

Social and Environmental Reporting and the Co-creation of Corporate Legitimacy

Asit Bhattacharyya

Newcastle Business School, University of Newcastle

E-Mail: asit.bhatta@newcastle.edu.au

Frank Wogbe Agbola

Newcastle Business School, University of Newcastle

E-Mail: Frank.Agbola@newcastle.edu.au

ABSTRACT

This paper extends the legitimacy theory by empirically investigating the extent and context of social, environmental and total voluntary non-financial disclosures across industries. The study uses 312 annual reports of publicly listed Indian companies for the accounting years 2006, 2012 and 2014. We follow a Multivariate Ordinary Least Squares (MOLS) modelling framework to test the hypotheses. Our empirical results indicate that the decision to provide voluntary non-financial disclosure is positively related to a firm's age, profitability, industrial category and leverage. Our results further indicate that, contrary to legitimacy theory, the decision to provide social and environmental non-financial disclosures by sampled publicly listed companies is found to correlate negatively with consumer proximity, leverage and industrial transport industry membership. Our results add new empirical evidence to support the view that non-financial disclosure by companies is influenced by country-specific characteristics within which the firm operates. Future research could extend the study to other emerging countries and include data from unlisted companies to validate our findings.

Keywords: Legitimacy Theory, Annual Report, Social Disclosure, Environmental Disclosure

INTRODUCTION

In recent years, there have been growing calls from investors and policy makers for voluntary social and environmental disclosures (SED) of firm activities to improve confidence in the operation of businesses globally. This has engendered a growing number of studies that have attempted to investigate the importance of non-financial

disclosures of companies (e.g., Ahn & Park, 2018; Baldini, Maso, Liberatore, Mazzi, & Terzani, 2018; Mahadeo, Hanuman, & Soobaroyen, 2011; Yin & Zhang, 2012; Lu & Abeyssekera, 2014; Behram, 2015). These studies and others (Claasen & Roloff, 2012; Omran & Ramdhony, 2015; Ramdhony, 2015) have relied on the legitimacy theory to explain SED by companies. Legitimacy theory is based on the premise that a company's value system is congruent with society's value system and thus society's expectation and firms' objectives are the same (Lindblom, 1994; Suchman, 1995). Lindblom (1994) defines legitimacy as "a condition or a status which exists when an entity's value system is congruent with the value system of the larger social system in which the entity operates" (p. 2). Corporate legitimacy, therefore, focuses on ensuring that the roles of firms are appropriate and meet the needs of society. According to Gray, Kouhy, and Lavers (1995), legitimacy theory provides a framework for explaining the non-financial disclosure strategies of companies, and this is empirically testable.

The literature suggest that many authors uses a matrix to examine the drivers of differences in disclosures in different context. Legitimacy theory is a "system-oriented" theory that underlines the investigations of "the role of information and disclosure in the relationship(s) between organizations, the State, individuals, and groups" (Gray, Owen, & Adams, 1996, p. 45). Deegan (2002) added that system-oriented theories identify disclosure as an "important means by which management can influence external perceptions about their organization" (p. 292). When business are espoused to the social, cultural and political practices through which social legitimacy is scrutinised and conferred (Patten, 1991), they are motivated to use disclosure to enhance their legitimacy. Therefore, differences in CSR disclosures amount are expected to be related to differences in socio-cultural experiences. Prior literature provides evidence that "corporate social and environmental disclosure strategies have been linked to legitimizing intentions" (Deegan, 2002, p. 297) and that differences in the volume of CSR disclosure are likely to be related with factors that capture different sociocultural exposures. In our study, we attempt to investigate whether the use of disclosure as a legitimating device changes along with changes in context.

We argue that, given the prominent regional socio-cultural differences, corporate non-financial disclosure strategies of a firm are determined by a country's socio-cultural setting. The objective of this paper is to investigate the determinants of non-financial disclosure of Indian publicly listed companies under the voluntary disclosure regime. Given the regional socio-cultural differences that exist, an understanding of the determinants of voluntary non-financial disclosure of companies in the emerging Asia region is pertinent. Based on legitimacy theory, we proceeded to test six hypotheses, and we find empirical evidence to show that the corporate disclosure strategies of a firm are influenced, within the context of India's publicly listed companies, by the country's socio-cultural setting.

The current study extends the legitimacy theoretic framework developed by Suchman (1995) to empirically validate the efficacy of the legitimacy theory in explaining the non-financial disclosure strategies of a firm within the developing country context of India's publicly listed companies. India is one of the largest and most important emerging economies in Asia, but it has experienced recurring fluctuations in its economy. In recent years, India has experienced a volatile economic growth trajectory. According to a recent report by the World Bank, the Indian economy grew by 8.5% in 2009, peaking at 10.5% in 2010 but declining quite dramatically to 3.2% in 2013 (The World Bank, 2014). Moreover, India is one of the largest CO₂-emitting countries in the world. It is estimated that India's emissions total about 6% of GDP, and this is projected to rise as the economy grows (EC, 2012). Moreover, Indian SED practices are far behind the SED practices of developed countries (Kansal, Joshi, & Batra, 2014).

We make three major contributions to the extant literature. First, we empirically validate the legitimacy theory for explaining non-financial disclosure by companies within a developing country context. Although some previous studies (Islam & Dellaportas, 2011; Kansal, Joshi, & Batra, 2014; Li & Zhang, 2010; Lu & Abeysekera, 2014; Mahadeo et al., 2011; Yin & Zhang, 2012) have examined the underlying forces of corporate social and environmental disclosures in developing countries, but determinants are not been explored within the context of legitimacy theory. Therefore, this study makes the first attempt to use legitimacy theory to examine non-financial disclosure strategies of companies in a south Asian developing country context. Second, in contrast to previous studies, we focus on industries that are perceived to be socially and environmentally sensitive. By ensuring that the study covers companies that have different profiles and strategies, we can enable critical validation of the legitimacy theory by accounting for the within- and cross-industry effects on non-financial disclosure of companies. Third, this study marks the first attempt to examine non-financial disclosure of one of the largest and fastest-growing global economies. This study is valuable in providing new insights into how companies operating in such an economy pursue social and environmental disclosures. In recent times India has implemented regulatory frameworks to improve the business climate. Embedding social and environmental criteria within the supply chain of companies, including its procurement practices, and adopting international quality standards and benchmarking are critical steps toward improving sustainable practices of companies in India.

The remainder of this paper is organised as follows. Section 2 provides an overview of the literature on legitimacy theory and develops the hypothesised relationships. Section 3 describes the methodology employed in the analyses and the description of the data sources of Indian publicly listed companies. Section 4 reports the empirical findings, while Section 5 discusses the empirical results. Finally, Section

6 summarises the main conclusions of the study and discusses the limitations and implications for future research.

THEORETICAL FRAMEWORK

System-oriented theories, such as legitimacy and institutional theory, are based on the premise that the actions of a firm are likely to have an impact on society, and vice versa (Chen & Roberts, 2010; Gray et al., 1995, 1996). Although these theories have different levels of promise, perception and specificity, they have same objectives to a great extent (Chen & Roberts, 2010). Given that there is no universally accepted theory for explaining CSR practices of a firm, this study adopts the legitimacy and institutional theories of the firm as the foundational theories for explaining the determinants of non-financial disclosure of publicly listed companies in India. Gray et al. (1995) outlines the benefits of legitimacy theory and articulate strategies to enhance the competitiveness of firms in the global marketplace.

