# **ECONSTOR** Make Your Publications Visible.

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Dehghan Khavari, Saeed; Abdorrahimian, Mohammadhossein; Mirjalili, Seyed Hossein; Shayesteh, Abolfazl

Article — Published Version The impact of social responsibility on the efficiency and profitability of banks: (Case of Banks Listed in Tehran Stock Exchange)

Journal of Money and Economy

*Suggested Citation:* Dehghan Khavari, Saeed; Abdorrahimian, Mohammadhossein; Mirjalili, Seyed Hossein; Shayesteh, Abolfazl (2023) : The impact of social responsibility on the efficiency and profitability of banks: (Case of Banks Listed in Tehran Stock Exchange), Journal of Money and Economy, ISSN 2588-7114, Monetary and Banking Research Institute, Central Bank of The Islamic Republic of Iran, Tehran, Iran, Vol. 18, Iss. 3, pp. 371-385, https://doi.org/10.61186/jme.18.60.371, http://jme.mbri.ac.ir/article-1-618-en.html

This Version is available at: https://hdl.handle.net/10419/309449

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by-nc/4.0/

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





Journal of Money and Economy Vol. 18, No. 3, Summer 2023 pp. 371-385 DOI: 10.61186/jme.18.60.371

# **Original Research Article**

# The Impact of Social Responsibility on the Efficiency and Profitability of Banks (Case of Banks Listed in Tehran Stock Exchange)

Saeed Dehghan Khavari <sup>*</sup>	Mohammadhossein Abdorrahimian <sup>†</sup>
Seyed Hossein Mirjalili <sup>‡</sup>	Abolfazl Shayesteh <sup>§</sup>

Received: 07 Jan 2023

Approved: 09 Oct 2024

Providing financial services for social projects represents corporate social responsibility (CSR), because it indicates ethical commitment for creating better social environment. It improves public image and loyalty of customers, increases the commercial value of the trademark, promote public trust, create confidence of the beneficiaries, and attract valuable resources by the corporate. Corporates have realized that they are responsible for the society in which they operate. We examined the impact of CSR on the efficiency and profitability of banks. The statistical population of the research is 16 banks listed in Tehran Stock Exchange during the period 2014-2018. Four variables represent efficiency and profitability. Also, six variables included in the model as control variables. The results indicated a positive and significant effect of social responsibility on the efficiency and profitability of the banks, so that the CSR has most effect on the return on assets, net profit margin and return on equity respectively.

Keywords: Social Responsibility, Bank Efficiency, Bank Profitability, Stock Exchange.

JEL Classification: G21, G14, C33

## **1** Introduction

Corporate social responsibilities are the relationships of the corporate with all stakeholders, including customers, employees, community members,

<sup>\*</sup> Department of Economics, Faculty of Humanities, Meybod University, Meybod, Iran; saeed.khavari@meybod.ac.ir (Corresponding Author)

<sup>&</sup>lt;sup>†</sup> Department of Finance and Accounting, Faculty of Humanities, Meybod University, Meybod, Iran; abdorahimian@meybod.ac.ir

<sup>&</sup>lt;sup>‡</sup> Faculty of Economics, Institute for Humanities and Cultural Studies, Tehran, Iran; h.jalili@ihcs.ac.ir

<sup>§</sup> Department of Financial Engineering, Faculty of Humanities, Science and Arts University, Yazd, Iran; abolfazl.shayesteh2000@gmail.com

shareholders and investors, government, and competitors, which reflect the behavior of corporate towards the society and their commitment to comply with their responsibilities. Social activities in business help to achieve economic development and improve the quality of life for society members (Kuo et al., 2021). Nowadays, regardless of the type of activity, corporates have realized that they are responsible for all stakeholders, preserving the environment and the society in which they operate (Shabani et al., 2019).

Therefore, corporate social responsibility refers to the emergence of a movement that tries to include environmental and social factors in the decision-making of the company's business strategy and its aim is to improve social and environmental performance in addition to economic dimensions. (Foroughi et al., 2018)

On the other hand, if corporates do not respect their social goals, environmental pollution, poverty, disease, discrimination, and disorder will include their environment, and if they do not look at the issue with foresight, these problems will eventually take their toll (Afiff and Anantadjaya, 2013).

