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Assessing the actual stage of social and environmental reporting of the companies listed at Bucharest Stock Exchange

Mihaela Turturea[a1]

[a]*Bucharest University of Economic Studies, Romania*

Abstract: Transparency is becoming a worldwide necessity determined by the increasing demand of responsible actors regarding certain justification related to the impact of different entities towards the environment. Within an economic environment described by complexity, continuous change and development our paper aims to provide an image of contemporary reporting practices in a developing country with regard to the inclusion of social and environmental aspects within reporting practices. This paper aims at examining the extent to which the Bucharest Stock Exchange listed companies belonging to premium and standard–categories report on CSR and the way stock price evolution can be explained through financial profitability, size, leverage, industry and CSR disclosures. The results achieved show that there is a concern among Romanian listed companies to include environmental and social disclosures in their reporting practices during 2001-2014 analyzed period, a significant number of companies reporting on CSR aspects.

Keywords: *social and environmental reporting, complexity, Bucharest Stock Exchange, CSR disclosure, stock price*

JEL Codes: Q50, M20, C10

[1] *Corresponding authors*: Mihaela Turturea, PhD Student at Bucharest University of Economic Studies, email address: mihaela.turturea@cig.ase.ro

1. Introduction

Nonfinancial information becomes a necessity at a global level within the annual reports which have to provide a holistic picture of the company's main interests, performances, governance, social and environmental aspects. Taking into consideration the fact that financial performance remains an important area to be recognized when taking decisions, it is not enough to consider only past financial performance of a company (King and Roberts, 2013), but also there have to be taken into consideration aspects regarding environmental, social and governance matters (Eccles & Krzus, 2010: 83; Frias-Aceituno *et al.*, 2013).

A significant development of the nonfinancial reporting topic can be traced in relation to the global economic financial crisis momentum (Breitenfellner & Wagner, 2010) which has determined different actors in the economic field to act more responsible and start implementing initiatives with regard to a better measurement and reporting various impacts on the environment and society (King & Roberts, 2013). However, scholars observe that in times of economic crisis corporate social responsibility (CSR) retains less attention (Karaibrahimoglu, 2010 in Jacob, 2012), 100 randomly selected companies from Fortune 500 showing a considerable decrease in CSR projects during the crisis period.

Limitations to traditional corporate reporting are addressed within recent accounting literature (Eccles & Krzus, 2010; King & Roberts, 2013; Reverte, 2014) as it abridges the reflection of the way the company will perform in the future and supplies data only for investors or financial suppliers without considering the communication with other stakeholders. Therefore, contemporary reporting is aimed to imply the submission of financial statements and other reports in order to better explain to interested third parties the entities impact on the society as a whole (Eccles & Krzus, 2010; King & Roberts, 2013). Likewise, the future of corporate reporting should provide complex perspectives on the work carried out by economic entities aimed at improving decision-making process for stakeholders (Reverte, 2014).

This research is aimed at being a response to the recent calls in the accounting literature with regard to the effect of CSR practice on financial performance of the companies belonging to developing countries. The paper contributes to existing research by analysing the environmental and social reporting practices as part of the integrated reporting (IR) process, by describing the regulation in force regarding these aspects within a developing country and by reflecting the limitations of traditional corporate reporting in relation to the new form of reporting, integrated reporting. Further, the empirical study reflects the extent to which the Bucharest Stock Exchange listed companies report on CSR and the way stock price evolution can be explained through financial profitability of a company, size of the company, leverage, industry and CSR disclosures. Moreover the paper analyzes the context of a developing country, Romania, to underline the effect of the undertaken efforts at a global level in addressing how the impact of social and environmental aspects can influence the business performance and how is this reflected in the change of the reporting practice. Also, the fact that CSR aspects related to the financial performance are less debated in developing countries has determined us to analyze and fill the gap in the literature. Goyal *et al.* (2013) show a weak proportion of the studies regarding sustainability in developing countries as related to developed ones. However, an increasing awareness of social responsibility in Romania is seized in the literature by Băleanu *et al.* (2011), Vintilă and Duca, (2013), Pantea *et al.* (2014), Pintea *et al.* (2012), Simionescu and Dumitrescu, (2014), Ciulu *et al.* (2015).

The results achieved show that there is a concern among Romanian listed companies to include environmental and social disclosures in their reporting practices during 2001-2014 analyzed period, a significant number of companies reporting on CSR aspects. However, these disclosures refer to more general philanthropic activities which are made public on the companies' websites or are included within their annual reports.