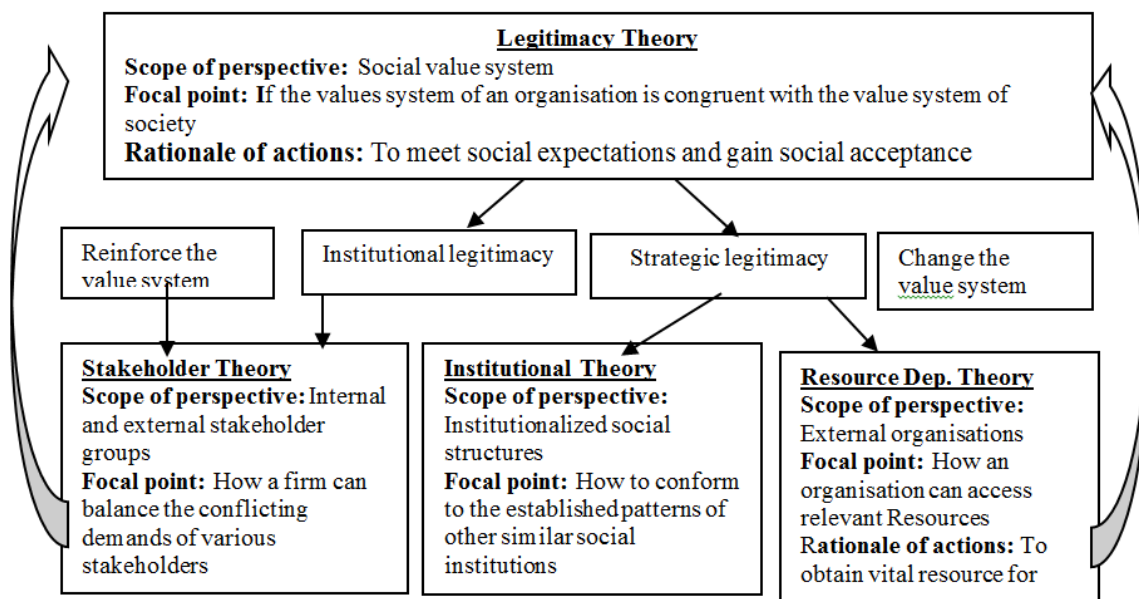
The relationship between firms and society can be explained using the legitimacy and institutional theories of the firm. Arguably, while firm decisions are traditionally made to ensure competitiveness in the marketplace, these actions are also likely to be defined by actions of society. For example, Amran and Devi (2008) argue that in recent times there has been a growing trend toward recognising the cognitive rather than the evaluative dimensions of human behaviour. Earlier, De Villiers and van Staden (2006) contended that if a firm perceives that society demands a set of information, the firm is likely to respond by providing such information to ensure that the firm maintains its legitimacy in society. Notably, social expectations of society vary from one location to another and from one country to another (Van Der Laan Smith, Adhikari, & Tondkar, 2005). The institutional theory provides the basis for explaining the influence of culture on CSR. Legitimacy is therefore perceived as providing congruency between a firm and its cultural environment, with greater emphasis on the cognitive rather than the evaluative dimensions of human behaviour (Amran & Devi, 2008). Therefore, legitimacy and institutional theories are capable of explaining different societal expectations and are thus closely interconnected.

The theories linking CSR and its determinants are depicted in Figure 1. Figure 1 shows that each theoretical framework can be utilised to analyse the essential conditions of a complex social occurrence. “Legitimacy theory appears to have a higher level of analysis than institutional theory, followed by resource dependence theory and stakeholder theory. However, they have a shared interest to explain how organisations survive in a changing society” (Chen & Robert, 2010, p. 653).

Considering the advantage of legitimacy theory over other theories, as illustrated by Gray et al. (1995), we use legitimacy theory as our theoretical foundation. Several studies have used legitimacy theory to explain CSR practices (Bachmann & Ingenhoff,

2017; Claasen & Roloff, 2012; Dube & Maroun, 2017; Mobus, 2005; Nègre, Verdier, Cho, & Patten, 2017; Scherer, 2018), but there is a growing body of literature arguing that CSR practices are more culturally or institutionally specific than general legitimacy (Campbell, 2007). CSR is dependent on the external environment in which companies are embedded (Marquis et al., 2007). Thus, understanding CSR practices requires an extensive view of the different contexts in which individual companies operate (Yin & Zhang, 2012). Prior studies point out that despite the increasing dominance of western CSR design, much deviation remains across contexts (Shafer et al., 2007; Yin & Zhang, 2012). Although there exist a growing number of theoretical and empirical studies on non-financial disclosure of firms, the interrelationship and determinantsof CSR in a developing country context remain unresolved (Belal & Owen, 2007; Jamali & Mirshak, 2007; Mahadeo et al., 2011; Yin & Zhang, 2012). This study aims to bridge this knowledge gap by providing a comprehensive analysis of CSR disclosure within the major developing country context of India.

Understanding of the Organisation–Society Relationship



Note. From “Toward a more coherent understanding of the organisation–society relationship: A theoretical consideration for social and environmental accounting research,” by J. C. Chen & R. W. Roberts (2010). *Journal of Business Ethics*, 97(4), p. 653.

Figure 1 The Relationships between Three Theories

A review of the literature has revealed three main strategies for sustaining legitimacy. First, firms can adjust their output, goals and methods of operation to enhance their competitiveness in the ever-changing global economy. Second, firms can

enhance their social legitimacy by communicating their practices to consumers, thus improving their image in the marketplace. Third, firms can use symbols to differentiate their product from competitors or link up with other firms with social legitimacy as a means of enhancing their own image among consumers (Dowling & Pfeffer, 1975). Some proponents of legitimacy theory (e.g., Bitektine, 2011) argue that a firm is perceived as legitimate if it is acting according to societal expectations or successfully manipulating expectations and perceptions of society concerning the firm. For Branco and Rodrigues (2008), legitimacy arises from a firm having embedded itself in the social environment in which it operates; as a result, its performance and expectations are affected by the environment. This boundary, therefore, determines the firm's survival and success. Cormier and Magnan (2003) and later Branco and Rodrigues (2008) argue that the corporate non-financial disclosure strategies of a firm are determined irrespective of the country's socio-cultural setting.

The seminal work of Suchman (1995) integrates the extant literature and employs the legitimacy theory popularised by Lindblom (1994) to explain the factors influencing disclosure by companies. We adopt Suchman's (1995) definition of legitimacy as "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions". While a growing number of studies have provided alternative means for sustaining legitimacy, there is no consensus regarding what it entails. Moreover, there is still no consensus regarding whether legitimacy can provide a comprehensive explanation of non-financial disclosures of a firm. Cormier and Magnan (2003) examined the environmental disclosure practices of French companies and found that corporate disclosure strategies are influenced by the prevailing environment within which a firm operates. In a related study, based on social legitimacy theory, Branco and Rodrigues (2008) argue that as firms are embedded within their social environments, their operations are influenced by their interface. However, Behram (2015) fails to confirm legitimacy theory as an explicator of environmental disclosure of firms in Turkey. Muttakin and Khan (2014), in their study of firm operations in Bangladesh, found that firm and industry characteristics do not account for corporate social responsibility disclosures. Rather, the CSR disclosure of firms in Bangladesh is determined by the pressures exerted by stakeholder groups. Some authors have argued that the driving force of social and environmental disclosure in emerging countries is pressure from powerful international lending institutions (Rahaman, Lawrence, & Roper, 2004), specific stakeholders (Belal & Owen, 2007), and 'outside forces' (Islam & Deegan, 2008). Pressures other than those of consumers may include pressures from non-governmental organisations or civil society groups, which are often the driving force behind social and environmental disclosures in developed countries (Islam & Deegan, 2008).

As Islam and Dellaportas (2011) observed, within the context of developing countries, there exists a multitude of social, political, economic and cultural factors that impact the decision making of firms. These many include the pattern of corporate ownership, business law and regulation, and state intervention in commercial and private activities, which in turn influence the decision-making process as it relates to social and environmental disclosures. Other factors that influence non-financial disclosure are religious or ethnic considerations, the degree of public concern about the environment, the prominence of civil society (Jamali & Mirshak, 2007) and attitudes toward philanthropy or social responsibility (Mahadeo et al., 2011). Despite this, there is a dearth of studies examining the determinants of social and environmental disclosure in developing countries (Belal & Momin, 2009; Jamali & Mirshak, 2007). Given the importance of social and environmental disclosure of a firm, as well as the fact that these disclosures in emerging economies differ from those of developed countries, in which most empirical studies have been conducted (Belal & Momin, 2009; Islam & Dellaportas, 2011; Mahadeo et al., 2011), there is a need for further study in this areas. Thus, the focus of the current study is to provide a comprehensive analysis of the determinants of social and environmental disclosures of firms within a developing country context, which has thus far been lacking in the empirical literature.

HYPOTHESIS DEVELOPMENT

Context and Determinants of Non-Financial Disclosure

A review of the extant literature has revealed the growing importance of evaluating social and environmental disclosures within a national context (Haniffa & Cooke, 2005). The theoretical arguments predict the association between disclosure and a range of firm characteristics. Utilising the tenets of legitimacy theory, we explicate the relationships between social and environmental disclosures and key factors deduced from the extant literature, including international experience, consumer proximity, size, industry, profitability and leverage. Given the dearth of studies on the Indian economy, this study extends the legitimacy theory by examining other key drivers of social and environmental disclosures. These factors may include the role of sustainability committees and board composition, particularly with regard to members on social and environmental duties. The relationship between SED and key determinants is discussed below.

International Experience

Based on legitimacy theory, it is argued that companies with international experience tend to recognise the impact of social and environmental disclosures on firm performance and efforts to meet standards set by the host country (Bansal & Roth, 2000). As argued by Bansal (2005) a manager that with international experience from either

operating in or depending on foreign markets will be likely to engage in SED. Resource based theory (Bansal, 2005) and social and political theories (Choi, 1999) can also be used to explain the significance of international experience as a factor that determines SED. Social and political theories are based on ‘social contracts’, suggesting that generally organisations rely on society’s support. It is perceived by the advocates of legitimacy theory that if organisational activities are not congruent with the society’s goal, then society may withdraw its endorsement of the organisation, leading to the demise of that organisation. An experienced manager will understand this and will be willing to receive continual social support through SED. SED practices of a country will certainly be affected by the defined role of a company and its stakeholders in that country. Companies operating in foreign countries have to address the dissimilarity of the customer needs that are impacted by that country’s culture and customs. They also have to consider the different legislations governing business in various countries. Companies are also exposed to a greater extent to the laws, rules and regulations governing trade within different countries. One can expect that, in developing economies, a company with a greater volume of international business is open to more stakeholder pressure and global scrutiny. This increased stakeholder pressure and scrutiny will stimulate more CSR activities and disclosure. Bansal (2005) reported that international experience is positively related with SED, but Branco and Rodrigues (2008) and Choi (1999) failed to find any relationship between the two. Based on above discussion, we propose:

H₁: There is a positive association between the degree of international activity and SED.

