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Integrated reporting and board features

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Abstract

In the last two decades the concept of sustainability reporting gained more importance in the companies' annual reports, a trend which is embedded also in integrated reporting. Issuing an integrated report became a necessity, because the report explains to the investors how the organization creates value over time. The governance structure, more exactly the board of directors, decides whether or not the company will issue an integrated report. Thus, are there certain features of the board that might influence the issuance of an integrated report? Do the companies which issue an integrated report have certain features of the governance structure? Looking for an answer to these questions, we seek for any possible correlations between a disclosure index and the corporate governance structure characteristics, on a sample from the companies participating at the International Integrated Reporting Council Examples Database. The results highlight that only the size of the board influences the extent to which the issued integrated report is in accordance with the International <IR> Framework.

Keywords: *integrated reporting, sustainability reporting, corporate reporting, corporate governance.*

JEL Classification: *M10, M40, G30, F60.*

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Introduction, motivation and importance

Corporate reporting evolved from the financial statements to a package of financial statements, management commentary, environmental reporting, governance and remuneration reporting. Nevertheless, the information in these reports was not interconnected, and it did not show how environmental and corporate social responsibility issues may affect the company's performance.

Thus, a new trend was born in the reporting field: integrated reporting (IR). In 2011 the International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, standard setters, including the accounting profession and NGOs launched a pilot programme regarding the issuance of an integrated report. The purpose of the Council was to issue a framework for integrated reporting (<IR> Framework), based on the feedback from the affected actors. Integrated reporting is a process founded on integrated thinking with the purpose to issue a periodic integrated report by an organization, about value creation over time.

Integrated reporting tries to put together both financial and non-financial information, developing the integrated thinking, underlying the interdependencies between them, improving the quality of information, identifying the material issues that affect the business, which will lead to a better allocation of the resources. All these elements support integrated thinking, decision-making and actions that are focused on value creation over the short, medium and long term. According to the IIRC, integrated thinking takes into account the connectivity and interdependencies between the range of factors that affect an organization's ability to create value over time, including:

- The capitals that the organization uses or affects, and the critical interdependencies, including trade-offs between them;
- The capacity of the organization to respond to key stakeholders' legitimate needs and interests;
- How the organization tailors its business model and strategy to respond to its external environment and the risks and opportunities it faces;
- The organization's activities, performance (financial and other) and outcomes in terms of the capitals – past, present and future.

Through an integrated report, a series of advantages will be gained (IIRC, 2013). The company will be able to:

- Improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital;
- Promote a more cohesive and efficient approach to corporate reporting that draws on different reporting strands and communicates the full range of factors that materially affect the ability of an organization to create value over time;
- Enhance accountability and stewardship for the broad base of capitals (financial, manufactured, intellectual, human, social and relationship, and natural) and promote understanding of their interdependencies
- Support integrated thinking, decision-making and actions that focus on the creation of value over the short, medium and long term.

The International <IR> Framework (IIRC, 2013) contains the following sections: **guiding principles** (strategic focus and future orientation, connectivity of information, stakeholder relationship, materiality, conciseness, reliability and completeness, consistency and comparability) and **content elements** (organizational overview and external environment; governance; business model; risks and opportunities; strategy and resource allocation; performance; outlook; basis of preparation and presentation).

There are also other reporting initiatives like the Global Reporting Initiative (GRI), which also issued guidelines regarding the preparation of a GRI report. The aim of the GRI is to make corporate responsibility reporting as common and comparable as financial reporting. However, the GRI guidelines have common points with the <IR> Framework, as sustainability reporting is an intrinsic element of integrated reporting (GRI, 2013b). Moreover, in order to reach a global adoption of the integrated report, the IIRC established collaborations with different partners such as: CDP (Carbon Disclosure Project), GRI, IFRS Foundation, IFAC (International Federation of Accountants), SASB (Sustainability Accounting Standards Board), WBCSD (World Business Council for Sustainable Development). The support for a global adoption is through endorsement, advocacy and profile-raising (IIRC website).

This research is based on integrated reports due to the fact that it is a growing phenomenon, as more companies choose to issue this type of voluntary report, and it might be the corporate reporting norm in the near future. Thus, we intend to analyse whether issuing this type of report might be influenced by the characteristics of the company's board, mainly because this type of reporting is not mandatory (except for the companies listed at the Johannesburg Stock Exchange – South Africa). This approach might give us an indication regarding the circumstances under which IR might occur.

