

# THE CONSTRUCT OF CORPORATE SOCIAL RESPONSIBILITY (CSR): DESIGNING A FORMATIVE MEASURE

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## **Abstract**

*A considerable amount of attention has been paid to the construct of Corporate Social Responsibility (CSR). However, research on the measurement of CSR has remained limited. There are a few attempts to measure CSR but improved measures of CSR are desperately needed. Measures have been hampered by the lack of clarity in theoretical frameworks and empirical methods for the CSR construct. Starting from the understanding that the empirical study of CSR measurement is in an undeveloped state, this research describes efforts to justify and prove the relationship between measurement items and construct. In this research an instrument is developed based on a critical review of both the conceptualisation and practice of this construct. Supporting validity evidence for the instrument is obtained from several sources to provide guidelines to the researcher to properly specify the CSR construct. Based on a study among Malaysian stakeholders, this research offers a CSR definition and also conceptualises CSR as a formative construct consisting of eight measures: process, policy, value, environment, personal, profit, people and political. Each measure captures differing aspects of CSR and changes in the measures cause changes in the underlying construct. Consequently, the combination of these variant measures defines the construct of CSR. This research proposes this conceptualisation as a systematic method on which to build CSR measures, which in turn are important step for efficient CSR management.*

**Keywords:** Corporate Social Responsibility (CSR), formative constructs, CSR measures, CSR scales, measurement models, methodology, stakeholders

## INTRODUCTION

There has been a resurgence of interest in the Corporate Social Responsibility (CSR) construct among researchers and practitioners (Turker, 2009). The growing body of literature has led to an abundance of definitions of CSR. For instance, Carroll (1999), Moon, Crane and Matten (2005), Dahlsrud (2006), Vaaland, Heide and Grønhaug (2008), Lu and Castka (2009) all present different viewpoints. They conclude CSR to be a contested concept, internally complex, with open rules for application, an overlapping term, with multiple synonyms, and a conception of business-society-relations and a dynamic phenomenon. From an empirical point of view, CSR has remained a rather incomplete and simplistic methodology (Aupperle, Carroll and Hatfield 1985; Dahlsrud, 2006; Kakabadse, Rozuel and Lee 2005; Lockett, Moon and Visser 2006; Lu and Castka 2009; Turker 2009). For instance, Vaaland *et al.* (2008) diagnose a lack of consensus on valid important features for CSR research; they therefore propose to focus on CSR holistically. However, this does not lead to practical insights for CSR stakeholders because the practices of good or bad CSR remain unclear. Effective measures are still considered the greatest hurdles for stakeholders (Dahlsrud, 2006; Turker 2009). In addition to the lack of consensus on the dimensions of CSR, recent publications challenge the common approach of incorporating complex constructs such as CSR into strategy (Galbreath, 2009). Given the developments increasing the usability of structural equation modelling in the social sciences (Bollen, 1989; Baumgartner and Homburg, 1996), the relevance of this discussion for the conceptualisation of CSR needs to be investigated through a more systematic approach.

Bollen (2002) noted that all measurement in social science assumes effect indicators and in structural equation modelling, every construct or latent variable is assigned a set of indicators. However, in publications, the epistemic relationship between variables and indicators is often not considered. Latent variables may be associated with reflective or formative indicators. Most researchers assume a reflective relationship, meaning that the unobserved latent variable affects the indicators. In this case, all indicators ‘measure the same thing and should covary at a high level if they are good measures of the underlying variable’ (Bagozzi, 1994:331). If the latent construct of all of its indicators- like an index or ranking- it needs to be measured formatively. ‘Formative indicators give rise to the unobserved theoretical construct. In this case the empirical indicators produce or contribute to the construct’ (Fornell, 1982:8). As Hulland (1999) claimed, it is very important from a conceptual and methodological standpoint, which kind of indicator specification is used. Diamantopoulos and Siguaw (2002:11) emphasise that the ‘alternative approaches to deriving measures can produce substantially different operationalisation of the same construct’. The above discussion makes clear the dangers of mis-specifying formative models as reflective, or vice versa.

The present paper makes an important contribution to the emerging literature on CSR by focusing on the construct’s epistemic structure. More specifically, it raises three research questions:

- 1 What is the definition of CSR?
- 2 How many CSR dimensions exist?
- 3 How can a formative approach to measuring CSR be developed?

In order to address the research questions, the paper is structured as follows: First, the relevant literature on CSR measures is reviewed; second, a four-step approach to formative indicator specification follows; third the empirical research design of the study will be described; fourth the preliminary research findings are presented; and finally, the present study and directions for future research are discussed.

## CSR: A FORMATIVE CONSTRUCT

### Measures of CSR

The development of constructs of CSR measures has been an object of debate since the 1960s. Initially, only two common methods of measures were applied by scholars. First, measurement was made using the reputation index (e.g. Alexander and Bucholz 1978; Bragdon and Marlin 1972; Folger and Nutt 1975; Heinze 1976; Sturdivant and Ginter 1977; Spicer 1978; Vance 1975). The second method was content analysis (e.g. Abbot and Monsen, 1979; Bowman and Haire, 1975; Ingram, 1978). Vance (1975) measured corporate social involvement by using reputation indexes and reported a negative result between social involvement and profitability, whereas Heinze (1976) and Bowman and Haire (1975) reported a positive result, although all used the same scales. These conflicting results derived from research design problems, thus, their measurement is clearly flawed (Cochran and Wood 1984). Abbot and Monsen (1979) used the Fortune 500 Social Involvement Disclosures (SID), but there is a drawback to using this scale as its social involvement index is only measured within the context of the U.S.A.; therefore, a generalisation problem arises. Similar to Ingram (1978), they failed to capture the importance dimension and finally discovered SID to be a more adequate technique for measuring CSR than the reputational index.

In the early 1980s, Cochran and Wood (1984) also used a specific reputation index as a measure of CSR. (Since they conducted studies over two time periods in order to enhance the sample size, inadequate sample was found to be one of the measurement problems, however, their study also revealed a weak linkage between CSR and financial performance and they became aware that CSR lacked extensive measures (i.e. rankings). They also noted that categorisation of CSR might give a relevant effect of CSR financial performance. However, Ullmann (1985) disagreed with Cochran and Wood's (1984) conclusion, claiming that they had used a poor measure of social performance when they used a reputational scale. However, compared to previous studies (see Ingram, 1978; Abbot and Monsen, 1979; Zenisek, 1979), Cochran and Wood's work appeared to be the most methodologically sound. The instrument they used was based on Carroll's (1979), and therefore the research validity was well established. The reliability of the instrument was tested by administering it to 158 business policy students in a large business school. Nonetheless, the result of their study was unable to support its empirical examination of the relationship between CSR and profitability, due to the limitation of their samples when assessing a perception of CSR among the delegate representatives.

