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Corporate Social Responsibility and Financial Performance Relationship in Healthcare Institutions: International Evidence

Sağlık Kurumlarında Kurumsal Sosyal Sorumluluk ve Finansal Performans İlişkisi: Uluslararası Kanıtlar

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Öz

Amaç: Bu çalışma sağlık kuruluşlarının kurumsal sosyal sorumluluk performansı ile finansal performansı arasındaki ilişkiyi uluslararası örneklem kullanarak incelemektedir.

Tasarım/Yöntem: Bu çalışmada Sıradan En Küçük Kareler, Ağırlıklı En Küçük Kareler, Ülke ve Kurum Sabit Etkiler Modelleri dâhil olmak üzere kuruluşların kurumsal sosyal sorumluluk performansı ve metodolojileri için çeşitli alternatif temsillerinden yararlanılmıştır. Çalışmanın örneklemini 21 ülkeden firmaların 1514 firma yılı gözlemi oluşturmaktadır ve ilgili veriler Refinitiv veri tabanından elde edilmiştir.

Bulgular: Kuruluşların kurumsal sosyal sorumluluk performansı ile finansal performansı arasındaki ilişkinin sağlık sektöründe anlamlı olduğunu doğrulamaktadır. Diğer bir ifadeyle, bu çalışma kuruluşların kurumsal sosyal sorumluluk performansının finansal performans üzerinde pozitif ve istatistiksel olarak anlamlı bir etkiye sahip olduğunu gösteren kanıtlar sunmaktadır.

Sınırlılıklar: Örneklemin veri tabanında yer alan sağlık kuruluşlarını ve mevcut dönemlerini içermesi araştırımın sınırlılıklarıdır.

Özgünlük/Değer: Diğer alanlarda yoğun olarak çalışılmasına karşın sağlık kuruluşları kapsamında sınırlı sayıda incelenen kurumsal sosyal sorumluluk ve finansal performans ilişkisinin bu çalışmada incelenmesi ve kurumsal sosyal sorumluluk ile ilgili konuların sağlık kuruluşlarının karlılığı ve hayatta kalmaları için önemli olduğuna dair kanıtların sunulması araştırmanın özgün değerini oluşturmaktadır.

Anahtar Kelimeler: Sosyal Performans, Kurumsal Sosyal Sorumluluk, Finansal Performans, Sağlık Kurumları.

Abstract

Purpose: This study examines the relationship between corporate social responsibility performance and financial performance of healthcare institutions using an international sample.

Design/Methodology: This study utilises various alternative representations of corporate social responsibility performance and methodologies for organisations, including Ordinary Least Squares, Weighted Least Squares, Country and Institution Fixed Effects Models. The sample of the study consists of 1514 firm-year observations of firms from 21 countries and the relevant data were obtained from the Refinitiv database.

Findings: The study confirms that the relationship between organisations' corporate social responsibility performance and financial performance is significant in the healthcare sector. In other words, this study provides evidence that organisations' corporate social responsibility performance has a positive and statistically significant effect on financial performance.

Limitations: The fact that the sample consists of healthcare institutions that are covered by the data provider and the sample period only covers the years in which the institutions have required data are the limitations of the study.

Originality/Value: The originality of this study lies in the fact that it examines the relationship between corporate social responsibility and financial performance, which has been extensively researched in other sectors but limited in the context of healthcare institutions and provides evidence that corporate social responsibility issues are important to the profitability and survival of healthcare institutions.

Keywords: Social Performance, Corporate Social Responsibility, Financial Performance, Healthcare Institutions.

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1. INTRODUCTION

Economic and cultural globalization, scientific and technological progress, increased access to information and acceptance of consumer rights causes some changes in modern societies. All these changes require organizations to act in accordance with ethical principles. This issue brings the concept of Corporate Social Responsibility CSR, which is an umbrella concept, to the agenda. CSR includes the main objectives such as increasing the profits of the shareholders of the organization, as well as taking into account the satisfaction of all key stakeholders and environmental sensitivity (Brandao et al., 2013).

CSR is a concept that closely concerns healthcare institutions like other organizations. Both private and public healthcare institutions have various social responsibilities. Understanding that social responsibility and profit motive can go together has made the issue important for healthcare institutions as well. With social responsibility practices, it gains a competitive advantage in the service industry market, and a positive image is obtained for external stakeholders.