As it will be explained in the following paragraphs, a series of other studies analyse the correlation between board features and voluntary environmental reporting. The contribution of this study to the accounting literature is that it analyses a possible correlation between the integrated reports and the company's board characteristics.

1. Literature review

Companies play the main role in the capitalist economies, creating economic grow which leads to a better social environment. In order to create added value, companies interact with different actors such as: investors, employees, regulators, suppliers, and customers to whom they deliver products, services and information. But in order to establish new relationships, the actors need information to enter into an exchange relationship with the company. In this sense, the companies disclose information to reduce the asymmetry between them and investors. This assumption refers to shareholders' theory which is concerned to resolve two problems: "*first is the agency problem… the second is the problem of risk sharing*" (Eisenhardt, 1989) which may occur in the relation between the principal and the party to whom it delegates the work – the agent.

Back in the 1960's, the companies only disclosed financial information; lately, due to globalization and the enlargement of companies, environmental and social issues became part of the public attention. The company's reporting function is met by corporate reporting which discloses the overall picture of a corporate enterprise's activities. It includes the following dimensions: financial reporting, executive remuneration, corporate governance and responsibility, narrative reporting, environmental and social reporting, human resource reporting, segment reporting, integrated reporting.

The need to report on a broader information area is supported by the explanatory factors of market value. In 1975, the market value explanatory factors consisted of physical and financial assets (83%) and other factors (17%). In 2009, the ratio reversed: 81% other factors, 19% physical and financial assets. Thus, a new type of reporting, which is integrated reporting emerged as an option to encompass both the financial and non-financial information. An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term (IIRC, 2013).

The purpose of an integrated report, as the IIRC highlights, is to explain to providers of financial capital how an organization creates value over time. It therefore contains relevant information, both financial and other. The integrated report is used by investors and shareholders to make decisions. However, not any type of information is taken into account by investors, but the one which influences the investment decision. Furthermore, the investors' behaviour is not influenced only by the mandatory disclosed financial information, but also by non-financial information and voluntary disclosed information. Thus, deciding whether or not to adopt IR and disclose on a broader range of information might influence the capital providers (investors).

This is mainly driven by corporate governance, because the management of the company decides what should or should not be disclosed. Thus, corporate governance should be considered to have an influence on disclosure, because the board of directors manages the information disclosure in annual reports. Therefore, disclosure may be a function of the structure, characteristics and constituents of boards, resulting the agency relationship, where the shareholders and investors require more information to be disclosed by the management (Haniffa and Cooke, 2002). It is considered that non-executive directors tend to have interests aligned with external stakeholders.

As the framework proposed by IIRC can be adopted voluntarily, the fact that voluntarily disclosed information could change the shareholders' and investors' behaviour or at least reduce the asymmetry between them and the management, based on the shareholders' theory is important. Voluntary disclosures lead to an improvement of reported earnings' credibility and lower the information asymmetry between investors and managers. Thus, voluntary disclosure is relevant for investors (Cormier and Magnan, 2007).

However, companies have to be cautious when making voluntary disclosures, due to the fact that disclosing certain types of information might negatively affect the company's reputation or reveal competition-sensitive information.

Previous studies

The voluntary disclosure of information was previously analysed in other studies. Mainly, the information disclosed voluntarily was non-financial.

Regarding the board characteristics, Brammer and Pavelin (2008) analyse whether or not the quality of voluntary environmental disclosure tends to be higher the more non-executive directors the firm has. They find a significant negative correlation; thus, the higher the number of non-executive directors, the higher the probability of not voluntarily disclosing environmental issues. The sample includes 447 companies, representing 64% of the FTSE All-Share Index, for the years 1999 and 2000.

Lim, Matolcsy and Chow (2007) examine the association between board composition and different types of voluntary disclosure, such as strategic information and historical financial information. The overall findings suggest that there is a positive and significant correlation between board composition and total voluntary disclosure in company annual reports. The results indicate that boards composed of largely independent directors voluntarily disclose more forward-looking quantitative and strategic information and that board structure does not influence the voluntary non-financial and financial information disclosure. The sample includes 181 Australian Top 500 companies, for the year 2001.

