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Intellectual Capital, Corporate Financial Performance and Social Responsibility

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Abstract

The main objective of our study was to test the relationship between intellectual capital and financial performance with social responsibility. To end, we investigate the relationship between intellectual capital and its components and social responsibility through financial variables. Population consisted of companies at Tehran Stock Exchange in which social responsibility was tested based on content analysis of annual reports of companies in 2019. Results show that intellectual capital does not significantly relate to corporate social responsibility. However, capital employed efficiency, one of its components, significantly impacted on the social responsibility, while the others including human and structural capitals efficiencies had no significant impact on. The findings of this study could suggest that companies listed at Tehran Stock Exchange could use of intellectual capital and improve their social responsibilities.

Keywords: Intellectual Capital, Financial Performance, Corporate Social Responsibility.

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Introduction

Corporate Social Responsibility (CSR) is the concept which has gained prominence in business reporting. Every corporation has the policy concerning CSR, which reports, annually, details of its activities. Every corporation could recognize the corporate activity, that is socially responsible and the activities, which are not socially responsible. There are two interesting points regarding CSR. Firstly, there is no consensus about the

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definition of socially responsibility. The comprehensive definition of social responsibility is concerned with what is or should be the relationship between global corporations, governments of countries and individual citizens. More locally, the definition is concerned with the relationship between the corporation and the local society in which it resides or operates. Another definition is concerned with the relationship between a corporation and its stakeholders (Crowther, & Aras, 2008). CSR is the allusion of firm behavior and one of the major issues in the business environment. It deals with a firm's relationship toward stakeholders and the increasingly recognized moral implications in investments (Cheung et.al, 2010). Industrialization on around of the world lead to important social responsibilities which impacted on the financial and non-financial on business. Firms in developing countries tend to move and engage on global markets because of globalization. Hence, firms to be able to participate and compete in global markets should participate in social responsibilities and disclose them. Altogether, the firms should know that different groups of the society demand different social responsibilities information, because, such information play important role in their decision-makings (Cho, 2007).

In other hand, many believe that intellectual assets such as intellectual capital obtain place beyond of material and physical place which could relate to firms social responsibility. Because disclosure of firms social responsibilities explain the relationship between individuals among organizations with external users, no doubt that if the firms could enhance intellectual assets such as intellectual capital in addition to their physical assets, they will provide necessary backgrounds to improve disclosure level of social responsibilities. The reason is that literature suggest that the added-value which the firms obtain through intellectual assets is more than physical assets. In addition to, trade units attempt to improve their performance which high disclosure of social responsibility is one of the factors which is used to measure trade unit performance which it can be realized through investment on intellectual assets. In other words, intellectual capital and disclosure of social responsibility have common goals including attempt to survive in competitiveness environment (Musibah et.al, 2013). In this regard, AzimiYancheshmeh and Hemati (2018) studied the impact of voluntary disclosure of different dimensions of intellectual capital on disclosure level of social responsibility and found that disclosure of different dimensions of intellectual capital positively impacted on the disclosure level of social responsibility. Noryaman (2015) considered the impact of intellectual capital on financial performance and resulted that financial performance significantly is influenced by intellectual capital. Theoretically and experimentally, literature suggested that intellectual assets have so significant added value. Therefore, we could consider the necessity to take attention to such capitals and related factors more and more overtime (Musibah et.al, 2013).

Moreover, financial performance and its evaluation is one of the subjects in management accounting that has been considered through agency theory. Different stakeholders in particular, shareholders attempt to invest on firms with suitable performance (Olugu & Wong Kuan, 2012). According to modern literature of management accounting (Mishra et.al, 2011; Avishek and David, 2017), firms must seek to engage on social responsibility activities to be able to realize stable competitiveness advantage, increased firm value and suitable financial performance. Literature take attention to relationship between social responsibility and financial performance. For example, Navarro et.al. (2016) found that firms use of economic and social achievements to obtain higher financial performance. Ramanathan et.al. (2017) consider the relationship between financial performance considering environmental regulations and found that financial performance positively related to environmental activities. Nekhili et.al. (2017) studied the mediating role of family firms on the relationship between social responsibility and firm value and found that market-based performance which is measured by Tubins'Q negatively related to non-family firms CSR disclosure and positively related to family firms CSR disclosure. Yinyoung et.al. (2018) suggested that CSR act as competitiveness advantage for all businesses and shareholders with CSR knowledge in restaurant industry could mediate the relationship between social and financial performance which lead to increased financial profit of the firms. Therefore, we could consider some related questions: whether social responsibility could improve financial performance of the firms. If the intellectual capital could improve social responsibility and if the financial performance of firms could mediate the relationship between social responsibility and intellectual capital?

