Chapter 7
Corporate Social Responsibility and Classification Shifting Between Operating and Non-operating Expenses: Evidence from Turkey

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Abstract This study searches for the constraining effect of corporate social responsibility (CSR) on classification shifting. The chapter includes the literature review about the definition of CSR and methods to measure CSR, and the relationship between CSR and earnings management. We chronologically categorize early empirical studies according to their variables, measurement tools, methods and findings. We interpret the findings in the literature to reach a common argument and make a comparison with our findings. In the chapter, corporate social responsibility is measured within the stakeholder approaches and through 57 variables which includes the criteria of employee rights, management structure, CSR strategies, consumers, suppliers, product quality, environment and society, and CSR projects and investments. Classification shifting between operating and non-operating expenses is measured through the expectation model developed by McVay (Account Rev 81(3):501–531, 2006). Our findings indicate a negative relationship between CSR and classification shifting.

Keywords Corporate social responsibility · Classification shifting
Constraining affect

7.1 Introduction

This study investigates the relationship between corporate social responsibility and classification shifting as a form of earnings management. We investigate whether

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socially responsible firms in a developing country behave differently from other firms when using classification shifting to classify operating expenses as non-operating.

Corporate social responsibility is one of the most prominent concepts in the literature. Although the issue of corporate social responsibility has been widely examined in the literature, there is no widely agreed definition of the concept. One of the reasons for terminological problems is the dynamic structure of the concept. The concept has changed and developed in parallel with the change of the relationship between business and society over time. Besides the terminological problems, the measurement of corporate social responsibility is one of the main problems for examining the corporate social responsibility and other disciplines relations. In this chapter, we propose a scale which is formed by different scales developed by previous researches for measuring corporate social responsibility. Corporate social responsibility has been measured within the stakeholder approaches and through 57 variables which include the criteria of employee rights, management structure, CSR strategies, consumers, suppliers, product quality, environment and society, CSR projects and investments.

Classification shifting received recent attention as an earnings management tool. McVay (2006) defines it as the deliberate misclassification of items within the income statement. Unlike the other two forms of earnings management which are accrual management and real earnings management, classification shifting does not affect the income of the current period or causes no change in the business practices. In the chapter, we analysed the corporate social responsibility and earning management relations in more than 20 empirical researches and chronologically categorise early empirical studies according to their variables, measurement tools, methods and findings. We interpret the findings in the literature to reach a common argument and make a comparison with our findings.

The remainder of the paper is organised as follows. Section 7.2 reviews the literature and develops hypotheses. Section 7.3 describes the data collection and the sample selection. Section 7.4 explains the measurement of classification shifting and reports descriptive statistics. Section 7.5 shows the empirical results, and Sect. 7.6 provides the conclusion.

7.2 Literature Review and Hypothesis Development

7.2.1 Defining Corporate Social Responsibility

Although the concept of corporate social responsibility (CSR) has been intensively studied and has had a long and diverse history in the literature, there is no widely accepted definition of this concept among scholars and practitioners. Therefore, CSR is a dynamic concept. When examining the CSR literature, it is seen that over decades the meaning of the concept has expanded depending on changes in the relationship between business and society in time. One of the first scholars to define the concept is Howard R. Bowen. In his "Social Responsibilities of the Businessman" study, Bowen proposed CSR to be the obligation of businessmen rather than the obligation of institutions (Bowen 1953). However, over time the social responsibility of institutions had begun to be debated because of the growing power of businesses in society. According to "Shareholder Approach" which has been developed within the framework of Milton Friedman's views and based on "invisible hand principle" of Adam Smith, the social responsibility of the companies can be achieved through the practical use of social resources (Wan and Wan 2006). Gaining maximum profits is an indication of the practical use of social resources. Companies are profit-oriented institutions, and they should not focus on social goals (Friedman 1962). In contrast to this view, McGuire (1963) emphasised that responsibility areas of businesses are far beyond the economic and legal obligations.