The remainder of this paper is structured as follows. The literature review regarding social and environmental reporting aspects is developed in the next section, followed by research method and results discussion. The last section represents the conclusion of this paper where limitations and future research proposals are underlined.

2. Literature review: Social and environmental reporting, part of the IR

Social and environmental aspects of the corporate activity are debated at a large scale among researchers (Baker *et al.*, 2012; Barbu *et al.*, 2014; Eccles & Krzus, 2010; King & Roberts, 2013). While corporate financial statements offer a backward looking picture of the company's performances and results (King & Roberts, 2013), the need for disclosing non-financial information is assessed through accounting literature as it eases the decision making process (Reverte, 2014) and helps organizations to demonstrate accountability (Gray & Gray, 2011; Mahadeo *et al.*, 2011; Staib, 2005).

To date, reporting practices have evolved from the traditional disclosures which rely on historical data to a new form of reporting, integrated reporting which implies the use of triple bottom line (TBL) foundations "including corporate social responsibility disclosures" (Bonsón & Bednárová, 2014:1). The concept of TBL is firstly introduced by Elkingtonin 1997 (Hahn & Kühnen, 2013; Rambaud & Richard, 2015; Perrini & Tencati, 2006) being aimed to present economic, social and environmental aspects of a company's activities. Staib (2005) notices these voluntary reports were named in the 1970's as Value Added Statements. While some researchers suggest that TBL reporting is often perceived as time consuming and representing more an obstacle than a reporting aid in presenting the information about a company (Staib, 2005), others notice an important shift to sustainability thinking (Dyllick & Hockerts, 2002 in Hahn & Kühnen, 2013: 6) and observe that the objective of ”meeting the needs of a firm's direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders as well” can be reached only by maintaining a company's ”economic, social and environmental capital base”.

Social and environmental reporting is observed by Hopwood (2009) in Baker *et al.* (2012) as a necessary component of CSR, meant to develop techniques for measuring, evaluating and reporting different impacts of an organisation towards the environment. Caroll (1991) in Polychronidoua *et al.* (2014: 194) refers to CSR as having four dimensions of social obligations: „the economic responsibility of profit, the legal responsibility of the firm to comply with laws, ethics obligation to act on social classes, though not legislative coded and finally the philanthropic responsibility to promote actions that promote social welfare”. Wood (1991) cited by Baker *et al.* (2012) defines CSR as the way companies have integrated this reporting practice into their business model, providing to them ,internally, a better monitoring of the corporate behaviour as related to the compliance with standards and norms.

Corporate sustainability initiatives can be traced from approximately three decades ago, starting with the Bruntland Report definition on sustainable development which represents a ” development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987 in Buys *et al.*, 2013: 1). The linkage between sustainability and accounting is recognized by Mathews (1997), Schaltegger and Burritt (2000), Schaltegger and Sturm (1992) cited by Schaltegger and Burritt (2010) as determined by the shortcomings of traditional accounting as it is unable to show reliable information regarding companies impact on the environment and society as a whole. Crowther (2002) cited by Gurvitsh and Sidorova (2012: 27) define the concept of sustainability as being concerned with the consequences of today's taken actions which might affect the resources “availability” in the future. Perrini and Tencati (2006: 298) consider that a “sustainability oriented company” should account for its actions towards various stakeholders while using “methods and tools that allow it to improve its social and ecological performance”. Also, they view corporate sustainability as the ability of an organisation to continue to operate over a long period of time, closely related to sustainable actions taken by various third parties.

Continuous efforts in establishing standards for social and environmental disclosures can be traced from 1997 when the Coalition for Environmentally Responsible Economies (CERES) has started the process of Global Reporting Initiative (GRI) as per Borkowski *et al.* (2010). Developments of GRI guidelines can be marked beginning with the year 2000 which is representative for the first publication of GRI reporting framework and guidelines. Later, there have been issued a several revisions of the initial version of the GRI Framework and Guidelines as follows: in 2002 – the G2 revision, in 2006- the G3 revision, in 2011- the G3.1 revision and the actual revised Framework and Guidelines, G4. The fourth generation of GRI Guidelines is launched in May 2013 and it is expected that companies, now issuing standalone sustainability reports or sustainability reports part of the nowadays integrated reports under G3 or G3.1 requirements, to pass to the new form of reporting beginning with 31 December 2015 (www.globalreportinginitive.com).