Size of the Reporting Entity

Legitimacy theory argues that there is an association between a company’s size and its disclosure of social and environmental information. The size of a company is the most important publicly visible feature. The social and environmental activities of larger companies normally attract more scrutiny and public attention and even governmental investigation. Larger companies use corporate communication via SED to gain, maintain or improve their legitimacy and to successfully associate with various stakeholder groups. It is expected that, to legitimise their activities, companies will report their perceived social duties and accountability in a more systematic way. Prior empirical studies have demonstrated a positive relationship between company size and SED, indicating that larger companies disclose more than smaller ones (e.g., Aras, Aybars, & Kutlu, 2010; Branco & Rodrigues, 2008; Hackston & Milne, 1996; Lu & Abeysekera, 2014; Mahadeo et al., 2011; Muttakin & Khan, 2014; Omran & Ramdhony, 2015; Reverte, 2009).

A positive association between company size and SED was reported by various prior studies (Branco & Rodrigues, 2008; Deegan & Gordon, 1996; Hackston & Milne, 1996; Kansal et al., 2014; Lu & Abeysekera, 2014; Mahadeo et al., 2011; Muttakin & Khan, 2014; Omran & Ramdhony, 2015). Based on prior research, the current study also predicts that the positive association between SED and company size is also applicable to companies in emerging economies. However, Kansal et al. (2014) reported a negative association between SED and company size in the Indian context. Despite this, and consistent with the findings of previous research in emerging countries (Lu & Abeysekera, 2014; Mahadeo et al., 2011; Muttakin & Khan, 2014; Omran & Ramdhony, 2015) our study hypothesises that:

H₂: There is a positive association between company size and SED.

Profitability

Legitimacy theory proposes that a positive or negative association between profitability and SED may exist (Neu et al., 1998). A profitable company would be keen to satisfy its social stakeholders by reassuring them that financial returns were not achieved at the expense of social concerns (Haniffa & Coke, 2005). On the other hand, Reverte (2009) commented that a company that is incurring financial loss might attempt to turn stakeholders attention away from its monetary difficulties and to persuade its stakeholders and especially its shareholders that its recent CSR undertakings will create future profits.

A mixed relationship between profitability and SED is identified by empirical studies in developed and developing countries. A positive association between profitability and SED is reported by Crisóstomo et al. (2011), Haniffa and Coke (2005), Kansal et al. (2014), Lu and Abeysekera (2014), Oeyono et al. (2011) and Roberts (1992), whereas Wallace and Naser (1995) reported a negative association between profitability and SED. Other studies found no association between SED and profitability (Adams, 2002; Aras et al., 2010; Branco & Rodrigues, 2008; Hackston & Milne, 1996; Mahadeo et al., 2011; Reverte, 2009.) Based on the inconclusive results from the literature, it may be assumed that there will be a positive, negative, or no association between company profitability and SED. Therefore, we hypothesise that:

H₃: There is a positive relation between company profitability and SED.

Industry Category

Proponents of legitimacy theory argue that companies operating in an industry in which activities are perceived to have a more significant and evident impact on society will enrich their SED activities to ‘compensate’ for the effects of their activities (Branco & Rodrigues, 2008; Mahadeo et al., 2011; Reverte, 2009). “Industries with high public visibility, or a potentially more important environmental impact, or having less

favourable public images were found to disclose more social responsibility information than their counterparts” (Branco & Rodrigues, 2008, p. 688). The adverse selection argument, advocated by Oyelere, Laswad, & Fisher (2003), also suggests that if a company within an industry does not follow the disclosure practices of that industry, the market may interpret this noncompliance as if the company is hiding bad news.

Prior authors (Adams, 2002; Deegan & Gordon, 1996; Hackston & Milne, 1996) advocated that industry category is associated with SED. Prior empirical studies in developed and developing countries have reported a positive association between SED and industry category (Deegan & Gordon, 1996; Gray et al., 1995; Hackston & Milne, 1996; Kansal et al., 2014; Lu & Abeysekera, 2014; Muttakin & Khan, 2014). However, a non-significant association was reported by Branco and Rodrigues (2008) and Mahadeo et al. (2011), who studied this relationship in a developing country context. The positive association between SED and industry category reported by Kansal et al. (2014) suggests that the SED-industry category association found in developed countries may also be found within emerging countries. Therefore, we propose:

H₄: There is a positive association between industry category and the extent of SED.

Consumer Proximity

The legitimacy theoretical framework leads to anticipation of the fact that greater social and environmental visibility is associated with the greater level of SED. Reported results of prior empirical SED studies in this regard are consistent with such an expectation. A significant positive relationship is reported by Branco and Rodrigues (2008) and suggesting that companies are disclosing more non-financial information although they have a limited social and environmental impact. If a company is close to the consumer groups, it is apparent that the company name will be recognised by the consumers. A company will be more socially visible if it is closer to the individual consumer. Therefore, it is probable that a more socially visible company will disclose more SED. Our study used a binary measure of high profile and low profile. Companies that are household names and well known to the end consumer and whose names are anticipated to be known to the maximum number of consumers are considered high profile. Therefore, we hypothesise that there is a relationship between SED and the measure of a company’s closeness to its ultimate consumers.

H₅: There is a positive association between SED and the consumer proximity measure.

Reporting an Entity’s Age

Legitimacy theory leads to the expectation that long-established companies are likely to disclose more social and environmental information to legitimise their existence in the society.

Previous empirical research (Gray et al., 1995; Robert, 1992) advocated that the SED of a company is influenced by the age of that company. Some authors (Cormier et al., 2005; Kansal et al., 2014) reported a positive relationship, whereas others (Gray et al., 1995; Rahman et al., 2004; Robert, 1992) found no conclusive evidence of an association between age and level of SED. This inconclusive empirical result is partly due to the fact that the association between firm age and SED has been examined in different periods using different sampling and measurement techniques. It is very difficult to draw any firm conclusion about the existence of any relationship without systematic investigation using multiple measures and standardised techniques (replication studies) (Lindsay, 1995). Due to inconclusive prior empirical results, we might expect a positive, a negative or even no association between SED and age of the firm. Therefore, we hypothesise-

H₆: There is a positive association between the age of the reporting entity and SED.

Research Design and Model Specification

Models for the determinants of non-disclosures

To test the hypotheses, we follow a Multivariate Ordinary Least Squares (MOLS) modelling framework. Data on international experience (IE), size of the reporting entity (TA), profitability (ROTA), industry where the company operates (IOC), age of the reporting entity (AGE), consumer proximity (CP) and leverage (LEV) were obtained from company's annual reports or website.

The empirical model was specified as follows:

$$DI_{ij} = \beta_{0i} + \beta_{1i}(IE_j) + \beta_{2i}(TA_j) + \beta_{3i}(ROA_j) + \beta_{4i}(IOC_j) + \beta_{5i}(CP_j) + \beta_{6i}(AGE_j) + \beta_{7i}(LEV_j) \quad (1)$$

where DI_{ij} denotes disclosure index, with subscript $i=1, 2$ and 3 denoting social disclosure, environmental disclosure and total disclosure (aggregation of social and environmental disclosure), respectively, and subscript j denotes company. IE_i denotes international experience as measured by export share, and TA_i denotes the size of the company as measured by the logarithm of total assets of the company. ROA_i denotes return on assets as measured by net profit to the book value of the company's total assets, and IOC_j is a dummy variable for industry categorisation of the company, with IOC equal to 1 if the company operates within any of the three (chemical, industrial transport, forest & paper) industries. AGE_j denotes company age in years and is derived based on the date of incorporation. CP_j is a dummy variable for Consumer proximity, equal to 1 if the company operations are high profile and 0 otherwise. LEV_j denotes a dummy variable for leverage of the company and is measured as the total debt to total assets ratio.

Control Variables

The SED literature has considered control variables proposed to explain the further probable influence of other factors on SED practices. Corporate social responsibility activities and disclosures are dependent on the availability of financial resources within a company (Brammer & Pavelin, 2008; Roberts, 1992). Following Branco and Rodrigues (2008) leverage is considered a control variable to apprehend the availability of economic resources within a company. Leverage explains the degree of financial risk to which a company is exposed. Pragmatic legitimacy refers to the fact that a company needs to cope with the perception of its prime stakeholders (lenders) to safeguard its existence. Companies with high leverage normally report and communicate more corporate information, including SED (Haniffa & Cooke, 2005; Reverte, 2009). With additional SED, companies may also demonstrate to other stakeholders that, as a corporate citizen, the company takes into account societal concerns, in spite of their high financial risk. The evidence is so far very mixed and inconclusive with regard to leverage. A positive relationship was reported by Mahadeo et al. (2011) and Khlif and Souissi (2010); a negative relationship was reported by Branco and Rodrigues (2008); and while Haniffa and Cooke (2005), Kansal et al. (2014), and Reverte (2009) reported a statistically non-significant relationship. Observing this inconclusiveness in the literature, the association between leverage and SED is tested without any presumed association sign in our study.