Similarly, Davis (1973) argued that CSR began at the end of the law. Sethi (1975) defined economic and legal responsibilities as social obligations, but according to him, CSR is concerned with social norms and values beyond these obligations. Carroll (1979), who is the most cited scholar in CSR studies, defined CSR in four dimensions as economic, legal, ethical and discretionary. However, then in 1991, Carroll improved his famous "CSR pyramid". In the latter study, Carroll preferred to use the concept of "philanthropic responsibility" instead of "discretionary" (Carrol 1991). Furthermore, different from Milton Friedman's views, Carroll highlighted the multidimensional structure of CSR, but conspicuously economic aims are also accepted as the basis of the pyramid in this study. Lantos divided Carroll's CSR dimensions into altruistic CSR and strategic CSR. Economic, legal and ethical responsibilities stayed in strategic CSR, and altruistic CSR was defined as "genuine and optional personal and organisational sacrifice"(Lantos 2001). Lantos (2001) also emphasised that altruistic CSR is unethical and should not be practised by public firms. It is only appropriate for private firms because it is not one of the main activities of the business. McWilliams and Siegel (2001), who argued that social responsibility boundaries could change according to the size of companies, defined CSR as the sum of company interests, legal obligations and social benefits. In the same study, they emphasised that being fair, legal or profitable are not the same as CSR, but that CSR expresses extra efforts or contributions made for society (McWilliams and Siegel 2001). On the other hand, the "stakeholder approach" also has an essential place in the development of the CSR concept.

While the concept of stakeholder takes place in various studies, Freeman's definition is widely accepted. According to Freeman (1984), "the stakeholder is any person or group that will influence or be affected by the achievement of the company's goals". In other words, stakeholders include anyone that affects them, or that is affected by the organisation's activities (Gray 2001). With the widespread acceptance of the stakeholder approach, responsibility areas of the business have also begun to be assessed among stakeholders. According to Hopkins (2003), CSR is defined as "treating the stakeholders in the firm ethically or in a responsible manner".

Today, CSR definitions of some important international organisations and practitioners are widely accepted, and these definitions are also based on the stakeholder approach. According to United Nations Industrial Development Organization's definition, CSR "is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders". The Commission of the European Communities explains CSR in two dimensions, internal and external. While employees and shareholders are involved within the internal dimension, business partners and suppliers, customers, public authorities and NGOs representing local communities as well as the environment are involved in the external dimension. Similarly, the International Business Leaders Forum (IBLF) defines CSR as "open and transparent business practices that are based on ethical values and respect for employees, communities and the environment. It is designed to deliver sustainable value to society at large, as well as to shareholders".

In this study, CSR is also considered within the framework of the stakeholder approach and is defined as the fair, transparent and ethical behaviour of business towards its all stakeholders.

7.2.2 Measuring Corporate Social Responsibility

In addition to discussions regarding the social responsibility areas of businesses, the measurement of CSR is also a matter of debate in the literature. Carroll (2000) notes that corporate social performance (CSP) can be measured and should not be separated from the firm's performance (Carroll 2000). He emphasises that the main problem is to develop valid and reliable measures. By emphasising the difficulty in measuring social performance, Waddock and Graves (1997) express the need for a new method that includes different research methods, reputation indices, analysis documents, as well as behavioural and perceptual measurements and case studies. Wartick and Cochran (1985) and Wood (1991) describe "performance" as related to organisational structures, processes, motivations or outcomes. According to this approach, the measurement of CSP should (1) be sensitive to the various CSR factors, (2) be independent of the organisation's characteristics, (3) be based on outcome measures and (4) reflect the values of stakeholders (Ruf et al. 1998).

While there are so many different approaches to measuring CSR in both academic writing and practice, the social performance measurement methods could be summarised into four categories:

– reputation indices and databases,
– social performance scales,
– content analysis and
– social performance indices.

At the end of the 1960s, the first reputation index emerged as Council of Economic Priorities (CEP). CEP is a one-dimensional index to measure the pollution performance of companies, and it has been used in many academic studies (Bragdan and Marlin 1972; Bowman and Haire 1975; Fogler and Nutt 1975) to measure social responsibility. Nonetheless, the index consists of only one dimension, so it has an important constraint to measure the multidimensional structure of CSR (Maignan and Ferrell 2000).

A second reputation index was generated by Milton Moskowitz, who categorised firms as "outstanding", "honourable mention" or "worst" according to their awareness to social issues (Moskowitz 1972, 1975). Moskowitz's model has also been used by some researchers like Bowman and Haire (1975), Sturdivant and Ginter (1977) and Cochran and Wood (1984). This method, however, has been criticised because the validity of this methodology depends on the sample selection process and the qualifications of those making the assessments (Abbott and Monsen 1979). In addition to this, the ratings of individuals may not necessarily be comparable (Ruf et al. 1998).