In the late 1980s, McGuire, Sundgren and Schneeweis (1988) obtained a set of CSR data from *Fortune* magazine's annual survey of corporate reputations. They used this data because the data set gave comparable data from a year to year from 1982. They assessed the corporate behaviour of all 500 industrials. The *Fortune* survey covers a large number of respondents (8000 executives, outside directors, and corporate analysts). Compared to annual reports and other official documents, *Fortune* provides complete and consistent information, as it also provides industry information which is normally critical in the CSR area. McGuire *et al.* (1988) suggested that the validity and appropriateness of the *Fortune* measure required further testing, as they found the *Fortune* ratings to be biased, which could affect the results. For example, the issues of environment, equal opportunity and product quality have received substantial attention in *Fortune* 500 reports because of criticisms encountered by corporations and government regulation. Therefore, it is possible that corporations may underreport their social involvement activities. Furthermore, the raw data in the report are not recent and may be wrongly categorised, thus affecting the validity and reliability of the resulting scale.

Maignan (2001) developed his measurement instruments based on Aupperle *et al.*'s (1985) survey instrument and a measure of corporate citizenship developed by Maignan and Ferrell (2000). Maignan followed Churchill's (1979) technique to develop the CSR measures. Maignan conducted three pre-tests to achieve the face validity and content validity of items and his work is methodologically sound. However, he realised that his measure is problematic in terms of conceptualisations. Singhapakdi, Vitell, Rallapalli and Kraft (1996) revised the scale on organisational effectiveness (OE) and combined the perceived role of ethics and social responsibility (PRESOR) together in measuring the individual value. The use of PRESOR was problematic because PRESOR does not measure socially responsible activities of business. Thus, the results on PRESOR did not confirm the original factorial structure of the instruments (Etheredge, 1999). Next, Ruf, Muralidhar and Paul (1998) based on the Kinder, Lydenberg, and Domini (KLD) secondary data, developed a CSR scale using analytical hierarchy process. Maignan and Ferrell (2000) criticised Ruf's scale on the grounds that those indices are inadequate to evaluate all businesses. Furthermore, Maignan and Ferrell (2000) argued that the KLD indices are not based on theoretical arguments. Maignan and Ferrell (2000) also developed scales based on the concept of corporate citizenship. They incorporated the Carroll's (1979) conceptual contribution) and stakeholder theory management. They also tested the scales developed in two dissimilar cultural settings with three primary stakeholders (i.e. customers, employees and public). They concluded that these stakeholders are not the only ones who can impose responsibilities on business; other stakeholders such as the organisation can also be directly affected.

Ramasamy and Yeung (2009) relied on Maignan's (2001) and Carroll's (1979) instruments when measuring the perception of CSR, although Maignan (*ibid*) had noted certain conceptual problems with his instruments. The findings show that the items employed are not representative of the same underlying construct. The improper adaptation or adoption of a construct may provide flawed results. Turker (2009) developed 18 items to measure CSR, pooling CSR items from prior scholars' works (i.e. Aupperle, 1985; Carroll, 1979; Jones, 1995; Maignan and Ferrell, 2000; Quazi & O'Brien, 2000). However, by excluding the economic construct from his developed scale, Turker ignored an important CSR dimension. Recently, Yungwook and Soo-Yeon (2010) used a survey questionnaire to collect CSR data, but faced sampling frame problems. As such, it is difficult to generalise their findings to all populations to measure the relationship between CSR and other related variables.

### **The Epistemic Nature of CSR**

CSR was shaped into theory, research and practice many years ago, particularly in developed countries. Bowen (1953) was among the early authors who wrote about the doctrine of social responsibility. Bowen's definition of CSR has influenced the theory and practice of CSR up to the present. In the 1960s, there was a significant growth in attempts to define CSR. Davis (1960) viewed CSR as businessmen having to make their social power commensurate with the performance of their social responsibility; Frederick (1960) was concerned about public expectations of an economic system; McGuire (1963) believed that organisations' responsibilities towards society are beyond the economic and legal expectation; Davis and Blomstrom (1966) identified individual's character as a main contributor to social responsibility; and Walton (1967) preferred voluntarism over coercion. Later, in the 1970s, there appeared to be an improvement in defining CSR in scholarly works. CSR was viewed as involving stakeholder obligation (Johnson, 1971); as a social obligation (Eells & Walton, 1974); as more than profit-making (Backman, 1975; Davis, 1960) as going beyond economic and legal requirements (McGuire, 1963); as a voluntary activity (Manne and Wallich, 1975); as concern for the social system (Eells and Walton, 1974); and as an approach to social responsiveness (Ackerman and Bauer, 1976; Sethi, 1975). In relation to this, Carroll (1979)

constituted four-kinds of social responsibility; economic, legal, ethical, and discretionary (or philanthropic), but his categorisation has met with some criticism, particularly the ethical and discretionary dimensions, which are not easily accessible (Clarkson, 1995).

Between the 1980s and the late 1990s, there were fewer studies on CSR definition and CSR remains a construct that lacks clarity (Clarkson, 1995). However, alternative concepts and themes began to appear. Subsequently, most of the research work began to articulate other concepts that were related to CSR theory. Corporate social performance, corporate social responsiveness, business ethics and stakeholder management are some examples of the alternative concepts and themes which were developed in a way to operationalise the CSR. Recent CSR literature has begun to consider business responsibilities to stakeholder society (particularly in newly emergent technologies) including global levels and commercial values. In this context, it appears that the emergence of societal marketing can be classified as the modern beginning of CSR literature (Kotler and Lee 2005). With the emphasis on stakeholders' welfare, Dahlsrud (2006) produced five CSR dimensions; environmental, social, economic, stakeholder and voluntary. However, Dahlsrud's work is limited to 37 CSR definitions and takes into account only definitions originating between 1980 and 2003. He argues that the reason for not considering definitions before 1980 was because previously CSR was referred to as 'social responsibility'. Thus, in order to be consistent in his analysis, he excluded any definitions of 'social responsibility'. However, it should be noted that the earliest CSR definitions formed the basis of more recent CSR definitions and therefore, definitions before 1980 are important in the development of CSR. Moreover, Dahlsrud's method of counting the frequency from Google is subject to question. Ramasamy and Yeung (2009) also identified culture as one of the CSR dimensions, without, however, being entirely certain as to the nature of this dimension, which remains subject to interpretation. In relation to this, Kakabadse *et al.* (2005) stated that CSR may have different meanings between countries. Thus, for those from different societies, notwithstanding the problem of literal translation, CSR may be interpreted and implemented in different ways. Therefore, theoretical meaningful relationships might be rejected in the face of insignificant results caused by inadequate operationalisations (Zahra and La Tour, 1987).