It is important that social responsibility, in addition to cultural and social effects, can also affect the company's performance. In fact, social responsibility reports provide information for investors about the company's current and future costs and benefits. Social responsibility reduces the asymmetry of information and increases the supervision of investors and finally reduces the opportunities of managers to abuse the cash of the plans. Therefore, social responsibility increases accuracy in the economic and financial performance of the company. (Chen et al., 2015)

As the bank's performance affects on society, therefore, its attention to social responsibilities is very important (Okafor et al., 2021). Banks provide public financial services and they are more related to social responsibility in Muslim societies. In this regard, banks can improve the welfare and economic conditions of the society.

The paper aims at identifying the impact of social responsibility on the efficiency and profitability of banks listed in Tehran Stock Exchange. Also, the impact of social responsibility on other aspects of banks' financial performance, such as financial stability and financial inclusion, has been investigated. The paper examines whether social responsibility impacts on efficiency and profitability of banks listed in Tehran Stock Exchange.

The paper structured as follows. After the introduction, in the second part, the theoretical background is provided. In the third part, the literature review is presented. The fourth part is dedicated to methodology. The fifth part deals

with model specification and its estimation. Finally, the paper concludes with the results.

### **2** Theoretical Background

The World Business Council for Sustainable Development (WBCSD) defines CSR as a business commitment to share and cooperate in sustainable economic development, working with workers, their families, local communities, and society at large to improve the quality of life.

The American Society for Quality (ASQ) defines social responsibility as the behavior and business participation of people and corporates in an ethical way, considering society, culture, and economy, and considers it as an effort through which individuals, corporates and governments can have a positive effect on development, business, and society.

Also, according to the International Chamber of Commerce (ICC), corporate social responsibility are voluntary commitments of business to manage the corporate activities in terms of accountability.

Table 1 shows different views on the appropriate role of business in society. On the one hand, there are those who believe that business has only economic responsibility, but among them are people who want managers to be sensitive to social effects, especially about society's potential losses. On the other hand, there are those who want to see an active role of corporate in solving the problems of society (Maranjori and Alikhani, 2014).

Table 1

Different	views on CSR	
Author	Perspective	Role of business in society
Albert	Net profit and	Business has low moral standards towards the society and
Carr	economic CSR	has no social responsibility except following the law
Milton	Specific profit and	The business should maximize the shareholder's assets,
Friedman	economic CSR	follow the law and be moral (refrain from fraud and
		deception and follow fair and legal play)
Edward	Social awareness	The business should be aware of the potential losses of its
Freemah	and moral CSR	activities on different interest groups
Archie	Social services and	Business should use its broad benefits to serve society
Carooll	philanthropic CSR	· · · · · ·
G 14	· · · · · · · · · · · · · · · · · · ·	

Source: Maranjori and Alikhani (2014)

According to their social responsibility, corporates are required to provide healthy products and services to the society at a reasonable price, and in this way, they are required to observe the rights of consumers (Fukuyama and Tan, 2022).

Certo and Graff have defined the social responsibility of the corporate as "the commitment and task of the management to do things that preserve and promote the welfare of the society and the interests of the corporate".

The corporate neglect of the external beneficiary causes unfavorable consequences for the consumer of the corporate products. Managers should be role models for all members of the corporate. They must commit that the corporate is taking steps towards increasing productivity as well as social responsibility (Han et al., 2016).

Although the society wants the organizations to produce and provide the needed goods and services, but at the same time, it also expects them to keep ethical principles in their economic activities. Today, organizations are expected to consider ethical principles and value when making their decisions and always try to establish a balance between economic and ethical issues. Different human societies engrave their ethics in the form of laws or regulations, customs and religious beliefs in the conscience of each member of the society. Therefore, ethical problems and issues arise for an organization when it deviates from the society's opinions regarding ethical matters. This issue is more important in Iran, because moral principles and social values have a certain authority over people, in such a way that people are sensitive to their disobedience.

Social responsibility is a method in economic management to empower the corporate and create sustainable growth and development in the three dimensions of economy, environment, and society. Therefore, nowadays corporates have realized the importance of their social responsibility more than in the past (Arshad and Razak, 2011).