Currently, one of the most popular measures of reputation is Fortune's Most Admired Company Surveys. This index ranks corporations from a managerial point of view and according to the following eight qualitative attributes: (1) quality of management, (2) quality of products or services, (3) value as a long-term investment, (4) innovativeness, (5) soundness of financial position, (6) ability to attract, develop and keep talented people, (7) responsibility to the community and environment and (8) wise use of corporate assets (Brown and Perry 1994). Although widely used, the validity of the Fortune survey is still criticised due to the survey being heavily based on financial performance criteria (Fombrun and Shanley 1990; Brown and Perry 1994; Fryxell and Wang 1994), and also evaluation concerns by industry experts (Flanagan et al. 2011). Besides the Fortune ratings, various magazine surveys are also used for measuring reputation around the World.

Another critical measure is the KLD database. Kinder, Lydenberg and Domini (KLD) is a rating agency that scales companies traded on the American stock exchange and focuses solely on CSR measurement. "KLD 400 Social Index" was created in 1990 by Kinder, Lydenberg and Domini. The index was named FTSE KLD 400 Social Index in 2009 and is now listed in the MSCI (Morgan Stanley Capital International) Index Series. The measurement headings of the KLD include community relations, employee relations, environment, product, treatment of women and minorities, military contracts, nuclear power and South Africa. The main difference between the Fortune and KLD database is that the KLD database is created with the contributions of "external experts" while the Fortune database is built up with the contributions of "internal experts" of a certain number of industries. Therefore, KLD values institutions based on more specific criteria. While Fortune is based mainly on economic data, the KLD is based on both economic and social data.

The second method of measuring CSR is social performance scales. Social performance scales are measurement models created at individual or organisational levels by combining different criteria for the measurement of CSR. One of the first examples was developed by Aupperle et al. (1985). This scale was based on the four-dimensional model of Carroll (1979), and it is important to consider the measurement of CSR by multiple criteria. Another notable example of social performance scales was developed by Ruf et al. (1998). They developed a scale which included KLD's eight performance criteria and by using an analytic hierarchy process. Quazi and O'Brien (2000) have also developed a two-dimensional social performance scale. However, this scale is suitable for revealing the perceptions of different managers, but not for measuring the organisational involvement with socially responsible activities

(Turker 2009). Another social performance scale belongs to Maignan and Ferrell (2000). However, unlike the others, the "Corporate citizenship scale" of Maignan and Ferrell (2000) is prepared at the organisational level. They used Carroll's (1979) responsibility dimensions (economic, legal, ethical and discretionary) within the scope of stakeholders. Nonetheless, they considered only three stakeholders: customers, employees and the public (Turker 2009).

The third method for measuring the CSR performance is to use content analysis. Abbott and Monsen (1979) developed a corporate social involvement disclosure scale based on a content analysis of the Fortune 500 companies. They analysed the response of the Fortune 500 to criticism and governmental pressure, the dimensions of such corporate response, and the relationship between social involvement and corporate profitability. Content analysis method has been used by many other researchers like Anderson and Frankle (1980), Freedman and Jaggi (1982), Bowman and Haire (1975), and Gray et al. (1995). According to Abbott and Monsen (1979), the content analysis method of measuring corporate social involvement has significant advantages as a technique for measuring corporate social responsibility. On the other hand, the major limitation of this measure is that given information about the corporate in annual reports can be different of the actual actions of business (McGuire et al. 1988).

The fourth social performance measurement method is social indices. Social performance indices, which are known as social responsibility or sustainability indices, aim to demonstrate the company's social, environmental and managerial performance and enable investors to invest in socially responsible companies. The most famous examples are the Dow Jones Sustainability Index and the FTSE4Good Index. Dow Jones Sustainability Index (DJSI) was launched in 1999. The Index aims to measure the sustainability performance of companies. DJSI collects sustainability indicators under three headings: economic, environmental and social. Another global accepted index is the FTSE4Good Index. Financial Times Stock Exchange (FTSE) is an organisation that established in 1995 with the cooperation of "Financial Times" Newspaper and London Stock Exchange. The FTSE4Good index is one of the socially responsible investment indices, and FTSE launched it in 2001. FTSE4Good has many commercial indices. The purpose of the index series is to measure performance and facilitate investments in companies with social responsibility. The FTSE4Good Index first lists companies according to five main criteria. These criteria are environmental sustainability, human rights, supply chain and labour standards, anti-corruption and climate change.

Besides FTSE4Good and Dow Jones, social indices have appeared in many countries in recent years. Sustainability indices have been implemented in many developed countries such as Germany (2007), Spain (2008), Austria (2008), Denmark (2008), Sweden (2008) and Norway (2008). South Africa (2004) and Brazil (2005), which have the sustainability index much earlier than developed countries, have been a guide for developed countries. South Africa Sustainability Index (JSE SRI Index) was launched in 2004. It is expected that the companies included in the index should adopt the triple bottom line principle and good corporate governance practices. The main headings of the index criteria are defined as the environment, society and management.