Literature Review and Hypotheses Development

Intellectual Capital

Kim et.al. (2010) defined the intellectual capital as "the intellectual resources that have been formalized, captured, and leveraged to create assets of higher value" and lu et.al. (2010) considered that intellectual capital "means anything an enterprise can use to increase its competitive advantage in the market place, including knowledge, information, intellectual property rights and experience. In other words, IC is presented as intangible assets and it produces value to enterprises that can be reflected as final income in financial statements, but it cannot be expressed as an accounting title in financial statements" Several contributions have provided different frameworks for classifying the different components of intellectual capital (Ramezan, 2011). Despite the lack of a common definition for intellectual capital, many researchers accept that there are three major categories for intellectual capital: human capital, structural (or organizational) capital and relational (or customer) capital (Beattie & Thomson, 2007; Wall, 2005; Kim et al., 2010; Rudez & Mihalic, 2007; Chu et al., 2006; Tai & Chen,2009). However, there are other categories include: process capital, innovation, research, and development capital (Tai & Chen, 2009; Meca & Martinez, 2007) end customer-relationship capital and non-end-customer-relationship capital (Rudez & Mihalic, 2007), Business capital (Ramezan, 2011), Social capital (Ramezan, 2011; Baker, 2008) strategy capital (Meca & Martinez, 2007).

Social Responsibility

While scholarly definitions of CSR are various (McWilliams, Siegel, & Wright, 2006; Sheth & Babiak, 2010; Snider et al., 2003), the best known, and for our purposes the most appropriate, is probably McWilliams and Siegel's (2001: 117) definition, ''actions that appear to further some social good, beyond the interests of the firm and that which is required by law.'' That is to say, CSR denotes activities by firms (particularly MNE subsidiaries in this paper) that appear to further some social good, where the activity level is ''above and beyond'' that mandated by law (Campbell et al., 2012). This definition offers a possible way to gauge CSR activities of MNE subsidiaries in host economies, a topic that has seldom been examined mainly due to difficulties in obtaining empirical data on CSR activities of foreign affiliates (Campbell et al., 2012; Yang & Rivers, 2009).

Financial Performance

Financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity,

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leverage, solvency, and profitability. Financial performance is the company's ability to manage and control its resources (IAI, 2016). The financial statements are financial records covering cash flows, balance sheets, profit-loss and capital changes that become information for corporate managers in taking the company's financial policy. The financial statements are the financial condition of a company comprising the balance sheet of profit/loss calculation, and other financial information, such as cash flows and retained earnings (Fatihudin, 2018). Fundamental analysis is an analysis based on the company's financial statements, prospectus and other company's financial profile. Technical analysis is an analysis based on market statistical data recorded by a body that describes the increase and decrease in demand and supply. Learning finance is an attempt to understand about financial management, financial reporting and financial decisions (Brealey & Myers, 1991).

Hypotheses

H1: IC significantly related to CSR

H2a: Capital employed efficiency (CEE) significantly related to CSR

H2b: Human capital efficiency (HCE) significantly related to CSR

H2c: Structural capital efficiency (SCE) significantly related to CSR

In Figure 1, we provide the framework of our study based on hypothesized relationship. It shows that independent variables is intellectual capital. The financial performance is the mediator variable which is measured using Tobin’s Q and corporate social responsibility is the dependent variable.

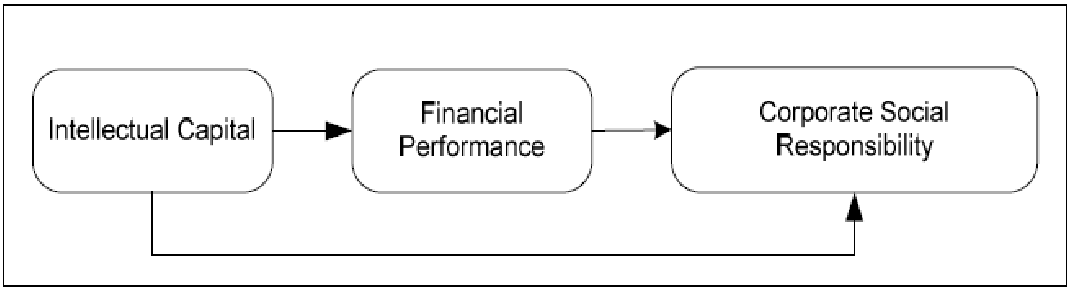

Figure 1. Relationship between IC and CSR

Research Methodology

This study was an applied one in which population consisted of all companies at Tehran Stock Exchange which 49 firms are selected as sample size because of the removal of the firms which had not conditions to include in our study, which the excluded conditions are described in next section. To test hypotheses, two regression model were setup which are provided in the below section.