Sample Selection

This study utilised data from companies listed on the Indian Stock Exchange. All listed companies on the stock exchange are exposed to a set of requirements and standards of financial and non-financial disclosure by the Indian securities authorities. Following Branco and Rodrigues (2008) and Mahadeo et al. (2011), we obtain non-financial disclosures from the annual reports. Companies were classified according to various criteria in various earlier studies. Usually, companies are grouped as high profile or low profile companies (Roberts, 1992; Hackston & Milne, 1996). Industrial sectors identified as “high profile”, such as forest and paper, automobiles, airlines, mining, metal, oil, and chemicals, are recognised as having consumer prominence, intense competition and high political risk (Roberts, 1992). Companies have been grouped according to environmental sensitivity by prior authors (Cho & Patten, 2007; Deegan & Gordon, 1996; Wilmshurst & Frost, 2000;). Industries with more risk of being criticised on environmental issues because of their activities, including those involved in natural resource extraction or pollution, such as oil exploration, chemical and allied products, metals, mining, industrial engineering and transport, are categorised as more environmentally sensitive industries. Therefore, high profile, more

environmentally sensitive industries are chosen for the current study. To collect social and environmental disclosure data samples, firms' annual reports from three years three years (2006, 2012 and 2014), covering a period of eight years, were used in this study. The annual report is extensively regarded as the prime means of corporate communication (both financial and nonfinancial) with the stakeholder about the companies' activities (Wiseman, 1982) and has been the source of data for almost all previous social and environmental disclosure studies (Lu & Abeysekera, 2014).

The final sample for analysis consisted of 312 Indian annual reports. Annual reports of publicly listed Indian companies were collected for the accounting years 2006, 2012 and 2014. These years were chosen to capture the pre- and post-global financial crisis periods as well as pre- and post-mandatory CSR regime periods, as the Indian Companies Act of 2013 legislated mandatory CSR in 2013. The chosen industry groups were (i) Chemical, (ii) Forestry and Paper, (iii) Industrial Transport and (iv) Other. The general social perception is that companies operating in these industries are more likely to be considered environmentally sensitive (Elkington, 1994). Industries were selected based on this perception in our study. We randomly selected companies from these industries. We use Data Stream 5.0 (electronic database) for the companies and their industry groupings. Organisational and other related websites were used for annual report collection. Table 1 presents the sample distribution according to industry classification.

Table 1 Distribution of Sample According to Industry and Size

Industry	Total	2014 Number	2012 Number	%
Chemicals	200	100	100	64.10
Forestry and Paper	44	22	22	14.10
Industrial Transport	38	19	19	43.48
Other	30	15	15	12.18
Grand Total	312	156	156	100.00

Content Analysis of Annual Reports

To examine the level and magnitude of the disclosure, this study adopted a quantitative approach, as has been used in prior studies (Branco & Rodrigues, 2008; Kansal et al., 2014; Mahadeo et al., 2011). The quantitative approach may penalise some companies by assigning a zero score even though that group of companies is not required to report a given element, as it is not related to the nature of their operations. To mitigate this problem, the whole annual report was read first to understand each company's operational nature, and then it was determined whether or not a particular item is necessary to disclose, as suggested by prior studies (Al-Akra et al., 2010; Cooke, 1989). Three disclosure indexes (social, environmental, and combined social and

environmental) were constructed for each company. Table 2 provides the distribution of the total disclosure scores. We selected the 35 most commonly employed items and used them to build the disclosure index, which proxies for the level of CSR disclosure. To determine the level of their disclosure, this checklist was applied to each company. Disclosure items were adopted mainly from the developing countries' studies (e.g., Al-Akra et al., 2010; Barako et al., 2006; Eng & Mac, 2003). Information collected from annual reports was quantitatively coded, assigning a value of zero, one or two to code the information reported. Information was assigned a value of two if it involved the disclosure of figures and tables of a largely quantitative nature, one if it disclosed more qualitative information (e.g., by brief mention of a particular topic), or zero if no information was disclosed relating to the topic.

Table 2 Distribution of Social, Environmental and Total Disclosure Scores

Disclosure Score	Total Disclosure		Social Disclosure				Environmental Disclosure					
	2014		2012		2014		2012		2014		2012	
	F	%	F	%	F	%	F	%	F	%	F	%
0-5	3	1.9	6	3.8	21	13.5	28	17.9	79	50.6	69	44.2
6-10	33	25	32	20.6	110	70.5	110	70.6	63	40.4	49	49.4
11-15	50	32.1	56	35.9	20	12.8	18	11.5	14	9.0	10	6.4
16-20	47	30.1	53	33.9	5	3.2	0	0	0	0	0	0
21-25	14	9.0	9	5.8	0	0	0	0	0	0	0	0
More than 25	3	1.9	0	0	0	0	0	0	0	0	0	0

Descriptive statistics

Consistent with the findings of Kansal et al. (2014) and Thompson and Zakaria (2004), sample companies primarily disclosed employee-related information, as opposed to information related to customer and community issues. None of them disclosed diversity, opportunity, human rights, integrity, or ethics information. Only two companies disclosed information on fines, lawsuits, or non-compliance incidents. This non-disclosure suggests that companies are only interested in disclosing general information for public relations, not for legitimising their activities; that is, companies' disclosure policies are not grounded on legitimacy theory. Inconsistent with the findings of similar studies of Thompson and Zakaria (2004) and Raman (2006), the current study found that 93% of Indian companies reported some form of environmental information. 'Energy, water, and materials' and 'general' are the two important categories under which most environmental information is disclosed. Information is mainly qualitative, as it primarily constitutes a company's statement of corporate commitment to environmental protection. This indicates that most companies disclose

qualitative and declarative information. The disclosure pattern suggests that companies are not willing to disclose specific information that could be perceived as negative and are simply interested in reporting general information to portray their socially responsible image. This insufficient disclosure is attributable to the fact that social and environmental awareness and pressure from stakeholders, various special groups, the general public and even the government in India are still relatively low. This is quite surprising considering that the country is a major carbon-dioxide (CO₂) emitter and is vulnerable to social and environmental impacts.

Table 3 provides descriptive statistics for all variables (Panel A) and compares data for 2014 and 2012 (Panel B). Panel A indicates that, on average, a higher percentage of environmental items than social items were disclosed in annual reports. Consistent with the finding of Yin and Zhang (2012) in China, our study also found that companies only achieved 12% of the total available score (8.46/70). Sahay (2004) also commented that the non-financial disclosure by Indian companies lags significantly behind that found in the developed world and that, in general, these disclosures are haphazard, fragmentary and insufficient.

Table 3 Panel B. Comparison of Social, Environmental and Total Disclosure

	2014			2012		
	DI Total	DI (Social)	DI (Environ)	DI Total	DI (Social)	DI (Environ)
Minimum	4	3	0	1	1	0
Maximum	30	16	14	25	14	14
Mean	14.12	8.17	5.96	13.74	7.65	6.09
Std. Dev.	5.180	2.702	3.059	4.761	2.414	3.167

Note: DI_i = disclosure index on environmental factors, social factors, or both; IE_i = International experience, measured by the percentage of sales outside India to total sales as reported in the annual report; TA_i = logarithm of book value of total assets of the reporting entity at year end; $ROTA_i$ = return on assets, measured by net profit to the of total assets for company I ; $C\ IND$ = industry in which the company operates (Chemical); $FP\ IND$ = industry in which the company operates (Forestry and Paper); $IT\ IND$ = industry in which the company operates (Industrial Transport); CPI = Consumer proximity (a binary measure (high/low profile) is used, with 1 if company i is a high profile company and 0 otherwise; the top 10% companies of an industry are considered high profile); ARE_i = age in years of the reporting entity based on the date of incorporation; LEV = Leverage, measured by the ratio of total debt/total assets.