Embracing sustainable policies in healthcare institutions may have direct and indirect effects on financial performance. Specifically, environmental sustainability practices can reduce operational costs through factors such as energy efficiency, waste management and carbon footprint reduction (Porter & Kramer, 2011). In terms of social sustainability, practices such as employee satisfaction, patient safety and community health projects contribute to long-term revenue growth by increasing patient loyalty and corporate reputation (Bodenheimer & Sinsky, 2014). Moreover, as regulatory authorities and investors are increasingly paying attention to the sustainability efforts of healthcare institutions, organisations with strong sustainability performance can access financing at lower capital costs (Friede et al., 2015).

On the other hand, increased patient and investor awareness of sustainability practices in the healthcare sector can create organisational competitive advantage. Research shows that hospitals that adopt sustainability strategies provide higher patient satisfaction and this has a positive impact on financial performance (Chowdhury et al., 2021). Especially green hospital practices create cost advantages by saving energy and water and gain the trust of patients and stakeholders through environmentally friendly policies (Kumari & Kumar, 2020). Therefore, the positive impact of sustainability performance on financial performance metrics in healthcare institutions are becoming an increasingly critical factor for strategic management.

CSR in the health sector is not extensively researched because it is believed that the services provided in the health sector already directly serve humanity. In addition to this, data availability is one of the main reason of the lack of the studies investigating the issue. For this reason, the aim of this study is to contribute to the limited literature with this study by using an international large sample. This study extends the literature by examining the relationship between social/CSR performance and financial performance from the perspective of healthcare institutions.

2. THE CONCEPT OF CSR

CSR is among the most important components of competitiveness that ensures the sustainable growth of the organization (Jang et al., 2019). Since CSR contributes positively to both the competitiveness and image of the organization, it is recommended that it should not only be included in the strategic plans but also be included in daily activities (Macuda, 2016). The basis of the CSR concept is to be in good communication and relationship with employees and other stakeholders and to protect the environment. CSR was previously seen only as a voluntary solution to social problems. However, this perspective has changed and it is believed that CSR and the organization should contribute to the solution of environmental and social problems (Lubis, 2018).

There is no clear and agreed-upon definition of CSR. For this reason, the concepts of corporate governance, corporate citizenship, corporate transparency and business ethics can be used synonymously with CSR (Leela, 2014). The meaning of the CSR concept may differ according to the organization, country and sector (Abderraouf and Nadira, 2018). In addition, since CSR is an interdisciplinary subject, it becomes a research topic in the fields such as business, ethics, philosophy, law, ecology, management and accounting (Macuda, 2016). CSR is expressed as both increasing the competition and value of organizations and making a positive contribution to social, economic and

environmental factors voluntarily (Leela, 2014). CSR is expressed as the support that organizations give to sustainable development. In another way, CSR is defined as the responsibility of the organization towards society (Droppert and Bennett, 2015).

CSR activities have four levels: profitability, legitimacy, ethics, and philanthropy. Profitability and legitimacy are mandatory activities that express compliance with applicable laws. Ethics and philanthropy includes persuasive voluntary practices (Lubis, 2018). In addition, CSR has four components: accountability, transparency, competiveness and responsibility. Accountability can be defined as openness about business activities, products, decisions and policies, and notification, explanation and responsiveness about these factors. Transparency is providing accurate and complete information of the organization to the public about its products and processes. When there is transparency, the public will have information about the internal processes of the organization, and trust in the organization will increase. Competiveness can be defined as the establishment of cooperation with the stakeholders of the organization. This component is very important for the sustainability of the organization. Responsibility refers to the compliance of the organization with legal documents, respect for the rights of employees, charity and environmental awareness (Safkaur, 2016).

CSR practices can be determined by the state, and organizations may be asked to respect human rights, minorities and the environment. Organizations can act in the form of not accepting these applications, fulfilling them and fulfilling more than these applications. In particular, businesses that exceed the minimum conditions can differentiate themselves from other businesses (Miller and Eden, 2020).

2.1. CSR in Healthcare Institutions

It can be said that CSR has emerged gradually in the health sector (Takahashi, 2013; Russo, 2016). CSR programs are also being established in Japan and the USA, where the majority of healthcare institutions are private. CSR activities are usually included in the balance scorecard. The mission statements of healthcare institutions are expanding and social responsibility statements such as helping patients, education and research are included in the mission statement (Takahashi et al., 2013).

