

# THE EFFECT OF OWNERSHIP CONCENTRATION ON NON-FINANCIAL INFORMATION MANDATORY DISCLOSURE: EVIDENCE FROM ITALY

Simona Fiandrino<sup>\*</sup>, Fabio Rizzato<sup>\*</sup>,  
Donatella Busso<sup>\*</sup>, Alain Devalle<sup>\*\*</sup>

<sup>\*</sup> Department of Management, University of Turin, Italy

<sup>\*\*</sup> *Corresponding author*, Department of Economic, Social, Mathematical and Statistical Sciences, University of Turin, Italy  
Contact details: Department of Economic, Social, Mathematical and Statistical Sciences, University of Turin,  
Corso Unione Sovietica 218 bis, 10134, Turin, Italy



## Abstract

**How to cite this paper:** Fiandrino, S., Rizzato, F., Busso, D., & Devalle, A. (2019). The effect of ownership concentration on non-financial information mandatory disclosure: Evidence from Italy. *Corporate Ownership & Control*, 17(1), 79-94. <http://doi.org/10.22495/cocv17i1art8>

Copyright © 2019 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).  
<https://creativecommons.org/licenses/by/4.0/>

**ISSN Online:** 1810-3057  
**ISSN Print:** 1727-9232

**Received:** 06.09.2019  
**Accepted:** 17.10.2019

**JEL Classification:** M14, M41  
**DOI:** 10.22495/cocv17i1art8

This study investigates the relationship between non-financial information (NFI) mandatory disclosure and ownership concentration in the Italian context, which is characterized by pyramidal groups and high ownership concentration. Hence, the intent is to understand to what extent NFI mandatory disclosure might be related to ownership concentration. In pursuing this objective, the empirical research examines 141 listed Italian companies that are obliged to prepare their NFI in accordance with Italian Legislative Decree 254/2016. The study addresses the following research method. First, the research develops an NFI disclosure score based on a dichotomous approach following a quantitative content analysis of the 2017 non-financial statements to assess their level of compliance. Then, it develops a multivariate regression analysis to test whether or not, and if so, to what extent, ownership concentration affects the disclosure of NFI. We aim to enhance the academic debate in light of the path development of NFI disclosure under mandatory requirements and the increased awareness around responsible business practices. Moreover, it draws insights on the controversial results of the relationship between ownership structure and corporate social responsibility (CSR) when the disclosure around sustainability issues becomes compulsory.

**Keywords:** Non-Financial Information Disclosure, Mandatory Disclosure, Ownership Concentration, Ownership Structure, Italy

**Authors' individual contribution:** Conceptualisation - S.F., F.R., D.B., A.D.; Methodology - F.R.; Formal Analysis - F.R.; Writing - S.F.; Supervision - D.B. and A.D.; Project Administration - D.B. and A.D.

## 1. INTRODUCTION

This paper examines the effect of ownership structure on the level of non-financial information (NFI hereafter) disclosure contextualized in Italy where there is high ownership concentration. This research seeks to understand the extent under which NFI mandatory disclosure is related to ownership concentration. As a matter of fact, the concentrated ownership may affect NFI disclosure,

depending on the different viewpoints with respect to CSR (Corporate Social Responsibility) practices (Faller, 2018). Such an implementation might depend on the cost of investing in these activities and eventually, on the demand for public disclosure, which may be weak in comparison with companies with lower ownership concentration (Muttakin & Khan, 2014). Furthermore, this research draws insights from the recent mandatory requirements on NFI disclosure of the Directive 95/2014/UE. The

Directive has obliged public interest entities to report non-financial information disclosure starting from the 2017 financial year. In Italy, the requirements on the disclosure of NFI have been transposed through the Legislative Decree 254/2016. The requirements demand the disclosure of the business model, related policies and outcomes, risks and opportunities, and non-financial key performance indicators related to five content topics - environmental, social, employee, human rights and anti-corruption. Hence, these mandatory requirements have turned the reporting of certain CSR initiatives into an imperative procedure from a voluntary basis.

In light of the path developments in the realm of NFI disclosure, few academic works have provided evidence for the level of compliance with this regulation (Hummel & Schlick, 2016; Chelli, Durocher, & Fortin, 2018; Schneider, Michelon, & Paananen, 2018; Cantino et al., 2019; Fiandrino, 2019). Moreover, there is no clear-cut relationship between CSR initiatives and ownership concentration (Faller, 2018); thus, we contribute to such a debate contextualised in a mandatory regime of NFI disclosure.

The intent is to address these gaps by illustrating the level of compliance of NFI with the new regulatory requirements and examining the relationship between NFI mandatory disclosure and ownership concentration. We select Italy as a setting of investigation and the rationale for choosing Italy as the target of this study is attributed to its characterization of pyramidal groups and high ownership concentration (Barca, 1994; Aganin & Volpin, 2005; Minetti & Paiella, 2012).

Along with these premises, the investigation is based on the 141 Italian companies that are obliged to prepare the non-financial statements in accordance with the Italian Legislative Decree No. 254/2016 starting from the 2017 financial year. The research addresses a quantitative content analysis of the company's 2017 non-financial statements and develops an NFI disclosure score to assess the level of such a disclosure. Then, it develops a multivariate regression analysis to test whether or not, and if so, to what extent, ownership concentration affects NFI mandatory disclosure.

The remainder of the paper proceeds as follows. Section 2 reviews the prior literature which investigates the relationship between non-financial information and ownership concentration, and then it analyses the Italian context as a set of study. Within this context, the research is teased out. Section 3 explains the research method employed in the present study, and then Section 4 examines the results. In Section 5 the paper discusses research implications and then, it ends by acknowledging limitations and drawing avenues for future developments.

## 2. LITERATURE REVIEW

### 2.1. The relationship between non-financial information disclosure and ownership structure

Gray, Owen, and Maunders (1987) firstly defined NFI disclosure as "the process of communicating the social and environmental effects of organizations (particularly companies) beyond the traditional role of providing a financial account to the owners of capital, in particular shareholders" (p. 9). Along with

the development path of NFI disclosure, the accounting literature originally focused on NFI voluntary disclosure and the effects proven by such an approach. These studies have demonstrated that NFI voluntary disclosure enhances transparency, improves reputation and brand value (Hahn & Kühnen, 2013), affects firm value (Cahan et al., 2016), increases share prices (De Villiers & Marques, 2016), reduces the cost of capital (Dhaliwal et al., 2011, 2012). Hence, higher levels of disclosure on sustainability aspects lead to lower equity costs, and such reductions can be explained by the decrease of asymmetric information among parties. Martínez-Ferrero, Ruiz-Cano, and García-Sánchez (2016), as well as Hung-Yuan (2014), confirm that the reduction of asymmetry information plays a crucial role in the sense that non-financial disclosure quality reduces the cost of capital by decreasing information asymmetry. In greater details, firms that promote Environmental, Social, and Governance (better known as ESG) disclosure to reduce information asymmetry achieve low capital costs (Dhaliwal et al., 2011).

When considering the relationship between CSR issues and ownership structure, there is no unanimous consensus yet (Faller, 2018). Literature generally classifies ownership into the following types: the presence of a strong block holder, such as a family; state ownership; national institutional ownership; the presence of foreign investors (Rizzato et al., 2018).

By following these classifications, accounting scholars have originally disentangled the effects proven by ownership concentration on NFI disclosure on a voluntary basis. The recent academic review of Faller (2018) has identified contradictory findings of prior research on the relationship between CSR and equity ownership. The study has reviewed academic papers and has addressed the dubious nexus with a narrative-based assessment of empirical results. The findings have highlighted a sharp inconclusiveness with "positive correlations (four studies), negative correlations (seven studies), or no conclusive correlation (two studies)". Supporting negative relations argue that closely-held equity owners are less inclined to support external CSR activities with high costs which shorten the distribution of short-term profits (Mackenzie, Rees, & Rodionova, 2013). In more details, when companies with high ownership concentration incur a large amount of costs related to CSR and sustainability issues (Clark & Hebb, 2005; Mackenzie, Rees, & Rodionova, 2013) and the identification of clear-cut costs and benefits for shareholders is tricky to identify (Barnea & Rubin, 2010), concentrated shareholders may be less interested in pursuing such CSR practices. In fact, when CSR activities are costly, they may decrease short-term profits available for distribution, thus shareholders' income will be limited (Rees & Rodionova, 2013). For such reasons, when equity ownership is concentrated, CSR activities might be less spread, namely the relationship is negative. Similarly, other studies which primarily has focused on family ownership have argued that family-oriented companies tend to disclose less information on CSR initiatives. It has been suggested that accountability and organizational legitimacy are not paramount of importance because external interests are likely to

be small (Chau & Gray, 2002; Muttakin & Khan, 2014). The work of Muttakin and Khan (2014) has confirmed the negative association on the extent of CSR disclosure and family ownership. The research has addressed the determinants of CSR disclosure on a sample of Bangladeshi listed companies during the period 2005-2009 and they have found a negative relationship between CSR disclosure and family ownership. This leads the authors to consider that “family owners are less concerned about public accountability and organizational legitimacy” (p. 172). The study of Chau and Gray (2002) considered that the management board can be less interested in engaging with socially responsible practices because the benefits could be lower than the related initial costs. The study has assessed strategic information, nonfinancial information and financial information, and, for the nonfinancial information section, it takes into consideration (1) information about directors, (2) employee information, (3) social policy and value-added information. Findings have confirmed hypothesis in favour of a negative and statistically significant relationship between NFI disclosure and family ownership which remains valid for each disclosure sub-section. Thus, it can be argued that “non-financial information is directed more toward a corporation’s social accountability and targeted at a wider spectrum of stakeholders than the owners/investors” (p. 251).