Latterly, there can be observed a growing interest among companies to present together with mandatory financial disclosures also voluntary social, environmental and governance aspects in the form of narrative fragments attached to annual reports. Nevertheless, South Africa seems to be the first country which makes the integrated reporting mandatory for all listed companies at the Johannesburg Stock Exchange (Rensburg & Botha, 2013) in order to better assess their impact on the environment and society presenting a holistic picture of their activities (Eccles & Krzus, 2010: 83; King & Roberts, 2013).

Corporate Social Responsibility has become an important topic referred to by more and more researchers in terms of permanent environmental degradation. Various initiatives regarding sustainable development can be seen at a global level. In this respect, Helsin and Ochoa (2008) have analyzed the strategic development of social responsibility in the business environment from the environmental and human resource perspectives and have pointed out 21 examples of CSR initiatives as presented in the following table.

Possible arguments for presenting environmental information are addressed by Kolk (2010) cited in Maubane *et al.* (2014) and refer to the following: improved credibility from greater transparency, ability to communicate efforts and standards, reputational benefits, cost savings identification, increased efficiency, enhanced business development opportunities and enhanced staff morale. At the opposite side, the reasons for not choosing to report on environmental aspects are the following: doubts on the advantages reporting on environmental issues would bring to the organisation, other competitors which do not disclose this type of information, the company has already a good reputation towards the environment, the image or reputation of the company might suffer, the expensive costs for disclosing environmental related aspects.

Table 1. CSR strategic principles and exemplifying practices

CSR strategic principles	Companies	Examples
1. Cultivate neededtalent opportunities	Mariott	Provide extraordinary career
	Microsoft	Nurture required IT talent
	GlaxoSmithKline	Expand access to medications
2. Develop new markets products	Philips Electronics	Produce resource-efficient
	Globe Telecom	Create first-time consumers
	Whole Foods	Specialize in organic products
3. Protect labor welfare education	Levi Strauss	Replace exploitation with
	Odegard & Rugmark	Certify ethical production
	Starbucks	Enhance farmers' productivity and welfare
4. Reduce your environmental footprint	DuPont	Create more value and less ''stuff''
	Ethel M	Produce abundant life from wastewater
	Norsk Hydro	Renew raw materials
5. Profit from by-products	Fuji Xerox	Redesign products for learning
	Shao Industries manufacturing	Adopt cradle-to-cradle
	Manildra	Convert grain and starch waste to fuels and food
6. Involve customers educatio	Target	Enable customers to improve
	Hewlett-Packard	Reduce the environmental cost of IT use
	Patagonia	Educate and engage customers

(Source: Helsin & Ochoa (2008: 125-144))

In addition to these findings, social and environmental disclosures are debated throughout the literature whether they have any relation to company's profitability (Qiu *et al.*, 2014, Waworuntu *et al.*, 2014). Qiu *et al.* (2014) argue that the environmental disclosures, despite the implication of high financial resources on systems which can identify, measure and report these aspects (Brammer & Pavelin, 2008; Buhr, 2002; Larsen, 2000; Li & McConomy, 1999 cited in Qiu *et al.*, 2014), are likely to be implemented by more profitable companies which may incur these financial resources as related to resource based theory (Hart, 1995 in Qiu *et al.*, 2014). Waworuntu *et al.* (2014) find that there is a moderate to strong correlation between corporate social performance and corporate financial performance of the top listed companies in ASEAN region (Singapore, Malaysia, Philippines, Indonesia and Thailand). Farag *et al.* (2015) reveal the fact that social performance of a company is related to previous financial performance.

Evidence from reporting practice on CSR aspects in developing countries like South Africa and Morocco is observed to have a positive impact on financial performance as well as a positive effect on stakeholder engagement (Khlif *et al.*, 2015). At the opposite side, Aras *et al.* (2010) stress the fact that there is likely to find a negative relationship between CSR and financial performance in the case of companies coming from developing countries because of the investors and other stakeholders which seek only financial performance of a company, not being interested in its sustainable development. They analyzed companies listed at Istambul Stock Exchange belonging to ISE National 100 Index and found out that there is no relationship between financial performance and CSR for the sample studyed, but there is a significant relationship between size of a company and CSR.

