The Impact of Product Market Competition on the Social Responsibility of Companies Listed in Tehran Stock Exchange

Rogayyeh sharegi and Younes badavar nahandi

Department of Accounting, Tabriz Branch, Islamic Azad University, Tabriz, Iran

ABSTRACT

The aim of the research is to study the effect of product market competition on dimensions of corporate social responsibility. The sample of the study consisted of 96 listed companies in Tehran Stock Exchange during the period 2009-2015. In this paper, social responsibility and its five dimensions were measured using a questionnaire. Moreover, the three indices (Herfindahl, n-firm concentration, and adjusted Lerner index) were used to assess product market competition. The results indicated that product market competition generally had a negative significant impact on corporate social responsibility.

INTRODUCTION

1- The problem statement:

Interest in social responsibility and disclosure of relevant information have a major impact on competitive service production and distribution, and it is sort of a pledge of support for company’s brand. Corporate social responsibility is a means of empowering organizations in order to analyze and explore overall business environment and develop appropriate organizational strategies so that they can bring kind of competitive advantage, as well as protecting company and its assets [29]. Once it was believed that enterprises and producers are simply accountable to shareholders and staff, or they were required to deliver the best quality product with more reasonable price to customers without the knowledge of what consequences and side effects a product has. Stiff competition, population increase, scarcity of resources and environmental pollution have given rise to new approaches to organization and management, for which commitment and social responsibility were the upshot of such development. Indeed, it can be said that the introduction of such responsibility was a response to needs and environmental challenges.

The actual duty of organization is to realize needs and demands of customers. Sensible companies are those who do not just ask for sale, but instead they view high quality and better service as their customer’s long-run satisfaction. On the path to development and growth, business venture has come to the idea that we need to do customers a service that the increase in sale or services is provided as a result of their satisfaction in order to achieve goals at the highest possible level.

According Fortune magazine, 63 percent of senior managers of leading companies believe that the observance of morality would increase positive perception and reputation of an organization, serving as a source of competitive advantage [18].

Smith views corporate social responsibility as a process of building wealth, promoting company’s competitive advantage and maximizing the value of the wealth generated for the society. Most experts hold that the costs of short-term social responsibility and its benefits are invariably kind of long-run advantages. Social responsibility is indeed kind of investment for the future, hoping to gain a sustainable and long-run competitive advantage. Senior managers who have a short-term perspective do not endure the short-term costs of social responsibility, turning a blind eye to it by arguing that social problems can only be handled by those in power. Conversely, managers who have long-run way of looking are keen to improve the welfare of society, deal with
social environmental pollution, boost workplace conditions, comply with human rights, and participate in public affairs and the like so that they can take advantage of social progress while they managed to earn reputation and credit among their clients and beneficiaries. Recently, researchers made an effort to study the relationship between social responsibility and various forms of competitive advantage. Today, organizations are under intense pressure to draw public trust and keep up competition in the global market. Given the foregoing discussion, the necessity for doing research capable of surveying the effect of product market competition on corporate social responsibility in Iran are obviously felt. The research seeks to find a solution to the question “how does product market competition affect the dimensions of the social responsibility of listed companies in Tehran Stock Exchange?"

2. Theoretical background:

Paying due attention to social capital and disclosure of relevant information have an important impact on the production distribution and competitive services, and it is some kind of a pledge of support for company’s brand. Corporate social responsibility is concerned as a means of empowering organizations to analyze the overall business setting and develop appropriate organizational strategies so that they can offer competitive advantage as well as protecting company and securing its assets (Chandler, 2006). According to Mahun (2002), researchers working in the field of marketing, public relationship and communication demonstrated that company’s reputation is one of the key determinants in increasing company’s production and service sale rate. Administrative and executive staff as well as domestic and foreign beneficiaries can use company fame to evaluate and exchange their perception of the company and commercial unit. Therefore, good fame can end up with better results for a company. The satisfaction of social responsibility and its report will help to boost such fame, thereby bringing competitive advantage to a company. As instances of competitive services and productions as a result of the disclosure of social responsibility, it is also possible to touch on high quality and lifetime products, delivery of products in the fastest possible time and with minimum cost, the emphasis on human dignity, job satisfaction, long-run and bilateral loyalty between organization and the entire beneficiaries, especially staff. As a result, corporate social responsibility would affect a vast range of organizational activities, including production and services, which eventually can improve its competitive advantage.