The process describing the generation of the underlying CSR items is seldom published and applications in the context of structural equation models (SEMs) are rare. By using such models, the relationship between CSR and other construct may be investigated and operationalise. CSR within and SEM-context is discussed by de los Salmones, García, Crespo and Bosque (2005), Podnar and Golob (2007), Glavas and Piderit (2009) and Poolthong and Mandhachitara (2009). Incorrect specification of the constructs might lead to inaccurate conclusions about the structural relationships between them (Jarvis, MacKenzie and Podsakoff, 2003) and to misleading managerial implications. Conceptualising CSR as a formative construct would mean that the indicators lead to the construct as input. CSR would be an aggregation of all its indicators such as stakeholders' loyalty. This would imply that because it gives values, a firm can have stakeholder loyalty and as it increases stakeholder satisfaction, it gains stakeholder loyalty, and so forth. The CSR construct itself has a formative nature, as discussed by Strike, Gao and Bansal (2006), Gjolberg (2009), Poolthong and Mandhachitara (2009), and creating formative measures of CSR suggests that changes in the survey items affect the CSR scales, rather than the other way round.

In the following sections, the process and results of conceptualising CSR as a formative construct are discussed on the basis of an empirical study.

## SCALE DEVELOPMENT

Within the context of this paper, CSR as perceived by stakeholders is to be measured using formative indicators. The process of developing such a measurement model is different from the process of building scales for reflective latent variables (Baumgartner and Homburg, 1996). A four-step approach to scale construction that includes content and indicator specification, indicator collinearity and external validity, as suggested by Diamantopoulos and Winklhofer (2001) was implemented in this study.

### Content Specification

The first step includes content specification, i.e. the definition of the construct. A wide understanding of the formative construct is generally necessary, as 'failure to consider all facets of the construct will lead to an exclusion of relevant indicators' (Diamantopoulos & Winklhofer, 2001:271). On the other hand, ex-post deletion of 'weak' indicators is usually not considered an option (Bagozzi, 1994; Nunnally & Bernstein, 1994). Drawing on existing scales and the literature on CSR, 377 documents (i.e. books, journals, articles and interview transcripts) were reviewed and 107 documents with CSR definitions were content analysed prior to this study to ensure that the definition of CSR would capture its domain of content sufficiently. The yield rate was 29 percent. The aim of these qualitative measures is to offer content validity of the construct, which Rossiter (2002) claims to be the most essential when defining measurement models. In the understanding of the content analysis, CSR is previewed as a collective meaning, implying that it is a complex set of activities that work together through a consistent flow to provide 'values' for stakeholders. These layers cover each other, which can be seen as very important. Each layer has a dynamic relationship with other layers. As one interviewee stated: *'CSR has two perspectives. One is what they (the firm) should do and another is what they want to show. For example, when they donate a big cheque, they want to show it. Otherwise they will just do what they want to do to help the need of society. So it depends, but I think neither is really wrong. From an Islamic perspective, it is different, for example, in terms of giving, 'the right hand should not know what the left hand doeth'. But from another perspective if you show you do it, maybe you want to encourage others to do it too, so perhaps it is OK...But there are companies that do CSR in such a way as to reduce their tax payments. For me, it is still OK since someone is also benefiting'*. This demonstrates that criticism of the CSR concept may be endless, as it is ambiguous in nature.

### Indicator Specification

The *second* step is the generation of the formative indicators making the construct. All facets of the construct need to be covered by these indicators in order to make a fit between the definition and its operationalisation. The indicators are not interchangeable in the formative case. The whole construct has to be covered by the indicators that build up a formative measurement model (Bollen and Lennox, 1991). In the case of CSR, all facets of the perceptions by stakeholders have to be included, calling for a variety of indicators capturing the different contributions of the CSR to different stakeholders' needs. The approach used to create the scale relies upon the idea that the same scale can be applied to multi-stakeholders. It integrates scholars (academic) and managerial (practical). Interviewees were selected based on a convenience sample. Using this snowball approach, 40 potential interviewees were contacted but only 24 were willing to participate. Interviewees were questioned in their roles as customers, shareholders and employees, and were to find definitions of 'CSR' and to discuss their perceptions and expectations of a company with CSR. After this inductive step, the rater agreement across major themes was computed. This comprised inter-rater agreement between the independent participants (n=2) and inter-rater agreement between the researcher

and colleague (n=2). The inter-rater agreement amongst the independent participants was carried out using seven randomly-selected definitions for each document. Both independent participants were given detailed written instructions and were asked to separately code the CSR using the major themes and elements developed through the emergent coding. When the 2 independent's code were compared it was found that the overall inter-rater agreement of the major themes was .69 (n=280)<sup>1</sup>. Specifically, the rater agreement for the major themes of CSR from books, journals, articles and interview transcripts was .74, .73, .53 and .76 respectively. Then the inter-rater agreement between the researcher and colleague was also carried out using seven randomly selected CSR definitions for each document. Both also separately coded the CSR using the major themes developed through the emergent coding. On comparing the findings, it was found that our overall inter-rater agreement of the major themes was .80 (n=280). Specifically, the reported agreement (Kappa coefficient) for the major themes of CSR from books, journals, articles and interview transcripts was .84, .83, .66 and .87. After consulting the reliability, one can be confident that this coding scheme is sufficiently reliable to make a meaningful and accurate empirical quantification of CSR definition.

Combining inductive and deductive procedures in the scale development process aims to develop a measure that is applicable to different disciplines, as the literature review and the input of the interviews were not restricted to single stakeholder groups' statements. A list of 80 items was gathered from the literature search and interviews. To refine the scales, a two-step pre-test was employed using an Internet survey. Beforehand, 206 e-mail invitations to participate were sent to individual stakeholders in Malaysia. Malaysia was chosen as the focus of this research as this developing country has demonstrated an increasing awareness of CSR in recent years (Lu and Castka (2009). Malaysia also promotes its CSR agendas at all levels. The questions were designed to check the content of the items developed and to determine on a five-point Likert-type scale how agreed with the 80 CSR items developed to ensure that only items perceived as relevant for CSR were include in the measure. These items were evaluated by 46 respondents. After the first step, an additional 15 items were added. The second step was a scale purification task, as proposed by Churchill (1979), again using an Internet survey administered to individual Malaysian stakeholders. This second step is referred to as Study 1. The 700 individual stakeholders with e-mail addresses were contacted and 172 answered the survey in Study 1, a response rate of about 24.57%. After elimination from the sample of respondents who had not completed all the survey sections, 142 responses were found usable.

### **Multicollinearity**

The *third* step in the development process is to check for indicator collinearity. In formative measures, principal component analysis (PCA) can be used to check the dimensionality of the latent construct (Coltman, Devinney, Midgley and Venaik, 2008). The indicators are not required to be highly intercorrelated. Indicators in a formative measure may be dropped as a consequence of low correlation, high multicollinearity or if they appear to be related to another construct. However, the researcher take care not to change the meaning of the construct when deleting an indicator (Diamantopoulos and Winklhofer, 2001; Diamantopoulos, Riefler and Roth, 2008). The variance inflation factor should not exceed ten (Kleinbaum, Kupper, Muller and Nizam, 1998; Hair, Anderson, Tatham and Black, 1995).