The relationship between CSR and financial performance is debated also at the national level (Vintilă & Duca, 2013, Pantea *et al.*, 2014, Pintea *et al.*, 2012, Simionescu & Dumitrescu, 2014, Ciulu *et al.*, 2015). Simionescu and Dumitrescu (2014) studied nineteen listed companies at Bucharest Stock Exchange (BSE) during 2009-2012 and observed whether CSR practices influence company financial performance. They found a positive and significant correlation between CSR, as dummy variable, and return on equity (ROE) as well for the relation between return on assets (ROA) and CSR. A positive correlation between CSR determined by corporate social expenditure, as dependent variable and size (measured by Total Assets) and financial performance (determined by ROA) of a company is observed by Vintilă and Duca (2013) while analyzing publicly available information on companies issuing CSR in Romania for the year 2008. Moreover, Ciulu *et al.* (2015) developed an interview based study on three companies, coming from North-Eastern part of Romania, Iasi, following an analysis of their CSR and sustainable development perceptions and observed that corporate responsibility activities are mainly oriented to the community levels, one of the companies being able to issue CSR reports. Also, they observed a dependency relationship between financial performance and CSR. At the opposite side, Pantea *et al.* (2014) found no significant correlation between financial performance, measured by ROA and ROE, and CSR for 55 listed companies at BSE over the 1999-2012 period. Pintea *et al*. (2014) confirm also the lack of correlation between environmental performance, measured through CO_2 emissions and financial performance for 14 companies in Romania which report on greenhouse gas emissions, analyzed over 2005-2010 period.

Foregoing studies present a growing commitment among companies to include social, environmental and governance issues along their annual reports, measuring and reporting these aspects in accordance with GRI Guidelines (Gurvitsh & Sidorova, 2012). Also, an increase in the number of companies including environmental aspects within their annual reports are mentioned by Deegan and Gordon (1996) in Suttipun and Stanton (2012). KPMG (2011) cited by De Villiers and Alexander (2014) observes an increase in the way companies disclose social and environmental information within their annual reports and on their websites. Disclosing information on the world wide web is recommended by researchers as it eases the connection to stakeholders which is made at a low cost and in real time (Joshi and Gao, 2009, Othman and Ameer, 2009, Wheeler and Elkington, 2001 in

Suttipun and Stanton 2012). An increase awareness of CSR disclosures is demonstrated by Waworuntu *et al.* (2014) along Asian companies.

Ali Omri and Khelil-Rhouma (2010:7) observe that mandatory disclosures of environmental issues in Francehas increased the overall social reporting practices among companies, but in the same time they have discovered that the application of the environmental regulations (Nouvelles Régulation Économique) remains limited due to its ambiguity and the unwillingness of companies to disclose certain information in order to ”avoid uncontrolled strategic risks”.

The research question arisen is whether companies coming from developing countries are committed to disclose their social and environmental performances and are aware of the possible benefits which may outflow.

3. Non-financial reporting and voluntary reporting initiatives in Romania

Romania, being a member state of European Union since 2007, gains important status within the nowadays geopolitical context. Due to the recent global financial crisis Eastern European stock markets have also been affected, in the way that Bucharest Stock Exchange “has lost its attractiveness to foreign investors” according to Brezinski and Stephan (2011) cited in Robu and Istrate (2014: 1).

In terms of voluntary reporting initiatives, at the national level, there are standards in force which offer guidance to companies in disclosing information related to environmental and social impacts, in identifying, controlling their environmental impact and in constantly improving their environmental performances. At the Romanian level, most of the listed companies report environmental aspects under the following international standards: ISO 14001:2004 Environmental Management Systems, ISO 14004: 2004 Environmental Management Systems, ISO 14064-1:2006 Greenhouse gases, ISO 26000:2010 Social Responsibility.

In addition to the standards above mentioned, according to European Commission website, there is another initiative called European Community’s Eco-Management and Audit Scheme (EMAS) and it has been introduced for the first time in 1995, at the European Community level. It deals with voluntarily disclosing data regarding company’s impact on the environment, aiming to improve environmental performance and to facilitate communication of environmental achievements to interested third parties. In Romania, the competent national body for registering EMAS organisation is represented by Ministry of Environment and Forests as per European Commission website. However, at the national level, there is a lack of interest among companies in registering such reports, only three companies being registered as EMAS organizations (e.g.: Montaj Carpați SA, Ecorec SA and Druckfarben România SRL).

As per GRI Sustainability Disclosure Database, presented on their website, in Romania, there are only seven companies coming from different industries which issue CSR reports and only five of them report in accordance with GRI Guidelines, having a C level of application. The companies earlier reminded of are not listed in the premium or standard categories at the Bucharest Stock Exchange and these are: Banca Comercială Română, EurActiv România, Farmaciile Dona, Opt Bank, Orange Romania, Romstal and Siveco.

