

Research Article

Corporate Social Responsibility (CSR): A Scale Development Study in Iran

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Abstract: The present research aims to explore a scale of Corporate Social Responsibility (CSR) in Iran. In this way, it reviews the literature exist on corporate social responsibility, gathers data and analyzes the data to test the emerging trends. After confirmation of reliability, factor analysis and multi dimensional scaling are used to an established survey instrument. Finally CSR was achieved as a construct with five dimensions: obligation to employees, obligation to customers and markets, obligation to social programs and natural environment, obligation to laws and regulations and obligation to society. These five dimensions represent the corporate accountability to some different groups of its stakeholders. In this study the convenient samples of managers and employees used in collecting data and developing the scale, however in exploratory studies, this type of sampling can be acceptable. Nevertheless, some limitations should be taken into consideration, while interpreting the findings of the study and generalizing them to general business environment. Therefore enlarging the sample size and using a random sampling method of managers and employees in future studies has to make Corporate Social Responsibility (CSR) scale more useful and enhance the generalization.

Keywords: Corporate Social Responsibility (CSR), Iran, norms, scale development

INTRODUCTION

Corporate Social Responsibility (CSR) is not a new idea (Smith, 2003) and the evolution of the CSR construct, beginning in the 1950s, which marks the modern era of CSR (Carroll, 1999). CRS has been an alive and significant issue in recent years and socially responsible organizations follow very ethical methods in their performance and satisfying their clients' expectations and needs. These organizations especially, pay attention to social responsibility and the environment in current time and future and promote this viewpoint. By open interaction with their clients, they obey the local and global regulations and even go beyond it. They are aware of their effects on the society and try to minimize the unfavorable effects and meanwhile paying attention to risk management, seeking opportunities to define projects that are beneficial both for the organization and society.

In general CRS deals with the relationships between corporate and the society and specifically this concept consider the effects of corporate operations on society. Some critics say that CRS concept lets the managers define the social obligations according to their own opinion and wants. Some other critics point some firms' financial and ethical infamies and state that

in spite of growing SCR, these infamies proves that firms and their managers, only think about their own benefits and SCR is merely a fine expression (Lee, 2008). Some others believe that firms purposes in social responsibility activities, may be politic and they try to lobby with political and local officials to gain some points along with their economic objectives. In fact firms can use social responsibility activities for political environment adjustment and to put forth their own political purposes or even use social responsibility activities as an instrument to keep their special political benefits in political bargaining, adjusting political equations and conclusion of economic agreements (Milne, 2002).

Generally, despite many different views to SCR, however there is a wide agreement about its main qualifications. SCR is the necessities beyond the minimum legal necessities, accepted voluntary, because economic entities consider it as their long-term advantages. Thus internal performance of social responsibility can lead to improvement of corporate situation and increasing its efficiency and profitability and finally its long-term continuity (Cardebat and Sirven, 2010).

In recent years some factors such as earth warming, production of hothouse gases, air pollution and

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damaging the environment, attract the attention of societies and governments to the role of firms in producing the goods and services more compatible with the environment or green products.

CSR has been existed in Iran as a national and Islamic strong tradition through an institutional mechanism called 'Waqf' (foundation) and of course limited to building of mosques, schools, water reservoirs, clinics and hospitals and other charitable centers. Today, most businessmen and family-owned firms have associated Waqfs and participate in building aforesaid centers or allocate a percentage of their revenues to create social benefits. However the SCR modern definitions have been propounded in Iran in recent years by some businesses, government officials, NGOs and academic communities. Development of companies and growth of competition in business environment caused CSR to be noticed in managerial processes and strategies.

With regard to the current circumstances, offering a model of Corporate Social Responsibility (CSR) in Iran and trying to step in improvement direction of the current business conditions through the results, is the main purpose of this study.