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<sup>1</sup> Note that the n=280 refers to the number of categories coded. Twenty-eight definitions were coded, each of which contained a potential of 10 themes.  $10 \times 28 = 280$

### External Construct Validity

The *fourth* and last step is checking external construct validity. To qualify formative indicators for the measurement model is to include the entire construct in a wider nomological context, meaning that other constructs and their relationships to the construct in question have to be measured (Bagozzi, 1994). Diamantopolous and Winklhofer (2001) claimed if the construct has the theoretically hypothesised impact on the other constructs in the structural model, this confirms the nomological validity of the measurement models used.

## RESEARCH DESIGN AND SAMPLE STRUCTURE

### Empirical Study and Data Collection

The procedure and results described both above and below were part of a larger research project that focused on measuring CSR and stakeholder loyalty from the perception of Malaysian stakeholders. This paper presents the results of Phase 1 and Study 1 of Phase 2 but not those of Study 2. Triangulation was employed to design a formative measure for CSR. A qualitative method was implemented in Phase 1 and quantitative one in Phase 2. Phase 2 incorporated Study 1 and Study 2. Data collection methods were literature search, interviews and surveys. Data analysis comprised content analysis (i.e. thematic analysis) and Exploratory Factor Analysis (EFA).

### Sampling

Sampling variability can cause the factor structure to be unreliable (Cliff and Pennell, 1967; Horn, 1967; Solomon, 1960). This may cause a problem with interpretation even when the factors appear to be clear and unambiguous (Ford, MacCallum and Tait, 1986). Many approaches have been suggested to minimise the interpretation of meaningless factor solution. Armstrong and Soelberg (1968) proved that variables with random numbers could be analysed and meaningful factors could be interpreted. Sampling error can be reduced by increasing sample size (Cliff and Pennell, 1967; Armstrong and Soelberg, 1968). Therefore, this study has ensured that its sample size is sufficient to confirm the ability to interpret the results of factor analysis and ensure the quality of the data or validity of the results. Table 1 indicates the descriptive statistics of the sample for Study 1. Most of them had reached postgraduate level and had a good understanding of English (The questionnaire was not translated into Malay). Moreover, this sample is composed of white collar workers familiar with technology, as it was discovered during the pilot study that they constantly utilised and accessed the Internet, which was required for participation in the online survey.

Table 1 Statistics of Study 1 Sample

Age		Education		Sex		Income		Industry	
Category	(%)	Category	(%)	Category	(%)	Category	(%)	Category	(%)
<30	19	Secondary	2.1	Male	40.1	< RM1000	3.5	G	23
30-50	78.2	Graduate	43.7	Female	59.9	RM1000-2500	15.5	PLC	17.6
>50	2.8	Post-graduate	54.2			RM2501-4000	38	GLC	34.5
						> RM4000	43	C	12
								NGO	12.7

G- Government; PLC- Public listed company; GLC- Government-linked company  
C- Consumer; NGO- Non-governmental organisation



## RESULTS

The study is concerned how factor analysis was actually applied in this empirical work. The understanding of how to deal with the complex issues for factor analytic methodology was assessed prior to conducting the factor analysis. Given that statistical procedures and techniques are complex in measuring item construct, a review of exploratory analysis is important, it provides a view of how well this application (i.e. psychometric theory) could be translated into practice. The research application of factor analysis is analysed and the study clearly and comprehensively presents the decision made on factor analysis and the results of the factor analysis. Other major issues were (1) the choice of factor model to be used; (2) the decision about the number of factors to retain; (3) the methods or rotation; and (4) the interpretation of the factor solution. We used factor analysis for examining (1) patterns of interrelationship; (2) data reduction; and (3) classification and description of data. Therefore, this study performed exploratory factor analysis (EFA) to discover discernible patterns of CSR dimensions.

### Content validation

Based on the qualitative findings, this study on CSR defines it thus:

'CSR is a continuous and long-term *process* guided by organisational and *personal values*. It is concerned with *people* (as stakeholders), the *environment* and organisational *policies*, and is influenced by *political* concerns. Adoption of CSR is often associated with monetary gain or *profit* for the initiator'.

The following offers a more explicit explanation of the above definition.

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<i>Profit</i>	Firms make an investment in CSR and consequently seek monetary gain while fulfilling their economic obligation
<i>Policy</i>	The compliance to regulation which extends beyond legal and ethical conduct
<i>Political</i>	Manipulation by certain organisations or individuals for their own agenda and interests
<i>Personal</i>	Individual character; subject to individual perception and expectation
<i>Process</i>	Long-term activities or business between and among stakeholders
<i>People</i>	The objects of a firm's responsibility and commitment (e.g. shareholders, employees, customers, suppliers, governments, non-governmental organisations and communities)
<i>Environment</i>	Effective management and protection of natural resources while balancing these with stakeholders' activities (i.e. ensuring that these do no harm to the Earth)
<i>Values</i>	The core beliefs that help a firm to differentiate its reputation and identity and guides communication efforts

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The participants were asked the extent to which they as stakeholders agreed with the interpretation of the developed CSR definition (1= strongly agree, 5= strongly disagree).

Table 2 shows the percentage of the total scores of the respondents (N=142). Four categories are used to measure whether the developed definition

C1 - accurately captures the true meaning of CSR,

C2 - is sufficiently practical,

C3 - is relevant to multi-stakeholders in all places

C4 - offers a sound theoretical and practical definition of CSR.

Table 2 Percentage of total scores of the respondents

Categories	Strongly Agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly disagree (%)	Total (%)
C1	18.3	59.9	11.3	7	3.5	100
C2	14.8	59.9	14.8	7	3.5	100
C3	14.8	59.9	11.3	10.5	3.5	100
C4	15.5	58.5	14.8	11.5	4.2	100

More than 70% of the respondents agreed with those categories and less than 5% strongly disagreed. It is evident from Table 2 that overall, respondents agreed about all categories of the developed CSR definition. Therefore, the definition is understandable to the respondents. This criterion is very important to further identifying CSR dimensionality.