CSR in healthcare institutions can be expressed as the ethical obligation of healthcare institutions to provide quality healthcare to everyone (Brandao et al., 2013). Since the decisions made in healthcare institutions directly affect human health, healthcare institutions represent a special situation in terms of CSR (Droppert and Bennett, 2015). CSR requires healthcare institutions to comply with the law and carry out activities that are beneficial to the society apart from general ethical rules (Gharaee et al., 2013).

Healthcare institutions are organizations that are expected to maximize benefit rather than profit and provide high quality service. However, it should not be forgotten that these institutions are also business enterprises and have economic characteristics. Despite this, it is believed that public or private healthcare institutions operate within the framework of ethical purposes rather than commercial activities. Due to this feature, CSR is a concept of high importance for healthcare institutions and highly associated with these institutions (Macuda, 2016).

Healthcare institutions are organizations that operate in an environment where there is a high level of regulation, with an insufficient number of personnel, especially nurses, working with increasing high-cost technologies, and operating in difficulties such as being expected to serve at international quality standards. In addition, diseases that cause pandemics or other serious diseases cause both public and private healthcare institutions to operate outside of their routine work. CSR has a very important function in working through all these difficulties and gaining the trust of its stakeholders (Safkaur, 2016).

CSR activities in healthcare institutions include practices such as training of health personnel, increasing public health through seminars and voluntary activities (Lubis, 2018). More generally, corporate social responsibility practices in healthcare institutions are divided into active and passive corporate social responsibility practices (Brandao et al., 2013):

Passive corporate social responsibility practices are as follows:

- Creating wealth and promoting employment
- Protecting the investments and interests of all stakeholders
- Respect for human rights
- Do not harm the environment
- To comply with the law

Active corporate social responsibility practices are as follows:

- Implementation of ethical codes of conduct
- Developing and implementing anti-discrimination policies
- Accountability in management decisions and performance metrics
- Respecting animal rights, especially in scientific research
- To actively contribute to the protection of the environment
- Contributing to national and international solidarity programs

With CSR activities, it is tried to create a positive perception towards the institution in the minds of patients/consumers towards healthcare institutions (Lubis, 2018). CSR activities will increase the attractiveness of the health institution in terms of donations and partnerships by enabling the health institution to establish good relations with the society. Although healthcare institutions operate in a way that shows social responsibility behaviors, this situation becomes more evident when health institutions embrace CSR related policies and communicate these efforts with their key stakeholders. In addition, CSR helps employees in healthcare institutions to continue working in the institution or to prevent them from leaving the institution. For example, people may not want to work in a health institution where ethical values are constantly violated. This problem may not occur with the application of CSR (Macuda, 2016).

There are various stakeholders for healthcare institutions such as patients, physicians, management personnel, nurses, material providers, policy makers, and these stakeholders have different effects on CSR. This effect varies between healthcare institutions. CSR coordinates and facilitates the relationship between these stakeholders and contributes to the management of role diversity and autonomy. CSR serves to protect stakeholders. For example, it helps policy makers maintain economic balance by protecting patients' rights against doctor's maltreatment, protecting physicians' rights against inappropriate requests, and preventing high financial cost procedures (Russo, 2016).

There are some difficulties in the implementation and acceptance of CSR in healthcare institutions for reasons specific to healthcare institutions. The first one is the perception that since healthcare institutions already have a social mission, there is no need for additional corporate social responsibility activities. Except for the private hospitals established for profit, especially in hospitals, public hospitals are established for the purpose of helping and treating patients and receive donations from various individuals and organizations. From this point of view, hospitals are the subject of corporate social responsibility activities of other institutions rather than performing their own corporate social responsibility activities. Secondly, health institutions typically operate in a highly regulated and government driven environment. For this reason, general strategies of healthcare institutions and CSR strategies may not be distinguished (Takahashi et al., 2013). Third, corporate social responsibility practices can be difficult to implement in the health sector, since in some cases they may conflict with the basic goals of the health institution. Despite this paradoxical situation, which arises due to the distinguishing features of healthcare institutions from other businesses, it will be in favour of for-profit and non-profit healthcare institutions to adopt corporate social responsibility (Brandao et al., 2013).