7.2.3 Classification Shifting

Classification shifting is one form of earnings management (EM). It is defined by McVay (2006) as the deliberate misclassification of income statement items to affect the decisions of financial statement users. The misclassification can be made between core expenses (operating expenses) and unique items (write-downs or writes of receivables, inventories, equipment or intangibles or gain or sale from the sale of equipment and investments) as measured by McVay (2006) and Fan et al. (2010). It can also be made through misclassification of core expenses as discontinued operations (Barua et al. 2010), or operating expenses as non-operating (Noh et al. 2014). Managers may also increase operating profit by classifying non-operating revenues as operating.

Most of the studies about classification shifting in the literature related with measurement of classification shifting. There are not a sufficient number of studies which investigate the motives of classification shifting or constraints to classification shifting. There are some studies which investigate the substitution effect of other earnings management methods with classification shifting. Abernathy et al. (2014) search whether managers use classification shifting more when there are restrictions to use accrual and real earnings management methods and find evidence that classification shifting is a substitute form of EM for both real and accrual earnings management. There is one study conducted by Athanasakou et al. (2011) which investigates the motive behind classification shifting and finds that UK firms use classification shifting to achieve analyst expectations. To our knowledge, there is no study in the literature which investigates the constraining effect of corporate social responsibility on classification shifting.

7.2.4 Hypothesis Development; CSR and Classification Shifting

There are many studies in the literature which examine the corporate social responsibility. One of the most studied subjects between them is the relationship between CSR and financial performance, and it has received considerable attention in the literature (Bragdon and Marlin 1972; Bowman and Haire 1975; Sturdivant and Ginter 1977; Cohran and Wood 1984; McGuire et al. 1988; Graves and Waddock 1994; Griffin and Mahon 1997; Hillman and Keim 2001; Lo and Sheu 2007; Andersen and Dejoy 2011; Kim and Statman 2012). Previous studies provide mixed results about the relationship between CSR and financial performance. Some of them show a positive relationship between CSR and financial performance (Bragdon and Marlin 1972; Heinze 1976; Anderson and Frankle 1980; Cochran and Wood 1984; Graves and Waddock 1994; Griffin and Mahon 1997; Graves and Waddock 2000; Lo and Sheu 2007) while some of them cannot provide a significant relationship between them (Alexander and Buchholz 1978; Hamilton et al. 1993; McWilliams and Siegel 2000). Another group of studies show mixed results (McGuire et al. 1988; Pava and Krausz 1996; Barnetti and Salomon 2006).

In the literature, CSR has also been recognised as one of the strategic parts of corporate reputation (Fombrun and Shanley 1990; Brown and Dacin 1997; Chun 2005; Fombrun 2005; Walker 2010; Bear et al. 2010). It is accepted as one of the strategic aims for corporations. Some studies provide evidence about the constraining effect of CSR on the firms' unethical behaviours like earnings manipulation. The studies examined the relationship between CSR and EM and also provide mixed results. A considerable amount of the studies show a significant negative relationship between CSR and EM. Some of these studies and their results are summarised in Table 7.1.

None of the previous studies related to the constraining effect of CSR on EM uses classification shifting as a measure of EM. Most of them use accrual management and real earnings management as the dependent variable. A common finding of these studies is that there is constraining effect of CSR on EM.

Based on the prior findings, we expect that socially responsible firms are less liable to make EM. CSR is a signal of future improvement for the firms and increases the reputation of the firms. Managers of the socially responsible firms will avoid from unethical behaviours to preserve their reputations. Therefore, we expect that socially responsible firms act reluctantly to manage earnings also through classification shifting. This expectation can be expressed as the following hypothesis.

$\boldsymbol{H_1}$: Socially responsible firms are less liable to make classification shifting between operating and non-operating expenses.

7.3 Data and Sample Selection

Financial data of the firms listed in Istanbul Stock Exchange obtained for the years 2007–2013. From the initial sample sales of less than 1 million are deleted to avoid outliers. Industries are classified according to Global Industry Classification Standards, and firms which belong to industries do not have more than eight firms are deleted. The full sample which is used in the expectation model has 920 firm-year observations. Then the content analysis is made to the financial reports of firms to determine corporate social responsibility variables. We obtained CSR data for 66 firms. The final sample has 447 firm-year observations.