### Indicator Collinearity

There are numerous arguments regarding the uses of factor analysis (Costello and Osborne, 2005; Floyd and Widaman 1995; Hinkin, 1995; 1998; Hinkin and Tracey, 1999; Reise, Waller and Comrey, 2000). Despite the obvious differences between principal component analysis (PCA) and common factor (FA), Reise *et al.*'s (2000) view is that the two procedures are often considered equivalent in practice. It has also been suggested that if the data are well structured, it makes no difference whether a common factor (FA) or principal component analysis (PCA) is used (see (Velicer, Peacock and Jackson, 1982). Therefore, the CSR items were submitted to PCA with Varimax rotation in order to identify the underlying constructs. The result of before and after items deleted and retained via PCA procedure were reported. Having been established to have different factorial structures with different items, the 95 items that made up the CSR sample were subjected to PCA using SPSS Version 17. The suitability of factor analysis for the sample was confirmed by a Kaiser-Meyer-Olkin (KMO) value of .814, which is considerably above the recommended value of 0.6 (Kaiser 1970; 1974). The Bartlett's Test of Sphericity (Bartlett, 1954) was highly significant ( $p < .000$ ). The correlation matrix also revealed many coefficient values above 0.3. The PCA revealed twenty-one eigenvalues exceeding 1, and the cumulative variance was 58.43%. Communalities were estimated using squared multiple correlations. Inspection of the scree plot indicated that the magnitude of Eigenvalues tapered off after the three factors. The scree plot result did not clearly support the extraction of current factors.

Therefore, the decision was made to submit only the meaningful factors to PCA before retaining these items. The following criteria were used to identify meaningful factors: (a) retain items with high communalities ( $>0.6$ ) and well-defined factors (have many large loadings). Retaining items with higher communalities is an absolute minimum for newly developed measures (Hinkin, 1998). Moreover, sample sizes of 100 are often adequate to identify meaningful factors underlying the items (Reise *et al.* 2000); (b) retain only those components with an Eigenvalues of greater than 1; (c) include all items with structure coefficient of an absolute value of 0.30 or greater; and (d) retain factors that were interpretable. After these criteria were taken into consideration, the 50 items were subjected to PCA to further determine the dimensionality of these items. Appendix 1 shows the descriptive statistics for the output.

The suitability of factor analysis for the sample was again confirmed by a Kaiser-Meyer-Olkin (KMO) value of 0.893. Table 3 shows the KMO and Bartlett's Test before and after items deleted. The table shows that the KMO value improved and moved closer to 1.0

after the 45 items were deleted from the 95 developed items. The Bartlett's Test of Sphericity was also highly significant ( $p < .000$ ).

Table 3 KMO and Bartlett's Test

		95 items	50 items
<b>Kaiser-Meyer-Olkin Adequacy.</b>	<b>Measure of Sampling</b>	.814	.893
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	12926.646	5930.835
	Df	4465	1225
	Sig.	.000	.000

The PCA also revealed eight eigenvalues exceeding 1 (see Table 4). The inspection of the scree plot now supported the extraction of the eight factors (see Figure 2). Figure 2 shows these values in the first five factors of the figure immediately above. From the seventh to eighth factors, the line is nearly flat but above it levels off. From the ninth factor, it is clearly seen that the line is almost flat, meaning that each successive factor accounts for ever smaller amounts of the total variance. The recommendation is to retain all components in the descent before the first one on the line where it levels off.

To obtain a clear interpretation of the components, varimax rotation with Kaiser Normalization was performed. The rotated factor loadings indicated a simple and clear structure (Thurstone, 1947), with the eight components showing a number of strong loadings. The logic is that interpretation is easiest when the varimax-factor correlations are closer to 1, which gives an indication that the variable has a clear association (Hair *et al.*, 1987). In exploring the analysis, there were multiple loadings for some of these CSR items. Since authors differ in their opinion as to what to do with multiple loadings (Pett, Lackey and Sullivan, 2003), the decision was made to retain these items, and to place them under appropriate components, because of their conceptual relationship to the other items under the same component.

Figure 2 Scree Plot

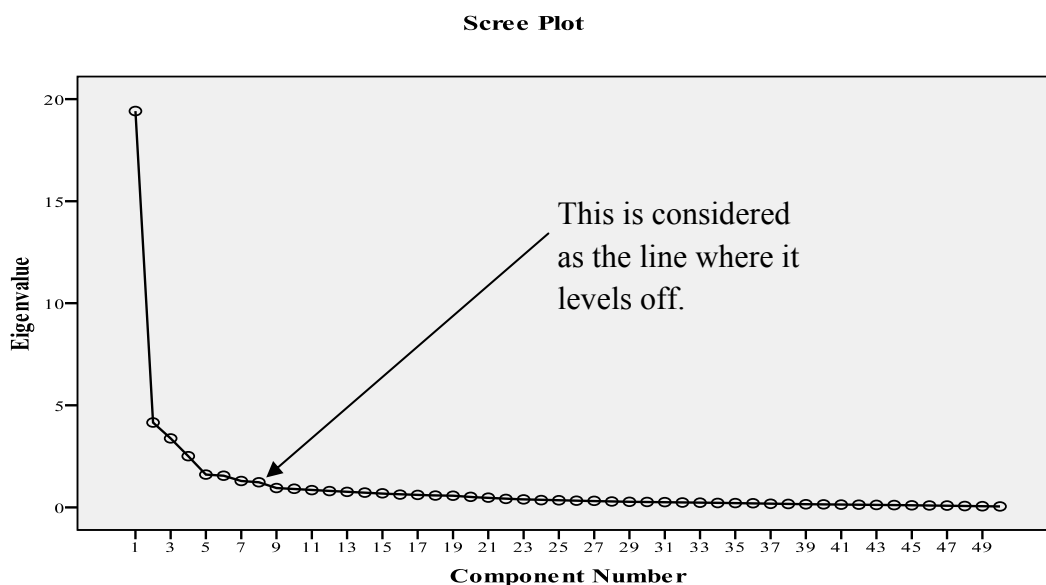


Table 4 Factor Analysis of the measures

Measures	Item	SL <sup>a</sup>	Commub <sup>b</sup>	Eigen <sup>c</sup>	POV <sup>d</sup>	CP <sup>e</sup>
Process	1	0.789	0.730	19.415	38.831	38.831
	2	0.743	0.730			
	3	0.728	0.728			
	4	0.724	0.705			
	5	0.714	0.782			
	6	0.692	0.727			
	7	0.672	0.689			
	8	0.613	0.667			
	9	0.604	0.678			
	10	0.597	0.600			
	11	0.571	0.722			
	12	0.541	0.666			
	13	0.536	0.648			
Policy	1	0.808	0.802	4.155	8.311	47.142
	2	0.754	0.824			
	3	0.729	0.741			
	4	0.715	0.694			
	5	0.709	0.767			
	6	0.705	0.765			
	7	0.677	0.725			
	8	0.657	0.712			
	9	0.653	0.726			
	10	0.636	0.676			
Values	1	0.766	0.721	3.377	6.754	53.895
	2	0.738	0.690			
	3	0.707	0.649			
	4	0.697	0.693			
	5	0.690	0.797			
	6	0.689	0.613			
	7	0.676	0.753			
	8	0.571	0.787			
	9	0.520	0.752			
Environment	1	0.650	0.628	2.505	5.010	58.905
	2	0.586	0.622			
	3	0.558	0.668			
	4	0.548	0.588			
	5	0.486	0.703			
	6	0.360	0.689			
Personal	1	0.570	0.657	1.602	3.205	62.110
	2	0.526	0.727			
	3	0.390	0.766			
Profit	1	0.744	0.664	1.550	3.100	65.210
	2	0.718	0.752			
	3	0.406	0.652			
People	1	0.656	0.708	1.289	2.579	67.789
	2	0.583	0.622			
Political	3	0.506	0.690	1.226	2.452	70.241
	1	0.447	0.674			
	2	0.458	0.727			
	3	0.399	0.627			

a. Standardised loadings; b. Communalities of each item; c. Eigenvalue;  
d. Percent of variance; e. Cumulative percent