Table 3 Panel A. Descriptive Statistics of Variables Employed in the Analyses

Variable	All Data				2014 Data				2012 Data			
	Minimum	Maximum	Mean	Std. Dev.	Minimum	Maximum	Mean	Std. Dev.	Minimum	Maximum	Mean	Std. Dev.
DI Total	1	30	13.93	4.971	4	30	14.12	5.180	1	25	13.74	4.761
DI Social	1	16	7.91	2.571	3	16	8.17	2.702	1	14	7.65	2.414
DI Environmental	0	14	6.02	3.109	0	14	5.96	3.059	0	14	6.09	3.167
IE	0	97.927	15.958	21.602	0	97.926	15.2485	21.611	0	79.000	16.6636	21.639
TA	0	6.000	3.935	.69151	3	6	4.00	.653	0	5	3.87	.725
ROA	-51.591	64.449	5.204	10.768	-51.591	64.449	4.504	11.360	-27.090	45.030	5.904	10.129
CIND	0	1.0	.635	.4823	0	1	.63	.483	0	1	.63	.483
ITIND	0	1	.14	.349	0	1	.14	.349	0	1	.14	.349
FPIND	0	1	.12	.328	0	1	.12	.328	0	1	.12	.328
AGE	0	107	34.92	18.821	0	107	34.83	18.774	0	107	35.01	18.927
CP	0	1	.40	.491	0	1	.39	.490	0	1	.41	.493
LEV	0	217.756	55.098	23.242	0	102.085	54.626	21.851	0	217.756	55.569	24.616

Table 4 Pearson Correlation Matrix for Explanatory Variables

	IE	ROA	TA	CIND	ITIND	FPIND	AGE	CP	LEV
IE	1								
ROA	0.102*	1							
TA	0.133**	0.061	1						
CIND	0.236***	0.181***	0-.058	1					
ITIND	-0.129**	0.019	0.171***	-0.670***	1				
FPIND	-.176***	-0.261***	-0.105*	-0.615***	-0.173***	1			
AGE	-0.016	-0.035	0.091	-0.009	-0.175***	0.198***	1		
CP	0.053	0.066	0.140	-0.016	-0.394***	0.440***	0.195***	1	
LEV	-0.029	-0.359***	0.093	0.007	-0.165***	0.165***	0.032	0.032	1

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

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

Empirical results

Table 4 reports the Pearson correlation matrix of variables employed in the analyses. Following Haniffa and Cooke (2005), a correlation coefficient greater than 0.8 indicates the potential presence of multicollinearity. Table 4 show that all the values are below 0.8, indicating the absence of multicollinearity in the data series.

Table 5 reports the results of the total disclosure model for Indian companies. Models including individual key variables show similar results. Due to the panel nature of the data series employed in the analyses, the empirical model specified in Equation (1) above was estimated using Estimated Generalised Least Squares (EGLS) in the Eviews version 9.0 econometric package. EGLS is useful because it corrects for heteroskedasticity and individual and time specific effects as well as for cross-section correlations in the sample data (Liu & Agbola, 2014).

Table 5 Regression Result of Total (Social and Environmental) Disclosure

Variable	Coefficient	t-Statistic	Prob.
Constant	1.020	0.929	0.354
AGE	0.023	6.860	0.000
CP	-0.258	-0.873	0.383
LEV	-0.015	-2.506	0.013
CIND	3.633	6.564	0.000
ITIND	-0.284	-0.463	0.644
FPIND	4.573	7.011	0.000
IE	0.013	2.186	0.030
TA	2.447	11.371	0.000
ROA	0.055	6.470	0.000
R-squared	0.63		
Adjusted R-squared	0.62		
Durbin-Watson stat	1.69		
F-statistic	56.96		
Prob (F-statistic)	0.00		

Note. Dependent Variable: TOTAL IDX

Method: Panel EGLS (Cross-section weights)

The R²-adjusted goodness-of-fit measure is estimated to be 0.62, which is relatively high. The coefficient of the leverage variable (LEV), which captures the extent to which a company can meet its financial obligations, is found to be negative and statistically significant at a 1% level ($p=0.013$), contrary to the expectation of legitimacy theory. The results indicate that an increase in the leverage ratio of a company is associated with a decrease in the disclosure of the company. The coefficient

of the age of the entity (AGE), which captures the extent to which a firm has been in operation, is found to be positive (0.023) and statistically significant at a 1% level ($p=0.000$), as expected. Thus, H_6 is supported. Our result suggests that the longer a firm is in operation in the international market the more, likely it is that it will make social and environmental disclosures in annual reports. The coefficient of the return on assets (ROA) variable, which captures the profitability of the company, is found to be positive (0.055) and statistically significant at a 1% level ($p=0.000$); this implies that an increase in return on assets results in an increased total disclosure of companies in India. Thus, H_3 is supported.

Table 5 indicates that the coefficients of dummy variables capturing the categorisation of companies – namely, chemical companies and forestry and paper companies – were found to be positive and statistically significant in the total disclosure model ($\beta=3.633$ & 4.573 ; $p=0.000$ in both cases). The results indicate that companies that are located in these industry categories are more likely to report SED in their annual reports; thus, H_4 is supported. Table 5 also shows that the coefficient of international experience (IE) is positive (0.013) and statistically significant at a 1% level ($p=0.030$), implying that greater international business activity has a positive effect on total disclosure of Indian companies, as suggested by legitimacy theory. Therefore, H_1 is supported. The coefficient of the total assets (TA) variable, which captures the size of the company, is found to be positive (2.447) and statistically significant at a 1% level ($p=0.000$), as expected. Thus, H_2 is supported.

Table 5 shows that, contrary to legitimacy theory, the coefficients of consumer proximity and industrial transport membership are found to be negative (-0.258 and -0.284, respectively) and statistically non-significant at a 5% level ($p=0.383$). Thus, H_4 is partially supported, while H_5 is not supported. The result indicates that high profile companies report less SED in their annual reports. A plausible explanation for this finding is that in the last decade or so, although there has been a gradual increase in SED by Indian companies, high profile companies have started to report non-financial information in a medium other than annual reports (e.g., company website, electronic and print media) to satisfy the information need of the vocal stakeholder so as to maintain their legitimacy. This situation could explain the negative association between consumer proximity and declining SED. It is natural for high profile companies to use the internet or electronic media to disclose their social involvement, because these are aimed at broader stakeholders than annual reports (Branco & Rodrigues, 2008).

Table 6 reports the results of the social disclosure model for Indian companies. Similar to total disclosure model, we estimated the model using the EGLS estimator. The R^2 -adjusted goodness-of-fit measure is estimated to be 0.66, which is relatively high. Notably, the coefficient of the leverage variable is found to be negative (-0.012) and statistically significant at 1% level ($p=0.000$), in influencing social disclosure of

companies in India. This is surprising given that, under legitimacy theory, an increase in leverage is expected to result in increased social disclosure of companies. Another important finding is that the coefficient of the age variable is found to be positive (0.011) and statistically significant ($p=0.000$) in influencing social disclosure. This satisfies our expectation that the age of the entity has a positive impact on social disclosure. We find that the coefficients of the variables that capture industry categorisation are positive in influencing social disclosure, implying that being part of these sectors increases the tendency to provide social disclosure in annual reports. Table 6 indicates that, similar to the total disclosure findings, the coefficient of international experience is found to be positive (0.001) but statistically non-significant (0.618), implying that greater international exposure is not associated with social disclosure of the company. Similar to the total disclosure findings, and contrary to legitimacy theory, the coefficient of the consumer proximity of the company is found to be negative (-0.101) and statistically non-significant ($p=0.495$). This result further affirms the plausible explanation that an increase in consumer proximity is associated with less social disclosure of companies in annual reports. As noted earlier, as Indian high profile companies become more stakeholder-oriented, they increasingly use the internet or electronic media rather than the traditional annual report to communicate their social involvement.

Table 6 Regression Result of Social Disclosure

Variable	Coefficient	t-Statistic	Prob.
C	1.754	4.075	0.000
AGE	0.011	3.700	0.000
CP	-0.101	-0.683	0.495
LEV	-0.012	-3.912	0.000
CIND	1.525	6.711	0.000
ITIND	0.627	2.023	0.044
FPIND	1.334	4.472	0.000
IE	0.001	0.500	0.618
LOG_TA	1.301	14.025	0.000
ROA	0.019	6.329	0.000
R-squared	0.66		
Adjusted R-squared	0.65		
Durbin-Watson stat	1.61		
F-statistic	65.23		
Prob (F-statistic)	0.00		

Note. Dependent Variable: SOCIAL IDX

Method: Panel EGLS (Cross-section weights)

Table 7 reports the results of the environmental disclosure model for Indian companies. Similar to the total disclosure model, we estimated the model using the EGLS estimator. The R^2 -adjusted goodness-of-fit measure is estimated to be 0.53, which suggests average explanatory power. Table 7 indicates that, similar to the total disclosure and social disclosure findings, the coefficient of the leverage variable is found to be negative (-0.002) but statistically non-significant ($p=0.704$) in influencing environmental disclosure of companies in India. This implies that an increase in leverage is not associated with an increase in environmental disclosure. Table 7 show that, consistent with previous empirical results, the coefficients of the variables that capture chemical, forest and paper industry categories are positive and statistically significant in influencing environmental disclosure of companies, implying that being part of these sectors increases the tendency to provide environmental disclosure in annual reports. Similar to the total disclosure findings, and contrary to legitimacy theory, the coefficient of the industrial transport category is found to negative (-0.903) and statistically significant ($p=0.027$) in influencing environmental disclosure. We argue that this result may reflect the fact that firms in industrial transport are less likely to be concerned with environmental disclosure, as environmental disclosure requires increased investment in ensuring the environmental sustainability of company activities. The coefficient of the international experience variable is found to be positive and statistically significant ($p=0.009$), implying that international exposure has an impact on the environmental disclosure of companies in India. The coefficient of the consumer proximity variable is found to be negative (-0.303) and statistically non-significant, implying that greater community engagement is associated with less reporting of environmental activities of the company.