LITERATURE REVIEW

Corporate Social Responsibility (CSR) definitions:

In recent years, the world of business and the corporate facing corporate social responsibility topic and a wide range of corporate encouraged to act socially responsible (Welford and Frost, 2006). Despite many efforts for better perception and development of a comprehensive and integrated definition of CSR, however there are some ambiguities about defining CSR both in businesses and in academic communities. But existing definitions are compatible at a high level and each of them underlines a particular dimension of CSR. There are several definitions of CSR including a wide range of ideas such as corporate sustainability, corporate citizenship, corporate responsibly investment, business sustainability and corporate governance. Some researchers believe plurality of the definitions cause ambiguous and subjective meaning of them (Orlitzky, 2005) and stated in a manner that may take CSR into consideration as a "solution for caste gaps" (Van, 2001).

Different organizations have different definitions of CSR; nevertheless there is a wide common area among them. Existing definition is not new at conceptual level but the developed models at operational level in recent years, is different. Because of the globalization, the business operation content is rapidly and increasingly changed. New Stakeholders and nations different lows incurred new expectations to business units. Therefore in this situation, CSR management instruments are needed and according to

'What is not measured is not managed', measuring SCR is necessary. As a result, circumstances of defining SCR is not a business main challenge, however perception of CSR development along by business strategies, measuring and managing it, is the main challenge.

CSR is a citizenship function with moral, ethical and social obligations between a corporation and publics (David *et al.*, 2005; Wang, 2007). Smith (2003) claims that CSR refers to the firm obligations to society or, more specifically, the firm's stakeholders-those affected by corporate policies and practices.

Mainly CSR is a concept that states corporate should decide for better participation with the society and clean environment. Nowadays corporate leaders face an active and challenging obligation in their effort to obey ethical and social standards in business social responsible operation (Morimoto and Ash, 2005). Social responsibility is an impartible part of business literature and is taken into consideration as an important and human dimension of management (Humphreys and Brown, 2008).

The evolution of CRS definitions: SCR definitions literature has evolved by social, political and business development over several decades and this trend will be continued. The definitions will be affected by globalization, communication development and changes of lows at international level as well. The evolution of CSR will set forth from 1920 decade till 21 century in summary.

1920-1950: the managers of businesses paid wide attention to some social responsibility and responsible actions definitions (Windsor, 2001) and editing of CSR in 1930s had been along with some discussions about the managers role (Post, 2003) beside, in fact the corporate management authority is an integrity for society and should be kept (Turner, 2006). Bowen (1953) defined CSR as a social obligation that means the trends and decisions favorable according to society values and objectives. Carroll (1999) named Bowen as the father of CSR and accounts his study as a beginning of new era in SCR. Piter Drucker was one of the first persons who dealt with CSR overtly and posed the social responsibility as a key subject for development of business objectives. While he believes that the primary responsibility of management is creating profits for the corporate and states that management should consider the effects of each trend and business action on the society (Joyner and Payne, 2002).

1960: despite inexistence of wide development of CSR literature in 1960 decade, Carroll (1991) believes that in effort to forming and defining CSR a lot of growth obtained and accounts Davis, Fredrich and Walton as the most famous authors in this era. Davis (1960) stated that some socially responsible business decisions can be compensate through a good chance of

gaining long-term economic profits. Frederick (1960) explained that social responsibility refers to the human and economic basis of the society in final analysis. Also, Walton (1967) stressed that CSR is a level of voluntary or optional action.

1970: the CSR literature had been under the influence of Frederick (1960) view about CSR in this era and his well-known ideas is used in present debates of CSR definitions and his viewpoint discussed over several decades. Nowadays CSR is an expectation about the needs and objectives of the society higher than economic viewpoint. Stehi (1975) introduced a three level model about the definition of corporate social performance and differentiated the corporate various actions:

- Social obligations (response to market and legal limitations)
- Social responsibility (compatible with social norms)
- Social accountability (compatibility and participation in the society)

Also, the studies of 1970 decade had been done, somewhat in direction with measuring corporate participation for including social responsibility dimensions in corporate annual reports.