The rule of thumb is to include all items with structure coefficients with an absolute value of 0.30 or greater (Steven, 2002). Therefore, in this analysis only items that loaded at levels of 0.3 or greater were retained for further analysis (see Table 4). Items were not retained if they did not load on any factor with a value of 0.3 or greater; loaded on the wrong factor; or had cross-loadings on two factors and the higher and interpretable factor was retained. Some of the related indicators loaded onto several factors. In the exploratory stage, we were reluctant to drop any of the factors and wished to retain the eight factors, even though some of the factors only had three items retained. Consequently, this construct is identified as Dimensions of the Corporate Social Responsibility (DCSR). The Process dimension has 13 items, the Policy dimension 10 items, the Values dimension 9 items, the Environment dimension 6 items, and the Personal, Profit, People and Political dimension each have 3 items.

## **DISCUSSION AND RECOMMENDATIONS FOR FUTURE RESEARCH**

The growing body of knowledge on CSR has been dominated by research focused on the construct itself; a better measure of CSR is important to stakeholders' efforts to position themselves more effectively in the market place (Turker, 2009). The inclusion of CSR in formative measures to examine its interplay with other constructs has been rare and the epistemic nature of a CSR complex construct has largely been ignored in the literature.

The present study investigated the epistemic nature of CSR and the attributes that form the construct. Its aim was to contribute to a better knowledge of the true meaning of CSR, both theoretical and of practical relevance to multi-stakeholders, to CSR dimensions, and to how to develop a formative measure of CSR. Acceptable validity of the developed CSR definition was obtained from the qualitative study. The domain of the construct led to a correct factor analytic procedure. The guidelines suggested by Ford *et al.* (1986) were followed during the factor analytic processes. This research holds that adherence to these guidelines has dramatically improved both the quality of the applied factor analysis literature and the validity of the information obtained from applied factor analysis research. The description of techniques used and the presentation of results were not given in a confusing or inaccurate manner. As such, the dimensionality of CSR was determined with eight dimensions.

### **Implications for Academics and Practitioners**

Researchers need to be aware of the conceptual differences between the measurement approaches and clearly identify their models' epistemic nature. The findings of the present study open the door for future research to 'operationalise' the dimensions of CSR and may have stimulated the broadening movement and the conceptualisation of CSR in other fields. Indeed, given the intuitive appeal and practical benefits of formative measurement, researchers and marketing practitioners may benefit from such efforts. This is an important step towards achieving efficient CSR management for all stakeholders.

### **Limitations and Further Research**

However, external construct validity is not present in this empirical research. As in any empirical research, the results of the present study cannot confirm the construct without taking into account the external construct validity. Study 2 is designed to do this. To make the model fully identified in the structural model (Bollen, 1989), CSR is hypothesised as having positive relationships with stakeholder satisfaction and loyalty. There are two main strands in the literature on the effect of CSR on loyalty: the direction of the relationship between measured CSR and stakeholder satisfaction and the magnitude and statistical significance of that relationship. The Partial-Least Square (PLS) approach is used to estimate

both the measurement and structural parameters in the structural equation model (Barclay, Higgins and Thompson, 1995; Chin, 1998; Fornell and Bookstein, 1982). PLS is considered more appropriate for models containing formative and reflective constructs (Chin, 1998; Fornell and Bookstein 1982; Lindgreen, Palmer, Wetzels and Antioico, 2009) and has been applied in a variety of disciplines, including marketing (Jagpal, 1981). This study could estimate the parameters in the structural model using PLS analysis that may help to confirm the nomological validity of the construct.

## REFERENCES

- Abbott, W. F. & Monsen, R. J. (1979). On the measurement of corporate social responsibility: self-reported disclosures as a method of measuring corporate social involvement. *Academy of Management Journal*, 22, 501.
- Ackerman, R.W. & Bauer, R.A. (1976). *Corporate Social Responsiveness*, Reston VA: Reston Publishing Company.
- Alexander, G.J. & Buchholz, R.A. (1978). Corporate social responsibility and stock market performance. *Academy of Management Journal*, 21, 479.
- Armstrong, J.S. & Soelberg, P. (1968). On interpretation of factor analysis. *Psychological Bulletin*, 70, 361.
- Aupperle, K.E., Carroll, A.B. & Hatfield, J.D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28, 446.
- Backman, J. (Ed). (1975). *Social responsibility and accountability*: New York: New York University Press.
- Bagozzi, R. (1994). Structural equation models in marketing research: Basic principles, in: R. Bagozi (ed) *Principles of Marketing Research*, Blackwell, Oxford, 317.
- Barclay, D., Higgins, C. & Thompson, R. (1995). The partial least squares approach to causal modeling: personal computer adoption and use as illustration. *Technology Studies*, 2(2), 285.
- Bartlett, M. S. (1954). A note on the multiplying factors for various  $\chi^2$  approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 16(2), 296-298.
- Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139.
- Bollen, K. (2002). Latent variables in psychology and the social sciences. *Ann Rev Psychol*, 53, 605.
- Bollen, K. (1989). *Structural Equations with Latent Variables*, Wiley, New York.
- Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin*, 110(2), 305.
- Bowen, Howard R. (1953). *Social responsibility and accountabilities of the businessman*, New York: Harper & Row.
- Bowman, E.H., & Haire, M. (1975). A strategic posture toward corporate social responsibility. *California Management Review*, 18, 49.
- Bragdon, J.H. & Marlin, J.A. (1972). Is pollution profitable? *Risk Management*, 19, 9.
- Carroll, A.B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4, 497.
- Carroll, A.B. (1999). CSR: Evolution of a definitional construct. *Business and Society*, 38, 268.