The process of changing the perspectives on social responsibility includes three periods. Management based on maximum profit which was based on only self- interest. Management based on trust, which is based on selfinterests, the interests of stakeholders and related corporates. The quality-oflife management that is focused on, in this era is based on self-interests, the interests of stakeholders, and the interests of society. The third view in the chronology of social responsibility, has a wider view of responsibility (Rajaei et al., 2016). In this view, corporates are like partners to other institutions to serve the society and finally to enhance the well-being and quality of social life (Kuo et al., 2021).

The rationale for the impact of social responsibilities on financial performance, including efficiency and profitability of corporate, can be due to ethical commitment, better social environment, preventing the spread of government laws and regulations, systematic interdependencies, helping to solve social problems, improving public image, increasing commercial value of the trademark, customer loyalty, improving the trust and confidence of the beneficiaries and attracting valuable resources to the corporate (Heidari Kurd Zanganeh et al., 2017).

Banks play a key role in the economic prosperity of any country. The role of the bank as a facilitator and driver of economic and trade cycles, as a wealth generating institution and also as a provider of services for local, national and international communities is vital and undeniable (Gangi et al., 2019). Considering the huge responsibility of banks in the economic development of communities, both at the national and international levels, the social responsibility of banks is more prominent compared to other companies active in the field of industry and economy, and at the same time, it has a direct effect on the responsible performance of other companies. Although banks and financial markets are exposed to market fluctuations and face problems such as unpaid debts and balance sheet structure issues, banks are required to deal with these problems responsibly. In addition, banks have a duty to be responsible for the problems they cause for society and its social citizens. (Shabani et al., 2019)

The effectiveness of social responsibility on financial efficiency and profitability may happen through social commitment and accountability. Social commitment realized when a corporate is involved in social activities due to its commitment to provide economic and legal responsibilities (Kuo et al., 2021). Managers working in a socially responsive corporate are guided by social norms and make practical decisions about the social activities they are involved in. Managers respond to what is socially important. A corporate with social responsibility looks at everything differently and its vision goes beyond what it is committed to (Fakhari and Fallahpour, 2017).

Social responsibility measurement in researches is different. As an example, some researches have used the questionnaire method. Shabani et al. (2019) used the questionnaire contains 72 ranked questions with multi-value ranges. Also Foroghi et al. (2018) used the combination of Kinder, Lydenberg, and Domini indices, board of directors' reports and notes attached to financial statements are used to calculate the social responsibility of the company. CSR denotes Corporate social responsibility which includes corporate governance indicator, product index, non-interest loan (Gharz-ol-Hasana) index, employee relations index, and environmental index. In case of disclosure, it is one and with no disclosure, it is zero. Then the social responsibility score is

calculated as number of components disclosed divided by total components. Banks with more market power have more advantage, and as a result, more license value. Permission basically means benefits from future operations of a bank, which accrue to its owners. Therefore, the license value represents the opportunity cost of bank failure. (Belasri et al., 2020). The z-score index is based on the license value theory to measure the stability of the bank and has an inverse relationship with the probability of bank failure. One of the important features of the index is that it shows the level of stability clearly, reasonably, and reliably (Bozorg Asl et al., 2018).

### **3 Literature Review**

Kuo et al. (2021) studied the impact of CSR on improving financial performance using a multilevel quadratic growth model. The results show that in the early stages of the implementation of practices based on social responsibility, there is a downward trend in the return of assets. However, it gradually increases after a period of implementation. On the other hand, the results indicated that CSR is the cornerstone for sustainable development of corporates and has a non-linear relationship with the financial performance. It is critical to consider the type of ownership when evaluating CSR.

Okafor et al. (2021) examined the impact of CSR on the financial performance of US technology corporates. They used panel data of top 100 technology corporates listed in the S&P 500 for the period between 2017 and 2019 using the statistical methods of content analysis, fixed effects, and cumulative regression models. The results show that corporates that spend more on CSR, their revenue and profitability increase more, which in turn results in the corporate growth.

Shabani et al., (2019) investigated the effect of bank's social responsibility initiatives on customers' attitude and behavior. The social responsibility initiatives defined as customer-oriented, philanthropic behavior and environmental protection. The findings indicated the positive effect of the bank's social responsibility initiatives on the attitude and behavior of the customers. The strongest effect on the attitude and behavior of the customers is customer-oriented, philanthropic behavior and environmental protection, respectively.