Today, with respect to globalization and wide-ranging information networks, it is expected that we express our concern and reaction to environmental problems, compliance with the interests of society, the rights of minorities, etc. In addition to this, the extended network monitors the entire activities of organizations and can easily damage organization’s face in the public eye through forums and different associations. Thus, enterprises are desperate to take vast measures to attract the public attention, whose common aspect is to exhibit the moral dimension of organization activities. It is worth noting that the larger an organization, the greater their concern about the issues should be. Immoral conduct arouses an unfavorable behavior in the business environment, causing the organization to fail. Buckley et al. [18] hold that long-term economic boom hinges upon a sustainable growth in terms of environmental and social concerns. The balance between economic progress, social responsibility and environmental protection can end up with competitive advantage. As a whole, we need to take an action economically sustainable and socially responsible and environmentally safe. Indeed, requirement for being internationally famous and building competitive advantage would autonomously lead companies into being socially responsible.

Kii and Paikeen believe that analysis of company failure and damages sustained by them demonstrate that morality and social sensitivity would finally increase company’s profitability concerning the process of decision-making and strategy development. Additionally, according to a report published in September 2005 by the Australian government, the economic growth of the country hit the average annual rate of 3.6 percent since 1998 through 2005, which exceeded that of many developed countries such as the US, Germany, Japan, and the UK. According to the same report, the grow determinants of the country were reported to be positive attitude to change, trained manpower with profound ethics. According to Fortune magazine, 63 percent of senior managers of top companies believe that the observance of ethics would enhance the positive image and reputation of organization, which is considered a source of competitive advantage (Buckly et al., 2001). In addition, a survey administered in Australia indicated that 90 percent of Australian people were interested in buying products from companies that behaved morally. The study showed that the more members of an organization trust each other, the less direct control will be required.

Alansari and Kern maintain that a company can achieve competitive advantage by integrating social responsibility into marketing ventures, which is more viable compared to rivals. The results of their model revealed that having established a CSR-oriented image with a competitive advantage to a company, customers viewed the company as an institution socially responsible, giving them privileged subjective position. They believe that company is required to integrate social responsibility into business and marketing strategy both strategically and tactically dependent on market trend, whose results include accountability and commitment of beneficiaries, market change as a drive, brand promotion, and bringing sustainable competitive advantage to
company. Therefore, attention to this matter seems inevitable as companies currently seek survival and growth in international market.

Porter and Kramer in their study, found that attention to social responsibility in companies would bring competitive advantage. On the other hand, in a research conducted by Toshiba in 2006, it was found that interest in CSR would result in competitive advantage followed by sustainable development. The adoption of social responsibility on the part of enterprises would promote the overall trust of investors in enterprise, spurring specialized manpower to cooperate with responsible agencies as does consumers to consume the products of the enterprises.

3. Research Background:

Chaterji found interest in social responsibility one of the most important competitive policies in the era of globalization. Porter and Kramer, in their study, came to the conclusion interest in corporate social responsibility would bring competitive advantage. On the other hand, in a survey conducted by Toshiba Co. in 2006, it was found that interest in CSR would bring in competitive advantage followed by sustainable corporate development. Fernández and Santaló [33], in a research entitled “when necessity becomes a virtue: the effect of product market competition on corporate social responsibility”, found that product market competition has positive relationship to widely used CSR measures. Particularly, they showed that difference in market concentration proxies are negatively related to the ratings of social effect. Moreover, evidence provided by them revealed that increase in competition due to higher import penetration is positively correlated with social ratings. They also reported that that the pollution level of firms is negatively associated to market concentration dimensions. Their estimate indicated that if everything undergoes no changes, coupled market competition will averagely increase ratings of CSR from 184 percent by 800 percent.