1980: this decade has been described as the decade of “more responsible perception of corporate strategy” (Freeman and McVea, 2001). In this decade Friedman viewpoint about the stakeholders was predominant and satisfying stockholder and stakeholder needs that relate to corporate operation (Windsor, 2001). In fact the stakeholder theory was the predominant paradigm in this era. Carroll (1999) believes that the focus was on the development of new definition and redefining of CSR concepts in 1980 decade and the track of new studies had been for creating alternative definitions in CSR literature such as corporate social accountability, business ethics and stakeholder theory. Armandi and Tuzzolino (1981) pointed that development of new instrument for evaluating CSR through new conceptual framework models, formed in this decade and these conceptual instruments can be used for measuring corporate social performance.

1990: in 1990 decade CSR literature, there was no particular development in CSR definitions; however CSR concept used as the main point of focus in stakeholder theory, business ethics and corporate citizenship (Carroll, 1999). Wood (1991) by posing the corporate social performance model provided important part of CSR literature in this era. Development of Wood conceptual framework and Carroll responsibility pyramid are two basic turnarounds in this decade. Also, in this decade subjects such as discussion about stakeholder against stockholder, social and environmental dimensions of stockholders activities for corporate financial performance and the risks thereof, global importance of CSR and role of business units and government more continued.

New millenary (21 century): By considering some corporate financial and ethical infamies and damages in the early of 21 century, discussion about CSR situation in global economy especially international businesses is increased for improving social and environmental conditions. In new century a considerable international development has occurred in CSR movement and human, social and environmental rights are taken into consideration at global level. Subjects such as government and social responsibility relationship and the relationship of social responsibility with legal and political matters are taken into consideration and obtained increasing importance at international level. In recent years, academic business researchers have paid increasing attention and interest to CSR. Increasing of the pressure on managers for social responsibility is one of the most important challenges for business enterprises. Corporate especially those who act globally, while follow maximizing stockholders values need to balance social, economical and environmental elements of their businesses more than before.

Frameworks and conceptual models of CSR: Over past three decades more attention has paid to CSR and CSR term has defined in different methods from economic viewpoint of increasing stockholders equity (Friedman, 1962) to economical, legal, ethical and altruistic responsibility (Carroll, 1979) and good corporate citizenship (Hemphill, 2004).

This variety of definitions arises from different fundamental assumptions about CSR. Domain of this perceptual variety of corporate covers minimum legal, economical and accountability to stockholders regulations to wider responsibility toward the whole system of society. The result of this divergence in fundamental assumptions is some doubt about CSR. Some cases are presented below:

- CSR is ambiguous term and can mean everything for everyone; it is without effective meaning (Frankental, 2001)
- Social responsibility as a concept is ambiguous and deficient (Preston and Post, 1975)
- Social responsibility is as a concept with variety of definition (Votaw, 1973)
- Social responsibility is as a concept without theoretical integration and empirical research (Defillipi, 1982)
- Social responsibility is as a concept without predominant paradigm (Jones, 1983)
- Social responsibility is as a concept sensitive to value and mental judgment (Aupperle *et al.*, 1985)

Clarkson (1995) discussed that the main problem about business units and the society is lack of interesting and suitable definitions of Corporate Social Performance (CSP) and Corporate Social

Responsibility (CSR) and lack of general agreement of these terms meaning from operational and managerial viewpoint. Therefore, conceptual framework of models and communication methodology, management affecting and being affected, corporate, stakeholders and society are necessary for effective analysis and still many managers are in challenge with the meaning of CSR. They have questions about the meaning of CSR and its relationship with daily business activities. Variety of literature exists on defining CSR however two conceptual models which strongly has taken into consideration in the literature will be reviewed here.

The first four part model of CSR posed by Carroll (1979) and named Corporate Social Performance (CSP) model and the second (CSP) model introduced by Wood (1991).

Carroll conceptual model (1979-1991): Carroll differentiate four kind of responsibility: economical, legal, ethical and altruistic responsibility. Economical responsibility include economic affairs such as creating return on investment for owners and stockholders, employment, labor fairly compensation, promotion of modern technology, innovation and producing new goods and services. In this view, business unit is basically an economic entity and all its roles are predicted base on this fundamental assumption. Legal responsibility includes expectation for obeying laws and playing role beside of obeying the play rules. From this viewpoint, the society expect that business units along with performing their economic mission, pay attention to legal necessities of social and legal system.