Kordestani et al. (2018) evaluated the impact of social responsibility disclosure on accounting, economic and market criteria for evaluating companies' performance using the data of 104 manufacturing companies listed in Tehran Stock Exchange during 2006 to 2015. The findings show that the level of social responsibility disclosure has a significant and positive effect on

the rate of return on assets, profit per share and value added of corporates. Although, the level of social responsibility disclosure has a significant and negative effect on the cost of capital of corporates.

Wang and Sarkis (2017) explored the effect of social responsibility disclosure on the financial performance of corporates using return on assets and Q-Tobin ratio as representatives of financial performance. The results show that social responsibility disclosure has a positive effect on both variables.

Pirzad (2019) explored the role of business ethics and social responsibility of companies towards the brand using customer attitudes and business ethics evidence using statistical analysis. The results show that customer attitudes consider CSR as important, and they value business ethics as a critical behavior in understanding brand attitudes.

Foroghi et al. (2018) examined the role of social responsibility in improving the financial and non-financial performance of corporates. To this end, the data on 107 companies listed in Tehran Stock Exchange during the period 2010 to 2019 were examined using statistical and 3SLS econometric methods. The results show that the societal aspect of social responsibility has a positive and significant effect on financial performance. It also has a positive and significant effect on non-financial performance.

Afiff and Anantadjaya (2013) investigated CSR and corporate performance in Indonesia using regression analysis. The results show that the effect of CSR initiatives on its employees, corporate size, profitability and financial leverage has a significant and positive effect on stock prices. Therefore, there is evidence that CSR positively effects on the corporate performance.

Arshad and Razak (2011) investigated the effect of CSR disclosure on performance by regression method. The results show that the disclosure of CSR activities has a significant effect on the success and potentially leads to a strong financial performance and value creation.

### 4 Methodology

The method of research is analytical- regression method. Because on the one hand, it discusses corporate social responsibility and on the other hand, regression is used to examine the relationship between variables. Nature of data is ex-post. The data extracted from the audited financial statements of the banks listed in Tehran Stock Exchange. We also collected data from "Rahavard Novin" software, the "Tehran Securities Exchange Technology Management Site", and the "Codal Website". The research conducted on the

banks listed on Tehran Stock Exchange during the period 2014 to 2018. Therefore, 16 banks have been selected as a statistical sample including Post Bank, Dey, Eghtesade Novin, Tejarat, Parsian, Karafarin, Saderat, Saman, Mellat, Pasargad, Hekmat Iranian, Sarmayeh, Iran Zamin, Sina, Ansar and Shahr.

The following multivariate regression equations are used to test the hypotheses. As an example, one of the equations from the set of equations used is as follows:

# $Z\_Score_{it} = \alpha_{0,it} + \alpha_1 CSP_{it} + \alpha_2 Size_{it} + \alpha_3 Lev_{it} + \alpha_4 Invest_{it} + \alpha_5 Inst_{it} + \alpha_6 Indep_{it} + \alpha_7 Age_{it}$

The method of GLS is used to resolve problems such as autocorrelation of residual terms and heterogeneity of variance. The GLS method balances the model variables of the regression model. For the combined data, we first conduct F test (Chow test) to choose the method of estimation between Pooling and Panel. Then, the Hausman test is used to choose between Fixed and Random effects. In fact, the panel data approach can well reveal the inconsistencies between individuals. This is an advantage of the panel data model compared to cross-section or time series models. If we ignore the heterogeneity of parameters between individuals and sections or during the time series, it can lead to inconsistent or meaningless estimates of parameters. We conducted White cross-section test to resolve the problem of variance heterogeneity or to improve estimates.