Table 7.1 Studies and their findings

Authors	Year	Research question	CSR proxy	EM proxy	Findings
Cho and Chun	2016	Whether a firm's CSR activities are associated with real activities earnings management (RAEM), and whether corporate governance moderates this relationship	KEJI (Korea Economic Justice Institute) index	RAEM	A negative relationship between CSR activities and RAEM. Good corporate governance strengthens the negative relationship between CSR and RAEM
Gras-Gil et al.	2016	Whether the extent of CSR is negatively associated with the absolute value of discretionary accruals	MERCO index (Spanish Monitor of Corporate Reputation)	Discretionary accruals	A significant negative relationship between CSR practices and absolute discretionary accruals
Martínez-Ferreroa et al.	2016	Whether the EM practices decrease corporate reputation or increase the cost of capital Can CSR practices reduce the negative impact of EM on capital cost?	EIRIS database for CSR, and Fortune index for reputation	Discretionary accruals	CSR can be used to shield the negative effect of discretionary accounting practices on the cost of capital, and it can be used to shield negative perception about the company
Suteja et al.	2016	Moderating effect of EM on the relationship between CSR disclosures and profitability	SR index calculated from the CSR disclosure provided in a company's annual report	Discretionary accruals	CSR disclosure is performed by companies merely as a defence strategy to cover EM practices
Wang et al.	2016	The impact of mandatory CSR reporting on absolute discretionary accruals	Mandatory CSR disclosure firm in China	Discretionary accruals and Earnings smoothing	Mandatory CSR disclosure firms' absolute discretionary accruals decrease substantially relative to nondisclosure firms
Bozzolan et al.	2015	Whether CSR-oriented firms are less likely to engage in REM than in AEM	EIRIS database	Real earnings management (REM) and accrual-based earnings management (AEM)	Firms with high levels of CSR orientation engage less in EM. Good CSR firms engage less in REM (which is value destroying) than in AEM, and this partially explains why they exhibit higher performance

(continued)

Table 7.1 (continued)

Authors	Year	Research question	CSR proxy	EM proxy	Findings
Gao and Zhang	2015	Whether earnings smoothing is more value relevant in CSR firms	CSR Score (KLD database)	Earnings Smoothing	Income-smoothing is more value relevant for firms with higher CSR
Ko et al.	2015	The relationship between CSR and accrual management	Being included in socially responsible investment funds (SRI)	Discretionary accruals (Modified Jones' model)	The negative relationship between CSR proxy and level of discretionary accruals
Martínez-Ferrero et al.	2015	The relationship between CSR and EM. Whether this relationship is affected by the institutional approach and investor protection policy	EIRIS database	Discretionary accruals	Both the effect of EM on CSR and the effect of CSR on EM were estimated negative and statistically significant. A higher level of EM in countries that encourage social practices is associated with lower levels of CSR. However, there have not been any significant results in countries that encourage investor protection policy
Muttakin et al.	2015	The relationship between CSR disclosures and earnings quality proxied by earnings accruals	CSR disclosures	Discretionary accruals (Modified Jones' model)	The positive relationship between CSR disclosures and income-increasing discretionary accruals
Grougiou et al.	2014	The relationship between CSR and EM	KLD database	Loan loss allowance	Managers who manage earnings in the banking sector tend to participate in more CSR activities, while CSR has not got any significant effect on EM
				Realised gain or loss on available for sale securities	
Kiattikulwattana	2014	The relationship between voluntary disclosure of a statement of management's responsibility for the financial reports (MRF) and EM	Disclosure of a statement of MRF	Discretionary accruals (Modified Jones' model)	No significant relationship between voluntary disclosure and earnings quality
				Real earnings management	

(continued)

Table 7.1 (continued)

Authors	Year	Research question	CSR proxy	EM proxy	Findings
Tandry et al.	2014	Effect of EM on the relationship between CSR disclosures and firm value	CSR disclosures	Discretionary accruals (Modified Jones' model)	EM tends to have a negative influence on the relationship between CSR disclosures and the value of the firm
Choi et al.	2013	Is the relationship between financial transparency and CSR activities affected by the business group affiliation and ownership structure of firms	KEJI index	Discretionary accruals (Modified Jones' model)	CSR ratings are negatively correlated with the level of EM. However, the relationship is weaker for the firms has concentrated ownership
Scholtens and Kang	2013	How EM is associated with CSR	CSR score according to Asia Sustainability Research	Earnings smoothing and earnings aggressiveness	Asian firms with relatively good CSR are engaged significantly less with earnings EM
Kim et al.	2012	Whether socially responsible firms behave more ethical and transparent from other firms in their financial reporting	KLD database	Discretionary accruals, RAEM, and Accounting and Auditing Enforcement Releases (AAERs)	A negative relationship between CSR and discretionary accruals, and also CSR and RAEM
					Therefore, CSR firms are less likely than non-CSR firms to be subject to AAERs against their executives
Heltzer	2011	The relationships between EM and subsamples of corporate environmental responsibility	KLD database	Discretionary accruals (Modified Jones' model)	Firms which respect the environment do not engage in more or less EM, relative to environmentally neutral firms. However, firms which disrespect the environment tend to engage in higher levels of EM, relative to other sample firms
Hong and Andersen	2011	The relationship between CSR and EM	KLD database	Accruals quality	A negative impact of CSR practices on EM
				RAEM	