Although the regulation may force business units to answer some special cases, being confident of business units to obey rules fairly, is difficult. On the other hand, rules and laws may cause business units to lose opportunity, because they try to limit the business actions. Ethical responsibility overcomes legal limitations through creating an ethical personality by which corporate can survive and continue (Solomon, 1994). Ethical responsibility includes the activities that not defined by law necessarily, but expected to be done by business units to prevent social damages and loses and respecting the public. This kind of responsibility basically rooted in human rights (Novak, 1996). In altruistic responsibility, corporate have a wide range of altruistic judgments and alternatives in decision situation for particular activities by altruistic participation help the society. This kind of responsibility rooted in the belief that business unit and society are interrelated (Frederik, 1994). Altruistic responsibility is the most debatable kind of responsibility with many limitations and may be inconsistent with business units economic and profitability tendency.

On the other view, according to Carroll's model it can be said that economical and legal responsibility is

socially necessary. Ethical responsibility is expected socially while altruistic responsibility is socially desirable and total responsibility consisted of these four dimensions of responsibility. Of course, by the passage of time, responsibility dimensions may be changed and this is related to type of industry, corporate social performance and corporate responsibility strategies. This model caused a considerable progress in CSR; however it was so limited to guide the researchers and managers about the process and measuring the dimensions of CSR. Clarkson (1995) explained that Carroll's conceptual model was difficult and complex for testing.

Wood's conceptual model (1991): Wood (1991) by introducing a model introduced corporate social performance as the result of obeying fundamental principle of CSR and refined the primary assumptions. This model caused a considerable progress in CSR studies. According to Wood model responsibility constitute a practical dimension that needs complement directive and motivational elements for social responsibility:

- CSR principles including: Structural principle, organizational principle, personal principle
- CSR process including: Environmental evaluation, stakeholder evaluation, management dimensions
- Consequences and results of corporate action including: Social effects, social programs, social policy

Consequences of corporate actions are the direct and obvious advantages in evaluating CSR. According to Wood model consequences are divided into three types: social effects of corporate action, developed programs and policies toward social dimensions and stakeholders profits that used to performing responsibility by the corporate. Being negative or positive effects of corporate action should be evaluated objectively. As Meehan *et al.* (2006) said although Wood model had an important role in researches but it was unsuccessful in dealing with the manager's practical needs and measuring SCR and its effects. In summary, it seems that both conceptual models instead of practical effectiveness had a tendency toward theory advancement and researches in CSR ground. Modern organizations in facing with complex and active nature of social environment point to the need and necessity of managing stakeholders continuously. Of course, dominating complex network of social environment is too difficult, to be done. CSR perception and model perspective, exploration of changes and satisfying different group of stakeholders needs, require durable supervising and dealing with it in an active and comprehensive manner.

CSR measuring methods: ‘What is not measured is not managed’ is a well-worn management catchphrase (Munoz and Kumar, 2004) so measuring SCR as a managerial topic is necessary. Carroll (2000) claimed that corporate social performance should be measured as an important subject to both business and society and the important matter is development of valid and reliable measures. During recent decades, businesses and academic communities have paid increasing attention to measure the socially responsible actions of organizations. However it should be noted that there is no single best method to measure corporate social activities (Wolfe and Aupperle, 1991; Turker, 2009). Waddock and Graves (1997) indicated measuring corporate social performance difficulties and evaluated the alternative ways, such as document content analysis, reputation indices and scales, instruments of forced-choice survey, behavioral and perceptual measures and case study. These alternative ways were categorized into three main procedures of expert evaluations, single-and multiple-issue indicators and managers’ surveys by Maignan and Ferrell (2000). The following procedures are proposed as feasible to measure CSR by extending the last-mentioned classification: single- and multiple-issue indicators, content analysis of corporate publications, reputation indices or databases, scales measuring CSR at the individual level and scales measuring CSR at the organizational level.