Oppositely, other academic works have highlighted a positive relationship between CSR and equity ownership concentration in response to corporate reputation and image (Dyer Jr & Whetten, 2006; Consolandi, Nascenzi, & Jaiswal-Dale, 2008; Prado-Lorenzo, Gallego-Alvarez, & Garcia-Sanchez, 2009). Among the others, the research of Laguir, Laguir, and Elbaz (2016) embraces the stewardship theory and sustains the idea that “family firms are more likely than non-family firms to see their stakeholders as partners” (p. 389), because are much more likely to see long-term orientation challenges to sustain future generations. With this view, CSR activities are more developed in family firms of second and following generations against family firms in their first generation. Ultimately, the accounting literature has originally disentangled the effects proven by ownership concentration on NFI disclosure by following a voluntary approach.

All prior things considered and anchored to Fallen (2018)’s work, discrepancies of results on the relationship between CSR preferences and ownership equity is linked to the analysis of different types of shareholders, country-specific compositions of shareholder types, and furthermore, they rely on voluntary approaches of such an NFI disclosure. This might influence the results in opposite directions. Accordingly, a great contextualization of the territory of investigation is extremely relevant, and this is even greater emphasised when turning a voluntary-based approach on NFI disclosure to an NFI mandatory adequacy.

The progressive change to NFI mandatory disclosure from a voluntary basis has raised numerous calls for regulatory adequacy to ensure data comparability (Beck, Dumay, & Frost, 2017) to allows investors to keep up-to-date information for their investment decisions (Overland, 2007) based

on ESG criteria and avoid misleading behaviours due to the existence of a uniform process. A compulsory approach to disclosure provides data comparability as well as the standardised and transparent ways for analysing companies’ social and environmental impacts. The progressive movement towards “more uniform, standardised, and globally accepted practices of business sustainability and sustainability reporting and assurance” has become paramount of importance; thus, mandatory requirements have been set up with Directive 95/2014/EU on the disclosure of NFI. Few papers focus on mandatory disclosure (Chelli, Durocher, & Fortin, 2018), while recent academic notes emphasise the need to deepen the analysis of such disclosure’s mandatory requirements (Schneider, Michelon, & Paananen, 2018; Cantino et al., 2019; Rizzato et al., 2019). This necessity is even more adamantly emphasised in light of the recent harmonisation towards the regulatory framework in accordance with Directive 95/2014/EU. The next section teases out the context of the present research.

## 2.2. Non-financial information mandatory disclosure and ownership concentration mirrored in the context of Italy

In Italy, the path towards the development of NFI mandatory disclosure has its origins in the amendments of Article 2428 of the Civil Code in 2007, as modified in order to adopt the Directive 2003/51/EC. The Directive, also known as Modernization Directive forced European companies to address and explain in their annual reports - within the management report - “both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters” (European Parliament, 2003; emphasis added). One year after, the Italian National Council of Chartered Accountants (Consiglio Nazionale dei Dottori Commercialisti e degli Esperti Contabili (CNDCEC)) recommended the inclusion of such kind of “soft information” with strategic implications closely related to the business itself and its operating activities. For instance, when talking about a gas and oil company whose activities might affect the environment, stakeholders might be interested to understand the company’s risks exposure to toxicity of petroleum which harms the environment through air and water pollution (CNDCEC; 2008). In 2016, the Italian legislator brought the Directive 95/2014/UE (European Parliament, 2013) into force with the Legislative Decree No. 254/16 (Decree hereafter).

The Decree obliges public-interest entities to prepare the non-financial statement by including the disclosure on the business model, related policies, outcomes, and Key Performance Indicators (KPIs), as well as risks and opportunities, related to, at a minimum, environmental, social, and employee matters and regarding human rights, anti-corruption issues. It leaves a broad margin of discretion with respect to the reporting channels to disclose such information, namely the alternative to presenting a distinctive section within the management report or presenting a separate report while specifying this choice in the management report. Furthermore,

companies can autonomously choose which type of international standard framework to rely on. They can anchor to the European Union-based frameworks, such as the Eco-Management and Audit Scheme (EMAS) or international standards frameworks such as the United Nation (UN) Global Compact, the Guiding Principles on Business and Human Right, the International Organization for Standardization's ISO 26000 or the Global Reporting Initiative (GRI) (European Parliament, 2014). Eventually, companies can implement self-reporting schemes by adopting more than one international framework. Explorative insights into the level of compliance and the adequacy of the new regulatory requirements have been recently provided in 2018 by Consob, the Italian authority responsible for regulating the Italian securities market also known as Commissione Nazionale per le società e la Borsa. The aim of the report has been twofold. First, it aimed to review how the Italian listed firms have implemented the non-financial information disclosure, considering whether they have assessed the materiality analysis and whether they have established a process with both an internal and an external assessment. To accomplish this objective, data have been collected from non-financial statements. Second, the report has explored whether companies have considered non-financial issues relevant at the board level. To do so, the study has conducted a survey involving the members of the Italian community of non-executive and independent directors (Nedcommunity). The survey has investigated whether independent directors engage with non-financial information disclosure and whether they have been keen to enact a cultural renewal of internal processes, reporting tools, and corporate governance systems towards the integration of sustainability issues into the company's business model. Referring to the analysis of the 2017 non-financial statements, the results have shown that 151 companies published non-financial statements by the end of 2018, and in so doing, they have presented overlapping and disparate documentations for each other: "139 companies have only published the information required by the Decree, either in a standalone document (called Sustainability Report in 53 cases) or in the management report; six firms have published an Integrated Report (IR), embedding the NFS; two issuers have published both an Integrated Report and a separate Sustainability Report (SR); one firm has released an Integrated Report and a Sustainability Report as an NFS; three companies have circulated both an NFS and a Sustainability Report" (p. 6). The intent of this new requirement lies in drawing up comparable non-financial statements; however, such a managerial discretion could contribute to loose specification with counterproductive effects on the level of disclosure as the Modernization Directive (2003/51/EC) produced in 2003 (Bini et al., 2017).

Drawing on these argumentations, there is a notable and conspicuous trend in favour of the evolution of NFI disclosure under a mandatory-based approach. The new regulatory requirements enact adequacy regarding organizational processes, reporting tools, and the active promotion and enhancement of strategies for sustainability issues at the core of business activities. Therefore, the

current context constitutes an ideal setting of investigation. Italy is characterized by ownership concentration, namely the presence of a strong block holder. In recent years, the presence of institutional investors (national and foreign) in company ownership has increased importance, and on the other hand, some big groups have as a shareholder the Italian state (Rizzato et al., 2018). Since the Italian capital market is dominated by a high degree of ownership concentration and due to a considerable presence of individual owners that hold sizable equity stakes in companies (Minetti & Paiella, 2012), it might be of interest to understand which role the ownership concentration plays in disclosing NFI. As literature has provided controversial results, we do not hypothesise a certain sign of relationship.

Consequently, we posit the following research question:

*RQ: To what extent does ownership concentration affect NFI mandatory disclosure?*

In keeping with this research question, the study proceeds with a twofold subsequent research procedure. First, it assesses the level of compliance in the first year of the regulation; second, it verifies whether ownership concentration affects the level of NFI mandatory disclosure in the context of Italy.

### 3. RESEARCH METHODOLOGY

#### 3.1. Sample of investigation

The initial sample of investigation has included 244 groups listed to the Italian Stock Exchange which belong to the FTSE MIB, the FTSE Italia Mid Cap, and the FTSE Small Cap on December 29, 2017. Table 1 summarizes the sample screening.

Table 1. Sample selection procedure

Description	Observation
Initial sample from the Italian Stock Exchange	244
Screening of companies not continuously listed (suspended)	(1)
Screening of foreign companies or companies with headquarters outside Italy (not obliged to be compliant with the Italian Legislative Decree 254/2016)	(11)
Screening of Italian companies outside the scope of the Italian Legislative Decree (number of employees < 500)	(78)
Screening of Italian companies that did not present the 2017 non-financial statement	(4)
Sample under the mandatory requirement of the Italian Legislative Decree 254/2016	150
Outliers from the regression analysis	(9)
Sample under investigation	141

We have excluded one listed Italian company whose shares were suspended at the end of December 2017. 11 foreign companies and companies with headquarters outside Italy have been also removed from the analysis as they do not have to be compliant with the Italian Legislative Decree, and 78 listed Italian companies did not meet the criteria of the Italian Legislative Decree 254/2016. In more details, 73 companies out of 78 had, on average, less than 500 employees in the 2016-2017 financial period, so they are out of the scope of this study. Data on the average number of employees have been

gathered on DataStream<sup>1</sup> at the end of December 2017. 5 companies out of 78 were subsidiaries of other listed companies, and they have decided not to present a non-financial statement, as it has been provided by the parent company; therefore, we have removed them accordingly. Finally, 4 companies have not presented the 2017 non-financial statement. Specifically, one company has been omitted from the initial sample because of the change in the closing date of its financial year, which had a duration of 15 months (from October 1, 2016 to December 31, 2017). As the Decree applies to financial years beginning on or after January 1, 2017, this company has decided to not present the 2017 non-financial statement. Furthermore, the study has not considered two other listed companies in the sample since their last annual report dated back to 2016, and one listed company has been excluded because its annual report was not available. The sample of listed companies under the mandatory requirement of the Italian Legislative Decree 254/2016 of our research consists of 150 listed Italian companies. Consob issued the list of the Italian listed companies (151 in total) for which the 2017 non-financial statement was available by August 31, 2018 (Delibera No. 20586, September 20, 2018).

In this research, we have ultimately excluded 9 companies as outliers of the regression analysis. The research has ended with a sample of 141 observations. Appendix A provides the list of the Italian listed companies included in our sample and specifies the company name, the Global Industry Classification Standard (GICS) taxonomy, the FTSE Italia All-Share composition, i.e. Ftse Mib, Ftse Italia Mid Cap, and Ftse Italia Small Cap<sup>2</sup>. All the listed companies under analysis have the headquarter in Italy as this constitutes the mandatory requirement to be compliant with the Italian Legislative Decree 254/2016.