Table 7 Regression Result of Environmental Disclosure
Dependent Variable: ENVIRON IDX
Method: Panel EGLS (Cross-section weights)

Variable	Coefficient	t-Statistic	Prob.
C	-2.101	-3.042	0.003
AGE	0.011	2.348	0.020
CP	-0.303	-1.386	0.167
LEV	-0.002	-0.380	0.704
CIND	2.447	6.074	0.000
ITIND	-0.903	-2.229	0.027
FPIND	3.518	6.582	0.000
IE	0.012	2.639	0.009
LOG_TA	1.429	10.186	0.000
ROA	0.029	4.342	0.000
R-squared	0.54		
Adjusted R-squared	0.52		
Durbin-Watson stat	1.74		
F-statistic	38.49		
Prob(F-statistic)	0.00		

Note. *** denotes statistical significance at 1% level; **at 5% level and * at 10% level.

DI_i = disclosure index on environmental factors, or social factors, or total of both factors; IE_i = International experience, measured by the percentage of sales outside India to total sale as reported in the annual report; TA_i = logarithm of book value of total assets of the reporting entity at year end; $ROTA_i$ = return on assets, measured by net profit to the of total assets for company i ; C IND = industry in which the company operates (Chemical); F&P IND = industry in which the company operates (Forestry and Paper); IT IND = industry in which the company operates (Industrial Transport); CP_i = Consumer proximity, a binary measure (high and low profile) is used. 1 if company i = a high profile company and 0 if it is a low profile company. Top10% companies of an industry are considered high profile; ARE_i = age in years of the reporting entity based on the date of incorporation; LEV = Leverage is measured by the ratio of Total debt/total assets

DISCUSSION

In this study, we observed that Indian companies have a very low rate of SED, implying that the legitimacy theory may not be valid within the Indian context. Pragmatic legitimacy suggests that the needs of the most demanding social stakeholders

(i.e., social support recipients, charitable organisations and the government) will be fulfilled by the companies through more social information disclosure (Suchman, 1995). The low environmental disclosure of Indian firms could be due to the improper attitudes of the Indian companies that admitting environmental impact of their activities might invite more (unwanted) attention and thus threaten their organisational legitimacy. The companies focus more on social disclosure themes because they such disclosures more legitimating ability compared to environmental disclosures. Mahadeo et al. (2011) commented that, from the perspective of pragmatic legitimacy, for their own benefit companies believe that shareholders are their main direct stakeholders, and environmental activity is comparatively less important than economic activities to that group of stakeholders.

Our results showed a negative relationship of consumer proximity with social and environmental disclosure. Consumer proximity leads more demand for donations and sponsorship in developing countries, and bigger companies will have to face more consequences if they are not perceived to be willing to meet such demands (Mahadeo et al., 2011). This could be the reason why larger Indian companies are inclined to disclose more to foster a relationship with stakeholders in order to maintain the pragmatic form of legitimacy. Branco and Rodrigues (2008) reported a non-significant association but not a negative association between consumer proximity and SED. The legitimacy theoretical framework leads to the expectation that higher levels of SED are associated with higher social and environmental visibility. A renowned company with a possible high impact on the environment will have more motivation than a less well-known company to validate its presence in society (Branco & Rodrigues, 2008). However, this does not appear to be the motive of Indian companies, as they disclose equal or less information related to community and environmental involvement than those companies those are far from consumer. Therefore, our results indicates that the argument of customer proximity, as well as observance of a moral form of legitimacy (i.e., “doing the right thing”), does not apply in all circumstances. Customer proximity and more social disclosure relationship depends on the context.

The results also show a negative industry category effect on environmental disclosure, suggesting that companies in the Indian industrial transport industry give less weight to environmental disclosure. This result is the opposite of the expectation of legitimacy theory and contradicts various prior studies in developed and developing countries (i.e., Aras et al., 2010; Branco & Rodrigues, 2008; Hackston & Milne, 1996; Kansal et al., 2014; Lu & Abeysekera, 2014; Omran & Ramdhony, 2015; Reverte, 2009). Legitimacy theory expects that companies in environmentally sensitive industries will disclose more social and environmental information to maintain their existing legitimacy. Our result contradicts this expectation, despite our sample companies being a member of an industry considered to be environmentally sensitive.

The proponents of legitimacy theory emphasise the importance of communication and companies' preference for the strategic use of unilateral corporate communication, such as social and environmental disclosure (Chen & Roberts, 2010, p. 660). Prior studies proxy size for social visibility and advocate that bigger companies will have a greater volume of social and environmental disclosure (Branco & Rodrigues, 2008; Reverte, 2009). Our results are consistent with these studies. Although our results concur regarding the size effect, it appears that bigger Indian companies do not use non-financial disclosure as a legitimating mechanism. Our result contradicts a recent Indian study (Kansal et al., 2014), which reported a negative relationship between size and non-financial disclosure.

Our result concurs with the findings of Behram (2015), which fail to confirm legitimacy theory as an explicator of environmental disclosure in the Turkey case, and Omran and Ramdhony (2015), who commented that legitimacy theory seems to be more suitable for organisations operating in developed countries, not in developing countries. Other authors (Belal & Momin, 2009; Jamali & Mirshak, 2007) have also argued that there is a lack of consensus regarding whether legitimacy can provide an inclusive explanation of SED, particularly in developing countries—where there is a dearth of empirical evidence.

Our results and the reviewed literature suggest that legitimacy theory alone cannot provide an inclusive explanation of SED in developing countries. One determinant of SED in developing countries could be economic security (Renaud et al., 2008). Different stages of economic development demand different types of national concern regarding social and environmental issues and thus demand different types or levels of corporate SED (Xiao et al., 2005). Examining the social reporting in the Arab Middle East (AME) region, Kamla (2007) concluded that the differences were due to each economy's social priorities. For Williams and Pei (1999), the differences in SED were due to technological development. Arguably, more social and environmental information can be disclosed via websites if there are sufficient investments in internet technologies. However, institutional settings, such as those in developing countries, could serve as a barrier to SED. Importantly, India is starting to place greater emphasis on electronic business and communication; as such, SED is becoming increasingly important, but it is still in its infancy. Corporate social and environmental activities are actively watched by organisations such as Greenpeace and Friends of the Earth in developed countries. However, similar organisations are very limited in developing countries. When they are present, they are likely to be from developed countries and to be less active in developing countries. Moreover, corporate social and environmental issues attract less attention in developing countries. The above discussion suggests that national culture and the regulatory arrangement shape the overall non-financial

disclosure setting in the developing countries, which in turn will affect corporate social and environmental practice at the firm level.

It is increasingly necessary to embed CSR norms within the procurement and supply chain practices of companies and to adopt international benchmarks in order to export goods to countries that accommodate sustainable practices. Thus, the general expectation is that more international experience will increase SED. However, our result showed a non-significant association between international experience and social disclosure, indicating again that legitimacy needs to be placed in its national context; that is, the developed economy norms cannot be simply taken for granted. The results indicated that Indian companies are not export-oriented; their focus was domestic consumption (average 85%). Although the Indian government is encouraging more and more international exposure of and exports from the Indian companies (exports increased marginally from 2006 to 2012), they are still focusing mainly on the domestic market. The major trading partners of Indian companies are from the Middle East – a region characterised by different social, cultural and technological development, with a non-financial disclosure position that is comparatively inferior to that of India. This is the reason for the non-significant association of international experience with social disclosure of Indian companies.

CONCLUSION

This paper investigates whether the legitimacy theory is capable of explaining the determinants of social, environmental and total disclosure of publicly listed companies in India. Our empirical findings are mixed. Our findings show that the industrial transport industry category of a company is negatively and statistically significantly associated with environmental disclosure. Most importantly, international experience and a company's worth are found to be statistically non-significant in influencing social disclosure of Indian companies. Consumer proximity was found to be unrelated (negative, non-significant) to voluntary non-financial disclosure of SED of companies in India. These findings are critical as they are contrary to the expectations of legitimacy theory. Consistent with legitimacy theory, we find that leverage is strongly associated with the total disclosure and environmental disclosure of companies.