Cho et al [30], in a research, found that companies engaged in competitive industries have weaker strategic structure and product market competition has a remarkable impact on company strategy and its alternative.

Cochen and Moon, in a study entitled “corporate social responsibility versus irresponsibility”, came to the conclusion that companies make investment in social projects in order to offset their negative social impact.

Flamer, in a survey entitled “does product market competition rear corporate social responsibility”, came to the conclusion that companies respond to tariff reduction by building up their involvement in CSR, which is an invaluable findings for CSR view and allows companies to improve their competitiveness. Moreover, the findings of the study state that increase in CSR is seen in companies engaging in industries concerned with customer’s sensitivity and companies concentrate their extra CSR investment on key stakeholders such as customers and staff. In the end, the research revealed that CSR increase, though small, has been appealed to companies facing financial constraints.

Superiririno et al, in a study entitled “effect of social responsibility on financial performance with real manipulation as a modifying variable”, found that higher level of actual manipulation in the course of operational cash flow can end up with negative effect concerning the relationship between CSR and financial performance as there is no effect on CSR activities in respect of actual manipulation. Despite the variable, financial performance substantially impacts on CSR. Additionally, CSR’s actual manipulation variables--company size, the size of the board committee, institutional ownership, leverage and financial performance--can considerably affect financial performance of companies in the future. 27 companies listed in Indonesia Stock Exchange between the years 2006-2008 were selected as the sample of the study.

Saeedi et al, in a study entitled “How does corporate social responsibility help company’s financial performance; mediation of competitive advantage, reputation and customer satisfaction”, concluded that the relationship between CSR and financial performance is forged through a mediation and the positive effect of SCR on financial performance is due to the positive effect of CSR on competitive advantage, reputation, and customer satisfaction. The final result indicated that reputation and competitive advantage simply form the relationship between CSR and company performance. Given the result, a function of CSR in promoting company performance indirectly through an increase in reputation and competitive advantage as level of customer satisfaction was improved. The statistical sample of the research consisted of 205 production and consumption companies supplied by Persian products. The study addressed sustainable competitive advantage, reputation, and customer satisfaction as three potential mediators in respect of relationship between CSR and company performance.

4. Research Hypotheses:

The main hypothesis: Product market competition has an impact on social responsibility dimensions of listed companies in Tehran Stock Exchange.

Subsidiary hypothesis 1: product market competition has an impact on the workplace conditions of the CSR of listed companies in Tehran Stock Exchange.

Subsidiary hypothesis 2: product market competition has an impact on the business behavior of CSR of listed companies in Tehran Stock Exchange.
Subsidiary hypothesis 3: product market competition has an impact on the society dimension of the CSR of listed companies in Tehran Stock Exchange.

5. Methodology:

The present study is an applied study in terms of purpose and it is an ex post facto research in terms of method and nature. In order to calculate product market competition as independent variable, relevant information was extracted from database, and a questionnaire was used for social responsibility along with its five dimensions, and subsequently relevant software programs were used for measurement of research variables. Having collected, extracted and classified research data, followed by analysis and significance test through Eviews software application, it was revealed that variables had a good degree of confidence. According to data collected through analyses, in order to ensure the accuracy of research hypotheses, the results of the test will be generalized into that of the statistical population.

6. Research population and sample:

The statistical population of the research consisted of all listed companies in Tehran Stock Exchange during 2010-2015, as they were selected based on the following criteria:
1. Financial information required by company for research time period
2. During the course of the study, they undergo no fiscal year change
3. Companies listed by the end of 2009 in stock exchange, and its name was not removed in the study course from companies listed in Tehran Stock Exchange.
4. Activities of company under consideration were not financial and investment-type activities
5. Questionnaires developed and dispatched to score the dimensions of social responsibility were completed by senior managers of companies listed in Tehran Stock Exchange.

