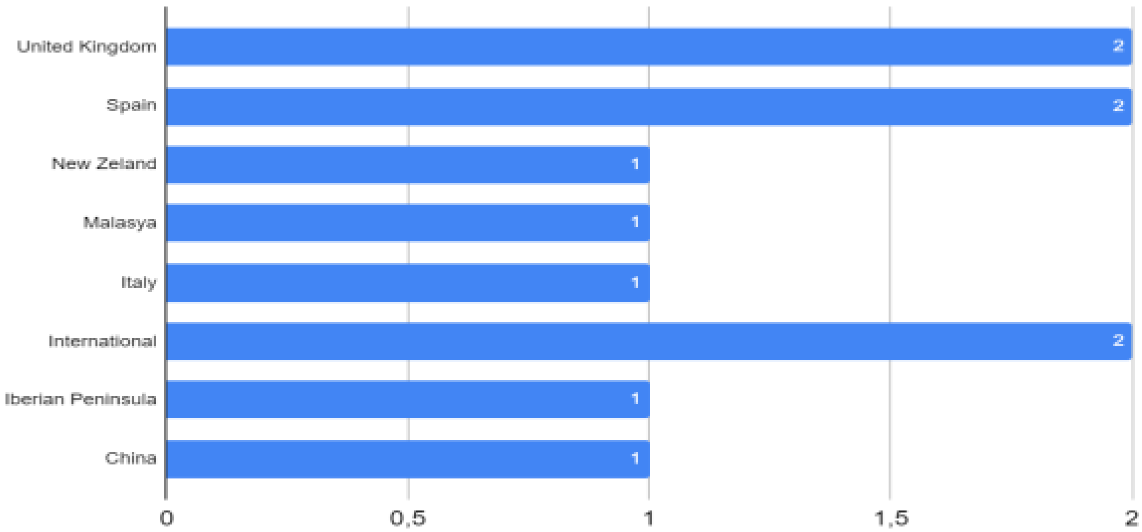

Fig. 2: Geographical Area

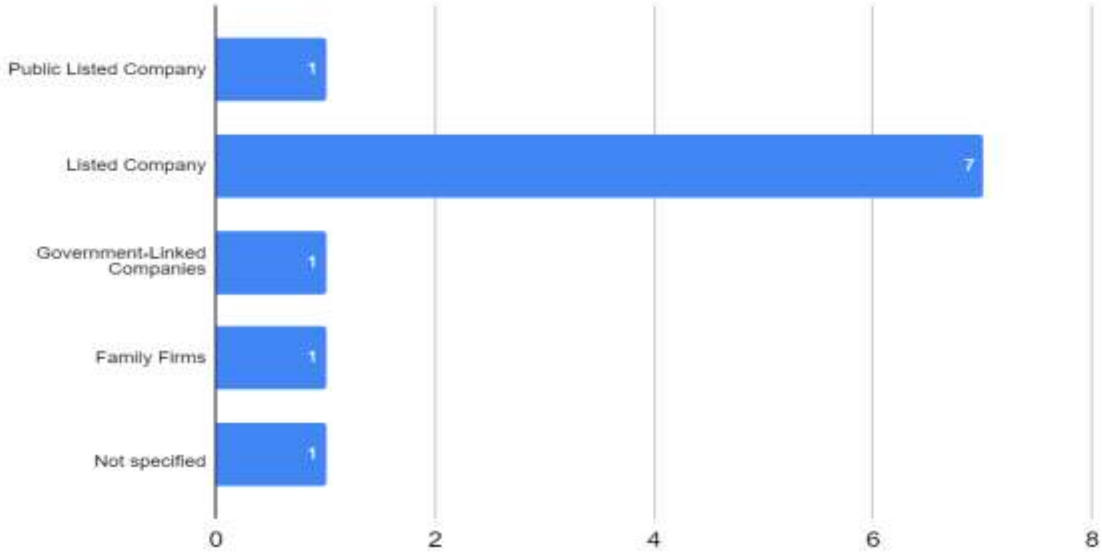

Fig. 3: Type of organisation

In addition, the analysis of the articles was carried out by highlighting the economic sectors of the organizations present in the research sample. In most cases, the economic sector is not specified, while with reference to the other identified sectors (Basic materials / industry and construction, Consumer goods, Financial services, Health care, Industrials Petrol and energy, Services, Technology and Telecommunications), it is not possible to define a dominant sector over the others. Furthermore, it is important to point out that in their research, Baldini et al,[7] Gisbert and Navallas,[28] Shan,[47] Alves et al[4] and Tauringana and Chithambo[49] voluntarily exclude financial firms. Figure 4 shows the economic sectors in which the researched companies operate.

Finally, in the research sample, it has been paid more attention to the issues of the presence of the Independent Director, Board Size and CEO Duality. Only two articles dealt with the issue of gender diversity within the Board of Director. Figure 5 shows to what extent the previously exposed issues have been studied by the researchers.