In order to understand whether the sample under analysis fairly represents an accurate reflection, we have compared the market capitalization of all Italian listed companies at the end of December 2017 (244 groups) with the 141 groups analysed. Table 2 shows the comparative analysis which highlights the representativeness of our sample.

Table 2. Sample description

Description	N. of groups at the end of December 2017	Market Capitalisation at the end of December 2017 (in Eur M)
Sample under analysis in our study	141	498.963,54
All the Italian listed companies	244	626.795,00
Representativeness of our study	57,78%	79,60%

### 3.2. Empirical model

The research performs the ordinary least square (OLS) regression model to determine the relationships between ownership concentration and NFI mandatory disclosure. The OLS model is the following:

$$\begin{aligned}
 NFI\_DISCLOSURE_i &= B_0 + B_1(OWN\_CONC)_i \\
 &+ B_2(REPORT\_FORMAT)_i \\
 &+ B_3(REPORT\_YEAR)_i \\
 &+ B_4(FTSE\_MIB)_i \\
 &+ B_5(FINANCIAL)_i \\
 &+ B_6(BETA)_i + B_7(ROE)_i \\
 &+ B_8(TOBIN)_i \\
 &+ B_9(LN\_EMPLOYEES)_i + \varepsilon_i.
 \end{aligned} \tag{1}$$

Where:

*NFI\_DISCLOSURE* = the level of NFI mandatory disclosure calculated with an index.

*OWN\_CONC* = the sum of the percentage of shares held by the three largest relevant shareholders according to Rossi et al. (2018).

*REPORT\_FORMAT* = the type of report where NFI has been disclosed for the 2017 financial year. It is a dummy variable and is equal to 1 when NFI has been presented in the Annual Report, 0 when NFI has been in a separate report.

*REPORT\_YEAR* = the number of years of the reporting of NFI and sustainability issues. When *REPORT\_YEAR* is equal to 1 means that the company has started to disclose NFI for 1 year.

*FTSE\_MIB* = the distinction between companies which belong to the FTSE MIB (in this case, the variable is equal to 1) and companies which do not belong to the FTSE MIB (in this case, the variable is equal to 0).

*FINANCIAL* = the distinction between companies which belong to the financial sector like banks and insurance companies (in this case, the variable is equal to 1) and companies which do not belong to the financial sector.

*BETA* = the market beta for each company of the fiscal year-end categorized as risky measure.

*ROE* = Return on Equity for each company of the fiscal year-end as performance measure, namely as the ratio of net income scaled by total shareholder equity.

*TOBIN* = the market's assessment of a company's riskiness of future cash flow, namely the ratio of the market value of assets to the replacement costs of assets (Cheng, 2008; Jermias & Gani, 2014).

*LN\_EMPLOYEES* = the number of employees scaled in logarithm as a measure of size.

<sup>1</sup> DataStream is a financial time series database owned by Thomson Reuters. It provides global financial and macro-economic data like for instance economic time series, macro forecasts, economics point in time, equities, equity indices, I/B/E/S (Institutional Brokers' Estimate System) estimates and global aggregates, fundamentals (as reported and standardised), ASSET4 Environmental, Social and Corporate Governance (ESG), fixed income securities, bonds and bond indices, credit default swaps (<https://infobase.thomsonreuters.com/infobase/login/?next=/infobase/>). The average number of employees collected in DataStream is the average of employees at the beginning and at the end of the fiscal year 2017.

<sup>2</sup> The FTSE MIB Index includes shares are selected from the universe of stock trading on the Borsa Italiana (BI) MTA and MIV markets. The FTSE MIB Index measures the performance of 40 shares listed on Borsa Italiana to ensure the index best represents the Italian equity markets for investors. It captures approximately 80% of the domestic market capitalisation broad Italian equity universe. The FTSE Italia Mid Cap Index includes the first 60 shares out of the FTSE MIB which are classified according the domestic market capitalisation in terms of liquidity and free float. The FTSE Italia Small Cap Index includes the other shares which are both out of the FTSE MIB and the FTSE Mid Cap (<https://www.borsaitaliana.it>).

Table 3 classifies all the variables taken into account, addressing the type, the classification, the source of data. The next subsections explain the construction of the NFI disclosure score as

dependent variable and the consideration of ownership concentration as independent variable and, finally, the variables as controls.

**Table 3.** Descriptions of variable

<i>Variables</i>	<i>Description</i>	<i>Classification</i>	<i>Type of variable</i>	<i>Source of data</i>
NFL_DISCLOSURE	is the level of NFI mandatory disclosure calculated with an index that ranges from 0 to 100 by considering 82 items.	Dependent	Numerical	Hand collection from the NFI statements
OWN_CONC	is the sum of the percentage of shares held by the three largest relevant shareholders according to Rossi et al. 2018.	Independent	Numerical	Hand collection from Consob Database
REPORT_FORMAT	is the type of report where NFI has been disclosed for the 2017 financial year. It is a dummy variable and is equal to 1 when NFI has been presented in the Annual Report, 0 when NFI has been in a separate report.	Control	Dummy	Hand collection from the NFI statements
REPORT_YEAR	is the number of years of the reporting of NFI and sustainability issues. When REPORT_YEAR is equal to 1 means that the company has started to disclose NFI for 1 year.	Control	Numerical	Hand collection from the NFI statements
FTSE_MIB	is the distinction between companies which belong to the FTSE MIB (in this case, the variable is equal to 1) and companies which do not belong to.	Control	Dummy	Hand collection from the Consob Database
FINANCIAL	is the distinction between companies which belong to the financial sector (e.g. banks, insurance companies) (in this case, the variable is equal to 1) and companies which do not belong to.	Control	Dummy	DataStream
BETA	is the market beta for each company of the fiscal year-end categorized as financial risky measure.	Control	Numerical	DataStream
ROE	is Return on Equity for each company of the fiscal year-end as performance measure, namely as the ratio of net income scaled by total shareholder equity. It is categorized as an accounting-based measure.	Control	Numerical	DataStream
TOBIN	is the market's assessment of a company's riskiness of future cash flow, namely the ratio of the market value of assets to the replacement costs of assets (Cheng, 2008; Jermias & Gani, 2014). It is categorized as a financial-based measure.	Control	Numerical	DataStream
LN_EMPLOYEES	is the number of employees scaled in logarithm as a measure of the size of the company.	Control	Numerical	DataStream

### 3.3. Dependent variable

To define the level of NFI disclosure according to the Italian Legislative Decree 254/2016 we developed an NFI disclosure score with a quantitative content analysis. This method was chosen because it has been widely adopted among accounting studies (Michelon, Pilonato, & Ricceri, 2015; Melloni, Caglio, & Perego, 2017), as it is generally carried out to construct disclosure indexes with the adoption of weighted or unweighted method criteria, also known as ranked or dichotomous scoring (Huang & Watson, 2015). Content analysis is “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2004, p. 18) that “views data as representations not of physical events but of texts, images, and expressions that are created to be seen, read, interpreted, and acted on for their meanings, and must therefore be analysed with such uses in mind. Analyzing texts in the contexts of their uses distinguishes content analysis from other methods of inquiry” (Krippendorff, 2013, p. 17). The content analysis performed in the present research followed two steps, in line with Krippendorff (2004). First, the authors developed the checklist containing the mandatory requirements of NFI. Second, they assessed the 2017 non-financial statement, with a specific focus on the computation of items with reference to the adopted international standard framework.

In the first phase, the research built the checklist, and doing so, the analysis followed the articles of the decree 254/2016 as an anchor point. The checklist included the general topic disclosures related to the business models, the policies, related results, main risks for each dimension – environmental and social issues, employees matters, human rights, and anti-corruption. In addition, the Decree requires the explanation of the risks which might affect the overall business activity of the company (Subparagraph 1 - Article 3). The analysis considered Subparagraph 3 (Article 3) to compare the results with the prior year's results; therefore, for each content dimensions, we included the comparison with the prior year. While reading Subparagraph 2 (Article 3), we included the mentioned specific topic disclosures. Then, we addressed the Key Performance Indicator (KPIs) measures. In taking into account these quantitative measures, we referred to the framework guidelines under which the disclosure of the KPIs needs to be acknowledged accordingly. Thus, the study questioned whether companies relied upon an international standards framework against an own reporting framework. All the companies were checked, and all opted for a framework of international standards, favouring the GRI Guidelines. Some of them chose more than one framework, but, in any case, all the 2017 non-financial statements adopted the GRI Guidelines.

Therefore, to prepare the disclosure score, the KPI sections of each content topic were developed according to the companies' chosen GRI Standards. The research considered the chosen GRI options (GRI-Referenced, Core option, Comprehensive option), as each entails different inclusions criteria when dealing with topic-specific standards for the disclosure of the related KPIs. This means that the NFI disclosure score directly accounted for the correspondence of discretionary disclosure with the adopted international standard framework because of their interwoven relationship. All the items of the checklist are shown in Appendix B, where it is possible to find the related description and the classifications (general topic disclosures; topic specific disclosures, and ultimately the KPIs measures).

In the second phase, the sentences within the non-financial statements were assessed according to their content, and therefore assigned as links to the items of the checklist. A dichotomous approach was adopted for the coding procedure: when a piece of non-financial information was identified, value "1" was assigned if the information was present, or "0" otherwise. The coding "Not Applicable" (NA) was taken into consideration in case a disclosure content was acknowledged as "not-material topic", and thereby not relevant to be disclosed in each compulsory theme in accordance with the law. In this sense, the non-financial information disclosure score referred to the "unweighted Cooke's method" (Cooke, 1989). Accordingly, the NFI disclosure score was defined as follows:

$$NFI\ disclosure\ score_j = \frac{\sum_{i=1}^n d_i}{\sum_{i=1}^n x_i} \quad (2)$$

Where:

$j$  = the company;

$i$  = the item;

$d$  = the item (assumed "1" if the information had been presented, otherwise used "0"); and

$x$  = the material item, which was coded with NA (Not Applicable).