Reputation indices and databases are the methods that extensively used for assessing corporate social actions such as the Canadian Social Investment Database (CSID), the Fortune Index and the Kinder, Lydenberg and Domini (KLD) Database. KLD rates firms, traded on the US stock exchange, based on eight attributes of social actions (community relations, employee relations, environment, product, treatment of women and minorities, military contracts, nuclear power and South Africa). Fortune’s reputation index also suggests a systematic instrument for assessing socially responsible actions from a managerial viewpoint. Abbott and Monsen (1979) pointed that a reputation index can also be used to derive new scales for measuring corporate social actions. Ruf *et al.* (1998) developed a scale to evaluate the relative importance of KLD’s eight dimensions by using an analytical hierarchy process. According to these authors, the attributes of KLD coincided with the legal, ethical and discretionary dimensions of Carroll (1979). However, Maignan and Ferrell (2000) uncovered these indices are not adequate for evaluating all businesses and revealed that both KLD and Fortune index items are not compatible with theoretical arguments. CSID as a notable database measures the sum of mean net strength and weakness of firm for each seven dimensions of community, diversity, employee relations, environment, international operations, product and business practices

and corporate governance (Mahoney and Thorne, 2005; Turker, 2009). The main limitation of these databases is their limited domain of assessment and evaluating firms in some specific countries instead of general business environment, however they explain some key stakeholder relationships.

Using single- and multiple-issue indicators is the second alternative method. Corporate crime is an indicator of socially responsible actions used by some authors (Davidson and Worrell, 1990; Baucus and Baucus, 1997). Council of Economic Priorities (CEP) set forth the pollution control performance, as a single-issue indicator and has been used by some scholars (Bragdon and Marlin, 1972; Freedman and Jaggi, 1982; Chen and Metcalf, 1984). This method deals with one dimension for assessing corporate social actions and it is its significant limitation (Maignan and Ferrell, 2000; Turker, 2009). Therefore, to overcoming this limitation a combination of these indicators are used as a multiple-issue indicator. The multiple-issue indicator has some limitations in describing CSR entirely. Furthermore these indicators were modeled in some specific countries, which also limit the generalization of this method to general business environments.

Content analysis of corporate publications is the third method which may also provide the possibility to derive new measures for corporate social activities (Abbott and Monsen, 1979; Turker, 2009). Ever-increasing literature of CSR makes possible using content analysis as a method of measuring CSR. However, McGuire *et al.* (1988) claims that the information contained in corporate publications may be different from existing corporate performances. Thus the main limitation of corporate documents may be the reliability of them, because some of documents may be provided to establish a more favorable image of firm and this may cause misinterpretation of these documents by the potential users. Some studies focus on the reliability of corporate environmental disclosures and provided empirical evidence that there is no significant association between the content of these reports and actual performance (Ingram and Frazier, 1980; Wiseman, 1982; Rockness, 1985; Freedman and Wasley, 1990; Turker, 2009).

Another method for measuring CSR is to use scales that measure the CSR perception of individuals. Aupperle (1984) developed a scale to measure the individual CSR values of managers according to Carroll’s four-dimensional model. Although this scale is useful for exploring managers’ socially responsible values, it is not an effective manner to acquire information about socially responsible actions of organizations. Moreover, the forced-choice instruments of the scale, is one of its limitations. Despite of being the first serious effort to understand the multidimensional nature of CSR (Ruf *et al.*, 1998), this scale is not suitable for evaluating an organization’s performance in the four domains separately; and also is not useful for evaluating organizational performance by

employees who view their study organization as highly responsible or highly irresponsible on all four dimensions (Peterson, 2004; Turker, 2009). Quazi and O'Brien (2000) offered a scale to measure the managerial attitudes about social responsibility as well. They constructed a scale based on a two-dimensional model, including the span of corporate responsibility and the range of outcomes of corporate social commitments. This scale is suitable to examine the managers' viewpoint about CSR in different cultural and economical environments, however it is not helpful to measure the organizational involvement with socially responsible actions. Perceived Role of Ethics and Social Responsibility (PRESOR) is another scale for to measuring managerial perceptions about the role of ethics and social responsibility in achieving organizational effectiveness (Singhapakdi *et al.*, 1996; Turker, 2009). Besides, PRESOR focuses on measuring individual values, instead of measuring socially responsible actions of businesses. Moreover Etheredge (1999) presented practical replication of PRESOR and its results did not verify the initial factorial structure of the instruments.