Given the above criteria, 96 companies out of 18 industries were selected as sample study.

7. Methods of research variable measurement:

7.1). Methods of product market competition measurement:
1. Herfindal-Hirschman index:
   \[ HHI = \sum Nj=1 \left( \frac{SALES_i}{\sum Nj i=1SALES_i,j} \right)^2 \]
   Where SALES_i,j is the total sales of company i in industry j. indeed, Herfindal-Hirschman index measure industry concentration; the higher the index is, the more concentration is, and the less competition will be in industry, and vice versa [11].
2. Concentration ratio of n enterprise (CRn)
   The metric is defined as follow
   \[ CR_n = \sum_{i=1}^{n} Si \]
   \[ K=\text{number of enterprises active in the market} \]
   \[ n=\text{the total number of big enterprises} \]
   \[ Si=\text{the market share of the } i\text{th enterprise} \]
   The metric include the share of N top enterprise. There is no theoretical backup to choose n, and the researcher voluntarily select n value, which is equal to 4 or zero. The value of the index stands between zero and 100 percent, for which zero represents total competition as does one hundred total monopoly. In other words, as moving toward one hundred from zero, the value of competition will decline and monopoly rises.

7.2- Measurement method of social responsibility:

Workplace conditions variable of CSR:
According to Vigeo institution, items of CSR workplace conditions are as follows:
Social dialogue
Working conditions
Clerk’s immunity and health care
Quality of management and clerk’s promotion system and
Quality of rewarding system.

According to Vigeo Institution, items of customers and suppliers dimension (business behavior) of CSR as follows:
Quality of relationship with customers, quality of relationships with suppliers, quality of relationships with minor dealers, avverting corruption and anti-competitive measures.

According to Vigeo, items of local community and society dimension of CSR are as follows:
1- Promoting socioeconomic level of the society
2- Social implications of goods and services related to companies, participation in public interest.
8. Empirical results of data analysis:

8.1. Testing main hypothesis:

H0: product market competition has no effect on the dimension of social responsibility of listed companies in Tehran Stock Exchange.

H1: product market competition has an effect on the dimension of social responsibility of listed companies in Tehran Stock Exchange.

**Dependent variable: CSR**

<table>
<thead>
<tr>
<th>Variable details</th>
<th>coefficient $\beta$</th>
<th>Std. Error</th>
<th>Statistic $t$</th>
<th>Significance level(Sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>intercept(1)</td>
<td>0.177299</td>
<td>0.157955</td>
<td>1.122462</td>
<td>0.2548</td>
</tr>
<tr>
<td>HHI</td>
<td>0.418718</td>
<td>0.408759</td>
<td>1.024363</td>
<td>0.3085</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.024913</td>
<td>0.011572</td>
<td>2.152760</td>
<td>0.0341</td>
</tr>
<tr>
<td>LEV</td>
<td>0.001688</td>
<td>0.066369</td>
<td>0.017601</td>
<td>0.9860</td>
</tr>
<tr>
<td>BETA</td>
<td>-0.005201</td>
<td>0.011230</td>
<td>-0.463144</td>
<td>0.6444</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>-1.491013</td>
<td>6.937601</td>
<td>-0.214918</td>
<td>0.8303</td>
</tr>
<tr>
<td>State ownership</td>
<td>0.160617</td>
<td>0.040817</td>
<td>3.936491</td>
<td>0.0002</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.105276</td>
<td>0.112556</td>
<td>0.935319</td>
<td>0.3522</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.101596</td>
<td>0.113470</td>
<td>0.895358</td>
<td>0.3731</td>
</tr>
</tbody>
</table>

Due to HHI index which is an inverted index of product market competition, i.e. monopoly index, given $\beta$ coefficient which is positive between HHI variable and dependent variable, it suggests that product market competition has a negative impact on dependent variable (CSR).