When considering the computation of the KPIs measures, the procedure addressed the compliance with the chosen GRI. In fact, the GRI options (Comprehensive, Core, Referenced) have different rules and requirements of disclosure, especially for the topic-specific standards. The Comprehensive option requires the disclosure of all topic-specific standards related to material issues, the Core option requires the reporting of at least one topic-specific disclosure, and, ultimately, the "GRI-referenced" requires the adoption of selected Standards or parts of their content to report specific information. This alternative is particularly practical for providing information on a specific economic, environmental, and/or social impact. For instance, if we consider the GRI 301 - Materials, we see that there are three topic-specific disclosures. For this section, the company must provide all the topic-specific disclosures option (Disclosure 301-1 11, Disclosure 301-2 12, and Disclosure 301-3), if the Comprehensive was chosen or at least one if the Core option was applied. In case the Referenced option was adopted, the organisation must firstly indicate whether this content is material, and if so, all reporting requirements that correspond to the

reported disclosures needs to be disclosed. Contrarily, such topic-specific disclosures can be absent. Based on these typologies, the points for the KPI sections were assigned under the conditions of the chosen GRI. For example, 20 items as KPIs environmental measures were considered from the topic-specific disclosures section related to the environment. We computed one point in case the disclosure of the environmental KPIs was respected according to the chosen GRI option. Thus, we assigned one point in case the following alternative were valid: 1) the all 20 environmental KPIs were present in case of the Comprehensive option; 2) at least one environmental KPI was present with the Core option; 3) the all environmental KPIs related to the selected topic-specific disclosures in case of Referenced-option. For that reason, the total number of hand-collected items was 82 (as shown in Appendix A), but the computation of the disclosure score was made upon 34 items in total, as the different GRI configurations led to more restrictive or less bounded KPI disclosures.

The assessment was developed manually; thus, to ensure the reliability of the coding and to minimize subjectivity as much as the authors possibly could, the following procedure was carried out. At an early stage, a pilot test was performed to verify the checklist and refine the coding procedure accordingly. Then, 20 non-financial statements were double-checked to verify and compare the classifications, but no significant differences were sorted out. Finally, the NFI disclosure score was derived to assess the level of compliance with NFI disclosure for each observation during the 2017 financial year.

### 3.4. Independent variable and controls

The variable *OWN\_CONC* constitutes our objective of interest because we seek to comprehend to what extent ownership concentration affects NFI mandatory disclosure. That is why ownership concentration is our independent variable. We calculated *OWN\_CONC* as the sum of the percentage of shares held by the three largest relevant shareholders in line with prior research (Rossi & Cebula, 2016; Rossi, Boylan, & Cebula, 2018). According to the Italian Legislative Decree 58/1998 (so-called "TUF" - "Testo Unico della Finanza"), art. 120, shareholders of a listed company with an interest higher than 3% of the voting rights are obliged to communicate their participation to both the company and the Italian Stock Exchange Commission (Consob). The threshold is increased to 5% if the listed company is a Small-Medium Enterprise. So we collected this information from the list published by Consob as available on 30th June 2017.

We then took into account the following control variables. *ANNUAL\_FORMAT* qualifies the typology of documents in which the NFI is presented. In more detail, it distinguishes whether the NFI was disclosed in the annual report or a standalone report. In the first case, the dummy variable *ANNUAL\_FORMAT* has a value of 1; in the second case, the dummy variable *ANNUAL\_REPORT* gets the value of 0. The variable *REPORT\_YEAR* describes the number of years that the sustainability and NFI were reported. It is a numerical variable and tracks the number of

years of NFI disclosure, including the first year of mandatory adequacy. Moreover, we included some measures for a firm's characteristics as controls, according to the stream of accounting research. Thus, the present research adopts the following as control variables: *ROE*, *TOBIN*, *BETA*, *LN\_EMPLOYEES*, *FINANCIAL*, *FTSE\_MIB*. *ROE* is commonly considered accounting-based measures (Muttakin & Khan, 2014; Gao et al., 2016; Qiu, Shaikat, & Tharyan, 2016). *ROE* is measured as the net income during the year 2017 that has been scaled by shareholder value equity, in line with prior research (Pavlopoulos, Magnis, & Iatridis, 2017; Baboukardos, 2018). The research further includes other financial-based measures to take into account risks. *TOBIN* as a measure of financial performance, and *BETA* as a measure of risks, are taken into consideration. Tobin's q is the market's assessment of a firm's future cash flows and the riskiness of that cash flow (Cahan et al., 2016), whereas *BETA* is the risk market measure using the Capital Assets Pricing Model (CAPM). This study opts for the inclusion of *LN\_EMPLOYEES* to measure the size of the company. Moreover, the number of employees represents the primary criterion of the Directive on non-financial information disclosure; thus, the size was assessed with the number of employees accordingly. In line with previous literature (Skouloudis et al., 2014; Halkos & Skouloudis, 2016; Qiu, Shaikat, & Tharyan, 2016), *LN\_EMPLOYEES* was the number of employees scaled by the natural logarithm to define the size of the company. Finally, the analysis included *FINANCIAL* as control to discern whether the company belonged to the financial sector (then assigned the value of "1") or not (in this case, the assigned value was "0") and *FTSE\_MIB* as control to discern whether the company belonged to the index *FTSE MIB* (value assigned "1") or not (value assigned "0").

#### 4. RESULTS

Table 4 provides the descriptive results of the NFI disclosure score. The level of compliance is equal to 83.17% in mean; this means that, on average, the sample under investigation has achieved a great level of disclosure on NFI mandatory in the first year of its compulsory implementation. The median NFI disclosure score is 82.35%; this explains the central tendency of data. In our case, there is a lower dispersion of values around the mean because the mean and the median of the level of the NFI disclosure score are close to each other. This is proved by the low value of standard deviation, which is equal to 0.09084. All the companies show an NFI disclosure score that is higher than 50%; the minimum is 64.70%, whereas the maximum is 100%, with a range of values equal to 35.21%.

Looking at quartiles, it is possible to notice that the lower quartile corresponding to the 25th percentile exhibits an NFI disclosure score that is lower than 76.69%; thus, 25% of companies get an NFI disclosure score to the left of 76.69%. On the other hand, the upper quartile representing the 75th percentile shows an NFI disclosure score higher than 88.23%, namely, 75% of groups mark NFI disclosure score to the right of 88.23%. Looking the distribution of the NFI disclosure score, 7.09% of the sample (10 cases out of 141) provided a disclosure lower than

69.99%, 34.04% of the sample (48 cases out of 141) is grouped in the range of 70.00%-79.99%. Almost half of the sample, corresponding to 36.87% (78 cases out of 141), provides an NFI disclosure between 80.00% and 89.99%, and this confirms the central tendencies of the mean and the median. Finally, a considerable part of the sample, representing 21.985% (31 cases out of 141), has achieved a score between 90.00% and 100%. This means that companies are compliant with high levels of NFI disclosure score. Such high levels are even corroborated if looking at the cumulative frequencies. Only the 7.09% of the groups show disclosure levels lower than 69.99%, 41.13% of the groups exhibit an NFI disclosure score lower than 79.99%, and 78.01% (more than three-quarters of the sample) achieve an NFI disclosure score lower than 89.99%.

**Table 4.** Descriptive statistics of the dependent variable

N		141
Mean		0.83173
Median		0.82352
St. Dev.		0.09084
Skewness		0.122
Kurtosis		-0.655
Min		0.64705
Max		1.00000
Range		0.35294
Percentile	25	0.76696
	50	0.82352
	75	0.88235

Distribution	N. of cases	Frequencies %	Cumulative frequencies
0.6000-0.6999	10	7.09	7.09
0.7000-0.7999	48	34.04	41.13
0.8000-0.8999	52	36.87	78.01
0.9000-1.0000	31	21.98	100.00
Total	141	100.00	

Figure 1 shows the distribution of the NFI disclosure score. Data are normally distributed: this is confirmed by their skewness (equal to 0.122) and Kurtosis (equal to -0.655). Specifically, the disclosure score distribution is skewed to the right and platykurtic. Overall, the descriptive findings of the dependent variable show that the requirements were actively applied, suggesting promising avenues for further implementations.

**Figure 1.** Distribution of the NFI disclosure score

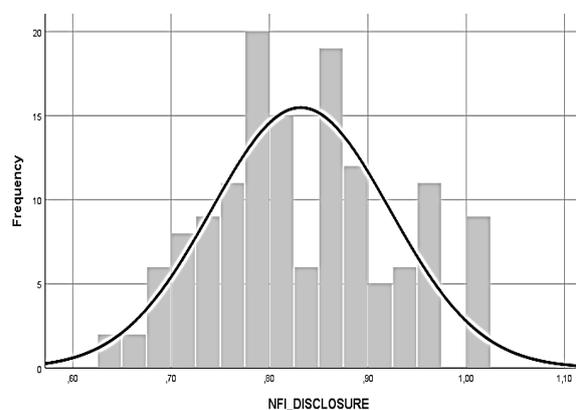


Table 5 shows the descriptive results of the independent variable and controls in case they are numerical variables. The variable *OWN\_CONC* has a mean of 53.83%, which explain a high level of ownership concentration in the sample. The minimum value is equal to 0.00% (because two companies did not have any relevant shareholders), whereas the maximum is equal to 99.48% (the maximum refers to a company for which only privileged shares were traded, whereas ordinary shares were not), which a dispersion of data of 20.65%. The skewness of -0.772 indicates that the frequency distribution of ownership concentration is right-skewed. The kurtosis is equal to 0.130, namely the frequency distribution is leptokurtic. The variable *BETA* gets a mean of 0.9466 which indicates that in mean companies have lower volatility ( $< 1$ ),

thus are less risky. The minimum is equal to 0.2710 (less risky) whereas the maximum value is 1.75 (high risk). When considering the variable *ROE*, we can see a mean equal to 8.99% with extreme values as minimum and maximum. The distribution of related data is skewed to the left (skewness equal to -0.714) and leptokurtic (Kurtosis equal to 5.454). The variable *TOBIN* has a mean of 0.9105 which suggests that companies' stocks are undervalued in mean because values are between 0 and 1, thus indicating that it costs more to replace a firm's assets than how much the firm is worth. Ultimately, the variable *LN\_EMPLOYEES* expresses the size of the company and is computed in the model with the natural logarithm of the number of employees.