In spite of increasing scales to measure CSR at individual level, there are not a sufficient number of scales for measuring CSR at the organizational level in the literature. Maignan and Ferrell (2000) according to the concept of corporate citizenship advanced one of the most significant scales dealing with CSR at organizational level. In their study, corporate citizenship was determined as the area to which businesses meet the economical, legal, ethical and discretionary responsibilities imposed on them by their stakeholders. The study included both the conceptual framework of Carroll (1979) and stakeholder management theory. They developed a scale of corporate citizenship and examined it empirically in two different cultural backgrounds. However, the significant limitation of the scale is that it surveys only three primary stakeholders, including customers, employees and public. Nevertheless they underlined that customers, employees and public are not the only stakeholders who can impose responsibilities on businesses.

Although there are several methods to measure corporate social actions in the literature, enough and significant studies have not been done in Iran in this context. Therefore As mentioned previously, offering a model of Corporate Social Responsibility (CSR) in Iran and trying to step in improvement direction of the current business conditions through the results is the main purpose of this study.

RESEARCH METHODOLOGY

Scale development: After reviewing the literature, 61 items were pointed out as a first step and some deep

interviews with business managers and employees were conducted in order to:

- Help the process of construct dimensions definition
- Collect new items
- Perform a complete evaluation of items' wording
- Eliminate any extra and ambiguous item or any item with poor wording

Finally, 50 scale items were collected through literature review and the interviews in total. The items were presented to some experts for evaluating their content validity. They read the items carefully to find any ambiguity, triviality, extras and logical structure as well as to be sure that the items reflect CSR definition. After eliminating 7 other items, the experts confirmed that the remaining items of CSR scale are sufficiently the representatives of the construct. By the revised scale consisted of 43 items the respondent indicates his/her opinion on a five-point Likert type questionnaire ranging from "strongly disagree" (1) to "strongly agree" (5).

Sample and data collection: The business managers and employees with, at least five years of experience were considered to be the analysis unit of the study. According to the process offered by Milne and Culnan (2004), the initial data collection was performed to refine the items on the existing business population of Fars province in south-west of Iran. Each respondent was asked to answer the questionnaire in accordance to the existing actions and behaviors in his/her own business. After removing the missing data, 385 questionnaires were found to be usable. In such a sample size, which is sufficient for factor analysis (Stevens, 1996), about 81% of respondents were employees and other 19% were managers. Further, regarding gender, 79% of the respondents were men and 21% were women. The mean age of the sample is also 38.2 years.

The available samples were acceptable as long as they meet two conditions: the nature of the study has to be exploratory and the questionnaire's items should be relevant to the respondents (Ferber, 1977) and this study meets both conditions. Kaiser-Meyer-Olkin measurement (KMO) for sampling adequacy was 0.87 indicating that the variables are interdependent (Malhotra, 2004).

RESULTS

Factor analysis: The results of exploratory analysis and principle components factor analysis using Varimax rotation came up with five factors. In case that:

- Item loading on a factor is 0.50 or more.
- Loading on two factors is not 0.50 or more.

Table 1: Items retained based on exploratory factor analysis

Item	1	2	3	4	5
2	0.69				
4	0.67				
7	0.81				
8	0.76				
9	0.80				
14		0.69			
15		0.82			
17		0.78			
20		0.72			
28		0.75			
22			0.81		
26			0.72		
31			0.68		
32			0.64		
40			0.69		
43			0.73		
23				0.82	
24				0.65	
25				0.71	
27				0.72	
19					0.79
21					0.81
30					0.69
35					0.86
36					0.62

- The analysis reliability indicates and item with the overall correlation higher than 0.40, the items are preserved (Hair *et al.*, 1998).