3. HYPOTHESES DEVELOPMENT

CSR has been the subject of many academic studies, and research focuses on financial performance, especially with CSR. Studies indicate that CSR positively affects financial performance

as it provides transparent business practices, trust among stakeholders and a positive brand image (Jang et al., 2019).

The relationship between CSR and financial performance was started to be investigated years ago, but still no definite conclusion has been reached (Roman et al., 1999; Jayachandran et al., 2013; Yang et al., 2019). The relationship between CSR and financial performance poses a challenge to Milton Friedman's view that the firm's social responsibility is to make a profit (Griffin and Mahon, 1997).

Various academic studies are conducted on how CSR affects the financial performance of the institution. Studies on the impact of CSR on financial performance may yield different results. This is due to the fact that CSR is a measure that measures different subjects. In other words, environmental and product policies, corporate governance and human relations can be included in CSR. This diversity can differentiate the effect of the concept on the financial performance of the institution (Yang et al., 2019). In addition, even if there is a positive relationship between CSR and financial performance, this situation is that organizations with good financial performance may not be the ones that allocate more resources for CSR (Waddock and Graves, 1997).

Studies investigating the effect of CSR activities on financial performance show that there are positive and negative effects. In some studies, it is concluded that the expenditures made for CSR increase the financial performance, while in some studies it is stated that the expenditures made for the CSR exceed the profit of the enterprise and therefore CSR activities reduce the financial performance. Although such discussions are made in the literature, the prevailing opinion is that CSR performance affects financial performance positively (Cho et al., 2019; Hwang and Chung, 2018; Leela, 2014). Various studies have found that CSR improves financial performance (Miller and Eden, 2020; Yang et al., 2019; Griffin and Mahon, 1997; Waddock and Graves, 1997; Cho et al., 2019; Hwang and Chung, 2018). According to the previous literature, Hypothesis 1 and 2 are established as follows:

H1: Healthcare institutions social performance has positive impact on financial performance.

H2: Healthcare institutions CSR performance has positive impact on financial performance.

4. METHODOLOGY AND DATA

4.1. Research Design

This quantitative study aims to investigate the effects of firms' CSR performance on financial performance in an international setting. In this regard, the variable of interest of the study is firms' CSR performance while financial performance is outcome variable of the study. Regression analysis is used to figure out the effects of firms' CSR performance on financial performance. In addition, Weighted Least Square method is utilized to control variability of sample size of the countries. The sample of the study consists of health institutions (referred as 'firm' in the study) from 21 countries. Refinitiv database is utilized to gather relevant data and Stata software is used to perform statistical analyses.

4.2. Measurement of CSR

Institutions' social and CSR performance embraces several aspects related to activities of institutions. In this context, following literature (Ioannou & Serafeim, 2012; Shaukat Qiu & Trojanowski, 2016) we used data provided by Refinitiv database which is one of the leading data provider in global setting. This database provides institution level data on yearly basis which enable researchers to conduct studies aiming to investigate corporate social/CSR performance and related issues. Refinitiv offers scores of environmental, social and governance (ESG) performance of institutions with considering more than 500 different ESG metrics (ESG, 2021) Institutions' social and CSR performance scores range between 0-100 and there is positive linear relationship between the score and the institution's performance. In other words, while 0 indicates the lowest performance, 100 indicates the highest performance.

In calculating institutions' social performance scores, Refinitiv considers four main issues related to workforce conditions (job satisfaction, healthy workplace etc.), human rights (respecting fundamental human rights), community (being a good citizen, protecting public health and respecting business ethics) and product responsibility (capacity to produce quality goods and services). In this

sense, social performance score reflects the social trust and loyalty to the institution. We used social performance scores of institutions in the study as proxy of institutions' social performance. As for CSR performance of institutions, Refinitiv considers institutions' activities in terms of whether institutions integrate ESG dimensions into their day-to-day decision-making processes (ESG, 2021).

4.3. Model

Models utilized to test hypotheses are based on previous studies. The main structure of the model is as follows:

$$Financial\ Performance_{i,t} = Social/CSR\ Performance_{i,t} + X_{i,t} + Y_{i,t} + \varepsilon_{i,t} \quad (1)$$

Equation 1 demonstrates the main concept of the model. Social and CSR performance of institutions are the variable of interests of the study. X and Y denote institution and country specific control variables respectively. By adding X and Y, we aim to control the variables at institution and country level that may affect institutions' financial performance. Last, $\varepsilon_{i,t}$ stands for residual of the models.