**Table 5.** Descriptive statistics of the independent variables

<i>Variables</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>St. dev.</i>	<i>Asymmetry</i>	<i>Kurtosis</i>
OWN_CONC	0.00000	0.99484	0.53835	0.20658	-0.77200	0.13000
REPORT_FORMAT	0,00000	1,00000				
REPORT_YEAR	1,00000	18,00000				
FTSE_MIB	0,00000	1,00000				
FINANCIAL	0,00000	1,00000				
BETA	0,27100	1,75200	0,94669	0,28886	-0,05258	-0,15170
ROE	-0,59427	0,68628	0,08998	0,15274	-0,71434	5,45468
TOBIN	0,01071	7,33960	0,91052	1,12895	2,67075	9,17425
LN_EMPLOYEES	6,20456	11,48135	8,09090	1,31839	0,63736	-0,27012

Table 6 shows the Pearson correlation. The results are useful to verify the presence of multicollinearity between the independent variables which could negatively affect the OLS regression analysis. In fact, in the OLS regression analysis, the correlation between the independent variables is not admitted, as it distorts both the regression parameters and the standard errors. Therefore, the analysis tests the lack of perfect multicollinearity

between the independent variables using Pearson correlation. The Pearson correlations indicate no relevant multicollinearity issues existing in the variables in our model. Even by additionally checking whether any multicollinearity with the Variation Inflation Factor (VIF), the results sort out that the OLS regression analysis is not likely to be affected by multicollinearity and the multivariate results hold consistent regression parameters.

**Table 6.** Correlation matrix

<i>Variables of interests</i>		<i>REPORT_FORMAT</i>	<i>REPORT_YEAR</i>	<i>FTSE_MIB</i>	<i>FINANCIAL</i>	<i>BETA</i>	<i>ROE</i>	<i>TOBIN</i>	<i>LN_EMPLOYEES</i>
REPORT_FORMAT	Pearson Correlation	1							
	Sign. (two tails)								
REPORT_YEAR	Pearson Correlation	-0,002	1						
	Sign. (two tails)	0,978							
FTSE_MIB	Pearson Correlation	0,036	,510*	1					
	Sign. (two tails)	0,670	0,000						
FINANCIAL	Pearson Correlation	-0,075	,378*	,229*	1				
	Sign. (two tails)	0,374	0,000	0,006					
BETA	Pearson Correlation	-0,127	,179*	0,157	,391**	1			
	Sign. (two tails)	0,135	0,033	0,064	0,000				
ROE	Pearson Correlation	-0,130	-0,016	0,146	-0,073	-0,056	1		
	Sign. (two tails)	0,123	0,852	0,083	0,390	0,512			
TOBIN	Pearson Correlation	-0,030	-0,106	0,028	-,184*	-,235**	,448**	1	
	Sign. (two tails)	0,721	0,212	0,744	0,029	0,005	0,000		
LN_EMPLOYEES	Pearson Correlation	0,042	,509**	,539**	0,141	0,144	-0,074	-0,132	1
	Sign. (two tails)	0,617	0,000	0,000	0,096	0,090	0,386	0,118	

Note: Sig. (2-tailed) in brackets

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 7 presents the multivariate analysis which exhibits the relationship between the NFI disclosure score and the ownership concentration. The aim is to establish whether the NFI disclosure score is related to ownership concentration and to validate the estimate. We can see from the results that ownership concentration affects the level of NFI disclosure. The coefficient is statistically significant and negative. In more detail, the coefficient of *OWN\_CONC* is equal to -0.191 with a p-value < 0.1000, which means that an increase of one percent in ownership concentration leads to a lower of the NFI disclosure score, which enjoys a 0.191% decrease. In other words, the relationship between the level of NFI disclosure and ownership concentration is negative, namely, the level of NFI disclosure score decreases by 0.191%, when ownership concentration increases of 1 percent. These results are in line with the academic studies which confirms a negative relationship.

**Table 7.** Multivariate results

OWN_CONC	-0.191*
REPORT_FORMAT	0.129
REPORT_YEAR	0.186*
FTSE_MIB	0.046
FINANCIAL	-0.164*
BETA	-0.143
ROE	0.156*
TOBIN	-0.065
LN_EMPLOYEES	0.091
R <sup>2</sup> = 0,18705	
R <sup>2</sup> adj = 0,13120	
N = 141	

Note: Beta with \* p-value < 0.1; \*\* p-value < 0.05;  
\*\*\* p-value < 0.01 for the NFI\_disclosure\_score

When looking at the control variables we can see that *REPORT\_YEAR*, *FINANCIAL*, *ROE* are statistically significant. Considering the variable *REPORT\_YEAR*, it appears that the relationship between the level of compliance and the number of years of prior NFI reporting is positive (beta coefficient = 0.186) and significant (p-value = 0.087). This means that the companies that have one-year experience disclosing NFI in the past are more likely to achieve a higher level of compliance which increases by 0.186%. The variable *FINANCIAL* suggests that moving from 0 (Financial sector) to 1 (Non-financial sector), the level of NFI disclosure is decreasing by 0.164%. *ROE* is positively and significantly associated with the NFI disclosure score, as the beta coefficient is 0.07343 with a p-value less than 0.10 (equal to 0.09293). Overall, the controls we added in our model have the explanatory power to hold the results. The model has an R-squared of 0.18705 which is an acceptable value by considering the subjectivity of the dependent variable and the few studies which focus on ownership concentration in Italy. The Adjusted R-squared of 0.13120 indicates that all the controls in the model express the analysis. To greatly specify the analysis, it could be possible to add other controls, and therefore, to see whether results hold such significance.

These findings indicate that our estimates of the NFI disclosure scores hold a significant and negative sign for the relationship between the level of NFI mandatory disclosure and ownership concentration. In other words, there is a negative

relation between the level of compliance with NFI mandatory disclosure valid in the first year of the regulatory adequacy and ownership concentration. Contextualized in the Italian setting, this means that Italian listed companies with high ownership concentration have tended to provide a lower level of disclosure of NFI. Such a linkage might be explained by the close relationship between equity owners holding a large number of shares, the board of directors and managers which may consequently drive and influence decision-making on the disclosure of NFI. In more details, shareholders and the team management might perceive the disclosure of NFI as a mere “costly, binding and forced task” which may potentially reduce short-term firm profit available for distribution. This might be especially more emphasized in the first years of the adherence to the compulsory requirements of NFI disclosure. In keeping with this logic, the compliance with NFI mandatory disclosure is lower, and this seems to be the case here, in this first year of regulatory adequacy. This fruitfully leads further reflections toward a re-consideration of responsible business practices and related disclosures as strategic tactics jointly linked to the core business rather than a purely constrained exercise.

This discussion suggests that the results are bounded around the first year of the NFI mandatory disclosure implementation, therefore several avenues of research can be drawn for future investigations. Accordingly, the next section addresses the concluding remarks by linking our results to prior research, acknowledges the limitations of the present study and proposes future research directions.

## 5. CONCLUSION

The present research has investigated the relationship between the level of NFI disclosure and ownership concentration in the first year of the regulatory adequacy of the compulsory requirements. The research has been motivated by a lack of consistency in defining a clear-cut relation between ownership structure and engagement with CSR issues (Faller, 2018). Keeping with this literature gap, the research has aimed to contribute to such a debate, and therefore, the study has been designed around a peculiar setting of investigation, characterized by high ownership concentration, as the case of Italy. With this premise, the study has developed the NFI disclosure score, and it has tested whether ownership concentration affects the level of NFI mandatory disclosure in Italy. The level of compliance is relatively high, (83.17% in mean), suggesting that companies has greatly reacted to the legal requirements enforced by regulators. For instance, the NFI statements have been all prepared according to the GRI's international standard framework, and this confirms the unanimous consensus regarding the adoption of this international standard framework. As demonstrated by the higher level of compliance with mandatory requirements, empirical research supports the regulative legitimacy of compliance with and adherence to regulations. This holds the theoretical grounds related to institutional legitimacy as compliance with established institutional logics (Chen & Roberts, 2010; Chelli et al., 2018). However

when disclosure is mandated by law, companies may be inclined to refer to it in a symbolic fashion for maintaining corporate legitimacy. In comparable situations, it may become likely that a company will decouple its communication about norm application from its actual implementation practices (Meyer et al., 1977; Suchman, 1995). In the context of comply or explain, it has been observed and argued that companies have reason to apply conformity, that they tick the boxes instead of disclosing their concrete actions (Arcot, Bruno, & Faure-Grimaud, 2010). Therefore, these results constitute first exploratory insights on the approach toward the implementation of the mandatory requirements on the disclosure of NFI.