### **5** Estimation and Analysis of Results

Variables of the model are as follows:

CSR denotes Corporate Social Responsibility which includes corporate governance indicator, product index, non-interest loan (Gharz-ol-Hasana) index, employee relations index, and environmental index. In case of disclosure, it is one and with no disclosure, it is zero. Then the social responsibility score is calculated from the following relationship:

### Social responsibility disclosure score = (number of components disclosed)/(total components)

Financial efficiency and profitability calculated using four criteria: return on assets which is calculated by dividing net profit by average assets (ROA), return on equity, which is calculated by dividing net profit by the average equity (ROE), profit per share is calculated by dividing net profit by the number of shares (EPS) and the net profit margin is calculated by dividing net profit by total revenue (NPM). Also, to examine the effect of social responsibility on other aspects of financial performance, financial stability has been calculated using the Z-Score variable for return on assets (ZA) which is calculated through the following formula:

### $ZA = (ROA + ETA)/\sigma ROA$

In this formula, ROA is the return on assets, ETA is the ratio of equity to total assets, and  $\sigma$ ROA is the standard deviation of return on assets as a proxy for return volatility. Also, financial inclusion as another aspect of financial performance is calculated using the number of ATMs and number of bank branches (NB).

Also, variables of financial leverage (LEV), bank size (natural logarithm of total assets) (SIZE), investment decisions (invest), share ownership of institutional investors (inst), independence of the board of directors (indep) and years of company membership in the stock exchange (Age) are considered as control variables.

The descriptive statistics of the sample show that the average CSR as an index of social responsibility is 0.319 and its standard deviation is 0.119. Also, the average index of return on assets is 0.108 and its standard deviation is 1.93, which indicates that the ratio of return on assets is 10.8%. Also, the descriptive analysis of other components related to banks shows that the average size and financial leverage of listed banks are 14.18 and 0.65, respectively, which indicates that banks get an average of 65% of their resources from debts.

### Table 2

Descriptive statistics of the main research variables (16 banks l	isted in
Tehran Stock Exchange)	

symbol	Average	Median	maximum	minimum	standard deviation
LEV	0.65524	0.59541	0.89854	0.35273	0.4447
SIZE	14.1849	14.0945	19.2492	10.5329	1.5836
ROE	0.1536	0.1425	0.452	-0.1067	0.53616
CSR	0.319	0.32155	0.73374	0	0.11981
EPS	253	205	445	-230	10.9543
NPM	0.114003	0.12985	0.38826	-0.1574	0.62741
ROA	0.10839	0.09328	0.325	-0.0731	1.9355
ZA	0.086807	0.101363	0.2902	-0.178	1.62605
Invest	-0.033	-0.026	0.893	0.826	0.173
Inst	0.714	0.706	1.00	0.209	0.163
Indep	0.598	0.577	1.00	0.198	0.154
ATŴ	453	474	1026	156	12.48448
NB	805	874	3125	296	0.626076

Source: Research findings

This study used the panel data model to analyze the data. Before estimating the regression model, it is necessary to check stationary of each variable. To this end, Levin-Lin-Chu test used. The results presented in table 3.

 Table 3

 Summary result of Levin-Lin-Chu test stationary of variables

Variable	Test statistic	p-value	
LEV	10.052	0.00	
SIZE	2.362	0.001	
ROE	-4.5697	0.003	
CSR	6.3521	0.00	
EPS	-3.0025	0.001	
NPM	-2.4789	0.016	
ROA	12.369	0.00	
ZA	-6.3605	0.00	
Invest	6.366	0.002	
Inst	2.364	0.049	
Indep	-2.064	0.037	
ATM	3.674	0.004	
NB	5.235	0.00	

Source: Research findings

The results of this test show that the variables are stationary. In the pooled data, the time series, and cross-sectional effects of data as well as their simultaneous effects are tested. According to the fixed effects model, an intercept for each year is provided. Also, according to the cross-sectional fixed effects model an intercept for each bank is provided. Now, to check whether these intercepts are statistically different significantly from each other, the Chow test is conducted.