**Dependent variable: CSR**

<table>
<thead>
<tr>
<th>Variable details</th>
<th>coefficient $\beta$</th>
<th>Std. Error</th>
<th>Statistic $t$</th>
<th>Significance level(Sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>intercept(1)</td>
<td>0.0744</td>
<td>0.145504</td>
<td>1.086270</td>
<td>0.0744</td>
</tr>
<tr>
<td>HHI</td>
<td>0.042537</td>
<td>0.368275</td>
<td>1.150162</td>
<td>0.2533</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.003800</td>
<td>0.067097</td>
<td>0.049927</td>
<td>0.9603</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.001618</td>
<td>0.011098</td>
<td>-0.145976</td>
<td>0.8444</td>
</tr>
<tr>
<td>BETA</td>
<td>-1.045106</td>
<td>6.953486</td>
<td>-0.150300</td>
<td>0.8809</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>0.163165</td>
<td>0.040888</td>
<td>3.990573</td>
<td>0.0001</td>
</tr>
<tr>
<td>State ownership</td>
<td>0.067536</td>
<td>0.106182</td>
<td>0.636227</td>
<td>0.5263</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.1055863</td>
<td>0.115777</td>
<td>0.914369</td>
<td>0.3631</td>
</tr>
</tbody>
</table>

Given the fact that N index of enterprise concentration is an inverted index of product market competition, i.e. monopoly index, given $\beta$ coefficient which is positive between N index and dependent variable (CSR), it suggests that product market competition, with respect to N index of enterprise concentration, has a negative impact on dependent variable (CSR).

8.2) testing sub-hypothesis 1:

H0: product market competition has no effect on workplace conditions of corporate social responsibility.

H1: product market competition has an effect on workplace conditions of corporate social responsibility.

**Dependent variable: workplace conditions dimension of social responsibility**

<table>
<thead>
<tr>
<th>Variable details</th>
<th>coefficient $\beta$</th>
<th>Standard error($)</th>
<th>Statistic $t$</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>intercept(1)</td>
<td>0.262819</td>
<td>0.145504</td>
<td>1.086270</td>
<td>0.0744</td>
</tr>
<tr>
<td>HHI</td>
<td>0.423576</td>
<td>0.368275</td>
<td>1.150162</td>
<td>0.2533</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.020490</td>
<td>0.010630</td>
<td>1.927576</td>
<td>0.0572</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.004070</td>
<td>0.061673</td>
<td>-0.060691</td>
<td>0.9475</td>
</tr>
<tr>
<td>BETA</td>
<td>-0.004354</td>
<td>0.009895</td>
<td>-0.439987</td>
<td>0.6611</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>-0.446008</td>
<td>6.226212</td>
<td>-1.356524</td>
<td>0.1785</td>
</tr>
<tr>
<td>State ownership</td>
<td>0.106481</td>
<td>0.036724</td>
<td>2.899457</td>
<td>0.0047</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.221070</td>
<td>0.102547</td>
<td>2.155790</td>
<td>0.0339</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.217890</td>
<td>0.108710</td>
<td>2.004317</td>
<td>0.0482</td>
</tr>
</tbody>
</table>

Due to HHI index which is an inverted index of product market competition, i.e. monopoly index, given $\beta$ coefficient which is positive between HHI variable and dependent variable (CSR), it suggests that product market competition has a negative impact on dependent variable (CSR).

There is no significant relationship between the independent variable N index of enterprise concentration and the dependent variable workplace conditions dimension of social responsibility.

8.3. Testing sub-hypothesis 2:
Due to HHI index which is an inverted index of product market competition, i.e. monopoly index, given β coefficient which is positive between HHI variable and dependent variable (CSR), it suggests that product market competition, with regard to HHI index, has a negative impact on dependent variable (business behavior dimension of social responsibility).

8.3. Testing sub-hypothesis 3:

H0: product market competition has no effect on society and local community dimension of social responsibility of listed companies in Tehran Stock Exchange.

H1: product market competition has an effect on society and local community dimension of social responsibility of listed companies in Tehran Stock Exchange.