Villiers, Naiker and van Staden (2011) investigate the relationship between corporate environmental performance and board characteristics, such as the role of directors. They find that companies having a higher concentration of independent directors and larger boards have a higher environmental performance. The sample includes 1,216 companies from the KLD database from USA, with 2,151 observations for the years 2003 (981 observations) and 2004 (1,170 observations).

Cheng and Courtenay (2006) analyse the association between board monitoring and the level of voluntary disclosure. They focus on the proportion of independent nonexecutive directors, board size, and whether or not the same person is both CEO and chairman. The results highlight that there is a significant and positive association between the proportion of independent non-executive directors and voluntary disclosure, in the sense that companies with a higher proportion of independent non-executive directors tend to disclose more than the companies with a lower proportion of independent non-executive directors. Board size and CEO duality are not correlated with the level of voluntary disclosure. The sample includes 104 listed companies on the Singapore Stock Exchange, for the year 2000.

2. Data and variables

The primary purpose of an integrated report is to explain to providers of financial capital how an organization creates value over time (short, medium and long term), based on its resources (financial, manufactured, intellectual, human, social and relationship, and natural capital) and relationships (IIRC, 2013). Thus, we can state that issuing an integrated report involves aspects such as: environmental reporting, corporate social responsibility, which are embedded in this report.

Therefore, we intend to search for any possible correlations between the disclosure of an integrated report and the company's board characteristics. Issuing an integrated report is mainly optional, excepting South Africa, and by doing so, investors might understand the company better, thus being convinced to invest. Certain board characteristics might influence the voluntary adoption of integrated reporting, in accordance with the <IR> Framework. Due to the fact that all the companies from the sample issued an integrated report, we intend to check the extent to which these reports are in accordance with the IIRC Examples Database, by the means of a disclosure index.

The board characteristics refer to the following items: independence, duality, and diversity (Prado-Lorenzo and Garcia-Sanchez, 2010). In this study, the characteristics of the board will be determined using: board size, the percentage of independent non-executive directors reported to the total number of board members, CEO gender, whether or not the CEO is also president/chairman of the board of directors, the existence of a CEO change during that year and the percentage of women in the board.

Thus, in order to test the possible correlations between issuing an integrated report, more specifically the extent to which an integrated report issued by a company complies with the recommendations from the <IR> Framework, and company's board characteristics, we will use the following variables:

- The extent to which the integrated report is issued in accordance with the <IR> Framework, using a **disclosure index** (DI) – ***dependent*** variable; and
- The board characteristics, identified based on previous studies: **board size**, **the percentage of independent non-executive directors reported to the total number of board members**, **CEO gender**, **whether or not the CEO is also president/chairman of the board of directors**, **the existence of a CEO change during that year and the percentage of women in the board.**

The DI is built up based on the <IR> Framework. Thus, in order to build up the DI, the following issues from the <IR> framework were taken into account: the presentation of the "**Six Capitals**", the "**Content Elements**" – which are presented based on the "**Guiding Principles**", to which we add whether the report is **audited** from the integrated report perspective. To make integrated reports as reliable and comparable as financial reports, an integrated assurance opinion must be provided (Eccles, Krzus and Watson, 2011). Ideally, it will be in the form of "positive assurance", rather than "negative assurance". Furthermore, it most probably will give assurance on the methods, methodology and procedures on which the integrated report was built, rather than on the accuracy of information.

Therefore, for the DI we checked whether or not the issued report contains the following content elements: **organizational overview and external environment; governance; business model; risks and opportunities; strategy and resource allocation; performance; outlook; basis of preparation and presentation**.

Thus, each of the items mentioned previously became a binary variable: if the report presented a certain element, then the variable took the value "**1**", and if not, it took the value "**0**". The same principle was applied when checking whether the report was audited as an integrated report (the value was "**1**") or not (the variable was "**0**"). Also, if the company presented information regarding the six capitals (**financial, manufactured, intellectual, human, social and relationship, natural**), which could be applicable to their business model and activity, the value was "**1**", and if not, then the value was "**0**". The same principle was applied for **CEO gender** ("1" was attributed for male and "0" for female executives), for the fact that **the CEO is also the president/chairman of the board of directors (**"0" was attributed if the CEO is also president/chairman of the board of directors and "1" if not) and for **the existence of a CEO change during that year** ("0" means there was no CEO change and "1" means there was a CEO change). Thus, if the company presented all the *content elements*, information regarding the *six capitals* and the issued report was *audited* as an integrated report, it could be attributed a score of "**10**".