Although there are a few companies registered as GRI or EMAS corporations, there are a lot more companies in Romania providing corporate responsibility (CR) aspects of their business as per KPMG (2013). According to a KPMG (2013) study, it can be observed that CR reporting gains attention across European companies between 2011 and 2013 (see Table 2). For example, 69% of the Romanian companies in 2013 are able to report corporate responsibility issues. This study was developed among 4100 companies, the largest 100 companies in 41 countries, identified based on revenue, market capitalization or other measure appropriate for the sector they belong to and include measures like: number of companies publishing CR information by country and sector, format and integration of CR reporting, use of reporting guidelines and standards, rate and type of verification of CR information, assurance provider (KPMG, 2013). This statistic reflects the way economic agents across countries are aware of their responsibility towards the environment. Gurvitsh and Sidorova (2012) refer also to statistics issued by GRI and observe an increase in the number of CSR reports issued under GRI Guidelines worldwide in the 2006-2011 period which has almost doubled and, in terms of companies reporting under GRI, they have increased by 3,58.

At the European Union level, the Directive 2014/95/EU comes as an amendment to the Accounting Directive 2013/34/EU and requires all listed and large non-listed companies with more than 500 employees to provide disclosures on non-financial information in their management report or in a separate report. This directive, entering into force on 6 December 2014, refers to the disclosure of information on environmental, social and employee aspects, leaving a flexible choice for the organizations in choosing the appropriate guidelines to follow (http://ec.europa.eu/).

Table 2. Rate of corporate responsibility reporting across European countries

Rate of CRR across European countries - 2011 and 2013 (% of companies reporting on CR)					
Country	**2011**	**2013**	**Country**	**2011**	**2013**
Belgium	-	68	Poland	-	56
Denmark	91	99	Portugal	69	71
Finland	85	81	Romania	54	69
France	94	99	Russia	58	57
Germany	62	67	Slovakia	63	57
Greece	33	43	Spain	88	81
Hungary	70	78	Sweden	72	79
Italy	74	77	Switzerland	64	67
Netherlands	82	82	UK	100	91
Norway	-	73			

Source: Adapted from KPMG, The KPMG survey of corporate responsibility reporting 2013: executive summary, available online at http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/corporate-responsibility/Documents/corporate-responsibility -reporting-survey-2013-exec-summary.pdf, 2013.

4. Research method

This study examines the extent to which the Bucharest Stock Exchange listed companies report on CSR and the way stock price evolution can be explained through financial profitability of a company, size of the company, leverage, CSR disclosures and industry.

Following Qiu *et al.* (2014) research paper, we intend to identify the viability of their statement regarding social and environmental disclosures which are extensively presented by companies with greater economic resources, demonstrating better economic benefits. Also, they observe that the share price of a company is positively correlated to the environmental and social disclosure and that higher and more profitable companies disclose more aspects of the business activity.

On the opposite side, results obtained by Farag *et al.* (2015) show that higher financial performance of a company determines lower corporate social performances and explain this through the managerial opportunism hypothesis (Preston and O'Bannon, 1997 in Farag *et al.*) which supposes that companies tend to increase shareholder's wealth by decreasing the spending on social actions.

Previous research has demonstrated that there is a positive relationship between company's size and the amount of CSR disclosures (Muttakin & Khan, 2014; Bruke *et al.*, 1986, Tagesson et al., 2009; Haniffa & Cooke, 2005; Branco and Rodrigues, 2006 in Bonsón & Bednárová, 2014; Adams *et al.*, 1998, Ghazali, 2007, in Muttakin & Khan, 2014) based on the fact that larger companies are more visible and have higher expectation returns from stakeholders.

The hypothesis presented in our empirical study is the following: *There is a correlation between market performance of a company, financial performance, size of the company, industry and CSR disclosures.*

Correlations between stock price and the following variables (performance indicators, company size and CSR disclosures) are expected to be positive as a result of previous studies (Qiu *et al.*, 2014). Also, prior studies show a positive correlation between stock returns and financial performance, measured by ROE index, leverage and a negative correlation with the size of the company, measured by Total Assets (Mulyono & Khairurizka, 2009).

4.1 Dataset and variables description

Our sample consists of the 85 listed companies at Bucharest Stock Exchange (BSE) belonging to the premium and standard categories presented over a fourteen years period, from 2001 to 2014. Premium and standard issuers represent the available two categories of shares registered within BSE regulated market. Premium issuers refer to companies with a market value of the free float of at least EUR 40 million, while the standard issuers refer to entities having an anticipated capital of at least EUR 1 million. We have excluded from our sample companies coming from financial sector due to different accounting practices used in preparing financial statements. Literature explains this through the willing "to avoid the undesirable noise associated with accounting numbers" (Lee *et al.*, 2009 in Frias-Aceituno *et al.*, 2013: 47). The final sample consists of 57 listed companies, after eliminating companies belonging to the financial sector and after excluding the outliers. Companies inside our study come from various industries as presented in the following table, the predominant industry being industrials described by 26,32% of the companies inside this study.