When considering the effect of ownership concentration on NFI mandatory disclosure, the study has identified a significant and negative relationship among the two variables of interest. As a matter of fact, the coefficient for ownership concentration is negative and statistically significant, suggesting that an increase of one percent of ownership concentration leads to a lower level of compliance of 0.191%. This confirms what has been already found in some studies in which it is suggested that the disclosure of NFI is less spread when equity ownership is concentrated. This means that when shares are in the hands of few owners, the level of compliance with NFI mandatory disclosure decreases. This confirms the findings of prior scholarly works which have identified a negative relation between ownership concentration and CSR issues (Clark & Hebb, 2005; Muttakin & Khan, 2014; Faller, 2018).

The study acknowledges the following limitations. First, the research has analysed one country: this has helped us to deeply focus on the mandatory requirements of the Italian national law on NFI disclosure which vary in comparison to other European countries because of the different transpositions of the Directive 2014/95/UE on the disclosure of NFI into national laws. Second, the study has considered one year of analysis: we have selected the first year of such a regulatory implementation to draw explorative results into this new setting.

Following these arguments, future research directions can be outlined accordingly. Academic studies might develop comparative-countries analysis to highlight the differences within this new context of NFI mandatory disclosure considering the development of the disclosure of NFI over time. Furthermore, it might be of interest to investigate the effectiveness of the regulatory adequacy and explore whether such application depends on the ownership structure such as family equity ownership, state equity ownership, institutional investor equity ownership, and small business ownership. Similarly, within this mandatory regime of NFI disclosure, it becomes crucial to understand the underlying reasons in approaching to CSR issues to discern mere compliant approaches against responsible business practices, and, in what follows, to examine any interdependence with both ownership concentration and ownership structure. Future research is highly encouraged to fruitfully enrich such a debate and improve this stream of research further.

## REFERENCES

1. Aganin, A., & Volpin, P. (2005). The history of corporate ownership in Italy. In R. K. Morck (Ed.), *A History of Corporate Governance around the World: Family Business Groups to Professional Managers* (pp. 325-366). Retrieved from <https://www.nber.org/books/morc05-1>
2. Arcot, S., Bruno, V., & Faure-Grimaud, A. (2010). Corporate governance in the UK: Is the comply or explain approach working? *International Review of Law and Economics*, 30(2), pp. 193-201. <https://doi.org/10.1016/j.irle.2010.03.002>
3. Baboukardos, D. (2018). The valuation relevance of environmental performance revisited: The moderating role of environmental provisions. *British Accounting Review*, 50(1), pp. 32-37. <https://doi.org/10.1016/j.bar.2017.09.002>
4. Barca, F. (1994). *Assetti proprietari e mercato delle imprese*. Il Mulino (Assetti proprietari e mercato delle imprese). Retrieved from <https://books.google.it/books?id=wKo8AAAACAAJ>
5. Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97(1), pp. 71-86. <https://doi.org/10.1007/s10551-010-0496-z>
6. Beck, C., Dumay, J., & Frost, G. (2017). In pursuit of a "single source of truth": From threatened legitimacy to integrated reporting. *Journal of Business Ethics*, 141(1), pp. 191-205. <https://doi.org/10.1007/s10551-014-2423-1>
7. Bini, L., Dainelli, F., & Giunta, F. (2017). Is a loosely specified regulatory intervention effective in disciplining management commentary? The case of performance indicator disclosure. *Journal of Management and Governance*, 21(1), pp. 63-91. <https://doi.org/10.1007/s10997-015-9334-0>
8. Cahan, S. F., De Villiers, C., Jeter, D. C., Naiker, V., & Van Staden, C. J. (2016). Are CSR disclosures value relevant? Cross-country evidence. *European Accounting Review*, 25(3), pp. 579-611. <https://doi.org/10.1080/09638180.2015.1064009>
9. Cantino, V., Devalle, A., Fiandrino, S., & Busso, D. (2019). The level of compliance with the Italian Legislative Decree No. 254/2016 and its determinants: Insights from Italy. *Financial Reporting*, 1, pp. 113-143. <https://doi.org/10.3280/FR2019-001004>
10. Chau, G. K., & Gray, S. J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal of Accounting*, 37(2), pp. 247-265. [https://doi.org/10.1016/S0020-7063\(02\)00153-X](https://doi.org/10.1016/S0020-7063(02)00153-X)
11. Chelli, M., Durocher, S., & Fortin, A. (2018). Normativity in environmental reporting: A comparison of three regimes. *Journal of Business Ethics*, 149(2), pp. 285-311. <https://doi.org/10.1007/s10551-016-3128-4>
12. Clark, G. L., & Hebb, T. (2005). Why should they care? The role of institutional investors in the market for corporate global responsibility. *Environment and Planning A: Economy and Space*, 37(11), pp. 2015-2031. <https://doi.org/10.1068/a38116>
13. CNDCEC (2008). *La relazione sulla gestione - Alcune considerazioni*. Retrieved from [http://www.irdcec.it/filemanager/active/045/DOCUMENTO\\_IRDCEC\\_01-2008-a.pdf?fid=45](http://www.irdcec.it/filemanager/active/045/DOCUMENTO_IRDCEC_01-2008-a.pdf?fid=45)

14. Consolandi, C., Nascenzi, P., & Jaiswal-Dale, A. (2008, September). *Ownership concentration and corporate social performance: Empirical evidence for European firms*. Paper presented at the CRR Conference. Retrieved from [https://crrconference.org/Previous\\_conferences/downloads/2006consolandinascenzijaiswaldaleownershipconc.pdf](https://crrconference.org/Previous_conferences/downloads/2006consolandinascenzijaiswaldaleownershipconc.pdf)
15. Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of International Financial Management & Accounting*, 1(2), pp. 171-195. <https://doi.org/10.1111/j.1467-646X.1989.tb00009.x>
16. De Villiers, C., & Marques, A. (2016). Corporate social responsibility, country-level predispositions, and the consequences of choosing a level of disclosure. *Accounting and Business Research*, 46(2), pp. 167-195. <https://doi.org/10.1080/00014788.2015.1039476>
17. Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *Accounting Review*, 86(1), pp. 59-100. <https://doi.org/10.2308/accr.00000005>
18. Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility disclosure. *Accounting Review*, 87(3), pp. 723-759. <https://doi.org/10.2308/accr-10218>
19. Dyer Jr, W. G., & Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), pp. 785-802. <https://doi.org/10.1111/j.1540-6520.2006.00151.x>
20. European Parliament (2003). Directive 2003/51/CE of the European Parliament and of the Council - of 18 June 2003 - amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings. *Official Journal of the European Union*. Retrieved from <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:178:0016:0022:en:PDF>
21. European Parliament (2014). Directive 2014/95/EU of the European Parliament and of the Council - of 22 October 2014 - amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. *Official Journal of the European Union*. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095>
22. European Parliament (2013). Directive 2013/34/EU amending Directive 2006/43/EC and repealing Council Directives 78/660/EEC and 83/349/EEC on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings. *Official Journal of the European Union*. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0034>
23. Faller, C. M. (2018). Does equity ownership matter for corporate social responsibility? A literature review of theories and recent empirical findings. *Journal of Business Ethics*, 150(1), pp. 15-40. <https://doi.org/10.1007/s10551-016-3122-x>
24. Fiandrino, S. (2019). *Disclosure of non-financial information disclosure. Evolutionary paths and harmonisation to mandatory requirements*. G. Giappichelli Editore.
25. Gao, F., Dong, Y., Ni, C., & Fu, R. (2016). Determinants and economic consequences of non-financial disclosure quality. *European Accounting Review*, 25(2), pp. 287-317. <https://doi.org/10.1080/09638180.2015.1013049>
26. Gray, R., Owen, D., & Maunders, K. (1987). *Corporate social reporting: Accounting and accountability*. London: Prentice-Hall.
27. Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, pp. 5-21. <https://doi.org/10.1016/j.jclepro.2013.07.005>
28. Halkos, G., & Skouloudis, A. (2016). Exploring the current status and key determinants of corporate disclosure on climate change: Evidence from the Greek business sector. *Environmental Science & Policy*, 56, pp. 22-31. <https://doi.org/10.1016/j.envsci.2015.10.011>
29. Huang, X. B., & Watson, L. (2015). Corporate social responsibility research in accounting. *Journal of Accounting Literature*, 34, pp. 1-16. <https://doi.org/10.1016/j.acclit.2015.03.001>
30. Hummel, K., & Schlick, C. (2016). The relationship between sustainability performance and sustainability disclosure - reconciling voluntary disclosure theory and legitimacy theory. *Journal of Accounting and Public Policy*, 35(5), pp. 455-476. <https://doi.org/10.1016/j.jaccpubpol.2016.06.001>
31. Hung-Yuan, L. (2014). Does disclosure of non-financial statement information reduce firms' propensity to under-invest? *Quarterly Journal of Finance and Accounting*, 51(3), pp. 1-44. Retrieved from <http://papers.ssrn.com/abstract=1465096%5Cnfiles/1459/SSRN-id1465096.pdf>
32. Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). London: Sage Publications. <https://doi.org/10.2307/2288384>
33. Laguir, I., Laguir, L., & Elbaz, J. (2016). Are family small- and medium-sized enterprises more socially responsible than nonfamily small- and medium-sized enterprises? *Corporate Social Responsibility and Environmental Management*, 23(6), pp. 386-398. <https://doi.org/10.1002/csr.1384>
34. Mackenzie, C., Rees, W., & Rodionova, T. (2013). Do responsible investment indices improve corporate social responsibility? FTSE4Good's impact on environmental management. *Corporate Governance: An International Review*, 21(5), pp. 495-512. <https://doi.org/10.1111/corg.12039>
35. Martínez-Ferrero, J., Ruiz-Cano, D., & García-Sánchez, I. M. (2016). The causal link between sustainable disclosure and information asymmetry: The moderating role of the stakeholder protection context. *Corporate Social Responsibility and Environmental Management*, 23(5), pp. 319-332. <https://doi.org/10.1002/csr.1379>
36. Melloni, G., Caglio, A., & Perego, P. (2017). Saying more with less? Disclosure conciseness, completeness and balance in Integrated Reports. *Journal of Accounting and Public Policy*, 36(3), pp. 220-238. <https://doi.org/10.1016/j.jaccpubpol.2017.03.001>
37. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), pp. 340-363. <https://doi.org/10.1086/226550>
38. Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33, pp. 59-78. <https://doi.org/10.1016/j.cpa.2014.10.003>
39. Minetti, R., & Paiella, M. (2012). *Ownership structure, governance, and innovation: Evidence from Italy* (Working Papers from Department of the Treasury, Ministry of the Economy and of Finance No. 10). Retrieved from <https://econpapers.repec.org/paper/ittwpaper/wp2012-10.htm>