One of the advantages of using the DI is that it measures and compares the information presented in the reports with the maximum amount of information that could be presented by the company. In this case, the DI measures to which extent the analysed reports are issued and presented based on the <IR> framework.

In this case DI is the dependent variable and it is computed as follows: $DI=\frac{\sum_{i=1}^{m} di}{\sum_{i=1}^{n} di}$;

where:

DI = disclosure index, DI = [0;1]

d_i = 1 if the item is disclosed and

d_i = 0 if the item is not disclosed;

m = number of disclosed items;

n = maximum number of analysed items.

Therefore, if the company has presented all the items and audited the report, the DI has the value "1". The DI takes values between 0 and 1, due to the fact that is an arithmetic average, a value closer to 1 indicating a greater compliance of the analysed report with the <IR> Framework.

The independent variables express the board characteristics through **board size, the percentage of**

independent non-executive directors reported to the total number of board members, CEO gender, whether or not the CEO is also the president/chairman of the board of directors, the existence of a CEO change during that year and the percentage of women in the board.

The data was collected manually for each company, from the uploaded reports in the IIRC Examples Database, available on the IIRC website. The sample initially included 122 observations and 89 companies for the years: 2012 (22 observations; 19 companies), 2013 (39; 30), 2014 (45; 32) and 2015 (13; 8). We decided to exclude the reports for the year 2011 due to the fact that it was the first year, and the reporters were not familiar with the framework, which might affect our results.

Figure no. 1 in the *Appendix* displays the DI composition for all 122 observations. Most of the companies (74 out of 89) are publicly listed companies, and 15 are private companies. They are from: North America – 7 companies, South America – 5, Europe – 49, Africa - 11, Asia - 13, Australasia - 4. The average length of a report is 167 pages.

3. Analysis and results

In order to test the possible correlations between the DI, which is the dependent variable, and the independent variables (respectively board size, percentage of independent non-executive directors reported to the total number of board members, CEO gender, whether or not the CEO is also the president/chairman of board of directors, the existence of a CEO change during that year and the percentage of women in the board), we relied on the Pearson correlation and ANOVA tests, using SPSS. Due to the fact that for some companies the variables could not be determined, we eliminated those companies from the sample, which lead to a total of **119 observations**. Nevertheless, the sample kept its structure and the parameters of central tendency kept their values.

In order to verify whether the distribution of the sample (population) follows the normal law, we used the Kolmogorov-Smirnov test. The results are highlighted in **Table no. 1**.

Table no. 1. One-Sample Kolmogorov-Smirnov Test

		DI
Population		119
Normal Parameters	Mean	0.6
	Std. Deviation	0.15
Asymp. Sig. (2-tailed)		0.21

Source: SPSS computations

Based on the above results, we can state that the distribution is normal, as the significance level of the test (0.21) is greater than the significance level (0.05). The same conclusion results from computing the parameters: mean (0.6), median (0.6) and mode (0.6), because all three al equal.

The variance coefficient is 25%, which is lower than 35%, resulting that the mean is significant for the studied reports.

For the analysed variables, the descriptive statistics are presented in **Table no. 2**.

We also tested whether or not the average score for the DI is different depending on: organization type, industry and region. For the organization type we had two segmentation variables: publicly listed company and private company. In this case the mean was the same (0.61), meaning that the disclosure process is not influenced by the company ownership structure. In case of the industry where companies operate, we obtained the following results: Consumer goods and services – 31 observations (mean = 0.61); Financial and professional services – 28 observations (mean = 0.67); Healthcare – 7 observations (mean = 0.51); Industrials and Basic materials – 27 observations (mean = 0.61); Telecommunications – 5 observations (mean = 0.58) and Utilities – 21 observations (mean = 0.6). Based on industry segmentation, we can state that companies operating in the financial sector tend to disclose more than those in the healthcare industry.