Table -	4
---------	---

Cross-Section Fixed Effect Test

Dependent		ROE	ROA	EPS	NPM	ZA	ATM	NB
Variables								
Cross-section F	Statistic	5.42	9.38	17.84	9.85	14.37	15.23	11.81
	Prob.	0.00	0.00	0.00	0.00	0.001	0.00	0.00
Cross-sectionChi-	Statistic	95.139	93.49	57.91	125.8	184.5	98.74	28.84
square	Prob.	0.00	0.00	0.00	0.00	0.002	0.00	0.00

Source: Research findings

Downloaded from jme.mbri.ac.ir on 2025-01-09

Dependent Variables		ROE	ROA	EPS	NPM	ZA	ATM	NB
Time series F	Statistic	1.66	1.02	1.01	4.86	1.004	0.95	1.19
	Prob.	0.09	0.10	0.23	0.007	0.09	0.41	0.52
Time series Chi-	Statistic	2.25	3.17	2.51	15.36	2.10	2.02	2.21
square	Prob.	0.19	0.29	0.45	0.005	0.31	0.89	0.87

# Table 5

Source: Research findings

For the set of equations, according to the Chow test statistic, in the case of cross-sectional fixed effects, the probability is less than 0.05, and in the case of time-series fixed effects, the probability is greater than 0.05. Therefore, the hypothesis H<sub>1</sub> based on the difference in the intercepts for cross-sectional fixed effects is confirmed. Thus, the cross-sectional fixed effects model is preferable.

After conducting the Chow test and choosing the cross-sectional fixed effects model, we used the Hausman test to choose the data test method from the two methods of fixed effects and random effects. The results of Hausman test are presented in Table 6.

Table 6 Cross-Section Random Effects Test

Dependent Variables		ROE	ROA	EPS	NPM	ZA	ATM	NB
Cross-section	Chi-Sq. Statistic	29.65	26.35	29.94	23.37	19.37	19.23	14.25
random effect	Prob .	0.00	0.001	0.00	0.00	0.001	0.00	0.00

Source: Research findings

Considering the probability related to the test, which is smaller than 0.05, at the 95% confidence level, random effects are rejected, and fixed effects are accepted.

We used Limer's F-test to choose between panel and pooled data methods, and we conducted Hausman's test to determine whether the effects are fixed or random. The regression results have been analyzed using t and F statistic for OLS method and z and  $\chi^2$  statistic for GLS method. In table 7, the estimation results of panel equations are provided. (Numbers in parentheses are the probability of coefficient significance). Brush-Pagan test used to check variance heterogeneity.

	ROE <sub>it</sub>	ROA <sub>it</sub>	EPS <sub>it</sub>	NPM <sub>it</sub>	ZA <sub>it</sub>	ATM <sub>it</sub>	NB <sub>it</sub>
с	-0.09	0.126	0.065	0.02	0.063	0.263	0.69
	(0.001)	(0.00)	(0.003)	(0.041)	(0.02)	(0.02)	(0.03)
CSR	0.029	0.072	0.018	0.038	0.79	0.014	0.48
	(0.013)	(0.002)	(0.001)	(0.002)	(0.003)	(0.15)	(0.23)
Size	0.02	0.042	0.052	0.06	0.017	0.18	0.78
	(0.89)	(0.63)	(0.00)	(0.49)	(0.01)	(0.001)	(0.002)
Lev	-0.06	-0.053	-0.48	-0.39	-0.052	-0.028	0.19
	(0.042)	(0.041)	(0.006)	(0.00)	(0.002)	(0.08)	(0.102)
Invest	0.002	0.75	0.089	0.95	1.23	0.09	2.81
	(0.85)	(0.53)	(0.63)	(0.71)	(0.75)	(0.58)	(0.52)
Inst	0.039	0.029	0.19	0.08	1.26	0.86	0.55
	(0.63)	(0.73)	(0.59)	(0.72)	(0.51)	(0.67)	(0.08)
Indep	1.005	0.986	0.53	0.89	0.09	0.002	2.58
-	(0.58)	(0.67)	(0.88)	(0.63)	(0.77)	(0.71)	(0.12)
Age	-0.0023	-0.004	-0.005	-0.012	0.059	1.23	1.89
-	(0.032)	(0.045)	(0.001)	(0.021)	(0.65)	(0.09)	(0.34)
$R^2$	0.51	0.55	0.62	0.51	0.45	0.42	0.41
$\overline{R}^2$	0.50	0.52	0.59	0.45	0.44	0.41	0.40
Brush-	0.61	1.68	0.59	0.02	23.26	2.06	0.056
Pagan Test	(0.402)	(0.175)	(0.12)	(0.76)	(0.01)	(0.043)	(0.95)
DW	1.89	2.02	1.92	1.89	1.99	2.031	2.23
F Statistic	22.36	19.68	15.02	28.55	16.05	14.36	12.87
	(0.00)	(0.00)	(0.02)	(0.00)	(0.01)	(0.03)	(0.04)

Estimation Results of Panel Regression Equations

Source: Research findings

According to the results of F-Limer and Hausman tests, we used panel data method as well as the fixed effects method to estimate the model. Also, based on the results of Breusch-Pagan test, for variance heterogeneity, we used GLS method for estimation. Also, Durbin-Watson statistic values are within the allowed range and indicate the absence of autocorrelation. The probability of F statistic also indicates the significance of all equations.