40. Muttakin, M. B., & Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. *Advances in Accounting*, 30(1), pp. 168-175. <https://doi.org/10.1016/j.adiac.2014.03.005>
41. Overland, J. (2007). Corporate social responsibility in context: The case for compulsory sustainability disclosure for listed public companies in Australia. *Macquarie Journal of International and Comparative Environmental Law*, 4(2), p. 1. <https://doi.org/10.2139/ssrn.1016606>
42. Pavlopoulos, A., Magnis, C., & Iatridis, G. E. (2017). Integrated reporting: Is it the last piece of the accounting disclosure puzzle? *Journal of Multinational Financial Management*, 41, pp. 23-46. <https://doi.org/10.1016/j.mulfin.2017.05.001>
43. Prado-Lorenzo, J., Gallego-Alvarez, I., & Garcia-Sanchez, I. M. (2009). Stakeholder engagement and corporate social responsibility reporting: The ownership structure effect. *Corporate Social Responsibility and Environmental Management*, 16(2), pp. 94-107. <https://doi.org/10.1002/csr.189>
44. Qiu, Y., Shaikat, A., & Tharyan, R. (2016). Environmental and social disclosures: Link with corporate financial performance. *British Accounting Review*, 48(1), pp. 102-116. <https://doi.org/10.1016/j.bar.2014.10.007>
45. Rees, W., & Rodionova, T. (2013). What type of controlling investors impact on which elements of corporate social responsibility? *Journal of Sustainable Finance & Investment*, 3(3), pp. 238-263. <https://doi.org/10.1080/20430795.2013.791143>
46. Rizzato, F., Busso, D., Devalle, A., & Zerbetto, A. (2018). Corporate governance system in Italy: Compliance and quality. *Corporate Ownership & Control*, 16(1-1), pp. 217-233. <https://doi.org/10.22495/cocv16i1c1art9>
47. Rizzato, F., Busso, D., Fiandrino, S., Cantino, V. (2019). Non-financial information and risk disclosure: Compliance levels with mandatory requirements in the Italian market. *The Future of Risk Management*, 2, pp. 105-142. [https://doi.org/10.1007/978-3-030-16526-0\\_4](https://doi.org/10.1007/978-3-030-16526-0_4)
48. Rossi, F., Boylan, R., & Cebula, R. J. (2018). Financial decisions and ownership structure as control mechanisms of agency problems: Evidence from Italy. *Corporate Governance*, 18(3), pp. 531-563. <https://doi.org/10.1108/CG-01-2017-0014>
49. Rossi, F., & Cebula, R. J. (2016). Debt and ownership structure: Evidence from Italy. *Corporate Governance*, 16(5), pp. 883-905. <https://doi.org/10.1108/CG-02-2016-0025>
50. Schneider, T., Michelon, G., & Paananen, M. (2018). Environmental and social matters in mandatory corporate reporting: An academic note\*. *Accounting Perspectives*, 17(2), pp. 275-305. <https://doi.org/10.1111/1911-3838.12173>
51. Skouloudis, A., Jones, N., Malesios, C., & Evangelinos, C. (2014). Trends and determinants of corporate non-financial disclosure in Greece. *Journal of Cleaner Production*, 68, pp. 174-188. <https://doi.org/10.1016/j.jclepro.2013.12.048>
52. Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), pp. 571-610. <https://doi.org/10.5465/amr.1995.9508080331>

## APPENDIX A (Part 1)

Name	Global Industry Classification Standard (GICS) taxonomy	FTSE Italia All-Share Composition
A2A	Utilities	Ftse Mib
AEFFE	Consumer Goods	Ftse Italia Small Cap
AMPLIFON	Health Care	Ftse Italia Mid Cap
ANSALDO STS	Industrials	Ftse Italia Mid Cap
AQUAFIL	Basic Materials	Ftse Italia Mid Cap
ASCOPIAVE	Utilities	Ftse Italia Mid Cap
ASTALDI	Industrials	Ftse Italia Small Cap
ASTM	Industrials	Ftse Italia Mid Cap
ATLANTIA	Industrials	Ftse Mib
AUTOGRILL	Consumer Services	Ftse Italia Mid Cap
AVIO	Industrials	Ftse Italia Small Cap
AZIMUT HOLDING	Financials	Ftse Mib
BANCA CARIGE	Financials	Ftse Italia Small Cap
BANCA GENERALI	Financials	Ftse Mib
BANCA IFIS	Financials	Ftse Italia Mid Cap
BANCA INTERMOBILIARE	Financials	Ftse Italia Small Cap
BANCA MEDIOLANUM	Financials	Ftse Italia Mid Cap
BANCA MONTE PASCHI SIENA	Financials	Ftse Italia Mid Cap
BANCA POPOLARE SONDRIO	Financials	Ftse Italia Mid Cap
BANCO BPM	Financials	Ftse Mib
BANCO DI DESIO E BRIANZA	Financials	Ftse Italia Small Cap
BASICNET	Consumer Goods	Ftse Italia Small Cap
BE	Technology	Ftse Italia Small Cap
BEGHELLI	Industrials	Ftse Italia Small Cap
BIALETTI INDUSTRIE	Consumer Goods	Ftse Italia Small Cap
BIANCAMANO	Industrials	Ftse Italia Small Cap
BIESSE	Industrials	Ftse Italia Mid Cap
BPER BANCA	Financials	Ftse Mib
BREMBO	Consumer Goods	Ftse Mib
BRUNELLO CUCINELLI	Consumer Goods	Ftse Italia Mid Cap
BUZZI UNICEM	Industrials	Ftse Mib
CAD IT	Technology	Ftse Italia Small Cap
CAIRO COMMUNICATION	Consumer Services	Ftse Italia Mid Cap
CALTAGRONE	Industrials	Ftse Italia Small Cap
CAMPARI	Consumer Goods	Ftse Mib
CARRARO	Industrials	Ftse Italia Small Cap
CATTOLICA ASSICURAZIONI	Financials	Ftse Italia Mid Cap

## APPENDIX A (Part 2)

<i>Name</i>	<i>Global Industry Classification Standard (GICS) taxonomy</i>	<i>FTSE Italia All-Share Composition</i>
CEMENTIR HOLDING	Industrials	Ftse Italia Mid Cap
CERVED INFORMATION SOLUTIONS	Industrials	Ftse Italia Mid Cap
CIR	Industrials	Ftse Italia Mid Cap
COFIDE	Industrials	Ftse Italia Small Cap
CREDITO EMILIANO	Financials	Ftse Italia Mid Cap
CREDITO VALTELLINESE	Financials	Ftse Italia Small Cap
CSP INTERNATIONAL	Consumer Goods	Ftse Italia Small Cap
DAMIANI	Consumer Services	Ftse Italia Small Cap
DANIELI & C	Industrials	Ftse Italia Mid Cap
DATALOGIC	Industrials	Ftse Italia Mid Cap
DE' LONGHI	Consumer Goods	Ftse Italia Mid Cap
DIASORIN	Health Care	Ftse Italia Mid Cap
DOBANK	Financials	Ftse Italia Mid Cap
EDISON	Utilities	Ftse Italia Small Cap
EI TOWERS	Technology	Ftse Italia Mid Cap
EL EN	Industrials	Ftse Italia Mid Cap
ELICA	Consumer Goods	Ftse Italia Small Cap
EMAK	Consumer Goods	Ftse Italia Small Cap
ENAV	Industrials	Ftse Italia Mid Cap
ENEL	Utilities	Ftse Mib
ENI	Oil & Gas	Ftse Mib
ERG	Utilities	Ftse Italia Mid Cap
ESPRINET	Technology	Ftse Italia Small Cap
EUKEDOS	Health Care	Ftse Italia Small Cap
EXPRIVIA	Technology	Ftse Italia Small Cap
FIERA MILANO	Industrials	Ftse Italia Small Cap
FILA	Consumer Goods	Ftse Italia Mid Cap
FINCANTIERI	Industrials	Ftse Italia Mid Cap
FNM	Consumer Services	Ftse Italia Small Cap
GAMENET	Consumer Services	Ftse Italia Small Cap
GEFRAN	Industrials	Ftse Italia Small Cap
GENERALI	Financials	Ftse Mib
GEOX	Consumer Goods	Ftse Italia Mid Cap
GRUPPO CERAMICHE RICCHETTI	Industrials	Ftse Italia Small Cap
HERA	Utilities	Ftse Italia Mid Cap
IL SOLE 24 ORE	Consumer Services	Ftse Italia Small Cap
IMA	Industrials	Ftse Italia Mid Cap
IMMSI	Consumer Goods	Ftse Italia Small Cap
INTERPUMP GROUP	Industrials	Ftse Italia Mid Cap
INTESA SANPAOLO	Financials	Ftse Mib
IRCE	Industrials	Ftse Italia Small Cap
IREN	Utilities	Ftse Italia Mid Cap
ISAGRO	Basic Materials	Ftse Italia Small Cap
ITALGAS	Utilities	Ftse Mib
ITALMOBILIARE	Industrials	Ftse Italia Mid Cap
LA DORIA	Consumer Goods	Ftse Italia Small Cap
LANDI RENZO	Consumer Goods	Ftse Italia Small Cap
LEONARDO	Industrials	Ftse Mib
LUVE	Industrials	Ftse Italia Small Cap
LUXOTTICA GROUP	Consumer Goods	Ftse Mib
MAIRE TECNIMONT	Oil & Gas	Ftse Italia Mid Cap
MARR	Consumer Services	Ftse Italia Mid Cap
MASSIMO ZANETTI BEVERAGE	Consumer Goods	Ftse Italia Small Cap
MEDIASET	Consumer Services	Ftse Mib
MEDIOBANCA	Financials	Ftse Mib
MONCLER	Consumer Goods	Ftse Mib
MONRIF	Consumer Services	Ftse Italia Small Cap
MUTUIONLINE	Financials	Ftse Italia Mid Cap
NICE	Industrials	Ftse Italia Small Cap
OPENJOBMETIS	Industrials	Ftse Italia Small Cap
OVS	Consumer Goods	Ftse Italia Mid Cap
PANARIAGROUP INDUSTRIE CERAMICHE	Industrials	Ftse Italia Small Cap
PARMALAT	Consumer Goods	Ftse Italia Mid Cap
PIAGGIO & C	Consumer Goods	Ftse Italia Mid Cap
PININFARINA	Consumer Goods	Ftse Italia Small Cap
PIQUADRO	Consumer Goods	Ftse Italia Small Cap
PIRELLI & C	Consumer Goods	Ftse Mib
PRIMA INDUSTRIE	Industrials	Ftse Italia Small Cap
PRYSMIAN	Industrials	Ftse Mib
RAI WAY	Consumer Services	Ftse Italia Mid Cap
RATTI	Consumer Goods	Ftse Italia Small Cap
RCS MEDIAGROUP	Consumer Services	Ftse Italia Mid Cap
RECORDATI	Health Care	Ftse Mib
RENO DE MEDICI	Industrials	Ftse Italia Small Cap