(continued)

Table 7.1 (continued)

Authors	Year	Research question	CSR proxy	EM proxy	Findings
Yip et al.	2011	Whether CSR disclosure is related to EM and if the relationship is mitigated by political cost considerations or by the firm's ethical predisposition	Disclosing CSR data on the websites, annual reports, or in a separate report	Discretionary accruals (Jones' model)	A significant relationship between CSR reporting and EM and the direction of relationship changes according to the industry of the firm
Gargouri et al.	2010	The relationship between corporate social performance (CSP) and EM	Canadian social investment database	Discretionary accruals (Modified Jones' model)	Level of CSP is positively associated with EM
Sun et al.	2010	The relationship between corporate environmental disclosure and EM	Reports of UK's environment agency trucost	Discretionary accruals	No significant relation
Chih et al.	2008	The relationship between earnings management and corporate social responsibility (CSR)	FTSE all-world developed index	Earnings smoothing Earnings aggressiveness Earnings losses and decreases avoidance	CSR firms conduct fewer earnings smoothing, but more earnings aggressiveness. Companies in the non-CSR group have higher incentives to avoid decreases in earnings
Prior et al.	2008	The relationship between earnings EM and CSR	CSR score obtained from SiRi Pro data	Discretionary accruals	The positive impact of earnings management practices on CSR

7.4 Research Methodology

In the study, classification shifting between operating and non-operating expenses is measured by the expectation model developed by McVay (2006). The model applied to each year and industry which has at least eight firms. In the model operating profit estimated as a linear function of operating profit of the previous year, asset turnover ratio, accruals of the previous year, change in sales and neglected change in sales as follows:

$$\mathrm{OP}_t = \beta_0 + \beta_1\ \mathrm{OP}_{t-1} + \beta_2\ \mathrm{ATO_t} + \beta_3\ \mathrm{Accruals}_{t-1} + \beta_4\ \Delta\mathrm{Sales}_t + \beta_5\ \mathrm{Neg}\Delta\mathrm{Sales}_t \tag{7.1}$$

where

OP	Operating Profit scaled by sales [(Sales-COGS- Selling, General, and Administrative Expenses)/Sales],
ATO	asset turnover ratio,
Accruals	the difference between net income before extraordinary items and cash flow from operations. The difference scaled by sales,
ΔSales	is the change in sales and
NegΔSales	is the per cent change in sales if ΔSales is less than zero, otherwise 0.

In the model developed by McVay (2006), the difference between the expected and actual operating profit is determined as unexpected operating profit. In the original model, McVay (2006) also uses the current period's accruals as an explanatory variable. Following Fan et al. (2010) and Adıgüzel (2017), we removed contemporaneous accruals from the model because of the mechanical relationship between unexpected operating profit and accrual-based non-operating expenses. Instead, in the multiple regression model, we used income-decreasing discretionary accruals as a control variable to control the optional part of accrual-based operating and non-operating expenses.

To test the likelihood of classification shifting in socially responsible firms (Hypothesis 1), the following equation is estimated:

$$\begin{aligned} UE\_OP_t = \beta_0 &+ \beta_1 \mathrm{Non\text{ - }Op\text{ - }Loss_t} + \beta_2 \mathrm{CSR\_Score}_t \\ &+ \beta_3 \mathrm{Non\text{ - }Op\text{ - }Loss}_t * \mathrm{CSR\_Score} + \beta_4 \mathrm{Abs\text{ - }IncDec\text{ - }Acc}_t \\ &+ \beta_5 \mathrm{Log\_Assets}_t + \beta_6 \mathrm{Leverage}_t \end{aligned} \tag{7.2}$$

UE_OP, the dependent variable of the model calculated as an unexpected change in the operating profit scaled by sales where unexpected operating profit is the difference between actual and expected operating profit. Non-Op-Loss variable is defined as the non-operating loss scaled by sales, and it is multiplied with −1. So the higher positive values of non-operating loss indicate more non-operating expenses (less non-operating revenues) in the period. If the firm has non-operating income, it is set to zero. $\mathrm{CSR\_Score}_t$ is determined through 57 variables within the framework of