Table 3 shows the distribution of the companies inside this study belonging to different industries, namely (basic materials, consumer cyclicals, consumer non-cyclicals, energy, healthcare, industrials and utilities). Also, it can be distinguished the fact that although the most widespread industry is industrials (26,32% of the companies), companies coming from this sector have the least responses to CSR aspects (6.67%). Moreover, the most companies which disclose CSR aspects are those belonging to healthcare and utilities industry.

Table 3. Companies disclosing CSR by industry 2001 – 2014 period

Ref. No.	Industry	Number of Companies	%Comp	Companies disclosing CSR	Companies disclosing CSR by industry
1	Basic Materials	12	21,05%	5	41,67%
2	Consumer Cyclicals	11	19,30%	6	54,55%
3	Consumer Non-Cyclicals	5	8,77%	2	40,00%
4	Energy	8	14,04%	5	62,50%
5	Healthcare	3	5,26%	2	66,67%
6	Industrials	15	26,32%	1	6,67%
7	Utilities	3	5,26%	2	66,67%
Total number of companies		57	100,00%	23	40,35%

The computer software used for the organization of the sample data as well as for the implementation of the regression model consists of both Microsoft Excel and EViews.

4.2 The model

Based on the quantitative data gathered the author has analyzed the stock price evolution of the sample and observed the correlation with other variables included in the study: financial profitability, measured by Pretax Return on Asset (Pretax_ROA), Revenues, company's size, determined by Total Assets, leverage, industry and CSR disclosures. Using descriptive statistics it is aimed at explaining the relation between financial performance and non-financial indicators for the Romanian listed companies which disclose and those which do not disclose CSR aspects of their activity.

The variables used are presented in the following table together with their measurement and the sources from which they are extracted. They are in line with the variables used by Qiu *et al.* (2014). While financial variables together with the stock price evolution and industry for each listed company come from Thomson Reuters Database, CSR disclosures are extracted from the annual reports, websites or stand-alone CSR reports for each company included in the study.

Table 4.Variable definition, measurement and sources

Category	Measure	Description	Source
Stock price evolution	Stock	Stock price takes the values from their last registration for each year. It is computed as a relative change from t_1 to t_0.	Thomson Reuters Database
Financial profitability	Pretax_ROA	It is calculated as Income Before Tax for the fiscal year divided by the Average Total Assets for the same period. It is represented as change from t_1 to t_0.	Thomson Reuters Database
	Revenue	It is extracted from Income Statement and is computed as a relative change from t_1 to t_0.	Thomson Reuters Database
Company's size	SizeTA	Natural logarithm of Total Assets.	Thomson Reuters Database
Other characteristics	LEV	Leverage is a ratio computed as Total debt divided to Total Assets for the same period	Thomson Reuters Database
CSR disclosures	Dummy_vrb	Dummy variable used as proxy for CSR disclosures. It is equal to 1 if the company discloses CSR aspects, otherwise it takes the value 0.	Annual Report; Standalone report or company's website
Industry	Ind	Industry is represented by the economic sector and takes the values 1 to 7, in this sequence: basic materials, consumer cyclicals, consumer non-cyclicals, energy, healthcare, industrials and utilities	Thomson Reuters Database

These variables are chosen based on previous studies with regard to the relation between CSR disclosures and financial performance of a company (Qiu *et al.*, 2014; Waworuntu *et al.*, 2014). All financial performance indicators, together with leverage index presented in our study are computed as an absolute change from t_1 to t_0, while the stock price evolution, being the estimated variable of our model, and revenue indicator are computed as a relative change from t_1 to t_0. Size of a company is determined as natural logarithm of Total Assets. CSR disclosures are reflected by the dummy variable and are collected manually from the company's websites. They measure different aspects of social responsibility companies report on their websites, in their annual reports or in standalone reports. Once a company starts reporting on social responsibility, the dummy variable equals to 1 and is counted for the entire analyzed period beginning with the year where this information is made available.