Given the significance of the CSR, which is the main variable in the hypothesis of the paper, the variable has a significant and positive effect on the return on equity with the coefficient of 0.029. Also, according to the results of equations, CSR has a positive and significant effect on the returns on assets of banks listed on the capital market with the coefficient of 0.072. Moreover, this variable has a positive and significant effect on other profitability indicators of the banks, i.e. profit per share, as well as on the banks' net profit margin, so that the coefficients are 0.018 and 0.038, respectively. CSR has a positive and significant effect on the return of the coefficient of this variable is equal to 0.79, so it also affects this aspect of

Table 7

financial performance of banks. This variable did not have a significant effect on the number of ATMs and the number of bank branches.

### **6** Conclusion

Social responsibility is one of the topics that has recently been the focus of most organizations, especially banks. In fact, social responsibility is a set of duties and obligations that organizations must perform in order to preserve and help the society in which it operates. Today, organizations, regardless of their type of activity, have realized that they are responsible for all stakeholders, preserving the environment and the society in which they operate. On the other hand, social responsibility can affect the performance of companies, which is an important issue. According to the results, the impact of CSR on all four criteria of efficiency and profitability of banks listed in Tehran Stock Exchange is positive and significant. The results on the positive effect of CSR on the return on equity are consistent with the research results of Barnett and Salmon (2012). Also, the results of the effect of CSR on the return on assets of banks listed in Tehran Stock Exchange are consistent with the research results of Wang and Sarkis (2017) and Barnett and Salmon (2012). Our results of the impact of CSR on the profit per share of banks are consistent with the research results of Abtahi et al. (2020) and Kuo et al. (2021). Also, the results on the effect of CSR on the net profit margin of banks are consistent with the research results of Saadatnia and Dehdar (2020), Barnett and Salmon (2012). Also, the results on the positive effect of CSR on financial stability as another aspect of the financial performance.

It is suggested that investors should prioritize investing in banks that have the most disclosure of social responsibility and its dimensions considering the positive and significant relationship between social responsibility disclosure and efficiency and profitability as well as financial performance from various aspects. Also, the organizations that are responsible for the preparation of accounting standards should pay attention to the preparation of social accounting standards. Also, these organizations should provide the necessary background for the disclosure of such information by the managers by conducting more research and considering the cultural and social characteristics of Iran. On the other hand, since the disclosure of information related to the social effects of banks' activities is not possible without the existence of binding laws, therefore, legislative institutions should also act in the field of binding laws. As the results show, social responsibility affects the success of the bank by increasing the legitimacy of the bank's actions, increasing the income, profitability and improving the competitive advantage. The stock exchange organization can oblige banks to disclose their social responsibilities in order to defend the rights of shareholders.