With regard to the presence of independent directors, a positive relationship with IC disclosure is noted by some authors. Yan[55] found that boards with a higher proportion of independent non-executive directors usually disclose a broader extent of intellectual capital information. Since independent non-executive directors play the roles who constrain the behaviour of the board, a higher proportion of them will put more pressure on CEOs and prevent CEOs from chasing for their own interests. In this way, CEOs will use less impression management and disclose broader and more specific intellectual capital information, which reduces information asymmetry.

Gisbert and Navallas[28] find that the presence of independent directors is significantly correlated with higher levels of voluntary disclosure. The results highlight the relevance of guaranteeing independence among board members in order to steer the interests of minority and majority shareholders towards more accountability and transparency so as to reduce the information asymmetries that arise in an open corporation. Baldini and Liberatore[7] claim that the proportion of independent directors has a positive impact on the disclosure of intellectual capital, even if the values of the variable are not statistically significant.

Also, Shan[47] and Alves et al[4] found that the proportion of independent directors has a significant positive impact on the extent of the voluntary disclosure. Abdul and Musman[1] find two opposite relationships. In their research they find a positive relationship in the case of Non-Government-Linked Companies (Non-GLC), while the results indicate that boards dominated by independent non-executive directors do not seem to enhance the level of firm's intellectual capital disclosure of GLCs.

Finally, also Tejedo Romero and Araujo[50] find a negative relationship in their study, even if focused only on human capital disclosure. Regarding the impact of the size of the board, most research confirms the existence of a positive relationship.