As shown in equation 1, there are four types of variable sets. First one is related to institutions' financial performance. We use both accounting based and market based well known financial performance proxies. Return on asset (ROA) and return on equity (ROE) are used as institutions' accounting based financial performance variables while Tobins Q is used as proxy for market based financial performance of institutions. These variables are calculated as ROA = (Net Income$_{i,t}$/Total Asset$_{i,t}$), ROE = (Net Income$_{i,t}$/Equity$_{i,t}$) and Tobins Q = (Equity Market Value$_{i,t}$+Liabilities Market Value$_{i,t}$)/(Equity Book Value$_{i,t}$+Liabilities Book Value$_{i,t}$). Using three financial performance metrics allow us to consider the financial performance of health institutions on both an accounting and market perspective.

Second set of variables are related to institutions' social (SocPer$_{i,t}$) and CSR (CSRS$_{i,t}$) performance. As mentioned before, these variables range between 0 and 100. Third set of variables ($X_{i,t}$) consist of control variables at institution level. Previous studies clearly established the effects of institution size (Size), leverage (Leverage) and sales growth (Growth) on institutions' financial performance (Detthamrong et al., 2017; Mak & Kusnadi, 2005). Therefore, we control the effects of these variables by adding them into the models. Size and leverage are calculated as natural logarithm of Total Asset$_{i,t}$ and (Total Debt$_{i,t}$/Total Asset$_{i,t}$) respectively. Growth stands for institutions' revenue growth and calculated as ((Total Revenue$_{i,t}$-Total Revenue$_{i,t-1}$)/Total Revenue$_{i,t-1}$). We also control country level variables and these constitute fourth set of variables. Following related literature, we control gross domestic products (calculated as natural logarithm of GDP) and its growth rate (GDPgr).

In terms of methodological issues, all variables (except for Social and CSR Performance) are winsorized at 1% and 99% to eliminate outliers into the data. In addition, we use country and year fixed effects in all models used in the main analyses. To ensure the findings do not suffer from multicollinearity problem, Variance Inflation Factor (VIF) values are calculated. In this context, Gujarati (2009) states that the threshold value of VIF is 10. In other words, VIF values higher than threshold value indicates multicollinearity problem in the model. Variables used in the study have 1.63 as the highest VIF value demonstrating nonexistence of multicollineariy problem.

4.4. Sample Distribution

The initial sample of the study covers all available institutions operating in healthcare services and equipment sector between 2010-2019 in Refinitiv. This sector consists of subsectors related to the public health including healthcare facilities, ambulance/emergency services, medical laboratories, medical equipment, veterinary services etc. We eliminate institution-year observations having missing social performance/CSRS data. We also exclude countries with observations lower than ten institution-year. Remaining sample consists of institutions from 21 countries. Since not all firms have data for each year, our panel is unbalanced, covering 1,514 firm-year observations. All variables are obtained from Refinitiv database but GDP and GDPgr are obtained from World Bank. Table 1 presents summary statistics of sample distribution.

As presented in Table 1, US has the largest sample size (917 institution-year) having required data. US is followed by Australia (103), Japan (76), Germany (54) and Sweden (41 institution-year) respectively. While institutions domiciled in Netherlands have the highest average social (SocPer) and CSR performance (CSRS) scores, South Korean institutions have the lowest average value in terms of social performance and Thai institutions have the lowest average value of CSR performance. One of the possible explanation of institutions' differing CSR performance scores is that engaging CSR activities reflect a degree of societal expectation which may vary in line with different social norms of each country in the study.