Table no. 2. Descriptive Statistics of variables

Parameter	DI	Board size	Indep. Non-exec	CEO president	CEO gender	CEO change	Women board
Population	119						
Mean	0.62	11.35	0.50	N/A	N/A	N/A	0.20
Median	0.60	11.00	0.54	N/A	N/A	N/A	0.20
Mode	0.60	9	0	1	1	0	0
Std. Deviation	0.15	3.36	0.30	N/A	N/A	N/A	0.12
Variance	0.02	11.32	0.09	N/A	N/A	N/A	0.01
Minimum	0.30	5	0	0	0	0	0
Maximum	0.90	21	1	1	1	1	0.56

Source: SPSS computations

Regarding the region where the company has its headquarters, we assigned the companies to the following regions: Africa – 16 observations (mean = 0.65); Asia - 17 observations (mean = 0.62); Australasia - 5 observations (mean = 0.68); Europe – 67 observations (mean = 0.60); North America – 8 observations (mean = 0.66) and South America – 6 observations (mean = 0.68). Based on the results, we can state that, in average, companies do not have significantly different disclosure practices, in accordance with the <IR> Framework.

In order to analyse the possible correlation between the DI and the independent variables, we used the Pearson correlation and ANOVA tests for which we stated the following two hypotheses, for each of the independent variables:

- ***H_0.*** Board size, the percentage of independent non-executive directors reported to the total number of board members, CEO gender, whether or not the CEO is also the president/chairman of the board of directors, the existence of a CEO change during that year and the percentage of women in the board, do not influence the extent to which the integrated report issued by the companies from the IIRC Examples Database is in accordance with the <IR> Framework, as highlighted by the DI; with the *alternative*
- ***H_1***. According to the DI, the extent to which the issued integrated report is in accordance with the <IR>Framework is influenced by the variables stated in H_0.

Applying the Pearson correlation to test the correlation between the dependent variable (DI) and the independent quantitative variables, we obtained the results presented in **Table no. 3**.

Table no. 3. Pearson Correlation test

		DI	Board size	Indep. Non-exec.	Women board
DI	Pearson Correlation	1	**0.191***	-0.112	0.088
	Sig. (2-tailed)		0.038	0.227	0.339
	N	119			

Source: SPSS computations

In order to explain the obtained results, the following remarks need to be made: a positive Pearson correlation coefficient indicates a direct link between the variables, whereas a negative coefficient indicates an indirect link between the variables. If the value of the coefficient is situated between [0; 0.3], then the link is weak; a coefficient between (0.3; 0.7] indicates that the link has an medium intensity and a coefficient between (0.7; 1] indicates that the link is strong.

In this case, we identified a significant correlation only for the *Board size*. The Pearson coefficient is 0.191 which means that there is a weak and direct link between the *DI* and *Board size*, which is also significant as the significance level is 0.038 (below the 0.05 level). In this case, we accept H_1 hypothesis.

The same methodology is applied for the other variables resulting that for: *Independent non-executive* and *Women board* variables, the H_0 hypothesis is accepted, thus there is no correlation.

To analyse the qualitative variables (*CEO gender*, *CEO president*, *CEO change*) in correlation with DI, we used ANOVA. The results are presented in **Table no. 4**.

Table no. 4. ANOVA Test

DI:	CEO president	CEO gender	CEO change
Sig.	0.231	0.211	0.764

Source: SPSS computations

Due to the fact that the significance levels for each of the analysed variables is greater than 0.05, the H_0 hypothesis is accepted. So, nor the *CEO gender*, *CEO president*, or *CEO change* variables influences the extent to which the issued integrated report is in accordance with the <IR>Framework (as expressed by the DI).

The only correlation found is between the *Board size* and the extent to which the issued integrated report is in accordance with the <IR>Framework (expressed by the DI), with a direct and weak link. Therefore, according to this finding, the more directors the board has, the more the issued integrated report is in accordance with the <IR>Framework. Our results are in accordance with the findings of Villiers, Naiken and van Staden (2011).

4. Conclusions and limitations

Previous studies analyse the possible correlation between board features and voluntary disclosures. The results highlight that there is a link between the percentage of independent and non-executive directors in the board structure, as well as board size and different types of voluntary disclosures.