Table 7.2 Descriptive statistics of the sample

Variable	Mean	Median	Std. Dev.	Min	Max
UE_OP	0.0018	0.0019	0.1309	−1.4113	1.0878
Non-Op-Loss	0.0820	0.1556	0.4534	0.0000	7.1020
CSR_Score	43.624	42.028	14.73	11.59	85.50
Abs-IncDec-Acc	0.2193	0.0000	2.3645	0.000	40.883
Log_Assets	5.938	5.8625	0.5156	4.0326	7.1668
Leverage	0.5859	0.4864	0.8923	0.0080	17.567

Variables
UE_OP Unexpected Operating profit scaled by sales
Non-Op-Loss Non-operating loss as a percentage of sales multiplied by −1. Non-operating income set to zero
CSR_Score Score of "corporate social responsibility", measured as a percentage share of company score in total CSR score
Log_Assets Log of total lag assets
Leverage Total liabilities/Lag total assets
Abs-IncDec-Acc Absolute value of income-decreasing discretionary accruals, set to zero for income-increasing accruals

stakeholders. A scale which considers eight stakeholders (employee rights, management structure, consumers, suppliers, product quality, environment, CSR strategies and society (CSR projects and investments)) is generated. Each criterion was scored 0–2 points, and the data were collected by content analysis from annual reports, non-financial reports, corporate governance reports and firms' press releases. To measure the effect of corporate social responsibility on the association between unexpected operating profit and non-operating loss, an interaction variable is used as Non-Op-Loss$_t$ * CSR_Score. Abs-IncDec-Acc variable is the absolute value of income-decreasing discretionary accruals scaled by assets. Income-decreasing discretionary accruals are used as a control variable to control the optional part of accrual-based operating and non-operating expenses. Log_Assets is the natural log of the total lag assets and used to control for the variations in the firms' sizes. Leverage is the total liabilities divided by lag total assets.

Table 7.2 shows descriptive statistics of the variables used in the multiple regression analysis. Mean and median values of UE_OP variable are very close to zero while minimum value and maximum values are −1.4113 and 1.0878, respectively. Non-Op-Loss has a mean value of 0.082 and median value of 0.155. A minimum value of Non-Op-Loss is zero because non-operating income values are set to zero in the model. CSR_Score changes between 11.59 and 85.50 and has a mean value of 43.62 and median value of 42.03. The minimum value of Abs-IncDec-Acc is zero because income-increasing accruals are set to zero in the model. The median value of zero for Abs-IncDec-Acc variable implies that more than half of the firm-years have income-increasing accruals.

Table 7.3 Pearson Correlations

	UE_OP	Non-Op-Loss	CSR_Score	Leverage	Log_Assets	Abs-IncDec-Acc
UE_OP	1.000					
Non-Op-Loss	*0.1029* *(0.0296)*	1.000				
CSR_Score	0.0542 (0.2526)	*−0.2315* *(0.0000)*	1.000			
Leverage	−0.0066 (0.8889)	−0.0299 (0.5278)	−0.0454 (0.3382)	1.000		
Log_Assets	*0.1260* *(0.0077)*	*−0.1355* *(0.0041)*	*0.4284* *(0.0000)*	*−0.1100* *(0.0200)*	1.000	
Abs-IncDec-Acc	*−0.1984* *(0.0000)*	*0.3143* *(0.0000)*	−0.0805 (0.0890)	0.0174 (0.7141)	*−0.1783* *(0.0002)*	1.000

Variables
UE_OP Unexpected Operating profit scaled by sales. Unexpected operating profit is the difference between actual and expected operating profit. Expected operating profit is calculated using the coefficients from the following model
$OP_t = \beta_0 + \beta_1\, OP_{t-1} + \beta_2\, ATO_t + \beta_3\, Accruals_{\,t-1} + \beta_4\, \Delta Sales_t + \beta_5\, Neg\Delta Sales_t$
Non-Op-Loss Non-operating loss divided by sales and multiplied by −1. Non-operating profit set to zero
CSR_Score Score of "corporate social responsibility", measured as a percentage share of company score in total CSR score
Abs-IncDec-Acc Absolute income is decreasing discretionary accruals, for the income-increasing accruals the value is set to 0
Log_Assets Log of total assets
Leverage Total liabilities/Lag total assets

7.5 Results

Table 7.3 provides Pearson correlations among variables of the model. The bold numbers indicate statistical significance at 0.05 and 0.01. There is a positive and significant correlation (0.1029) between UE_OP and Non-Op-Loss which shows classification shifting. The negative and significant correlation between CSR_Score and Non-Op-Loss indicates that socially responsible firms have lower non-operating expenses. Log_Assets has significant correlations with all of the variables. From these correlations, we can state that more prominent firms have higher unexpected operating profit and are more socially responsible. More prominent firms have more non-operating income rather than non-operating loss, and their debt ratios are lower. They have less income-decreasing discretionary accruals. The negative and significant coefficient between Abs-IncDec-Acc and UE_OP (−0.1984) suggests that the firms who manage accruals to have a lower income have lower unexpected operating profit.