Table 1: Summary Statistics of Key Variables by Country

Country	# of observation	SocPer	CSRS	ROA	ROE	TobinsQ
Australia	103	39.864	36.846	0.046	0.095	2.373
Belgium	15	72.878	38.817	-0.021	0.028	3.544
Brazil	16	38.193	37.198	0.136	0.241	1.771
Canada	27	35.004	26.380	-0.006	0.037	1.625
China	17	32.453	56.708	0.189	0.167	6.026
Denmark	34	62.798	41.878	0.127	0.278	5.079
France	21	64.227	18.660	0.064	0.123	2.250
Germany	54	61.646	28.650	0.056	0.122	1.905
Hong Kong	20	34.082	26.589	0.051	0.072	2.850
Japan	76	51.007	52.332	0.058	0.091	2.512
Malaysia	17	47.087	38.774	0.081	0.116	3.317
Netherlands	10	94.704	86.803	0.092	0.087	3.862
New Zealand	27	35.750	26.909	0.104	0.22	2.963
Singapore	12	36.536	46.273	0.097	0.126	2.560
South Africa	19	64.367	59.470	0.087	0.236	2.275
South Korea	10	33.099	-	0.051	0.097	1.925
Sweden	41	53.259	20.368	0.069	0.147	3.512
Switzerland	28	59.009	45.869	0.098	0.168	3.678
Thailand	16	38.632	13.298	0.122	0.205	4.349
UK	34	57.981	49.968	0.059	0.093	2.166
US	917	41.166	51.440	0.023	0.018	2.777
Total	1514	44.622	43.635	0.042	0.064	2.806

5. FINDINGS

5.1. Descriptive Statistics and Correlation Analysis

Summary statistics of the variables used in the study are presented at Table 2. This table includes variables used in the robustness check as well as variables used in the main analyses. The number of observations varies from variable to variable as some variables have missing values and we aimed to perform analyses by using the highest number of observations. The final number of observations used in the analysis is presented in Table 4.

As shown in Table 2, the average values of institutions' social (SocPer) and CSR performance (CSRS) are 44.622 and 43.635 respectively. As for financial performance proxies, sample institutions have the average value of ROA, ROE and TobinsQ as 0.041, 0.063 and 2.806 respectively. This indicates that sample institutions make profit from their activities in the investigation period. Growth has the average value of 0.132 indicating sample institutions have average sales growth compared to previous year at 13.2%. Regarding the Leverage, it is seen that the sample institutions have an average total debt

of 23.9% of their total assets. As mentioned before, Table 2 includes variables used in the robustness check. These variables are introduced in robustness check section. However, it is determined that 67.8% of sample institutions have separate CSR committee on their board of directors (this ratio has been calculated by considering only the sample of institutions having CSRS) and sample institutions have average value of 0.056 earnings before interest and taxes.

Table 2: Descriptive Statistics

	# of obs.	Mean	Min	max	Std. Dev.
SocPer	1514	44.622	1.201	96.432	23.067
CSRS	745	43.635	0.714	98.401	26.542
CSRcom	730	0.678	0.000	1.000	0.467
ROA	1507	0.041	-0.183	0.681	0.094
ROE	1452	0.063	-0.577	0.531	0.214
Q	1501	2.806	0.173	11.336	2.287
Ebit	1509	0.056	-0.693	0.305	0.152
Size	1511	21.896	14.256	28.900	2.261
Growth	1418	0.132	-0.280	0.639	0.175
Leverage	1511	0.239	0.000	0.865	0.196
GDP	1514	29.509	25.711	30.696	1.490
GDPgr	1514	0.032	-0.266	0.325	0.051

Findings showing the relationship between variables are presented at Table 3. As reported in Table 3, there is positive and statistically significant relationship between institutions' social performance (SocPer) scores and financial performance proxies. In this context, SocPer has correlation coefficients as 0.2999 ($p<0.001$), 0.331 ($p<0.001$) 0.082 ($p<0.001$) and 0.327 ($p<0.001$) correlation coefficients with ROA, ROE, TobinsQ and Ebit respectively. Similar correlation findings are obtained for CSRS as well. Regarding this relationship, CSRS has correlation coefficients as 0.213 ($p<0.001$), 0.234 ($p<0.001$), 0.045 ($p<0.10$) and 0.225 ($p<0.001$) with ROA, ROE, TobinsQ and Ebit respectively. These findings demonstrate that there is positive and statistically significant relationship between SocPer, CSRS and institutions' financial performance. As for institution level control variables, Size has positive statistically significant correlation coefficients with accounting based financial performance proxies (ROA 0.322 $p<0.001$, ROE 0.358 $p<0.001$ and Ebit 0.408 $p<0.001$) and negative statistically significant correlation coefficient with market based financial performance proxy (TobinsQ -0.217 $p<0.001$). Leverage has negative statistically significant correlation coefficients with all financial performance proxies (with ROA -0.195 $p<0.001$, ROE -0.123 $p<0.001$, TobinsQ -0.262 $p<0.001$ and Ebit -0.088 $p<0.001$). Lastly, Growth has negative (positive) statistically significant coefficients with accounting (market) based financial performance as ROA -0.232 $p<0.001$, ROE -0.246 $p<0.001$ and Ebit -0.268 $p<0.001$ (TobinsQ 0.236 $p<0.001$).