Given the fact that N index of enterprise concentration is an inverted index of product market competition, i.e. monopoly index, given β which is negative between N index of enterprise concentration and dependent variable (CSR), it suggests that product market completion, with respect to N index of enterprise concentration, has a positive impact on the dependent variable (business dimension of social responsibility).
has a positive impact on the dependent variable (society and local community dimension of social responsibility).

<table>
<thead>
<tr>
<th>Variable details</th>
<th>coefficients β</th>
<th>Standard error(σ)</th>
<th>statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>intercept) Ci</td>
<td>0.177299</td>
<td>0.157955</td>
<td>1.122462</td>
<td>0.2548</td>
</tr>
<tr>
<td>HHI</td>
<td>0.418718</td>
<td>0.408759</td>
<td>1.024363</td>
<td>0.3085</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.024913</td>
<td>0.015727</td>
<td>2.152760</td>
<td>0.0341</td>
</tr>
<tr>
<td>LEV</td>
<td>0.001168</td>
<td>0.0066369</td>
<td>0.017601</td>
<td>0.9860</td>
</tr>
<tr>
<td>BETA</td>
<td>-0.005201</td>
<td>0.011230</td>
<td>-0.463144</td>
<td>0.6444</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>-1.491013</td>
<td>6.937601</td>
<td>-0.214918</td>
<td>0.8303</td>
</tr>
<tr>
<td>State ownership</td>
<td>0.160676</td>
<td>0.040817</td>
<td>3.936491</td>
<td>0.0002</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.105236</td>
<td>0.112556</td>
<td>0.955319</td>
<td>0.3522</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.101596</td>
<td>0.113470</td>
<td>0.895358</td>
<td>0.3731</td>
</tr>
</tbody>
</table>

9. Overall conclusion of the research:

The main purpose of the study is to account for the question whether product market competition has an impact on dimensions of social responsibility of listed companies in Tehran Stock Exchange. To this end, a number of hypotheses were developed and tested with respect to the measures of social responsibility and market competition. Hypotheses were tested during two different time range, 2013 and the mean years 2008-2013. The results of tests based on 2013 data indicated that product market competition has no significant impact on the dimensions of corporate social responsibility in a short-term range. The same tests based on the mean years of 2008-2013, however, indicated better results which suggest the impact of product market competition has no significant impact on the dimensions of corporate social responsibility (environment, business behavior, workplace, society and local community dimensions). The results of testing hypotheses with the mean data of 2008-2013 seem closer to reality and correspond with the idea that the effects of corporate social responsibility manifest themselves in a long-term course. In the end, with the confirmation of the four hypotheses, we come to the conclusion that there is a significant correlation between market competition and the dimensions of social responsibility of selected firms in a long term. That is, the more competition in product market is, the less the tendency toward complying with the criteria of social responsibility. However, the opposite was true concerning business behavior and society and local community dimensions, i.e. the more competition in product market is, the more the tendency toward complying with the two dimensions of social responsibility. As a whole, product market completion would lead companies to pay more attention to quality of products, commitment to after-sale services, dealing with customers’ complaints, timely payment of claims and the setting of the society and place where they work. On the contrary, given the realization of social responsibility measures and compliance with them on the part of firms, they may incur huge costs (with regard to the business environment of Iran); such costs in turn increase production expenses, production costs would increase product sale prices. Moreover, with regard to negative slope of demand curve, as product price increases, sale reduction is expected for these companies. Thus, compliance with the criteria of social responsibility would not be to the benefit of the companies due to the prevailing situation of business in this country and the costs of such compliance are greater than their benefits.

The results of the study were no in line with the following works; Baron [16], Porter and Kramer, Fisman et al, Porter, Rousou and Fots, MilitarouAinsko, Fernandez and Santalo, De clerk and M Zali, and Flamer, whereas they were in line with that of Begnoli and Wuts, which concluded that more serious competition in product market tends to the reduction of CSR presentation.

REFERENCES