First Model: The first regression model used to address the first hypothesis will be the following, which is mapped in figure 2, too:

$$CSR = \beta0 + \beta\ 1IC + \beta\ 2MB + \beta\ 3FSIZE + \beta4ROA + \beta5ATO + \varepsilon$$

CSR = Corporate Social Responsibility score

IC = intellectual Capital

MB = Market valuation (Market-to-Book ratio)

FSIZE = Firm Size (Natural Log of Market Capitalization)

ROA = Return on Assets

ATO = Asset Turnover

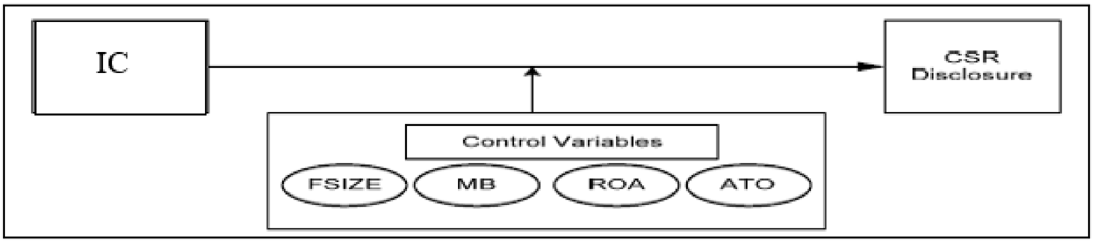

Figure 2. Relationship between IC and CSR, and mediating control variables including Firm size, Market valuation, Return on asset and asset turnover

Second Model: The second regression model, which looks into the different components of VAIC, to address the second hypothesis will be as follows:

CSR = β0 + β 1CEE + β2HCE + β3SCE + β4MB + β5FSIZE + β6ROA + β7ATO + ε

CEE = Capital employed efficiency coefficient

HCE = Human capital efficiency coefficient

SCE = Structural capital efficiency coefficient

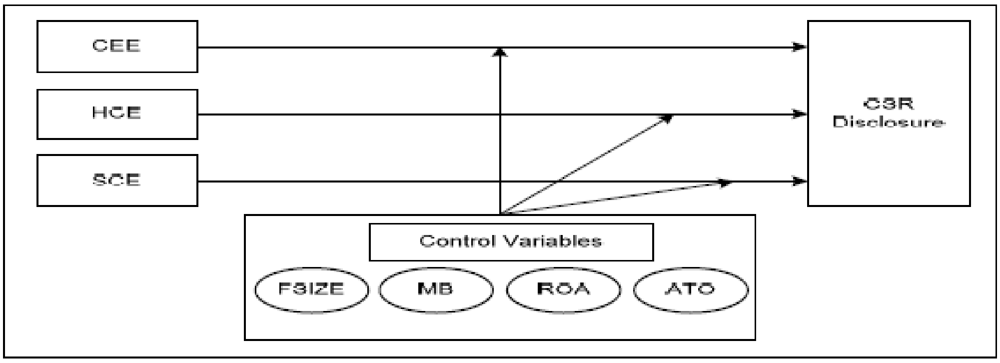

Figure 3. Relationship between IC components, Financial Performance and CSR

In which, the inclusion of financial performance as an affecting variable on CSR is justified because all CSR activities will require the expenditure of limited financial resources. With limited financial resources, companies will be more inclined to reallocate those resources to other parts of the company with a higher priority such as operations, production, and marketing etc. which are their primary lines of business (Esrock & Leichty, 1998).

Measurement of Intellectual Capital

IC is defined as: IC = HCE + SCE + CEE

In which, HC= human capital, SC = structural capital, CE = capital employed after the three components of firm resources have been calculated.

Measurement of Corporate Social Responsibility

The dependent variable of this study is corporate social responsibility (CSR), which is measured based on content analysis of the company's annual reports and their disclosures of social responsibility activities.

Sampling Design

The sample for the population is taken in 2019 from Trahran Stock Exchabge. Some companies are excluded from the list for several reasons. First, to provide a good comparison between the companies being tested, the study separated financial and non-financial industries. In the end, only non-financial companies were chosen as the part of the study, since they would provide a larger sample size and span different industries to provide a better overall picture of the situation. Third, numerous companies that did not have annual reports available were omitted from the sample.