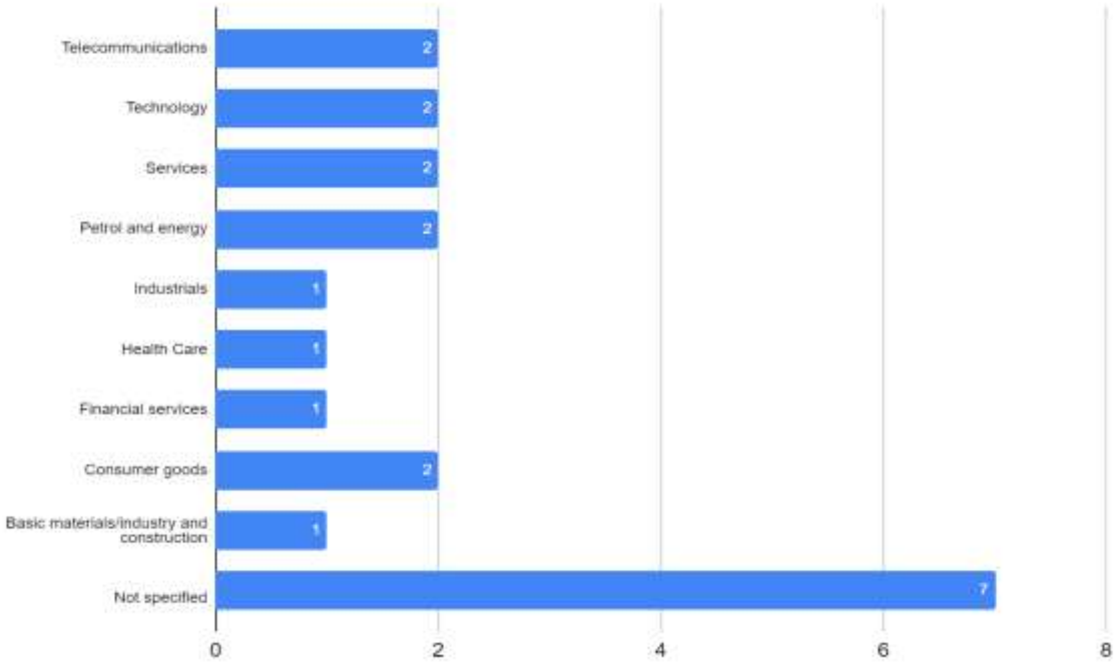

Fig. 4: Economic sectors

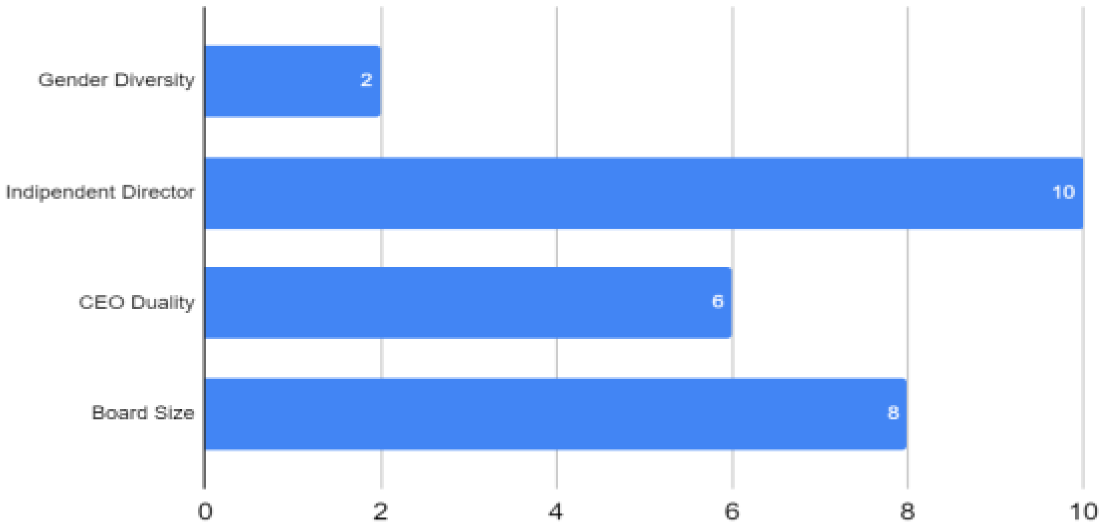

Fig. 5: Exposed issues extent

Peters and Romi[42] found evidence of a significant positive relationship between board size and GHG disclosure. Other studies found a positive association include for environmental disclosure in general,[18] for intellectual capital,[15] for voluntary disclosure in Malaysia[2] and for voluntary disclosure by Italian listed companies.[3]

Abdul and Musman,[1] find a positive association between the Government-Linked Companies intellectual capital disclosure and board size. This result supports the theory which argues that large boards may comprise directors with different backgrounds, expertise and values, which could help the company to make better collective decisions and influence intellectual capital disclosure.

The same relationship is confirmed by Baldini and Liberatore[7] that found a positive relationship between the size of the board of directors and the level of disclosure of intellectual capital, though the latter variable is not significant. Finally, Yan[55] claims that Board size has no significant correlation with intellectual capital disclosures in CEOs' statements. Regarding CEO duality, Baldini and Liberatore[7] find that duality has an inverse relationship with the disclosure of intellectual capital, although not significant.

The same result also came from Cerbioni and Parbonetti[15]. Instead, Abdul and Musman asserted that there is no significant relationship between the independent board and the separation of the position of the board's chairman and CEO with the intellectual capital disclosure among the GLCs and according to Li et al[37] that rejected the idea of duality, because of no influence on intellectual capital disclosure.

Finally, Tejedo Romero and Araujo[50] claimed that gender diversity has a positive and significant relationship with disclosure. That is, a BD with more women provides more information on IC. A gender-diverse board adopts more socially responsible methods and increases disclosure, reducing information asymmetry and mitigating agency problems for all stakeholders as women tend to encourage more responsible behaviours concerning voluntary disclosure of information, though Carbone et al[13] suggested that family ownership limits the positive effect of board gender diversity on intellectual capital disclosure.

Conclusion

In this review, we investigated the link between Board Composition and IC disclosure. The review of the literature confirms the interest in the topic of intellectual capital, highlighting how the different characteristics of the Board of Directors can affect the disclosure of this information. Regarding the presence of Independent Directors, the relationship with the level of IC disclosure appears to be to a greater extent. Therefore, some articles affirm a negative relationship between the two variables (Independent Director and IC Disclosure). The size of the Board of Directors is judged as a significant variable regarding the disclosure of IC. The sample shows a positive relationship between Board Size and IC disclosure.

Regarding the relationship between CEO duality and IC disclosure, the results indicate that in two articles, it is present a negative correlation, instead in a single article it lacks any significant correlation between the two variables. Finally, the relationship between gender diversity within the Board of directors and IC disclosure appears to be the topic investigated to a lesser extent. Nevertheless, it is possible to say that gender diversity has a positive impact on the level of IC disclosure. This relationship is limited regarding the Family Firms. This review presents various limitations.

First of all, it is limited to a specific area (Business, Management and Accounting) and this limitation may have affected the sample size. Secondly, the lack of sector identification in seven articles could be a limit. In this context, further research could be conducted referring to a specific sector, verifying whether the relationships highlighted in the sample remain unchanged or not. The voluntary disclosure of non-financial information is an increasingly important topic within organizations as it mitigates agency problems among stakeholders and reduces information asymmetries in the market. For these reasons, additional research could be conducted analysing unlisted companies which should be encouraged to voluntarily disclose non-financial information to a greater extent.

Next, the issue of gender diversity could be explored as the presence of women on the Boards of Directors positively influences the disclosure of non-financial and environmental information. In this context, organizations could more easily address the challenges posed by corporate social responsibility. In conclusion, the studies related to the IC go through the fifth stage of research and in this context, it would be necessary to expand the boundaries of research. For example, the study of the IC could be deepened within the Hybrid organizations (Benefit Corporation and B-Corps) by analyzing how the level of information relating to the IC disclosure contributes to the achievement of the social objective (declared within the company statutes) and to the maintenance or the improvement of the needed assessments to obtain particular certifications.

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