The findings of this study have important implications for policy. From a company perspective, the results indicate the need to be cognisant of the impact of national institutional settings and cultural traditions on non-financial SED. Importantly, SED initiatives can lead to failure in the market economy through the misallocation of resources in instances where the local expectations of reporting of non-financial disclosures do not match those of foreign markets. Importantly, non-alignment of home and host country SED could potentially lead to wastage on the part of domestic businesses. From a policy perspective, the results reveal that it is prudent to implement

measures that ensure better integration and acknowledgement of various stakeholder interests. Promotion of inter-linkages between host and home country stakeholders should be reinforced through feedback channels. Given that the underlying mechanisms of the SED agenda within emerging economies are somewhat different from those in developed economies, this study highlights the need to provide incentives through the regulatory framework, creating an effective business climate and empowering consumer groups. To improve the overall SED, encouraging favourable institutional environments, providing financial incentives and training to companies that take SED advancement initiatives, punishing irresponsible behaviour and influencing consumer support of responsible business are essential. Future research can extend this study to other emerging countries to validate the findings. Future research should also focus on other antecedents specific to emerging economies, such as examining unlisted companies' SED practices in emerging economies.

REFERENCES

- Adams, C. A. (2002). Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing and Accountability Journal*, 5(2), 223-250.
<https://doi.org/10.1108/09513570210418905>
- Ahn, S.Y. & Park, D. J (2018). Corporate Social Responsibility and Corporate Longevity: The Mediating Role of Social Capital and Moral Legitimacy in Korea. *Journal of Business Ethics*, 150(1), 117-134.
<https://doi.org/10.1007/s10551-016-3161-3>
- Al-Akra, M., Eddie, I. A. & Ali, M. J. (2010). The association between privatisation and voluntary disclosure: evidence from Jordan. *Accounting and Business Research*, 40(1), 55-74.
<https://doi.org/10.1080/00014788.2010.9663384>
- Aras, G., Aybars, A. & Kutlu, O. (2010). Managing corporate performance investigating the relationship between corporate social responsibility and financial performance in emerging markets. *International Journal of Productivity and Performance Management*, 59(3), 229- 254.
<https://doi.org/10.1108/17410401011023573>
- Amran, A., & Devi, S.S. (2008). The impact of government and foreign affiliate on corporate social reporting: The case of Malaysia. *Managerial Auditing Journal*, 23(4), 386-404.
<https://doi.org/10.1108/02686900810864327>
- Bachmann, P. & Inghoff, D. (2017). How Do Media Companies Gain Legitimacy? An Experimental Study on the (Ir) Relevance of CSR Communication. *International Journal of Strategic Communication*, 11(1), 79-94.

- <https://doi.org/10.1080/1553118x.2016.1249282>
- Baldini, M, Maso, L.D., Liberatore, G., Mazzi, F. & Terzani, S. (2018). Role of Country- and Firm-Level Determinants in Environmental, Social, and Governance Disclosure. *Journal of Business Ethics*, 150(1), 79-98.
<https://doi.org/10.1007/s10551-016-3139-1>
- Bansal, P. (2005). Evolving sustainability: A Longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
<https://doi.org/10.1002/smj.441>
- Bansal, P. & Roth, K. (2000). Why companies go green: a model of ecological responsiveness. *Academy of Management Journal*, 43(4), 717-736.
<https://doi.org/10.5465/1556363>
- Barako, D.G., Hancock, P. & Izan, H.Y. (2006). Factors influencing voluntary disclosure by Kenyan companies. *Corporate Governance*, 14(2), 107-125.
<https://doi.org/10.1111/j.1467-8683.2006.00491.x>
- Belal A. R. & Momin, M. (2009). Corporate social reporting (CSR) in emerging economies: A review and future direction. *Research in Accounting in Emerging Economics*, 9, 119-143.
[https://doi.org/10.1108/s1479-3563\(2009\)0000009007](https://doi.org/10.1108/s1479-3563(2009)0000009007)
- Belal, A. R. & Owen, D. (2007). The views of corporate managers on the current state of, and future prospects for, social reporting in Bangladesh: An engagement based study. *Accounting, Auditing and Accountability Journal*, 20(3), 472-494.
<https://doi.org/10.1108/09513570710748599>
- Behram, N.K. (2015). A cross-sectoral analysis of environmental disclosures in a legitimacy theory context. *Journal of Management and Sustainability*, 5(1), 20-37.
<https://doi.org/10.5539/jms.v5n1p20>
- Bitektine, A. (2011). Towards a theory of social judgements of organizations: The case of legitimacy, reputation, and status. *Academy of Management Review*, 36(1), 151-179.
<https://doi.org/10.5465/amr.2009.0382>
- Brammer, S. & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17(2), 120-136.
<https://doi.org/10.1002/bse.506>
- Branco, M. C. & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics*, 83(4), 685-701.
<https://doi.org/10.1007/s10551-007-9658-z>
- Campbell, J.L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *The Academy of Management Review*, 32(3), 946-967.

- <https://doi.org/10.5465/amr.2007.25275684>
- Chen, J. C. & Roberts, R. W. (2010). Toward a more coherent understanding of the organisation–society relationship: A theoretical consideration for social and environmental accounting research. *Journal of Business Ethics*, 97(4), 651-665.
<https://doi.org/10.1007/s10551-010-0531-0>
- Cho, C. H. & Patten, D M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society*, 32(7-8), 639-647.
<http://dx.doi.org/10.1016/j.aos.2006.09.009>
- Choi, J.-S. (1999). An Investigation of the Initial Voluntary Environmental Disclosures made in Korean semi-annual financial reports. *Pacific Accounting Review*, 11(1), 73-102.
- Claasen, C. & Roloff, J. (2012). The link between responsibility and legitimacy: The case of de beers in Namibia. *Journal of Business Ethics*, 107(3), 379–398.
<https://doi.org/10.1007/s10551-011-1045-0>
- Cooke, T. E. (1989). Disclosure in the corporate annual reports of Swedish companies. *Accounting and Business Research*, 19(74), 113-124.
<https://doi.org/10.1080/00014788.1989.9728841>
- Cormier, D., Magnan, M. & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions?. *European Accounting Review*, 14(1), 3-39.
<https://doi.org/10.1080/0963818042000339617>
- Cormier, D. & Magnan, M. (2003). Environmental reporting management: A Continental European perspective. *Journal of Accounting and Public Policy*, 22(1), 43-62.
[https://doi.org/10.1016/s0278-4254\(02\)00085-6](https://doi.org/10.1016/s0278-4254(02)00085-6)
- Crisóstomo, V. L., Freire, F. D. S. & Vasconcellos, F. C. (2011). Corporate social responsibility, firm value and financial performance in Brazil. *Social Responsibility Journal*, 7(2), 295-309.
<https://doi.org/10.1108/17471111111141549>
- Deegan, C (2002). The legitimising effect of social & environmental disclosures—A theoretical Foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282-311.
<https://doi.org/10.1108/09513570210435852>
- Deegan, C. & Gordon, B. (1996). A study of the environmental disclosure policies of Australian corporations. *Accounting and Business Research*, 26(3), 187-199.
<https://doi.org/10.1080/00014788.1996.9729510>

- De Villiers, C. & Van Staden, C. (2006). Can less environmental disclosure have a legitimizing effects? Evidence from Africa. *Accounting, Organisation and Society*, 31(8), 763-781.
<https://doi.org/10.1016/j.aos.2006.03.001>
- Dowling, J. & Pfeffer, J., (1975). Organisational legitimacy: Social values and organisational behaviour. *Pacific Sociological Review*, 18(1), 122-136.
<https://doi.org/10.2307/1388226>
- Dube, S. & Maroun, W. (2017). Corporate social responsibility reporting by South African mining companies: Evidence of legitimacy theory. *South African Journal of Business Management* 48(1), 23 -34.
<https://doi.org/10.4102/sajbm.v48i1.17>
- EC (2012). Emissions trading: annual compliance round-up shows declining emissions in 2011. Retrieved from
<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/477>
- Eng, L. L. & Mak, Y. T., (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22(4), 325–345.
[https://doi.org/10.1016/S0278-4254\(03\)00037-1](https://doi.org/10.1016/S0278-4254(03)00037-1)
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainability. *California Management Review*, 36(2), 90-100.
<https://doi.org/10.2307/41165746>
- Gray, R., Kouhy, R. & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.
<https://doi.org/10.1108/09513579510146996>
- Gray, R., Owen, D. & Adams, C. (1996). *Accounting and accountability: Changes and challenges in corporate social and environmental reporting*, Hemel Hempstead: Prentice Hall.
- Hackston, D. & Milne, M. J. (1996). Some determinant of social and environmental disclosures in New Zealand companies. *Accounting, Auditing and Accountability Journal*, 9 (1), 77-108.
<https://doi.org/10.1108/09513579610109987>
- Haniffa, R. M. & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430.
<https://doi.org/10.1016/j.jaccpubpol.2005.06.001>
- Islam, M. A. & Deegan, C. (2008). Motivations for an organisation within a developing country to report social responsibility information: Evidence from Bangladesh. *Accounting, Auditing and Accountability Journal*, 21(6), 850-874.
<https://doi.org/10.1108/09513570810893272>