## APPENDIX A (Part 3)

<i>Name</i>	<i>Global Industry Classification Standard (GICS) taxonomy</i>	<i>FTSE Italia All-Share Composition</i>
SABAF	Industrials	Ftse Italia Small Cap
SAES GETTERS	Industrials	Ftse Italia Small Cap
SAFILO GROUP	Consumer Goods	Ftse Italia Small Cap
SAIPEM	Oil & Gas	Ftse Mib
SALINI IMPREGILO	Industrials	Ftse Italia Mid Cap
SALVATORE FERRAGAMO	Consumer Goods	Ftse Mib
SARAS	Oil & Gas	Ftse Italia Mid Cap
SESA	Technology	Ftse Italia Small Cap
SIAS	Industrials	Ftse Italia Mid Cap
SNAITECH	Consumer Services	Ftse Italia Small Cap
SNAM	Utilities	Ftse Mib
SOGEFI	Consumer Goods	Ftse Italia Small Cap
SOL	Basic Materials	Ftse Italia Mid Cap
TECHNOGYM	Consumer Goods	Ftse Italia Mid Cap
TELECOM ITALIA	Telecommunications	Ftse Mib
TERNA	Utilities	Ftse Mib
TESMEC	Industrials	Ftse Italia Small Cap
TISCALI	Technology	Ftse Italia Small Cap
TOD'S	Consumer Goods	Ftse Italia Mid Cap
TOSCANA AEROPORTI	Industrials	Ftse Italia Small Cap
TXT	Technology	Ftse Italia Small Cap
UBI BANCA	Financials	Ftse Mib
UNICREDIT	Financials	Ftse Mib
UNIEURO	Consumer Services	Ftse Italia Small Cap
UNIPOL	Financials	Ftse Mib
VITTORIA ASSICURAZIONI	Financials	Ftse Italia Mid Cap
YOOX NET-A-PORTER GROUP	Consumer Services	Ftse Mib
ZIGNAGO VETRO	Industrials	Ftse Italia Mid Cap

## APPENDIX B. NFI DISCLOSURE LIST OF ITEMS (Part 1)

<i>Content topic</i>	<i>N.</i>	<i>Disclosure items in accordance with the Italian Legislative Decree 254/2016</i>	<i>Item Classification</i>
Environmental matters	1	The business model with reference to environmental issues (current period)	General-topic disclosure
	2	Policies on environmental matters (current period)	General-topic disclosure
	3	Results on environmental matters (current period)	General-topic disclosure
	4	Results on environmental matters (prior period)	General-topic disclosure
	5	Energy consumption within the organization	KPIs
	6	Energy consumption outside of the organization	KPIs
	7	Energy intensity	KPIs
	8	Reduction of energy consumption	KPIs
	9	Reductions in energy requirements of products and services	KPIs
	10	Water withdrawal by source	KPIs
	11	Water sources significantly affected by the withdrawal of water	KPIs
	12	Water recycled and reused	KPIs
	13	Direct (Scope 1) GHG emissions	KPIs
	14	Energy indirect (Scope 2) GHG emissions	KPIs
	15	Other indirect (Scope 3) GHG emissions	KPIs
	16	GHG emissions intensity	KPIs
	17	Reduction of GHG emissions	KPIs
	18	Emissions of ozone-depleting substances (ODS)	KPIs
	19	Nitrogen oxides (Nox) sulfur oxides (Sox), and other significant air emissions	KPIs
	20	Water discharge by quality and destination	KPIs
	21	Waste by type and disposal method	KPIs
	22	Significant spills	KPIs
	23	Transport of hazardous waste	KPIs
	24	Water bodies affected by water discharges and or runoff	KPIs
	25	Identification of key risks and opportunities for environmental matters	Specific-topic disclosure
	26	Identification of effects on environmental matters related to business relationships, products or services	Specific-topic disclosure
	27	Undertaking actions to manage risks on environmental matters	Specific-topic disclosure
Social matters	28	Business Model on social matters (current period)	General-topic disclosure
	29	Policies on social matters (current period)	General-topic disclosure
	30	Results on social matters (current period)	General-topic disclosure
	31	Results on social matters (prior period)	General-topic disclosure
	32	Identification of key risks and opportunities effects on social matters (current period)	General-topic disclosure
	33	Actions to ensure gender diversity opportunity (actions in favor of childhood, families etc.)	Specific-topic disclosure

## APPENDIX B. NFI DISCLOSURE LIST OF ITEMS (Part 2)

<i>Content topic</i>	<i>N.</i>	<i>Disclosure items in accordance with the Italian Legislative Decree 254/2016</i>	<i>Item Classification</i>
Social matters	34	Operations with local community engagement, impact assessment, and development programs	KPIs
	35	Operations with significant actual and potential negative impacts on local communities	KPIs
	36	New suppliers that were screened using social criteria	KPIs
	37	Negative social impacts in the supply chain and actions taken	KPIs
	38	Political contributions	KPIs
	39	Assessment of the health and safety impacts of product and service categories	KPIs
	40	Incidents of non-compliance concerning the health and safety impacts of products and services	KPIs
	41	Requirements for products and service information and labeling	KPIs
	42	Incidents of non-compliance concerning product and service information and labelling	KPIs
	43	Incidents of non-compliance concerning marketing communications	KPIs
44	Substantiated complaints concerning breaches of customer privacy and losses of customer data	KPIs	
Employee matters	45	Business Model with reference to employee matters (current period)	General-topic disclosure
	46	Policies on employee matters (current period)	General-topic disclosure
	47	Results on employee matters (current period)	General-topic disclosure
	48	Results on employee matters for prior periods (prior period)	General-topic disclosure
	49	New employee hires and employee turnover	KPIs
	50	Benefits provided to full-time employees that are not provided to temporary or part-time employees.	KPIs
	51	Parental leave	KPIs
	52	Minimum notice periods regarding operational changes	KPIs
	53	Workers representation in formal joint management-worker health and safety committees	KPIs
	54	Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities	KPIs
	55	Workers with high incidence or high risk of diseases related to their occupation	KPIs
	56	Health and safety topics covered in formal agreements with trade unions	KPIs
	57	Average hours of training per year per employee	KPIs
	58	Programs for upgrading employee skills and transition assistance programs	KPIs
59	Percentage of employees receiving regular performance and career development reviews	KPIs	
Human rights	60	Identification of key risks and opportunities on employee matters	General-topic disclosure
	61	Business model on human rights matters (current period)	General-topic disclosure
	62	Policies on human rights matters (current period)	General-topic disclosure
	63	Results on human rights matters (current period)	General-topic disclosure
	64	Results on human rights matters (prior period)	General-topic disclosure
	65	Incidents of discrimination and corrective action are taken	KPIs
	66	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	KPIs
	67	Operations and suppliers at significant risk for incidents of child labor	KPIs
	68	Operations and suppliers at significant risk for incidents forced or compulsory labor	KPIs
	69	Security personnel trained in human rights policies or procedures	KPIs
	70	Incidents of violations involving rights of indigenous peoples	KPIs
	71	Operations that have been subject to human rights reviews or impact assessments	KPIs
	72	Employee training on human rights policies or procedures	KPIs
	73	Significant investment agreements and contracts that include human rights clauses or that underwent human right screening	KPIs
	74	Identification of key risks and opportunities from human rights matters (current period)	General-topic disclosure
Anti-corruption	75	Business Model with reference to anticorruption matters (current period)	General-topic disclosure
	76	References to 231 related to anti-corruption	General-topic disclosure
	77	Policies against corruption (current period) GRI 205-2 - G4-SO4	General-topic disclosure
	78	Results on anti-corruption (current period) GRI 205-1 - G4-SO5	General-topic disclosure
	79	Results on anti-corruption (prior period)	General-topic disclosure
	80	Confirmed incidents of corruption and action taken	KPIs
	81	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	KPIs
	82	Identification of key risks and opportunities on anti-corruption matters (current period)	General-topic disclosure