Table 3: Correlation Coefficients

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) SocPer	1								
(2) CSRS	0.699[a]	1							
(3) ROA	0.299[a]	0.213[a]	1						
(4) ROE	0.331[a]	0.234[a]	0.886[a]	1					
(5) TobinsQ	0.082[a]	0.045[c]	0.223[a]	0.119[a]	1				
(6) Ebit	0.327[a]	0.225[a]	0.829[a]	0.832[a]	0.120[a]	1			
(7) Size	0.474[a]	0.490[a]	0.322[a]	0.358[a]	-0.217[a]	0.408[a]	1		
(8) Leverage	0.093[a]	0.068[a]	-0.195[a]	-0.123[a]	-0.262[a]	-0.088[a]	0.132[a]	1	
(9) Growth	-0.233[a]	-0.202[a]	-0.232[a]	-0.246[a]	0.236[a]	-0.268[a]	-0.292[a]	-0.048[c]	1

This table shows the correlation coefficients of the variables. a, and c demonstrate the significance level at %1, and %10, respectively.

5.2. Main Results

Table 4 provides findings with regards to effects of institutions' social and CSR performance on financial performance. First three models (from 1 to 3) show the effects of social performance of institutions (SocPer) on both accounting (ROA and ROE) and market based (TobinsQ) financial performance proxies. Remaining three models (from 4 to 6) show the effects of corporate CSR performance (CSRS) on both accounting and market based financial performance proxies.

Table 4: The Effects of Social and CSR Performance on Financial Performance

Variables	(1) ROA	(2) ROE	(3) TobinsQ	(4) ROA	(5) ROE	(6) TobinsQ
SocPer	0.001***	0.002***	0.035***			
	(0.000)	(0.000)	(0.003)			
CSRS				0.001**	0.001***	0.014***
				(0.000)	(0.000)	(0.003)
Size	0.008***	0.036***	-0.464	0.033**	0.008*	-0.472**
	(0.001)	(0.003)	(0.041)	(0.016)	(0.004)	(0.057)
Leverage	-0.126***	-0.328***	-2.409***	-0.106***	-0.316***	-3.004***
	(0.011)	(0.029)	(0.300)	(0.015)	(0.037)	(0.443)
Growth	-0.083***	-0.160***	2.395***	-0.011	-0.016	2.239***
	(0.013)	(0.030)	(0.329)	(0.020)	(0.044)	(0.572)
GDP	-0.054	-0.163**	-0.037	-0.054	-0.169**	-0.371
	(0.034)	(0.079)	(0.862)	(0.034)	(0.077)	(0.969)
GDPgr	0.025	0.067	1.670	0.014	0.030	0.040
	(0.055)	(0.128)	(1.389)	(0.056)	(0.125)	(1.594)
C	1.423	3.970*	11.441	1.677**	4.823**	22.624
	(0.966)	(2.233)	(24.134)	(0.953)	(2.156)	(27.132)
# of observation	1416	1366	1407	694	667	693
Adjusted R-squared	0.318	0.320	0.282	0.267	0.210	0.382
# of institution	315	309	314	161	158	161
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Heteroscedasticity robust standard errors are in parentheses. ***,**, and * show significance level at 1%, 5% and 10%, respectively.

As reported in model 1, institutions' social performance has positive and statistically effects on both accounting and market based financial performance proxies. This indicates that an increase in institutions' social performance causes an increase in institutions' ROA, ROE and TobinsQ. These three models have adjusted R2 between 28.2% and 32%. Findings also show that 28% and 32% of the change in financial performance proxies is explained by the variables in the models. In this context, it is seen that H1 hypothesis suggesting that healthcare institutions' social performance has positive impact on their financial performance is supported by these findings. As for H2 it is observed that CSRS has positive statistically significant coefficients at %1 demonstrating institutions' CSR performance has positive impact on financial performance. Hence, the findings observed through the model 4-6 are consistent with H2. In addition, these findings are observed after controlling several institution and country level variables including Size, Leverage, Growth, GDP and GDPgr. Overall, our findings confirm that institutions' social and CSR performance have positive impact on institutions operating in healthcare service and equipment sector. It should also be noted that these results are consistent with previous literature examining other sectors. (Jayachandran et al., 2013; Mishra and Sua, 2010).