Table 7.4 reports the estimation results of the model which examines the level of classification shifting in socially responsible firms. The positive and significant

Table 7.4 Multiple regression results

Model 2		
Variable	Predicted sign	Coefficient (z-statistics)
Intercept		−0.1580 (−2.18)**
Non-Op-Loss	+	*0.0736* (1.70)*
CSR_Score_t		0.0004 (0.86)
Non-Op-Loss $_t$* CSR_Score		−0.0011 (−0.38)
Abs-IncDec-Acc		*−0.0131* (−4.80)***
Log_Assets		0.0236 (1.81)*
Leverage		0.0022 (0.33)
Adjusted R^2	36%	
Chi^2	39.88	
Number of observations	447	
Number of firms	66	
Period	2007–2013	

*,**,*** indicates statistical significance at 0.1, 0.05, 0.01%

Variables

UE_OP Unexpected Operating profit scaled by sales where unexpected operating profit is the difference between actual and expected operating profit. Expected value is calculated using the coefficients from model 1

$OP_t = \beta_0 + \beta_1 OP_{t-1} + \beta_2 ATO_t + \beta_3 Accruals_{t-1} + \beta_4 \Delta Sales_t + \beta_5 Neg\Delta Sales_t$ (7.3)

Non-Op-Loss Non-operating loss as a percentage of sales multiplied by −1. Non-operating income set to zero

CSR_Score Score of "corporate social responsibility", measured as the percentage share of company score in total CSR score

Abs-IncDec-Acc Absolute value of income-decreasing discretionary accruals (for the income-increasing accruals the value is set to 0) calculated using the coefficients from the model below. Model applied for each year and for each industry group as

$Ta_t/Asset_{t-1} = \beta_0 + \alpha\ [1/Asset_{t-1}] + \beta_1\ [(\Delta Sales_t - \Delta AccRec_t)/Asset_{t-1}] + \beta_2\ [PPE_t/Asset_{t-1}] + \beta_3 - ROA_{t-1} + \varepsilon_t$

Ta total accruals

ΔSales revenues in year $_t$ less revenues in year $_{t-1}$

ΔAccRec net receivables in year $_t$ less net receivables in year $_{t-1}$

PPE gross property, plant, and equipment in year $_t$

ROA return on asset in year $_t$

Asset total assets

Log_Assets Log of total assets

Leverage Total liabilities/Lag total assets coefficient of Non-Op-Loss (0.0736) indicates classification shifting between operating and non-operating expenses in the firms which are not socially responsible. The interaction variable Non-Op-Loss$_t$ * CSR_Score has a negative but not significant coefficient of −0.0011. Although it is not significant the direction of coefficient states that classification shifting is lower in socially responsible firms compared with not socially responsible firms. The significant and negative coefficient of Abs-IncDec-Acc (−0.0131) states that the firms who manage accruals to have a lower income have lower unexpected operating profit. The overall findings state that socially responsible firms make less classification shifting than not socially responsible firms.

7.6 Conclusion

In this book chapter, we investigate the constraining effect of corporate social responsibility on earnings management practices of managers. In the literature, a considerable amount of studies investigate this relationship by using the accrual management and real activities management as earnings management methods. Most of them provide evidence of a significant negative relationship between CSR and earnings management. To our knowledge, this is the first study investigating the constraining effect of CSR on classification shifting between operating and non-operating expenses.

We determined the CSR scores of the firms through 57 variables within the framework of stakeholders. Our scale includes variables about the eight stakeholders; employee rights, management structure, consumers, suppliers, product quality, environment, CSR strategies and society (CSR projects and investments). We measured classification shifting between operating and non-operating expenses by using the expectation model developed by McVay(2006) with a modification. We exclude contemporaneous accruals from the model.

Our findings support the typical findings of the previous studies. We found that socially responsible firms are less liable to make earnings management through classification shifting. This finding supports the assumption that socially responsible firms avoid from unethical behaviours to protect their reputations.

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