The model used in our analysis can be transposed into the following relation:

$$\Delta\%Stock\_price_i = \alpha_0+\alpha_1*\Delta Pretax\_ROA_i+ \alpha_2*\Delta Rev_i + \alpha_3*\Delta TA_{i+} \alpha_4*\Delta LEV_i + \alpha_5*\Delta\%EMP_i +\alpha_6*Dummy\_vrb_i+ \alpha_7*Ind_i+ \varepsilon_i$$

5. Results

Table 5 shows a descriptive statistics for the panel data used in our study with regard to mean, median, standard deviation, kurtosis, skewness, minimum, maximum and confidence level. As we can observe, the data used in our research counts 515 observations and present the following characteristics.

While different values for mean, median, standard deviation parameters suggest an asymmetric distribution, the statistic parameters skewness and kurtosis explain also the lack of symmetry. Results close to 0 for skewness parameter shows a normal distribution of data series.

The absolute change in the profitability ratio (Pretax_ROA) shows that companies compounding our sample have on average a negative result of -0.0053%. The relative change in revenues is on average 0.0615%, while the absolute change in leverage is 0.0003%.
The dummy variable, which shows social and environmental disclosures, suggest that, on average, 39.03% of the companies within our sample present CSR disclosures within their annual reports, in a separate CSR report or on the company's website.

Table 5. Descriptive statistics

Variables	Mean	Median	Std. Dev.	Kurtosis	Skewness	Min.	Max.	Count	Conf. Lev.(95,0%)
Δ%Stock_pr	0,1985	0,0553	0,5907	1,8700	1,2096	-0,8087	2,8658	515	0,0511
ΔPretax_ROA	-0,0053	-0,0020	0,0678	5,1625	0,2328	-0,3120	0,3610	515	0,0059
Δ%Rev	0,0615	0,0356	0,3280	13,0865	2,3713	-0,7360	2,4972	515	0,0284
lnTA	10,6801	10,4932	1,5084	1,8391	1,1454	7,8489	16,0797	515	0,1306
ΔLEV	0,0003	0	0,0874	19,4434	0,6876	-0,5215	0,7923	515	0,0076
Dummy_vrb	0,3903	0	0,4883	-1,8035	0,4511	0	1,0000	515	0,0423
Ind	3,6058	4	2,0063	-1,5561	0,0409	1	7,0000	515	0,1737

5.1 Correlation analysis

Table 6 provides the correlation matrix for key variables for the years 2001-2014. As we can observe, the explained variable, the stock price, has a positive and significant correlation (at 1% level of significance) with Pretax ROA and revenues, while having a significant and negative correlation with the size of the company, measured through total assets. It can be observed a positive correlation with the dummy variable and industry, except for correlation with leverage indicator.

Confirming previous results obtained by Muttakin and Khan (2014), we can observe a positive and significant correlation between size of the company, measured through Total Assets (lnTA) and CSR disclosures, described by the dummy variable. The dummy variable, used as proxy for companies which disclose or not CSR aspects, is positively correlated with all performance indicators (Pretax_ROA), stock price evolution and revenues, being significantly correlated to total assets. Accordingly, our correlation matrix output confirm Qiu *et al.* (2014) results regarding the fact that there is a correlation between stock price evolution and CSR disclosures and between pretax ROA and CSR disclosures, supposing that companies with greater economic resources disclose social and environmental aspects, the quantity of information disclosed not being followed within this study.

Table 6. Correlation matrix for key variables for the years 2001-2014

Variables	Δ%Stock_pr	ΔPretax_ROA	*Δ%Rev*	*Dummy_vrb*	*lnTA*	*ΔLEV*	*Ind*
Δ%Stock_pr	1						
ΔPretax_ROA	0,1406**	1					
Δ%Rev	0,2656**	0,1345**	1				
Dummy_vrb	0,0530	0,0554	0,0454	1			
lnTA	-0,0779*	-0,0233	0,0403	0,4512*	1		
ΔLEV	-0,0293	-0,1658**	0,0892**	-0,0408	-0,0172	1	
Ind	0,0267	-0,0546	-0,0277	-0,2240**	0,0368	-0,0071	1

. *, ** indicates significance at 5% and 1% levels respectively

5.2 The regression model

Table 7 presents the estimation of the parameters used in the regression model. Following the results obtained, the relationship between the dependent variable stock price (Δ%Stock_pr) and the independent variables: pretax Return on Assets (ΔPretax_ROA), revenues (Δ%Rev), leverage (ΔLEV), size of the company measured in relation to Total Assets (lnTA), dummy variable (Dummy_vrb), industry (Ind) can be observed through the following equation:

$$Stock\_pr = 0.6347 + 0.82*\Delta Pretax\_ROA + 0.4652*\Delta\%Rev - 0.23*\Delta LEV - 0.06*lnTA + 0.02*Ind + 0.14*Dummy\_vrb$$