Entirely 18 items were removed. According to Table 1, the exploratory analysis of the five factors indicated that they explained 82.3% of variance and the factor loadings were on the domain between 0.62 and 0.86. The Alpha coefficient was at the acceptable level on the domain between 0.81 and 0.88 (Nunnally and Bernstein, 1994). The first measured factor was “Obligation to employees” (“ = 0.81) and explained 17.9% of variance with five items. The second factor, “Obligation to customers and markets” (“ = 0.86), included five items that explained 18.1% of variance. The third factor was “Obligation to social programs and natural environment” (“ = 0.82) that explained 17.1% of variance and included six items. The fourth factor, “Obligation to laws and regulations” (“ = 0.83) included four items that explained 16.8% of variance. The last item was “Obligation to society” (“ = 0.83) that explained 16.7% of variance with five items.

Table 2: Construct measurement summary: confirmatory factor analysis

Item description	Std. loading (t-value)
Obligation to employees	
2	0.84 (11.41)
4	0.81 (14.52)
7	0.87 (13.66)
8	0.78 (13.09)
Obligation to customers and markets	
15	0.93 (16.72)
17	0.86 (14.54)
20	0.75 (13.45)
28	0.80 (13.61)
Obligation to social programs and natural environment	
26	0.87 (14.12)
32	0.73 (13.22)
40	0.79 (12.14)
43	0.75 (13.31)
Obligation to laws and regulations	
24	0.71 (11.07)
25	0.80 (12.16)
27	0.79 (12.83)
Obligation to society	
19	0.81 (12.27)
30	0.86 (13.64)
35	0.81 (12.05)
36	0.78 (12.57)

χ^2 (62): 160.14; $p < 0.01$; GFI: 0.92 CFI: 0.93; RMSEA: 0.09; RMR: 0.06; TLI (NNFI): 0.95

Confirmatory factor analysis:

Reliability, convergent and discriminant validity: In order to perform a more comprehensive assessment of the factor instruction and reliability of the purified 25-item scale and in order to establish convergent, discriminant and nomological validities, the confirmatory factor analyses were conducted. The purified data set underwent Confirmatory Factor Analysis (CFA) using LISREL 8.72 software program (Joreskog and Sorbom, 1996). At first, a five factor model was estimated using all of 25 items. The problematic items were gradually removed and the process ended in the remove of six items. As presented in Table 2, a renewed factor model had an acceptable fit; CFI and NNFI are higher than 0.90; RMSEA and RMR were not over 0.08 and 0.06, respectively (Hair *et al.*, 1998).

Measurements’ reliability was confirmed by composite reliability index being over the recommended level of 0.60 (Bagozzi and Yi, 1988). Further, the extracted variance for each dimension was higher the recommended level of 0.50 (Hair *et al.*, 1998), which is presented in Table 3. Following the

Table 3: Means, standard deviations, scale reliability, AVE_a and correlations

	Means	S.D.	AVE	1	2	3	4	5
Obligation to employees	4.15	0.51	0.80	0.81b	0.41	0.28	0.31	0.41
Obligation to customers and markets	3.82	0.74	0.84	0.45	0.78	0.42	0.57	0.18
Obligation to social programs and natural environment	3.90	0.77	0.79	0.61	0.57	0.80	0.48	0.45
Obligation to laws and regulations	3.76	0.64	0.77	0.42	0.39	0.45	0.83	0.32
Obligation to society	3.59	0.61	0.81	0.53	0.32	0.63	0.32	0.78

a: Average variance extracted; b: Scale composite reliability is reported in bold along the diagonal; Correlations are reported in the lower half of the matrix shared variances are reported in the upper half of the matrix; All correlations are significant at ($p < 0.01$); S.D.: Standard deviation

Table 4: The overall fit of the modified measurement mode

R ²	0.82
χ ² (df)	211.90 (88)
Goodness-of-Fit Index (GFI)	0.85
Comparative Fit Index (CFI)	0.90
Non-Normed Fit Index (NNFI)	0.84
Root Mean square Residual (RMR)	0.06
RMSEA	0.08

recommended processes by Fornell and Larcker (1981) and Bagozzi and Yi (1988), the convergent validity was assessed through the confirmation of *t* values related to parameter estimation (Table 2 and Appendix 1). All of *t*-values were positive and significant (*p*<0.01). The discriminant validity was examined by the comparison of the mean variance elicited by each construct with the shared variance between the construct and all variables. For each comparison, the explained variance was over all of the combinations of the shared variance (Table 3).