Findings and Discussion

Table 1. Descriptive Statistics Table

Statistics	IC	CEE	HCE	SCE	CSR
Mean	4.81	0.29	3.51	0.64	6.96
Standard Deviation	2.42	0.19	1.98	0.20	4.12
Minimum	0.74	0.01	0.84	-0.09	0.00
Maximum	10.43	0.74	9.35	0.84	14.94

From Table 1, it is apparent that large portions of the IC are made up of the HCE variable. This shows that most of the IC is a result of how the companies utilize their human capital (Jelcic, 2007). Also, this illustrates that Iranian companies are more efficient in using human capital as a source to add value to the company than other sources such as capital employed and structural capital (Firer & Williams, 2003). In their study, (Tuzzolini & Armandi, 1981) claim that CSR is at the top of the hierarchy of needs of a company, therefore it needs to fulfill its other needs (financial security, market position, etc.) before it conducts CSR. This could mean that most Iranian companies see CSR as charitable action.

Findings and Discussion of First Hypothesis

Table 2. Coefficients[a]

	B	Std-Error	Beta	t	Sig.	Tolerance	VIF
(constant)	-16.960	7.527		2.149	0.019		
IC	0.049	0.254	0.198	0.219	0.753	0.799	1.174
MB	0.004	0.001	0.284	2.465	0.13	0.914	10.18
ROA	-0.074	0.107	-0.174	-0.685	0.384	0.364	1.197
ATO	0.897	0.899	0.154	0.896	0.285	0.464	1.749
FSIZE	1.489	0.394	0.486	3.298	0.004	0.479	1.609

a. Dependent Variable CSR
b. Predictors: (Constant), FSIZE, MB, ATO, IC, ROA

From Table 2, CSR shows a strong relationship with financial performance, such as FSIZE and MB. However, the IC was unable to show that it has a significant impact on CSR. The results did not present any statistical evidence that would support the presence of an association between corporate intellectual ability, measured by the IC and CSR. That could be explained by how Iran companies perceive IC and CSR in the first place.

Findings and Discussion of Second Hypothesis

Table 3. Coefficients[a]

	B	Std-Error	eta	t	Sig.	Tolerance	VIF
(constant)	-18.976	6.894		-2.436			
CEE	15.997	6.587	0.498	2.132	0.35	0.197	4.107
HCE	-0.274	0.364	-0.19	0.885	0.274	0.342	3.027
SCE	4.254	4.223	0.024	0.779	0.319	0.319	3.028
MB	.008	0.002	0.286	2.644	0.011	0.876	1.028
ROA	-0.274	0.143	-0.464	-2.218	0.26	0.218	4.324
ATO	0.019	0.895	0.005	0.016	0.895	0.184	2.074
FSIZE	1.426	0.475	0.526	3.364	0.005	0.527	1.613

a. Dependent Variable CSR
b. Predictors: (Constant), FSIZE, MB, ATO, ROA, HCE, SCE, CEE

From table 3, we can observe that FSIZE and MB have positive consistent influence on CSR. From the components of intellectual capital, only CEE had a significant positive relationship towards CSR while HCE and SCE were insignificant. In regard to the control variables, firm size and market valuation were still significant as it was in the first regression. Profitability had become significant in the first second, in a negative relationship.

Discussion

The objective of this study was to consider the relationship between intellectual Capital, Corporate financial Performance and social Responsibility. To end, we setup regression models in which we test the relationship between IC and CSR and the relationship between IC components including capital employed efficiency coefficient (CEE), human capital efficiency coefficient (HCE) and structural capital efficiency coefficient (SCE) and CSR. In this regard, Arabi and Abdoli (2015) studied the impact of IC on SCR in banks listed in Tehran Stock Exchange and found that IC significantly related to CSR in Iranian banks which supports the results of our study. Abolhasan Ranjbar and Shariaat Jafari (2012) studied the relationship between IC and CSR through the case study of economic and asset affair organization of Tehran and resulted that IC positively and significantly related to CSR and social responsibility was directly influenced by structural capital, relationship capital and human capital which supports our results. In addition to, from the results of the control variable, it indicated that market valuation and firm size had a significant relationship with corporate social responsibility. Moreover, it seems apparent that the level of corporate social responsibility in Iran is at the stage where companies still see CSR as a means to manage social relationships but not to incorporate it within corporate strategy.

Conclusion

Totally, the results of this study are merely preliminary findings regarding the issue of the relationship between intellectual capital and corporate social responsibility disclosure. Taking into account the lack of financial journals which have carried out the same research, the author believes that further research into this field would be necessary in our countries with better research models and variables being taken into account. Further research could reveal how intellectual capital and corporate social responsibility, two items that are rarely affiliated with one another, could actually be complementing one another as a company tries to seek better social performance and enhance intellectual capital at the same time.

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