Starting from the previously mentioned studies, we tested to whether or not board characteristics of the companies from the IIRC Examples Database influence the extent to which the companies issued an integrated report that is in accordance with the <IR> Framework. Here we can find some similarities with the previous studies, due to the fact that issuing an integrated report in accordance with the IIRC proposed framework is voluntary.

Using the Pearson correlation and the ANOVA tests, we verified whether or not there is any correlation between the DI and the independent variables. For the board characteristics, we found that there is a direct and weak link between board size and the extent to which the issued integrated report is in accordance with the <IR> Framework. Therefore, according to this finding, the bigger the board is, the more the issued integrated report is in accordance with the <IR> Framework. For the other variables no correlation could be found. Thus, issuing an integrated report does not depend on the percentage of independent non-executive directors reported to the total number of board members, CEO gender, whether or not the CEO is also president/chairman of the board of directors, the existence of a CEO change during that year and the percentage of women in the board.

Some of the reasons of this result is that the <IR> Framework is not mandatory, the principles and the guidelines being very flexible. Also, issuing an integrated report is something new and also an exercise for the participating companies.

Nevertheless, issuing an integrated report should not depend on some features of the company's board, because this type of reporting develops the integrated thinking, improves the quality of information available to the providers of financial capital and leads to a more efficient and productive allocation of capital. Moreover, integrated reporting intends to become the norm.

The main limitations of this study are the size of the sample and the choice of independent variables. Possible future research questions could take into consideration other variables which highlight the economic, regulatory, legal, labour and cultural backgrounds of the companies' countries of origin (based on the institutional theory).

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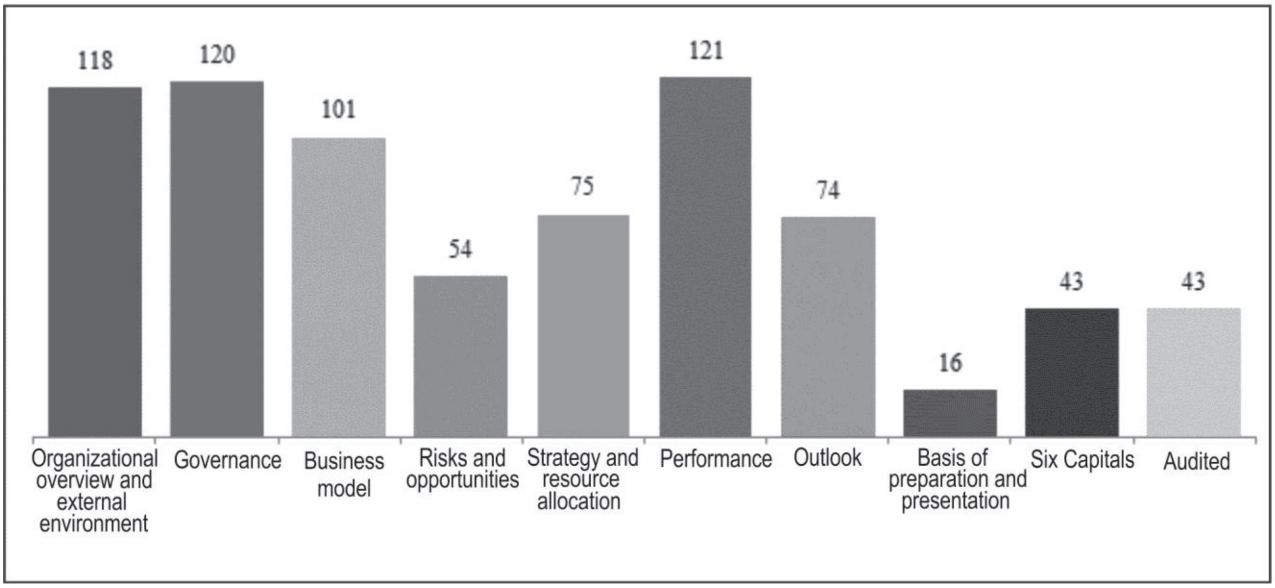
APPENDIX

Figure no. 1. Disclosure index – drilled by items



Source: author's projection

Table no. 5. Disclosure index – drilled by score

DI score	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	Total
Number of companies	5	11	25	29	22	20	7	3	122

Source: author's projection