In Table 4, the conducted analyses on the five dimensions of CSR through structural equation modeling (LISREL 8.72) are presented. The fit indices indicate the acceptable fit and R² being equal to 0.82.

DISCUSSION AND IMPLICATION

Corporate Social Responsibility (CSR) has been an important matter for businesses and their stakeholders in recent years and measuring CSR, can help decision makers make intelligent decisions about and for businesses and their stakeholders. This study aimed to develop a CSR scale regarding the literature and CSR was achieved as a construct with five dimensions: obligation to employees, obligation to customers and markets, obligation to social programs and natural environment, obligation to laws and regulations and obligation to society. These five dimensions represent the corporate accountability to some different groups of its stakeholders.

Managerial implications: The results of this study can be used by corporate affairs directors and policy makers and can cause their focus on those factors that can help creating wealth, maximizing the companies' profits, increasing their market share, positioning the company as a well-known and authoritative company, managing social risks and so on, or in general, planning and performing corporate strategies through socially responsible activities.

Limitations and future research: Some limitations should be taken into consideration, while generalizing the validity of the scale and future studies have to address them. First, this research used the convenient samples of managers and employee to develop its scale. These samples are acceptable for exploratory studies. Nevertheless, the results may not be generalized to general business environments. As a result, a random sampling method of managers and employees has to make CSR scale more useful for generalization. Second

the scale does not cover every stakeholder of a business and finally, the data was collected from a sample which was drawn from only one country with particular cultural and economical specification and the generalization is limited. Therefore, there is surely a need for more studies in order to confirm the results.

CONCLUSION

Business has grown noticeably in the last decades however concerns about CSR issues are also intensified. This study took a step to measure CSR scale in Iran as a developing country. The results of this research can offer some important implications for businesses and it seems that it can be a stimulator for future studies in the field of CSR. Finally, although the results of the study presented a reasonable structure for the scale, there is surely a need for more studies in order to confirm these results. Especially, studies conducted in different sectors, for example, NGOs and governmental agencies, or different countries will be useful in this purpose.

APPENDIX 1

CSR scale in this study

Obligation to employees:

- 2- My firm provides good condition for personal development of employees in many aspects.
- 4- My firm managers consider employees needs and wants in their decision making.
- 7- My firm tries to make fair decision about and for the employees.
- 8- My firm tries to provide a work and life condition for its employees better than before.

Obligation to customers and markets:

- 15- My firm considers both customer satisfaction and his/her long-term benefits in its plans and actions.
- 17- My firm has enough disclosure about its products and services to customers.
- 20- My firm respects customer rights meanwhile attention to other stakeholders' rights.
- 28- My firm tries to implement local and international standards in its production.

Obligation to social programs and natural environment:

- 26- My firm participates in activities which aim to protect and improve the natural environment.
- 32- My firm takes part in altruistic activities and encourages its employees to participate in such activities.
- 40- My firm tries to minimize its unfavorable and damaging effects on the natural environment.
- 43- My firm supports social welfare programs and creation of employment opportunities.

Obligation to laws and regulations:

- 24- My firm tries to act on the basis of local and global legal regulations.
- 25- Complying with legal regulations in every situation is an underlying purpose of my firm.
- 27- My firm always pays its taxes and other duties regularly and completely.

Obligation to society:

- 19- My firm cooperates with other private and public entities in social responsibility projects.

- 30- My firm emphasizes the importance of its social responsibilities to the society
35- My firm targets sustainable development and creation of a better life for future generations
36- My firm seeking opportunities to define projects that are beneficial both for the organization and society.

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