5.3. Robustness Checks

We use several alternative analyses and proxies to ensure that our results are robust. First, in line with previous studies, we use alternative proxies for both institutions' financial (Ebit) and social/CSR performance (CSRcom – which is a categorical variable that takes value of 1 if institution has CSR committee on board of directors and 0 otherwise). Ebit differs from ROA/ROE by excluding interest and taxes which are not related to institutions' ongoing profitability and provide more clear representation of profitability of institutions' ongoing operations. The existence of CSR committee shows the institutions' awareness to CSR related issues. It is observed that findings from alternative proxies have similar results with main results.

Second, as in many other cross country studies, countries in the study show great variability in terms of sample size. For example, US has the highest number of institution-year observations (917) whereas Netherlands and South Korea have the lowest number of institution-year observations (both have 10). There are two methods that can be applied to deal with the unequal sample size. One of these is to use weighted least square method (WLS) and the other one is to rerun the analyses by excluding countries with the highest institution-year observations from the sample (Han et al., 2010). In the WLS method, weight is inversely proportional to the number of observations of countries. By using the WLS method, the bias caused by the unequal number of observations of countries in the sample can be

eliminated. In this context, we use both WLS method and exclude US from the sample before rerunning our analyses. According to untabulated findings, main results remain qualitatively same.

Third, different from main analyses, we use firm-fixed effects to control the effects of time invariant unobservable factors that may have impact on both dependent and independent variables. Obtained results from firm-fixed effects provide supporting evidence to both H1 an H2 hypotheses. Overall, performed robustness checks demonstrate that our main results are robust and reveal that firms' social and CSR performance has positive and significant impact on financial performance.

6. CONCLUSION

Although healthcare institutions are business enterprises and vary according to countries, the explicit use of concepts such as profit and financial performance is avoided in these institutions. In other words, there may be a concern that private or public healthcare institutions are actually established to serve people, especially in countries where the social health system is dominant, and that the juxtaposition of these institutions with financial terms, especially profit, may be perceived as unethical in the society. For this reason, there is no price information on the websites of healthcare institutions. In fact, all kinds of advertisements and promotions by healthcare institutions are prohibited by law due to the concern that it will create unnecessary use of services in Turkey. Although they were established with the mission of serving people, healthcare institutions are also business enterprises. Private healthcare institutions are established for profit in addition to other purposes (such as serving the community, maintaining their existence). Public healthcare institutions, on the other hand, are not the primary purpose of making profit, but at least these institutions are expected to be able to meet their expenses with their own income. For this reason, monitoring the financial performance of their institutions is among the important duties of healthcare institutions managers. For this reason, the concept of CSR, which is thought to increase financial performance, has been the subject of this study.

In this study, the relationship between CSR and financial performance, which can be considered limited in the sample of healthcare institutions, is investigated. Studies on the CSR-financial performance relationship have not found a consensus. However, as stated in the literature section, the prevailing opinion as a result of the studies is that there is a positive relationship between the two variables and that CSR increases financial performance. As a result of the analyses made in this study, it is concluded that CSR increased financial performance in line with the prevailing opinion in the literature. For this reason, it can be said that giving importance to CSR, which is already the main purpose for healthcare institutions, will also increase their financial performance. As a result of the study, the managers of healthcare institutions should be sensitive to the environment, transparency and accountability in organizational policies, developing and implementing policies that will ensure the adoption of ethical principles by all personnel, not harming the subjects in research on humans and animals, obeying the laws in all work and processes, organizing social support and assistance programs. or to implement active and passive CSR activities, such as contributing to such programs. Thus, it will be possible to benefit from the various benefits of CSR and its positive effect on financial performance as revealed as a result of this research. In the future, in case of receiving financial data from healthcare institutions, the relationship between CSR and various financial performance metrics can be examined. Thus, it will contribute to the limited work in the literature as well as in terms of practice. Although the study covers a long process and a large amount of data, the study has the limitation of being formed in line with the variables in the data due to the use of secondary data. It is also accepted that the data is error-free and reliable.

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