Table 7. Regression results

Dependent variable:	*Δ%Stock_pr*			
R-squared	0.101694	Mean dependent var		0.198522
Adjusted R-squared	0.091084	S.D. dependent var		0.590672
S.E. of regression	0.563129	Akaike info criterion		1.702884
Sum squared resid	161.0942	Schwarz criterion		1.760572
Log likelihood	-431.4926	Hannan-Quinn criter.		1.725492
F-statistic	9.584797	Durbin-Watson stat		1.962176
Prob(F-statistic)	0.000000	No. observations		515
Variable	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
C	0.634683	0.191051	3.322057	0.0010
ΔPretax_ROA	0.822177	0.376995	2.180870	0.0297
Δ%Rev	0.465186	0.077034	6.038719	0.0000
ΔLEV	-0.229946	0.290433	-0.791737	0.4289
lnTA	-0.055025	0.018720	-2.939349	0.0034
Ind	0.020423	0.012878	1.585862	0.1134
Dummy_vrb	0.137432	0.059345	2.315801	0.0210

The regression equation can be interpreted as follows: if the Pretax ROA increases with one additional unit, than stock price will increase by 0.82, holding everything else fixed. For the other variables the interpretation will follow the same structure, excluding the qualitative variable, in our case the dummy variable. So, the stock price for companies disclosing social and environmental aspects will increase by 0.14 as compared to companies not disclosing these aspects.

The coefficient of determination shows that 10.17% of the variability in stock price is explained through the variation of the chosen factors presented in our model. The low results of R-squared demonstrate that beside the independent variables taken into consideration in our study, there are other factors which influence the evolution of the stock price and should be included in our research to improve the model. Also, Durbin-Watson result of 0.37 reflects a positive autocorrelation of errors in our sample, explaining the fact that there are other factors or non-financial variables which may explain better the model.

The validity of our model is sustained by the low probability results of the independent variables and of the standard errors. F-significance equal to 5.34796307527962E-10 is lower than 5%, meaning that the model is valid and may be used for the analysis of the dependence of stock price on the variables above mentioned.

6. Conclusions

For decades, as presented in the research paper, social and environmental aspects have become important issues to be considered when referring to a competitive, complex environment. Due to globalization and high market pressure, companies in developing countries have started to align to the standards imposed at a global level for better achieving a sustainable society.

This research provides evidence for Romanian listed companies revealing the fact that market performance of a company can be explained through financial performance indicators (Pretax ROA, Revenues), size of a company determined by total assets and CSR disclosures. We have noticed a growing concern among Romanian listed companies to include certain environmental and social disclosures in their reporting practices during the analyzed period, 40.35% of the companies being able to disclose to some extent social and environmental aspects of their activities. It is important to underline that most of the disclosures made are related to social or environmental projects developed for a sustainable future. For example, few of the projects developed by listed companies compounding our sample are: *People and facts* (Transgaz), *Together for each* (Rompetrol Rafinărie), *Antibiotice - Science and Soul* (Antibiotice), *Plant a tree* (Omv Petrom).

The results obtained within this empirical study confirm previous studies results (Vintilă & Duca, 2013, Qiu *et al.*, 2014, Simionescu & Dumitrescu, 2014, Waworuntu, 2014) and validates the resource based theory assumption (Hart, 1995 in Qiu *et al.*, 2014) which supposes that the more profitable a company is, the more financial resources can be allocated to CSR systems, thus more environmental disclosures are likely to be issued. As confirmed also by foregoing studies which present a positive and strong relationship between the size of the companies and the amount of disclosed information (Watts & Zimmerman, 1986 in Muttakin & Khan, 2014), the size, expressed by log of total assets, of BSE listed companies is significantly and positively correlated to CSR disclosures.

The results of our study are subject to several limitations, the first one being the limited number of observations due to non availability of data for the studied period. Other limitation to be considered is the fact that the dummy variable presented cannot show the difference between companies disclosing CSR issues within their annual reports, in a separate report or on their websites.

This study contributes to the existing literature by offering an analysis of the CSR and financial performance perspectives within a developing country, having practical implications for the business environment which might begin to disclose nonfinancial aspects of the companies' activities. Future research should consider the design of an appropriate corporate social performance index which can explain the social and environmental performance and relate it to the companies coming from different jurisdictions. Interesting is to find other variables which may sustain and improve the model presented in this paper.

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