- Chin, W. (1998). The partial least squares approach to structural equation modelling, in Marcoulides, G.A. (Ed.), *Modern Business Research Methods*, Lawrence Erlbaum Associates, Mahwah, NJ, 295.
- Churchill, G.A. Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, pp. 64-73.
- Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corpora. *Academy of Management Review*, 20(1), 92.
- Cliff, N. & Pennell, R. (1967). The influence of communality factor strength and loading size on the sampling characteristics of factor loadings. *Psychometrika*, 32, 309.
- Cochran, P.L. & Wood, R.A. (1984). Corporate social responsibility and financial performance. *Academy of Management Journal*, 27, 42.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37.
- Coltman, T., Devinney, T., Midgley, D., & Venaik, S. (2008). Formative versus reflective measurement models: Two applications of formative measurement. *Journal of Business Research*, 61(12), 1250.
- Costello, A.B & Osborne, J.W. (2005), Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis, *Practical Assessment, Research & Evaluation*, 10, 1.
- Dahlsrud, A. (2006). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1.
- Davis, K. & Blomstrom, R.L. (1966). *Business and its environment*. New York:McGraw-Hill.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2,70.
- de los Salmones, Ma del Mar García, Crespo, A. H., & Bosque, I. R. d. (2005). Influence of corporate social responsibility on loyalty and valuation of services. *Journal of Business Ethics*, 61(4), 369.
- Diamantopoulos, A. & Siguaw, J. A. (2002). Formative vs reflective indicators in measure development: Does the choice of indicators matter?, *The Center For Hospitality Research Working Papers*, Ithaca.
- Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *JMR, Journal of Marketing Research*, 38(2), 269.
- Diamantopoulos, A., Riefler, P., & Roth, K. (2008). Advancing formative measurement models. *Journal of Business Research*, 61(12), 1203.
- Eells, R. & Walton, C. (1974). *Conceptual Foundation of Business*, 3<sup>rd</sup> Edition, Irwin, Burr Ridge, IL.
- Etheredge, J. M. (1999). The perceived role of ethics and social responsibility: An alternative scale structure. *Journal of Business Ethics*, 18(1), 51.
- Floyd, F. J. & Widaman, K. F. (1995). Factor Analysis in the Development and Refinement of Clinical Assessment Instruments. *Psychological Assessment*, 7(3), 286.
- Folger, H. R. & Nutt, F. (1975). A note on social responsibility and stock valuation. *Academy of Management Journal*, 18, 155.
- Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39(2), 291.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *JMR, Journal of Marketing Research*, 19(4), 440.

- Frederick, W. C. (1960). The growing concern over business responsibility. *California Management Review*, 2, 54.
- Galbreath, J. (2009). Building corporate social responsibility into strategy. *European Business Review*, 21(2), 109.
- Gjøølberg. (2009). The origin of corporate social responsibility: Global forces or national legacies? *Socio - Economic Review*, 7(4), 605.
- Glavas, A., & Piderit, S. (2009). How does doing good matter? effects of corporate citizenship on employees. *The Journal of Corporate Citizenship*, (36), 51.
- Hair, J.F., Anderson, R.E, Tatham, R.L. and Black, W.C. (1995) *Multivariate Data Analysis*, 4<sup>th</sup> edn., Prentice Hall, Englewood Cliffs.
- Heinze, D.C. (1976). Financial correlates of a social involvement measure. *Akron Business and Economic Review*, 7, 48.
- Hinkin, T.R. (1995). A review of scale development practices in the study of organisations. *Journal of Management*, 21, 967.
- Hinkin, T.R. (1998). A Brief Tutorial on the Development of Measures for Use in Survey Questionnaires. *Organizational Research Methods*, 1(1), 104.
- Hinkin, T.R. & Tracey, J.B. (1999). An analysis of variance approach to content validation, *Organizational Research Method*, 2, 175.
- Horn, J.L. (1967). On subjectivity in factor analysis. *Educational and psychological Measurement*, 27, 811.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195.
- Ingram, R.W. (1978). An investigation of the information content of (certain) social responsibility disclosures. *Journal of Accounting Research*, 16, 270.
- Jagpal, H. S. (1981). Measuring Joint Advertising Effects in Multiproduct Firms. *Journal of Advertising Research*, 21 (1), 65.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, 30(2), 199.
- Johnson, H.L. (1971). *Business in contemporary society: Framework and issues*. Belmont, CA: Wadsworth.
- Jones, T.M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20, 404.
- Kaiser, H.F. (1970). A second generation Little-Jiffy. *Psychometrika*, 35, 401.
- Kaiser, H.F. (1974). An Index of Factorial Simplicity, *Psychometrika*, 39(1), 31.
- Kakabadse, N.K., Rozuel, C. & Lee, D. L (2005). Corporate social responsibility and stakeholder approach: A conceptual review. *Int. J. Business Governance and Ethics*, 1, 277.
- Kim, Y., & Kim, S. (2010). The influence of cultural values on perceptions of corporate social responsibility: Application of Hofstede's dimensions to Korean public relations practitioners. *Journal of Business Ethics*, 91(4), 485.
- Kleinbaum, D.G., Kupper, L., Muller, K.E. & Nizam, A. (1998). *Applied Regression Analysis and Other Multivariable Methods*, 3<sup>rd</sup> edn. Duxbury Press, Pacific Grove.
- Kotler, P & Lee, N. (2005). *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause*. Hoboken, NJ: John Wiley.
- Lindgreen, A., Palmer, R., Wetzels, M., & Antico, M. (2009). Do different marketing practices require different leadership styles? an exploratory study. *The Journal of Business & Industrial Marketing*, 24(1), 14.



- Lockett, A., Moon, J., & Visser, W. (2006). Corporate social responsibility in management research: Focus, nature, salience and sources of influence. *The Journal of Management Studies*, 43(1), 115.
- Lu, J., & Castka, P. (2009). Corporate social responsibility in malaysia - experts' views and perspectives. *Corporate Social - Responsibility and Environmental Management*, 16(3), 146.
- Maignan, I. & Ferrell, O.C. (2000). Measuring corporate citizenship in two countries: the case of the
- Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: a cross-cultural comparison. *Journal of Business Ethics*, 30, 57.
- Manne, H.G & Wallich, H.C (1972). *The Modern Corporation and Social Responsibility*, Washington DC - American Enterprise Institute for Public Policy Research.
- McGuire, J.B., Sundgren, A. & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal*, 31, 854.
- McGuire, J.W. (1963), *Business and Society*, McGraw-Hill.
- Moon, J., Crane, A., & Matten, D. (2005). CAN CORPORATIONS BE CITIZENS: Corporate citizenship as a metaphor for business participation in society. *Business Ethics Quarterly*, 15(3), 429.
- Nunnally, J.C. and Bernstein, I.H. (1994). *Psychometric Theory*, 3rd edn. McGraw-Hill, New York.
- Pett, M.A, Lackey, N.R & Sullivan, J.J (2003). *Making Sense of factor analysis: the use of factor analysis for instrument development in health care research*. London: Sage Publications.
- Podnar, K., & Golob, U. (2007). CSR expectations: The focus of corporate marketing. *Corporate Communications*, 12(4), 326.
- Poolthong, Y., & Mandhachitara, R. (2009). Customer expectations of CSR, perceived service quality and brand effect in thai retail banking. *The International Journal of Bank Marketing*, 27(6), 408.
- Quazi, M. & O'Brien, D. (2000). An empirical test of a cross-national model of corporate social responsibility. *Journal of Business Ethics*, 25, 33.
- Ramasamy, B., & Yeung, M. (2009). Chinese consumers' perception of corporate social responsibility (CSR). *Journal of Business Ethics*, 88, 119.
- Reise, S.P, Waller, N.G, & Comrey, A.L. (2000). Factor Analysis and Scale Revision. *Psychological Assessment*, 12(3), 287.
- Rositer, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19(4), 305.
- Ruf, B.M., Muralidhar, K & Paul, K. (1998). The development of a systematic aggregate measure of corporate social performance. *Journal of Management*, 24, 119.
- Sethi, S.P. (1975). Dimensions of corporate social responsibility. *California Management Review*, 17, 58.
- Singhapakdi, A., Vitell, S.J, Rallapalli, K.C. & Kraft, K.L. (1996). The perceived role of ethics and social responsibility: a scale development. *Journal of Business Ethics*, 15, 1131.
- Solomon, H. (1960). A survey of mathematical models in factor analysis. In Solomon H (Ed.), *Mathematical thinking in the measurement of behaviour* (pp.269-314). Glencoe: Free Press.
- Spicer, B.H. (1978). Investors, corporate social performance and information disclosure: An empirical study. *The Accounting Review*, 53, 94.
- Stevens, J.P. (2002). *Applied multivariate statistics for the social sciences* (4<sup>th</sup> ed.). Mahwaw, NJ: Lawrence Erlbaum Associates.