- Islam, M. & Dellaportas, S., (2011). Perceptions of corporate social and environmental accounting and reporting practices from accountants in Bangladesh. *Social Responsibility Journal*, 7(4), 649-664.
<https://doi.org/10.1108/17471111111175191>
- Jamali, D. & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics*, 72(3), 243-262.
<https://doi.org/10.1007/s10551-006-9168-4>
- Khlif, H. & Souissi, M. (2010). The determinants of corporate disclosure: A meta-analysis. *International Journal of Accounting and Information Management*, 18(3), 198-219.
<https://doi.org/10.1108/18347641011068965>
- Kamla, R. (2007). Critically appreciating social accounting and reporting in the Arab Middle East: A postcolonial perspective. *Advances in International Accounting*, 20, 105-177.
[https://doi.org/10.1016/s0897-3660\(07\)20005-4](https://doi.org/10.1016/s0897-3660(07)20005-4)
- Kansal, M., Joshi, M. & Batra, G.S. (2014). Determinants of corporate social responsibility disclosures: Evidence from India. *Advances in Accounting*, 30(1), 217-229.
<https://doi.org/10.1016/j.adiac.2014.03.009>
- Lindblom, C. K. (1994). The Implications of organisational legitimacy for corporate social performance and disclosure. Paper Presented at the Critical Perspectives on Accounting Conference, New York.
- Lindsay, R. M. (1995). Reconsidering the status of tests of significance: An alternative criterion of adequacy. *Accounting, Organisations and Society*, 20(1), 35-53.
[https://doi.org/10.1016/0361-3682\(93\)e0004-z](https://doi.org/10.1016/0361-3682(93)e0004-z)
- Liu, W.S. & Agbola, F.W. (2014). Regional analysis of the impact of inward foreign direct investment on economic growth in the Chinese electronic industry. *Applied Economics*, 46(22), 2576-2592.
<https://doi.org/10.1080/00036846.2014.907478>
- Li, W. & Zhang, R. (2010). Corporate social responsibility, ownership structure, and political interference: Evidence from China. *Journal of Business Ethics*, 96(4), 631-645.
<https://doi.org/10.1007/s10551-010-0488-z>
- Lu, Y. & Abeysekera, I. (2014). Stakeholders' power, corporate characteristics, and social and environmental disclosure. *Journal of Cleaner Production*, 64, 426-436.
<https://doi.org/10.1016/j.jclepro.2013.10.005>

- Mahadeo, J. D., Oogarah-Hanuman, V. & Soobaroyen, T. (2011). A longitudinal study of corporate social disclosures in a developing economy. *Journal of Business Ethics*, 104(4), 545-558.
<https://doi.org/10.1007/s10551-011-0929-3>
- Marquis, C., Glynn, M.A. & Davis, G.F. (2007). Community isomorphism and corporate social action. *Academy of Management Review*, 32(3), 925-945.
<https://doi.org/10.5465/amr.2007.25275683>
- Mobus, J.L. (2005). Mandatory environmental disclosures in a legitimacy theory context. *Accounting, Auditing & Accountability Journal*, 18(4), 492-517.
<https://doi.org/10.1108/09513570510609333>
- Muttakin, M.B. & Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. *Advances in Accounting, incorporating Advances in International Accounting*, 30(1), 168-175.
<https://doi.org/10.1016/j.adiac.2014.03.005>
- Nègre, E., Verdier, M.A, Cho, C.H. & Patten, D.M. (2017). Disclosure strategies and investor reactions to downsizing announcements: A legitimacy perspective. *Journal of Accounting and Public Policy*, 36 (3), 239-257.
<https://doi.org/10.1016/j.jaccpubpol.2017.03.003>
- Neu, D., Warsame, H. & Pedwell, K. (1998). Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3), 265-282.
[https://doi.org/10.1016/s0361-3682\(97\)00008-1](https://doi.org/10.1016/s0361-3682(97)00008-1)
- Oeyono, J., Samy, M. & Bampton, R. (2011). An examination of corporate social responsibility and financial performance: A study of the top 50 Indonesian listed corporations. *Journal of Global Responsibility*, 2(1), 100-112.
<https://doi.org/10.1108/20412561111128555>
- Oyelere, P., Laswad, F. & Fisher, R., (2003). Determinants of internet financial reporting by New Zealand companies. *Journal of International Financial Management and Accounting*, 14(1), 26-63.
<https://doi.org/10.1111/1467-646x.00089>
- Omran, M. A. & Ramdhony, D. (2015). Theoretical perspectives on corporate social responsibility disclosure: A critical review. *International Journal of Accounting and Financial Reporting*, 5(2), 38-55.
<https://doi.org/10.5296/ijaf.v5i2.8035>
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public policy*, 10(4), 297-308.
[https://doi.org/10.1016/0278-4254\(91\)90003-3](https://doi.org/10.1016/0278-4254(91)90003-3)

- Rahman, A. S., Lawrence, S. & Roper, J. (2004). Social and environmental reporting at the VRA: Institutionalized legitimacy or legitimation crisis?. *Critical Perspectives on Accounting*, *e*(1), 35-56.
[https://doi.org/10.1016/s1045-2354\(03\)00005-4](https://doi.org/10.1016/s1045-2354(03)00005-4)
- Raman, S. R. (2006). Corporate social reporting in India – A view from the top. *Global Business Review*, *7*(2), 313-324.
<https://doi.org/10.1177/097215090600700208>
- Ramdhony, D. (2015). Corporate social reporting by Mauritian banks. *International Journal of Accounting and Financial Reporting*, *5*(2), 56-73.
<https://doi.org/10.5296/ijaf.v5i2.8067>
- Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, *88*(2), 351-366.
<https://doi.org/10.1007/s10551-008-9968-9>
- Renaud, F., Bogardi, J.J., Dun, O. & Warner, K. (2008). Control, adapt or flee: How to face environmental migration, *United Nations University - Institute for Environment and Human Security (UNU-EHS) | Bonn, Germany*. 5, 44.
- Roberts, R. W. (1992). Determinant of corporate social responsibility disclosure: an application of stakeholder theory. *Accounting Organisations and Society* *17*(6), 595-612.
- Sahay, A. (2004). Environmental reporting by Indian corporations. *Corporate Social Responsibility and Environmental Management*, *11*(1), 12-22.
<https://doi.org/10.1002/csr.51>
- Scherer, A.G. (2018). Theory assessment and agenda setting in political CSR: A critical theory perspective. *International Journal of Management Reviews*, *20*(2), 387-410.
<https://doi.org/10.1111/ijmr.12137>
- Shafer, W. E. (2007). Social paradigms and attitudes toward environmental accountability. *Journal of Business Ethics*, *65*(2), 121-147.
<https://doi.org/10.1007/s10551-005-4606-2>
- Suchman, M.C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571-610.
<https://doi.org/10.5465/amr.1995.9508080331>
- Thompson, P. & Zakaria, Z. (2004). Corporate social responsibility reporting in Malaysia: Progress and prospects. *Journal of Corporate Citizenship*, *13*, 125-136.
<https://doi.org/10.9774/GLEAF.4700.2004.sp.000014>
- The World Bank annual report (2014). Retrieved from
<http://documents.worldbank.org/curated/en/111781468170952958/Main-report>
- Van Der Laan Smith, J., Adhikari, A. & Tondkar, R.H. (2005). Exploring differences in social disclosures internally: A stakeholder perspective. *Journal of Accounting and Public Policy*, *24*(2), 123-151.

- <https://doi.org/10.1016/j.jaccpubpol.2004.12.007>
- Wallace, R.S. & Naser, K., (1995). Firm specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy*, 14(4), 311-368.
- [https://doi.org/10.1016/0278-4254\(95\)00042-9](https://doi.org/10.1016/0278-4254(95)00042-9)
- Williams, S. & Pei, C. (1999). Corporate social disclosures by listed companies on their web sites: An international comparison. *The International Journal of Accounting*, 34(3), 389-419.
- [https://doi.org/10.1016/s0020-7063\(99\)00016-3](https://doi.org/10.1016/s0020-7063(99)00016-3)
- Wilmshurst, T. D. & Frost, G. R. (2000). Corporate environmental reporting: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*. 13(1), 10-26.
- <https://doi.org/10.1108/09513570010316126>
- Wiseman, J. (1982). An evaluation of environmental disclosures made in corporate annual reports. *Accounting, Organizations and Society*, 7(1), 53-63.
- [https://doi.org/10.1016/0361-3682\(82\)90025-3](https://doi.org/10.1016/0361-3682(82)90025-3)
- Xiao, J. Z., Gao, S. S., Heravi, S. & Cheung, Y. C. (2005). The impact of social and economic development on corporate social and environmental disclosure in Hong Kong and the U.K. *Advances in International Accounting*, 18, 219-243.
- [https://doi.org/10.1016/s0897-3660\(05\)18011-8](https://doi.org/10.1016/s0897-3660(05)18011-8)
- Yin, J. & Zhang, Y. (2012). Institutional dynamics and corporate social responsibility (CSR) in an emerging country context: Evidence from China. *Journal of Business Ethics*, 111(2), 301-316.
- <https://doi.org/10.1007/s10551-012-1243-4>