### References

- Abtahi, Mehdi; Hosseini-Khormi, Seyed-Mohammed and Zareen Taj, Bahare. (2019). The effect of disclosure of social responsibility information on the financial performance and value of companies (case of Cement industry listed in Tehran Stock Exchange). *Journal of new research in management and accounting*, new period, number 43, pages 1-12.
- Afiff, Saffana & Samuel, P.D. Anantadjaya (2013). Csr & Performance: Any Evidence from Indonesian LQ45? *Review of Integrative Business & Economics Research*, Vol 2 (1), pp 85-101
- Arshad, R .and Razak, S.N.A.A. (2011). Corporate Social Responsibility Disclosure and Interaction Effects of Ownership Structure on Firm Performance. *Business, Engineering and Industrial Applications (ISBEIA)*, 5(11), 25-28.
- Barnett, M. & Salomon, R. A. (2012). Does it pay to be really good? Addressing the relationship between social and financial performance. *Strategic Management Journal*, 33, 1304-1320.
- Belasri, Sanaa & Gomes, Mathieu & Pijourlet, Guillaume. (2020). Corporate social responsibility and bank efficiency. *Journal of Multinational Financial Management*, vol. 54(C).
- Bozorg Asl, M., Barzideh, F., & Samadi, M. (2018). The Effect of Liquidity Risk and Credit Risk on Financial Stability Banking industry in Iran; Multiple regression approach. *Financial Knowledge of Securities Analysis*, 11(38), 1-13.
- Chen, T., Harford, J., & Lin, C. (2015). Do analysts matter for governance? Evidence from natural experiments. *Journal of Financial Economics*, Vol. 86, Pp. 279–305
- Fakhari, H., & Fallahpour, F. (2017). The Mediating Effect Of Financial Performance On The Relationship Between Corporate Social Responsibility And Market Value-Added (Study: At Listed Companies in The Tehran Stock Exchange). *Financial Management Perspective*, 7(20), 97-114.
- Foroghi, D., Amiri, H., & Javanmard, M. (2018). Impace of Corporate Social Responsibility to Cash Holdings Through Synchronous Effect of Chosen Variables. *Financial Accounting Research*, 10(1), 19-36. doi: 10.22108/far.2018.105438.1125
- Fukuyama, Hirofumi & Tan, Yong (2022). Implementing strategic disposability for performance evaluation: Innovation, stability, profitability and corporate social responsibility in Chinese banking. *European Journal of Operational Research*, vol. 296(2), pages 652-668.
- Gangi, F., Mustilli, M. and Varrone, N. (2019). The impact of corporate social responsibility (CSR) knowledge on corporate financial performance: evidence from the European banking industry. *Journal of Knowledge Management*, Vol. 23 No. 1, pp. 110-134.

- Han, J.J., Kim, H. J., & Yu, J. (2016). Empirical study on relationship between corporate social responsibility and financial performance in Korea. *Asian Journal* of Sustainability and Social Responsibility, 1, 61-76.
- Heidari Kurd Zanganeh, Gholamreza; Norush, Iraj and Jafari, Mohammad Hassan. (2017). Social responsibility and financial performance in companies listed in Tehran Stock Exchange. *Economic Journal*, 3(17), 12-39.
- Kuo, T.-C., Chen, H.-M., Meng, H.-M. (2021). Do corporate social responsibility practices improve financial performance? A case study of airline companies. *Journal of Cleaner Production*, Volume 310, 10
- Kordestani, G., Ghaderzadeh, S. K., & Haghighat, H. (2018). Impact of social responsibility disclosure on accounting, economic and market based Measures Of corporate performance evaluation. *Journal of Accounting Advances*, 10(1), 187-217.
- Maranjory, M., & Alikhani, R. (2014). Social Responsibility Disclosure and Corporate Governance. Accounting and Auditing Review, 21(3), 329-348.
- Okafor, A., Adusei, M., Adeleye, B.N. (2021). Corporate social responsibility and financial performance: Evidence from U.S tech firms. *Journal of Cleaner Production*, Volume 292
- Pirzad, Mojtaba. (2019). The role of business ethics and CSR towards the brand. An Approach in Business Management, No. 2, pp. 268-288.
- Rajaei, Yadollah; Nasiri, Mahin and Mohammadi, Nabi Elah. (2016). The relationship between social responsibilities of companies and the limitation of financial resources in companies listed in Tehran Stock Exchange. Quarterly Journal of Quantitative Studies in Management, 7(1), 25-39.
- Saadatnia, M., & Dehdar, F. (2020). Investigating the Impact of Social Responsibility on the Financial Performance of Banks from the Islamic Perspective. *Journal of Economic Essays; an Islamic Approach*, 17(34), 121-152.
- Shabani, A., Habibi, R., & Alizadeh, M. (2019). Investigating the Impact of Banks' Social Responsibility on the Attitude and Behavior of Customers. *Scintific Journal of Islamic Finance Researches* (IFR), 9(1), 111-144.
- Wang, Z. & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial Performance. *Journal of Cleaner Production*, 162, 1607-16167.

[ Downloaded from jme.mbri.ac.ir on 2025-01-09