- Strike, V. M., Gao, J., & Bansal, P. (2006). Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, 37(6), 850.
- Sturdivant, F.D. & Ginter, J.L. (1977). Corporate social responsiveness: Management attitudes and economic performance. *California Management Review*, 19, 30.
- Thurstone, L.L. (1947). *Mutltiple-factor analysis*. Chicago, IL: University of Chicago Press.
- Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, 85(4), 411.
- Ullmann, A.A. (1985). Data in search of a theory: a critical examination of the relationships among social performance, social disclosure, and economic performance of U.S. firms. *Academy of Management Review*, 10, 540.
- Vaaland, T. I., Heide, M., & Grønhaug, K. (2008). Corporate social responsibility: Investigating theory and research in the marketing context. *European Journal of Marketing*, 42(9/10), 927.
- Walton, C. (1967). *Corporate Social Responsibilities*. Belmont, CA: Wadsworth.
- Vance, S.C. (1975). Are socially responsible corporations good investment risks? *Management Review*, New York, August, 64.
- Velicer, W.F., Peacock, A.C., & Jackson, D.N. (1982). A comparison of component and factor patterns: A Monte Carlo approach. *Multivariate Behavioral Research*, 17, 371.
- Zahra, S.A & LaTour, M.S. (1987). Corporate Social Responsibility and Organizational Effectiveness: A multivariate approach. *Journal of Business Ethics*, 6, 459.
- Zenisek, T. J. (1979). Corporate social responsibility: A conceptualization based on organizational literature. *Academy of Management Review*, 4, 359.

## Appendix 1 Descriptive Statistics

No	Item	Mean <sup>a</sup>	SD <sup>b</sup>	N <sup>c</sup>
32	induces products and services innovation	2.1690	0.74350	142
57	smoothes business operations	2.3521	0.84381	142
78	overcomes business problems	2.6268	0.91178	142
31	provides safe and healthy products in the market	2.1972	0.74605	142
27	requires a company to provide high-quality products to its customers	2.2394	0.80715	142
62	increases the value of the products	2.1831	0.79555	142
58	helps a company to market their products and services easily	2.0634	0.73624	142
34	believes in customer satisfaction	2.0986	0.76548	142
70	helps a company to achieve its target	2.2465	0.78267	142
71	is a company's innovation	2.1056	0.71168	142
72	ensures consumers are not cheated	2.4296	0.91013	142
18	helps ensure that employees are offered a reasonable salary	2.6549	0.93054	142
61	increases the value of intangible products	2.0915	0.76172	142
95	concerns fair layoffs	2.2535	0.66776	142
94	concerns fair compensation	2.1901	0.67302	142
82	positions products profitably	2.2183	0.70576	142
89	increases product safety and health	1.7535	0.79168	142
84	helps a company to manage their procurement	2.2254	0.62336	142

<b>85</b>	supports a firm's infrastructure	2.1972	0.61007	142
<b>93</b>	protects local certified food	2.2465	0.72627	142
<b>88</b>	concerns better labour relation	2.1479	0.60667	142
<b>92</b>	concerns diversity and non-discriminations	2.0915	0.61776	142
<b>85</b>	promotes a firm's technology development	2.1761	0.63357	142
<b>52</b>	provides a social values to the company	1.8028	0.57414	142
<b>56</b>	creates a good company portfolio	1.7676	0.73093	142
<b>54</b>	makes a company outstanding	1.9155	0.62448	142
<b>50</b>	creates a sense of belonging	2.0282	0.69388	142
<b>53</b>	encourages a company to be more creative	1.9366	0.70675	142
<b>60</b>	increases the value of the company	1.9577	0.67239	142
<b>78</b>	creates a good culture in society	1.8310	0.69417	142
<b>44</b>	helps public social awareness	1.8873	0.74471	142
<b>43</b>	creates honest, responsible, ethical and generous people	1.9859	0.70445	142
<b>67</b>	helps shape human behaviour	2.1761	0.79269	142
<b>45</b>	is against child abuse	2.1197	0.78535	142
<b>63</b>	Protects the natural resources	2.1268	0.76129	142
<b>73</b>	overcomes social problems	2.4296	0.89441	142
<b>91</b>	provides a healthy working environment	2.0211	0.73868	142
<b>19</b>	supports recycling	2.0704	0.63746	142
<b>38</b>	promotes a company paying its taxes on a regular and continuing basis	2.3028	0.82505	142
<b>39</b>	encourages a company to follow government regulations	2.1972	0.72679	142
<b>42</b>	helps people change their attitude	2.0986	0.82780	142
<b>1</b>	contributes to company profits	2.2113	0.81503	142
<b>2</b>	is an activity that attracts customers	1.8944	0.69147	142
<b>24</b>	helps the management with a competitive strategies	2.1338	0.80096	142
<b>13</b>	encourages its employees to become involved in social activities voluntarily	1.8380	0.74982	142
<b>10</b>	gives back to society to improve the quality of life	1.7042	0.71249	142
<b>16</b>	improves the quality of employees' lives	2.2535	0.86243	142
<b>22</b>	encourages its employees to develop their skills and careers	2.1197	0.83778	142
<b>30</b>	provides accurate information to all	2.3873	0.79759	142
<b>37</b>	is a contribution of talent according to the needs of society	2.1549	0.77456	142

a. Mean of the variables; b. Standard deviations of the variables; c. Number of cases